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Chapter 1

Equivariant Morphisms from Regular Maps to S^3

1.0.1 Reflexible Maps

	Mapping	Immersion		Embedding
	necessary and sufficient	necessary	sufficient	necessary
Genus 2				
R2.1	2 C_2, C_3, C_4, C_6, C_8, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, C_4, C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, 2 D_2, D_3
R2.2	3 C_2, C_3, C_4, 2 C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, C_4, 2 C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_4, C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, 4 D_2, D_3
R2.3	2 C_2, 2 C_4, C_8, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 D_2
R2.4	C_2, 2 C_5, 2 C_{10}	C_2	C_2	C_2
R2.5	3 C_2, C_3, 3 C_6, 3 D_2	3 C_2, C_3, 3 C_6, 3 D_2	3 C_2, C_6, 3 D_2	3 C_2, C_3, 3 D_2
R2.6	C_2, C_4, 2 C_8	C_2, C_4	C_2, C_4	C_2
Genus 3				
R3.1	**Tet**, **Oct**, C_2, C_3, C_4, C_7, D_2, D_3, D_4	**Tet**, **Oct**, C_2, C_3, C_4, D_2, D_3, D_4	**Tet**, **Oct**, C_2, C_4, D_2, D_3, D_4	**Tet**, C_2, C_3, D_2, D_3
R3.2	**Tet**, **Oct**, 2 C_2, C_3, 3 C_4, C_8, 3 D_2, D_3, 2 D_4	**Tet**, **Oct**, 2 C_2, C_3, 3 C_4, 3 D_2, D_3, 2 D_4	**Tet**, **Oct**, 2 C_2, 2 C_4, 3 D_2, D_3, 2 D_4	**Tet**, 2 C_2, C_3, 3 D_2, D_3
R3.3	2 C_2, C_3, 2 C_4, C_6, 2 C_{12}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, C_6, C_{12}, 2 D_2, D_4	2 C_2, C_4, C_6, 2 D_2, D_4	2 C_2, 2 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R3.4	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, 16 D_2, 2 D_3, 4 D_4, D_6	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, 16 D_2, 2 D_3, 4 D_4, D_6	**Tet**, **Oct**, 3 C_2, C_4, C_6, 16 D_2, D_3, 4 D_4, D_6	**Tet**, 5 C_2, C_3, C_4, 16 D_2, D_3, 2 D_4
R3.5	3 C_2, 5 C_4, C_8, 4 D_2, 2 D_4	3 C_2, 5 C_4, 4 D_2, 2 D_4	3 C_2, 3 C_4, 4 D_2, 2 D_4	3 C_2, 4 D_2
R3.6	5 C_2, 3 C_4, 2 C_8, 13 D_2, 3 D_4	5 C_2, 3 C_4, C_8, 13 D_2, 3 D_4	3 C_2, 2 C_4, 13 D_2, 3 D_4	5 C_2, C_4, 13 D_2, D_4
R3.7	3 C_2, C_3, 2 C_4, C_6, C_{12}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 3 D_2, 2 D_3, D_6	2 C_2, 2 C_4, C_6, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, D_3
R3.8	**Tet**, 3 C_2, C_3, C_6, 6 D_2	**Tet**, 3 C_2, C_3, C_6, 6 D_2	**Tet**, 2 C_2, C_6, 6 D_2	**Tet**, 3 C_2, C_3, 6 D_2
R3.9	C_2, 3 C_7, 3 C_{14}	C_2	C_2	C_2
R3.10	2 C_2, 2 C_4, 2 C_8, 2 D_2	2 C_2, 2 C_4, 2 D_2	2 C_2, C_4, 2 D_2	2 C_2, 2 D_2
R3.11	3 C_2, 2 C_4, 4 C_8, 3 D_2	3 C_2, 2 C_4, 2 C_8, 3 D_2	2 C_2, C_4, 3 D_2	3 C_2, C_4, 3 D_2
R3.12	C_2, C_3, C_4, C_6, 2 C_{12}	C_2, C_3, C_4, C_6	C_2, C_4, C_6	C_2, C_3
Genus 4				
R4.1	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, C_{12}, 3 D_2, D_3, D_4	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, 3 D_2, D_3, D_4	2 **Tet**, **Oct**, 2 C_2, C_6, 3 D_2, D_3, D_4	2 C_2, C_3, C_4, 3 D_2, D_3, D_4
R4.2	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_6, 3 D_2, 2 D_3, D_4, D_5, D_6	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, 3 D_2, 2 D_3, D_4, D_6	**Tet**, **Oct**, 2 C_2, C_6, 3 D_2, 2 D_3, D_4, D_6	2 C_2, C_3, C_4, 3 D_2, 2 D_3, D_4
R4.3	3 C_2, 2 C_3, C_4, 2 C_6, 4 D_2, 4 D_3, D_4, 2 D_6	3 C_2, 2 C_3, C_4, 2 C_6, 4 D_2, 4 D_3, D_4, 2 D_6	3 C_2, C_6, 4 D_2, 4 D_3, D_4, 2 D_6	3 C_2, 2 C_3, C_4, 4 D_2, 4 D_3, D_4
R4.4	3 C_2, C_4, 2 C_5, 4 C_{10}, 4 D_2, D_4, 2 D_5, 2 D_{10}	3 C_2, C_4, C_5, 2 C_{10}, 4 D_2, D_4, D_5, D_{10}	3 C_2, C_4, C_{10}, 4 D_2, D_4, D_5, D_{10}	3 C_2, C_5, 4 D_2, D_5
R4.5	2 C_2, 2 C_4, 2 C_8, 2 C_{16}, 2 D_2, D_4, 2 D_8	2 C_2, 2 C_4, C_8, 2 D_2, D_4, D_8	2 C_2, 2 C_4, C_8, 2 D_2, D_4, D_8	2 C_2, 2 D_2
R4.6	**Tet**, 2 **Ico**, C_2, C_3, 2 C_5, D_2, D_3, 2 D_5	**Tet**, C_2, C_3, D_2, D_3	**Tet**, C_2, D_2, D_3	C_2, C_3, D_2, D_3
R4.7	3 C_2, 3 C_3, 2 C_6, 3 D_2, 5 D_3, 2 D_6	3 C_2, 3 C_3, 2 C_6, 3 D_2, 5 D_3, 2 D_6	3 C_2, 3 D_2, 5 D_3, 2 D_6	3 C_2, 3 C_3, 3 D_2, 5 D_3
R4.8	3 C_2, 3 C_3, 5 C_6, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, 5 C_6, 3 D_2, 2 D_3, D_6	3 C_2, 4 C_6, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 3 D_2, 2 D_3
R4.9	3 C_2, C_3, C_4, 3 C_6, C_{12}, 4 D_2, D_4	3 C_2, C_3, C_4, 3 C_6, 4 D_2, D_4	3 C_2, C_6, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R4.10	C_2, C_3, C_6, 3 C_9, 3 C_{18}	C_2, C_3, C_6	C_2, C_6	C_2
R4.11	3 C_2, 2 C_5, 6 C_{10}, 3 D_2	3 C_2, C_5, 3 C_{10}, 3 D_2	3 C_2, C_{10}, 3 D_2	3 C_2, C_5, 3 D_2
R4.12	C_2, C_4, 2 C_8, 4 C_{16}	C_2, C_4, C_8	C_2, C_4, C_8	C_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 5				
R5.1	**Tet**, **Oct**, 4 C_2, C_3, 3 C_4, C_6, 2 C_8, 12 D_2, D_3, 3 D_4, D_6	**Tet**, **Oct**, 4 C_2, C_3, 3 C_4, C_6, C_8, 12 D_2, D_3, 3 D_4, D_6	**Oct**, 2 C_2, 2 C_4, C_8, 11 D_2, D_3, 3 D_4, D_6	**Tet**, **Oct**, 4 C_2, C_3, C_4, 12 D_2, D_3, 2 D_4
R5.2	**Tet**, 2 **Ico**, 3 C_2, C_3, 2 C_5, C_6, 2 C_{10}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_5, C_6, C_{10}, 7 D_2, 2 D_3, 2 D_5, D_6, D_{10}	2 C_2, C_6, C_{10}, 6 D_2, D_3, D_5, D_6, D_{10}	**Tet**, 3 C_2, C_3, C_5, 7 D_2, 2 D_3, D_5
R5.3	4 C_2, 3 C_4, 2 C_5, 21 D_2, 6 D_4, 2 D_5	4 C_2, 3 C_4, C_5, 21 D_2, 6 D_4, D_5	2 C_2, C_4, 17 D_2, 6 D_4, D_5	4 C_2, 2 C_4, C_5, 21 D_2, 4 D_4, D_5
R5.4	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_6, 26 D_2, D_3, 5 D_4, D_6	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_6, 26 D_2, D_3, 5 D_4, D_6	**Oct**, 3 C_2, C_4, C_6, 21 D_2, D_3, 5 D_4, D_6	**Tet**, **Oct**, 6 C_2, C_3, 2 C_4, 26 D_2, D_3, 4 D_4
R5.5	6 C_2, 3 C_4, C_8, 27 D_2, 3 D_4	6 C_2, 3 C_4, 27 D_2, 3 D_4	3 C_2, 2 C_4, 21 D_2, 3 D_4	6 C_2, C_4, 27 D_2, 2 D_4
R5.6	6 C_2, 5 C_4, 2 C_8, 19 D_2, 3 D_4	6 C_2, 5 C_4, C_8, 19 D_2, 3 D_4	3 C_2, 4 C_4, C_8, 17 D_2, 3 D_4	6 C_2, C_4, 19 D_2, 2 D_4
R5.7	5 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, 13 D_2, 2 D_3, 4 D_6	5 C_2, C_3, 2 C_4, 3 C_6, C_{12}, 13 D_2, 2 D_3, 4 D_6	3 C_2, 2 C_4, C_6, 11 D_2, D_3, 3 D_6	5 C_2, C_3, C_6, 13 D_2, 2 D_3, D_6
R5.8	3 C_2, 2 C_4, 2 C_5, 2 C_{10}, 2 C_{20}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, 2 C_4, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_{10}, 3 D_2, D_5, D_{10}	3 C_2, C_5, 3 D_2, D_5
R5.9	3 C_2, 2 C_5, 15 D_2	3 C_2, C_5, 15 D_2	C_2, 11 D_2	3 C_2, C_5, 15 D_2
R5.10	**Tet**, 7 C_2, C_3, 3 C_6, 31 D_2	**Tet**, 7 C_2, C_3, 3 C_6, 31 D_2	3 C_2, 2 C_6, 23 D_2	**Tet**, 7 C_2, C_3, 31 D_2
R5.11	C_2, C_3, 2 C_5, C_6, 2 C_{15}, 2 D_5	C_2, C_3, C_5, C_6, D_5	C_2, C_6, D_5	C_2, C_5, D_5
R5.12	4 C_2, 2 C_4, 2 C_8, 10 D_2, 2 D_4	4 C_2, 2 C_4, 10 D_2, 2 D_4	2 C_2, 2 C_4, 8 D_2, 2 D_4	4 C_2, 10 D_2
R5.13	5 C_2, 3 C_4, 4 C_8, 13 D_2	5 C_2, 3 C_4, 2 C_8, 13 D_2	2 C_2, 3 C_4, 2 C_8, 11 D_2	5 C_2, 13 D_2
R5.14	C_2, 5 C_{11}, 5 C_{22}	C_2	C_2	C_2
R5.15	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_{12}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, 3 D_2	2 C_2, 2 C_4, C_6, 3 D_2	3 C_2, C_3, C_6, 3 D_2
R5.16	C_2, C_4, 2 C_5, 2 C_{10}, 4 C_{20}	C_2, C_4, C_5, C_{10}	C_2, C_4, C_{10}	C_2, C_5
Genus 6				
R6.1	C_2, C_3, 4 C_5, 2 C_{10}, D_3, 2 D_5	C_2, C_3, 3 C_5, C_{10}, D_3, 2 D_5	C_2, C_{10}, D_3, 2 D_5	C_2, C_3, 2 C_5, D_3, 2 D_5
R6.2	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_6, 3 D_2, 2 D_3, D_4, D_5, D_6	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_6, 3 D_2, 2 D_3, D_4, D_5, D_6	**Tet**, **Oct**, **Ico**, 2 C_2, C_4, 3 D_2, 2 D_3, D_4, D_5, D_6	**Tet**, 2 C_2, C_3, C_5, C_6, 3 D_2, 2 D_3, D_5, D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R6.3	2 C_2, C_3, C_4, C_6, 3 C_9, 3 D_2, D_3, D_4, D_6, 3 D_9	2 C_2, C_3, C_4, C_6, C_9, 3 D_2, D_3, D_4, D_6, D_9	2 C_2, C_4, C_6, 3 D_2, D_3, D_4, D_6, D_9	2 C_2, C_3, 3 D_2, D_3
R6.4	3 C_2, C_4, 3 C_7, 6 C_{14}, 4 D_2, D_4, 3 D_7, 3 D_{14}	3 C_2, C_4, C_7, 2 C_{14}, 4 D_2, D_4, D_7, D_{14}	3 C_2, C_4, C_{14}, 4 D_2, D_4, D_7, D_{14}	3 C_2, C_7, 4 D_2, D_7
R6.5	2 C_2, C_3, 2 C_4, C_6, C_8, 2 C_{12}, 2 C_{24}, 2 D_2, D_3, D_4, D_6, 2 D_{12}	2 C_2, C_3, 2 C_4, C_6, C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_4, C_6, C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, C_3, 2 D_2, D_3
R6.6	C_2, 8 C_5, 2 C_{10}, 2 D_5	C_2, 6 C_5, C_{10}, 2 D_5	C_2, C_{10}, 2 D_5	C_2, 4 C_5, 2 D_5
R6.7	3 C_2, C_3, C_4, 2 C_6, 2 C_8, C_{12}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}	3 C_2, C_3, C_4, 2 C_6, C_8, C_{12}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}	3 C_2, C_6, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}	3 C_2, C_3, C_4, 4 D_2, D_3, 2 D_4
R6.8	2 C_2, C_3, C_4, C_6, C_8, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, C_4, C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, 2 D_2, D_3
R6.9	C_2, C_3, C_6, 3 C_9, D_2	C_2, C_3, C_6, C_9, D_2	C_2, C_6, D_2	C_2, C_3, D_2
R6.10	C_2, C_3, 2 C_5, 2 C_{10}, 2 C_{15}, D_3	C_2, C_3, C_5, C_{10}, D_3	C_2, C_{10}, D_3	C_2, C_3, D_3
R6.11	C_2, 6 C_{13}, 6 C_{26}	C_2	C_2	C_2
R6.12	3 C_2, 3 C_7, 9 C_{14}, 3 D_2	3 C_2, C_7, 3 C_{14}, 3 D_2	3 C_2, C_{14}, 3 D_2	3 C_2, C_7, 3 D_2
R6.13	C_2, C_3, C_4, C_6, 2 C_8, 2 C_{12}, 4 C_{24}	C_2, C_3, C_4, C_6, C_{12}	C_2, C_4, C_6, C_{12}	C_2, C_3
Genus 7				
R7.1	C_2, C_3, 3 C_7, 3 C_9, 3 D_2, D_3, 3 D_7, 3 D_9	C_2, C_3, C_7, 3 C_9, 3 D_2, D_3, D_7, 3 D_9	C_2, 3 D_2, D_3, D_7, 3 D_9	C_2, C_3, C_7, 3 D_2, D_3, D_7
R7.2	2 C_2, 3 C_3, 2 C_4, 3 C_6, 3 C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 3 C_3, 2 C_4, 3 C_6, 2 C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_4, 3 C_6, 2 C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, C_3, 2 D_2, D_3
R7.3	3 C_2, 4 C_4, 2 C_8, 2 C_{16}, 4 D_2, 2 D_4, D_8	3 C_2, 4 C_4, C_8, 4 D_2, 2 D_4, D_8	3 C_2, 3 C_4, 4 D_2, 2 D_4, D_8	3 C_2, C_4, 4 D_2, D_4
R7.4	5 C_2, 3 C_4, 4 C_8, 4 C_{16}, 13 D_2, 3 D_4, 6 D_8	5 C_2, 3 C_4, 3 C_8, C_{16}, 13 D_2, 3 D_4, 5 D_8	3 C_2, 2 C_4, 13 D_2, 2 D_4, 3 D_8	5 C_2, C_4, C_8, 13 D_2, 2 D_4, D_8
R7.5	3 C_2, 2 C_4, 3 C_7, 3 C_{14}, 3 C_{28}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, 2 C_4, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}	2 C_2, 2 C_4, C_{14}, 3 D_2, D_7, D_{14}	3 C_2, C_7, 3 D_2, D_7
R7.6	C_2, 3 C_3, C_6, 6 C_9, D_3, 3 D_9	C_2, 3 C_3, C_6, 4 C_9, D_3, 3 D_9	C_2, C_6, D_3, 3 D_9	C_2, 2 C_3, D_3
R7.7	2 C_2, C_3, 2 C_4, C_6, 2 C_{12}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, C_6, C_{12}, 2 D_2, D_4	2 C_2, 2 C_4, C_6, C_{12}, 2 D_2, D_4	2 C_2, 2 D_2
R7.8	C_2, C_3, C_6, 3 C_7, 3 C_{21}, 3 D_7	C_2, C_3, C_6, C_7, D_7	C_2, C_6, D_7	C_2, C_7, D_7
R7.9	C_2, C_3, 2 C_5, C_6, 2 C_{10}, 4 C_{15}, 4 C_{30}	C_2, C_3, C_6	C_2, C_6	C_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R7.10	3 C_2, 2 C_4, 4 C_8, 8 C_{16}, 3 D_2	3 C_2, 2 C_4, 3 C_8, 2 C_{16}, 3 D_2	2 C_2, C_4, 3 D_2	3 C_2, C_4, C_8, 3 D_2
R7.11	2 C_2, 2 C_4, 3 C_8, 4 C_{16}, 2 D_2	2 C_2, 2 C_4, C_8, 2 D_2	2 C_2, C_4, 2 D_2	2 C_2, C_4, 2 D_2
R7.12	C_2, C_4, 3 C_7, 3 C_{14}, 6 C_{28}	C_2, C_4, C_7, C_{14}	C_2, C_4, C_{14}	C_2, C_7
Genus 8				
R8.1	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	**Tet**, **Oct**, 2 C_2, C_6, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	**Tet**, 2 C_2, C_3, C_4, C_7, C_8, 3 D_2, 2 D_3, 2 D_4, D_7, D_8
R8.2	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	**Tet**, **Oct**, 2 C_2, C_6, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	**Tet**, 2 C_2, C_3, C_4, C_7, C_8, 3 D_2, 2 D_3, 2 D_4, D_7, D_8
R8.3	3 C_2, C_3, C_4, 2 C_6, 3 C_9, 6 C_{18}, 4 D_2, D_3, D_4, D_6, 3 D_9, 3 D_{18}	3 C_2, C_3, C_4, 2 C_6, C_9, 2 C_{18}, 4 D_2, D_3, D_4, D_6, D_9, D_{18}	3 C_2, C_4, C_6, C_{18}, 4 D_2, D_3, D_4, D_6, D_9, D_{18}	3 C_2, C_3, C_9, 4 D_2, D_3, D_9
R8.4	2 C_2, 2 C_4, 2 C_8, 4 C_{16}, 4 C_{32}, 2 D_2, D_4, 2 D_8, 4 D_{16}	2 C_2, 2 C_4, C_8, C_{16}, 2 D_2, D_4, D_8, D_{16}	2 C_2, 2 C_4, C_8, C_{16}, 2 D_2, D_4, D_8, D_{16}	2 C_2, 2 D_2
R8.5	3 C_2, C_3, 2 C_5, C_6, 2 C_{10}, 2 C_{15}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 2 D_{15}	3 C_2, C_3, C_5, C_6, C_{10}, C_{15}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}	3 C_2, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}	3 C_2, C_3, C_5, 3 D_2, 2 D_3, 2 D_5
R8.6	3 C_2, C_3, C_4, 3 C_6, 2 C_8, C_{12}, 2 C_{24}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_3, C_4, 3 C_6, C_8, 4 D_2, 2 D_4, D_8	3 C_2, C_6, 4 D_2, 2 D_4, D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8
R8.7	2 C_2, C_3, 2 C_4, C_6, C_8, 2 C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, C_3, 2 C_4, C_6, C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_4, C_6, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, C_3, 2 D_2, D_3
R8.8	3 C_2, C_4, 2 C_5, 6 C_{10}, 2 C_{20}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R8.9	C_2, 8 C_{17}, 8 C_{34}	C_2	C_2	C_2
R8.10	3 C_2, C_3, 3 C_6, 3 C_9, 9 C_{18}, 3 D_2	3 C_2, C_3, 3 C_6, C_9, 3 C_{18}, 3 D_2	3 C_2, C_6, C_{18}, 3 D_2	3 C_2, C_3, C_9, 3 D_2
R8.11	C_2, C_4, 2 C_8, 4 C_{16}, 8 C_{32}	C_2, C_4, C_8, C_{16}	C_2, C_4, C_8, C_{16}	C_2
Genus 9				
R9.1	**Tet**, 5 C_2, C_3, 3 C_4, C_6, 2 C_{12}, 23 D_2, 6 D_4	**Tet**, 5 C_2, C_3, 3 C_4, C_6, C_{12}, 23 D_2, 6 D_4	2 C_2, C_4, C_6, C_{12}, 16 D_2, 4 D_4	5 C_2, 2 C_4, 23 D_2, 6 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R9.2	3 C_2, 3 C_4, 2 C_5, 2 C_8, 2 C_{10}, 8 D_2, 4 D_4, 2 D_5, 2 D_8, 2 D_{10}	3 C_2, 3 C_4, C_5, 2 C_8, C_{10}, 8 D_2, 4 D_4, D_5, 2 D_8, D_{10}	2 C_2, C_4, 8 D_2, 4 D_4, D_5, 2 D_8, D_{10}	3 C_2, 2 C_4, C_5, 2 C_8, 8 D_2, 4 D_4, D_5, 2 D_8
R9.3	4 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, C_{12}, 8 D_2, D_3, 5 D_4, D_6, 2 D_8, D_{12}	4 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, C_{12}, 8 D_2, D_3, 5 D_4, D_6, 2 D_8, D_{12}	3 C_2, C_4, C_6, 8 D_2, D_3, 5 D_4, D_6, 2 D_8, D_{12}	4 C_2, C_3, 3 C_4, 2 C_8, 8 D_2, D_3, 5 D_4, 2 D_8
R9.4	3 **Tet**, 4 **Oct**, 6 C_2, C_3, 5 C_4, C_6, 27 D_2, 2 D_3, 13 D_4, D_6	3 **Tet**, 4 **Oct**, 6 C_2, C_3, 5 C_4, C_6, 27 D_2, 2 D_3, 13 D_4, D_6	**Tet**, 3 **Oct**, 3 C_2, C_4, C_6, 21 D_2, D_3, 11 D_4, D_6	3 **Tet**, 6 C_2, C_3, 4 C_4, 27 D_2, D_3, 11 D_4
R9.5	4 C_2, 5 C_4, 3 C_8, 8 D_2, 4 D_4, D_8	4 C_2, 5 C_4, 2 C_8, 8 D_2, 4 D_4, D_8	3 C_2, 2 C_4, C_8, 8 D_2, 4 D_4, D_8	4 C_2, 3 C_4, C_8, 8 D_2, 4 D_4, D_8
R9.6	5 C_2, 5 C_4, 3 C_8, 14 D_2, 7 D_4, D_8	5 C_2, 5 C_4, 2 C_8, 14 D_2, 7 D_4, D_8	3 C_2, 2 C_4, 12 D_2, 6 D_4, D_8	5 C_2, 3 C_4, C_8, 14 D_2, 6 D_4, D_8
R9.7	9 C_2, 6 C_4, 2 C_8, 54 D_2, 11 D_4	9 C_2, 6 C_4, C_8, 54 D_2, 11 D_4	3 C_2, 3 C_4, C_8, 37 D_2, 8 D_4	9 C_2, 3 C_4, 54 D_2, 11 D_4
R9.8	4 C_2, 4 C_4, 3 C_8, 10 D_2, 5 D_4, 3 D_8	4 C_2, 4 C_4, 2 C_8, 10 D_2, 5 D_4, 3 D_8	3 C_2, 3 C_4, 2 C_8, 10 D_2, 5 D_4, 3 D_8	4 C_2, C_4, 10 D_2, 2 D_4
R9.9	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, C_6, C_{12}, 16 D_2, 2 D_3, 4 D_4, D_6	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, C_6, 16 D_2, 2 D_3, 4 D_4, D_6	**Oct**, 3 C_2, 3 C_4, C_6, 13 D_2, D_3, 3 D_4, D_6	**Tet**, 5 C_2, C_3, 2 C_4, 16 D_2, D_3, 4 D_4
R9.10	5 C_2, C_3, 3 C_4, 4 C_6, 2 C_{12}, 13 D_2, D_3, 2 D_4, 2 D_6	5 C_2, C_3, 3 C_4, 4 C_6, C_{12}, 13 D_2, D_3, 2 D_4, 2 D_6	3 C_2, 2 C_4, C_6, 11 D_2, D_3, 2 D_4, 2 D_6	5 C_2, C_3, C_4, 13 D_2, D_3, 2 D_4
R9.11	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_6, 2 C_{12}, 18 D_2, 2 D_3, 6 D_4, 2 D_6, 2 D_{12}	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_6, C_{12}, 18 D_2, 2 D_3, 6 D_4, 2 D_6, D_{12}	**Tet**, 2 **Oct**, 3 C_2, 3 C_4, C_6, 16 D_2, D_3, 6 D_4, 2 D_6, D_{12}	**Tet**, 5 C_2, C_3, C_4, 18 D_2, D_3, D_4
R9.12	5 C_2, 2 C_4, 2 C_5, 6 C_{10}, 4 C_{20}, 13 D_2, 4 D_5, 8 D_{10}	5 C_2, 2 C_4, C_5, 3 C_{10}, C_{20}, 13 D_2, 2 D_5, 4 D_{10}	3 C_2, 2 C_4, C_{10}, 11 D_2, D_5, 3 D_{10}	5 C_2, C_5, C_{10}, 13 D_2, 2 D_5, D_{10}
R9.13	3 C_2, C_3, 2 C_4, C_6, 3 C_9, C_{12}, 3 C_{18}, 3 C_{36}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, C_3, 2 C_4, C_6, C_9, C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	2 C_2, 2 C_4, C_6, C_{18}, 3 D_2, D_3, D_6, D_9, D_{18}	3 C_2, C_3, C_9, 3 D_2, D_3, D_9
R9.14	2 C_2, 2 C_4, 2 C_5, 2 C_{10}, 2 D_2, 2 D_4	2 C_2, 2 C_4, C_5, C_{10}, 2 D_2, 2 D_4	C_2, 2 D_2, 2 D_4	2 C_2, 2 C_4, C_5, 2 D_2, 2 D_4
R9.15	**Tet**, 2 **Ico**, 3 C_2, C_3, 2 C_5, C_6, 2 C_{10}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_5, C_6, C_{10}, 7 D_2, 2 D_3, 2 D_5, D_6, D_{10}	2 C_2, C_6, C_{10}, 6 D_2, D_3, D_5, D_6, D_{10}	**Tet**, 3 C_2, C_3, C_5, 7 D_2, D_3, 2 D_5
R9.16	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_6, 3 D_2, 2 D_3, D_4, D_5, D_6	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, 3 D_2, 2 D_3, D_4, D_6	**Oct**, C_2, C_6, 2 D_2, D_3, D_4, D_6	**Tet**, 2 C_2, C_3, C_4, 3 D_2, D_3, D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R9.17	4 C_2, C_3, 4 C_4, 3 C_6, C_{12}, 6 D_2, 4 D_4	4 C_2, C_3, 4 C_4, 3 C_6, C_{12}, 6 D_2, 4 D_4	3 C_2, 2 C_6, 6 D_2, 4 D_4	4 C_2, C_3, 4 C_4, 6 D_2, 4 D_4
R9.18	3 **Tet**, 4 C_2, C_3, C_4, C_6, 16 D_2, 2 D_4	3 **Tet**, 4 C_2, C_3, C_4, C_6, 16 D_2, 2 D_4	**Tet**, 2 C_2, C_6, 12 D_2, 2 D_4	3 **Tet**, 4 C_2, C_3, C_4, 16 D_2, 2 D_4
R9.19	5 C_2, 5 C_4, 4 C_8, 15 D_2, 6 D_4	5 C_2, 5 C_4, 2 C_8, 15 D_2, 6 D_4	3 C_2, 2 C_4, 13 D_2, 5 D_4	5 C_2, 3 C_4, 15 D_2, 4 D_4
R9.20	5 C_2, 6 C_4, 6 C_8, 13 D_2, 3 D_4	5 C_2, 6 C_4, 4 C_8, 13 D_2, 3 D_4	3 C_2, 3 C_4, 3 C_8, 11 D_2, 2 D_4	5 C_2, 2 C_4, 13 D_2, 3 D_4
R9.21	4 C_2, 4 C_4, 4 C_8, 9 D_2, D_4	4 C_2, 4 C_4, 2 C_8, 9 D_2, D_4	3 C_2, 2 C_4, 2 C_8, 9 D_2, D_4	4 C_2, 2 C_4, 9 D_2, D_4
R9.22	7 C_2, 3 C_4, 4 C_8, 30 D_2	7 C_2, 3 C_4, 2 C_8, 30 D_2	2 C_2, 2 C_4, 2 C_8, 19 D_2	7 C_2, C_4, 30 D_2
R9.23	3 C_2, 4 C_4, 2 C_8, 8 D_2, D_4	3 C_2, 4 C_4, 8 D_2, D_4	2 C_2, 3 C_4, 8 D_2, D_4	3 C_2, C_4, 8 D_2
R9.24	2 C_2, C_3, 2 C_4, C_6, 2 C_8, C_{12}, 2 C_{24}, 2 D_2, D_3, D_6	2 C_2, C_3, 2 C_4, C_6, 2 D_2, D_3, D_6	2 C_2, C_4, C_6, 2 D_2, D_3, D_6	2 C_2, C_3, 2 D_2, D_3
R9.25	3 C_2, C_3, 2 C_4, C_6, 4 C_8, C_{12}, 2 C_{24}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 2 C_8, 3 D_2, 2 D_3, D_6	2 C_2, C_4, C_6, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, D_3
R9.26	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 2 C_{12}, 6 D_2	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 6 D_2	2 C_2, C_4, C_6, 5 D_2	**Tet**, 3 C_2, C_3, 6 D_2
R9.27	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 2 C_{12}, 6 D_2	**Tet**, 3 C_2, C_3, 2 C_4, C_6, C_{12}, 6 D_2	**Tet**, 2 C_2, C_4, C_6, 6 D_2	**Tet**, 3 C_2, C_3, C_4, 6 D_2
R9.28	5 C_2, C_3, 2 C_4, 5 C_6, 4 C_{12}, 13 D_2	5 C_2, C_3, 2 C_4, 5 C_6, 2 C_{12}, 13 D_2	3 C_2, 2 C_4, C_6, 11 D_2	5 C_2, C_3, 13 D_2
R9.29	C_2, C_3, 3 C_7, 3 C_{14}, 3 C_{21}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R9.30	C_2, 9 C_{19}, 9 C_{38}	C_2	C_2	C_2
R9.31	3 C_2, 2 C_4, 2 C_5, 6 C_{10}, 8 C_{20}, 3 D_2	3 C_2, 2 C_4, C_5, 3 C_{10}, 2 C_{20}, 3 D_2	2 C_2, 2 C_4, C_{10}, 3 D_2	3 C_2, C_5, C_{10}, 3 D_2
R9.32	C_2, C_3, C_4, C_6, 3 C_9, 2 C_{12}, 3 C_{18}, 6 C_{36}	C_2, C_3, C_4, C_6, C_9, C_{18}	C_2, C_4, C_6, C_{18}	C_2, C_3, C_9
Genus 10				
R10.1	**Tet**, C_2, 4 C_3, C_6, 2 C_9, D_2, 2 D_3, D_6	**Tet**, C_2, 4 C_3, C_6, C_9, D_2, 2 D_3, D_6	**Tet**, C_2, C_6, D_2, 2 D_3, D_6	C_2, 2 C_3, D_2, 2 D_3
R10.2	2 **Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 4 C_6, C_{12}, 3 D_2, 2 D_3, D_4, D_6	2 **Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 4 C_6, 3 D_2, 2 D_3, D_4, D_6	2 **Tet**, **Oct**, 2 C_2, C_4, 3 C_6, 3 D_2, 2 D_3, D_4, D_6	2 C_2, 2 C_3, 3 D_2, 2 D_3
R10.3	2 **Tet**, 2 **Ico**, C_2, 3 C_3, 2 C_5, C_6, 2 C_{15}, D_2, D_3, 2 D_5	2 **Tet**, **Ico**, C_2, 3 C_3, C_5, C_6, D_2, D_3, D_5	2 **Tet**, **Ico**, C_2, C_6, D_2, D_3, D_5	C_2, C_3, C_5, D_2, D_3, D_5
R10.4	C_2, 4 C_3, C_6, 3 C_9, 3 C_{18}, 2 D_3	C_2, 4 C_3, C_6, C_9, C_{18}, 2 D_3	C_2, C_6, C_{18}, 2 D_3	C_2, 2 C_3, 2 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R10.5	2 C_2, 3 C_3, C_4, 4 C_6, C_8, C_{12}, 2 C_{24}, 2 D_2, D_3, D_4, D_6	2 C_2, 3 C_3, C_4, 4 C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, 3 C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, 2 D_2, D_3
R10.6	**Tet**, **Oct**, 2 **Ico**, C_2, C_3, C_4, 2 C_5, D_2, D_3, D_4, 2 D_5	**Tet**, **Oct**, **Ico**, C_2, C_3, C_4, C_5, D_2, D_3, D_4, D_5	**Tet**, **Oct**, **Ico**, C_2, C_4, D_2, D_3, D_4, D_5	C_2, C_3, C_5, D_2, D_3, D_5
R10.7	3 C_2, 3 C_3, C_4, 3 C_6, 2 C_{12}, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 3 C_3, C_4, 3 C_6, 2 C_{12}, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 2 C_6, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 3 C_3, C_4, 4 D_2, 6 D_3, D_4
R10.8	3 C_2, 5 C_3, C_4, 5 C_6, 4 D_2, 6 D_3, D_4, 3 D_6	3 C_2, 5 C_3, C_4, 5 C_6, 4 D_2, 6 D_3, D_4, 3 D_6	3 C_2, C_4, 5 C_6, 4 D_2, 6 D_3, D_4, 3 D_6	3 C_2, 4 C_3, 4 D_2, 6 D_3
R10.9	**Tet**, **Oct**, C_2, C_3, C_4, C_7, D_2, D_3, D_4	**Tet**, **Oct**, C_2, C_3, C_4, D_2, D_3, D_4	**Tet**, **Oct**, C_2, C_4, D_2, D_3, D_4	C_2, C_3, D_2, D_3
R10.10	C_2, 3 C_3, C_4, C_6, 2 C_{12}, 2 D_3	C_2, 3 C_3, C_4, C_6, C_{12}, 2 D_3	C_2, C_4, C_6, C_{12}, 2 D_3	C_2, 2 C_3, 2 D_3
R10.11	3 C_2, C_4, 5 C_{11}, 10 C_{22}, 4 D_2, D_4, 5 D_{11}, 5 D_{22}	3 C_2, C_4, C_{11}, 2 C_{22}, 4 D_2, D_4, D_{11}, D_{22}	3 C_2, C_4, C_{22}, 4 D_2, D_4, D_{11}, D_{22}	3 C_2, C_{11}, 4 D_2, D_{11}
R10.12	2 C_2, 2 C_4, 2 C_5, C_8, 2 C_{10}, 4 C_{20}, 4 C_{40}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 4 D_{20}	2 C_2, 2 C_4, C_5, C_{10}, C_{20}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, 2 C_4, C_{10}, C_{20}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, C_5, 2 D_2, D_5
R10.13	3 C_2, 7 C_3, 7 C_6, 3 D_2, 5 D_3, 2 D_6	3 C_2, 7 C_3, 7 C_6, 3 D_2, 5 D_3, 2 D_6	3 C_2, 7 C_6, 3 D_2, 5 D_3, 2 D_6	3 C_2, 5 C_3, 3 D_2, 5 D_3
R10.14	3 C_2, 4 C_3, 3 C_6, 3 D_2, 7 D_3, 3 D_6	3 C_2, 4 C_3, 3 C_6, 3 D_2, 7 D_3, 3 D_6	3 C_2, C_6, 3 D_2, 7 D_3, 3 D_6	3 C_2, 4 C_3, 3 D_2, 7 D_3
R10.15	3 C_2, 4 C_3, 6 C_6, 3 D_2, 4 D_3, 2 D_6	3 C_2, 4 C_3, 6 C_6, 3 D_2, 4 D_3, 2 D_6	3 C_2, 5 C_6, 3 D_2, 4 D_3, 2 D_6	3 C_2, 2 C_3, 3 D_2, 4 D_3
R10.16	3 C_2, 3 C_3, C_4, 8 C_6, C_{12}, 4 D_2, D_3, D_4, D_6	3 C_2, 3 C_3, C_4, 8 C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_4, 6 C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, 4 D_2, D_3
R10.17	3 C_2, 3 C_3, C_4, 4 C_6, 2 C_{12}, 4 D_2, 4 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 3 C_3, C_4, 4 C_6, C_{12}, 4 D_2, 4 D_3, D_4, 4 D_6, D_{12}	3 C_2, C_4, 2 C_6, 4 D_2, 4 D_3, D_4, 4 D_6, D_{12}	3 C_2, 3 C_3, C_6, 4 D_2, 4 D_3, 2 D_6
R10.18	3 C_2, 3 C_3, C_4, 5 C_6, 5 C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, 3 C_3, C_4, 5 C_6, 4 C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, 4 C_6, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, C_3, C_4, 4 D_2, 2 D_3, D_4
R10.19	3 C_2, C_3, 2 C_5, 3 C_6, 2 C_{10}, 2 C_{15}, 2 C_{30}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_3, C_5, 3 C_6, C_{10}, 3 D_2, 2 D_5, D_{10}	3 C_2, C_6, 3 D_2, 2 D_5, D_{10}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}
R10.20	C_2, 3 C_3, C_6, 6 C_9, 3 C_{18}, D_3	C_2, 3 C_3, C_6, 2 C_9, C_{18}, D_3	C_2, C_6, C_{18}, D_3	C_2, 2 C_3, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R10.21	2 C_2, C_3, 2 C_4, 2 C_6, C_8, 2 C_{12}, 2 C_{24}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, 2 C_6, 2 D_2, D_4	2 C_2, 2 C_4, C_6, 2 D_2, D_4	2 C_2, 2 D_2
R10.22	C_2, C_3, C_6, 3 C_7, 3 C_{14}, 6 C_{21}, 6 C_{42}	C_2, C_3, C_6	C_2, C_6	C_2
R10.23	3 C_2, 5 C_{11}, 15 C_{22}, 3 D_2	3 C_2, C_{11}, 3 C_{22}, 3 D_2	3 C_2, C_{22}, 3 D_2	3 C_2, C_{11}, 3 D_2
R10.24	C_2, C_4, 2 C_5, 2 C_8, 2 C_{10}, 4 C_{20}, 8 C_{40}	C_2, C_4, C_5, C_{10}, C_{20}	C_2, C_4, C_{10}, C_{20}	C_2, C_5
Genus 11				
R11.1	**Tet**, 2 **Oct**, **Ico**, 5 C_2, C_3, 2 C_4, C_5, 3 C_6, C_{10}, 16 D_2, 4 D_3, 4 D_4, 2 D_5, 6 D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 5 C_2, C_3, 2 C_4, C_5, 3 C_6, C_{10}, 16 D_2, 4 D_3, 4 D_4, 2 D_5, 6 D_6, D_{10}	**Tet**, **Oct**, **Ico**, 3 C_2, C_4, 16 D_2, 3 D_3, 4 D_4, 2 D_5, 6 D_6, D_{10}	**Tet**, **Oct**, **Ico**, 5 C_2, C_3, C_4, C_5, C_6, C_{10}, 16 D_2, 4 D_3, 2 D_4, 2 D_5, 2 D_6, D_{10}
R11.2	3 C_2, C_3, 5 C_4, 2 C_6, C_8, 2 C_{12}, 2 C_{24}, 4 D_2, D_3, 2 D_4, D_6, D_{12}	3 C_2, C_3, 5 C_4, 2 C_6, C_{12}, 4 D_2, D_3, 2 D_4, D_6, D_{12}	3 C_2, 4 C_4, C_6, 4 D_2, D_3, 2 D_4, D_6, D_{12}	3 C_2, C_3, C_6, 4 D_2, D_3, D_6
R11.3	5 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, 4 C_{12}, 4 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_{12}	5 C_2, C_3, 3 C_4, 3 C_6, C_8, 3 C_{12}, C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 5 D_{12}	3 C_2, 2 C_4, C_6, 13 D_2, D_3, 3 D_4, 3 D_6, 3 D_{12}	5 C_2, C_3, C_4, C_6, C_{12}, 13 D_2, 2 D_3, D_4, 2 D_6, D_{12}
R11.4	3 C_2, 2 C_4, 5 C_{11}, 5 C_{22}, 5 C_{44}, 3 D_2, 10 D_{11}, 5 D_{22}	3 C_2, 2 C_4, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	2 C_2, 2 C_4, C_{22}, 3 D_2, D_{11}, D_{22}	3 C_2, C_{11}, 3 D_2, D_{11}
R11.5	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_6, 3 D_2, 2 D_3, D_4, D_5, D_6	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_6, 3 D_2, 2 D_3, D_4, D_5, D_6	**Tet**, **Oct**, **Ico**, 2 C_2, C_4, 3 D_2, 2 D_3, D_4, D_5, D_6	**Tet**, **Ico**, 2 C_2, C_3, C_5, C_6, 3 D_2, 2 D_3, D_5, D_6
R11.6	5 C_2, C_3, 2 C_4, 3 C_6, 2 C_8, 13 D_2, 2 D_3, 3 D_4, 4 D_6	5 C_2, C_3, 2 C_4, 3 C_6, C_8, 13 D_2, 2 D_3, 3 D_4, 4 D_6	3 C_2, 2 C_4, 2 C_6, C_8, 13 D_2, D_3, 3 D_4, 4 D_6	5 C_2, C_3, 13 D_2, 2 D_3
R11.7	3 C_2, C_3, 3 C_4, 2 C_6, 2 C_8, 4 D_2, D_3, 2 D_4, D_6	3 C_2, C_3, 3 C_4, 2 C_6, C_8, 4 D_2, D_3, 2 D_4, D_6	3 C_2, 3 C_4, 2 C_6, C_8, 4 D_2, D_3, 2 D_4, D_6	3 C_2, C_3, 4 D_2, D_3
R11.8	C_2, C_3, C_6, 5 C_{11}, 5 C_{33}, 5 D_{11}	C_2, C_3, C_6, C_{11}, D_{11}	C_2, C_6, D_{11}	C_2, C_{11}, D_{11}
R11.9	4 C_2, 2 C_4, 4 C_8, 2 C_{16}, 9 D_2, 3 D_4, 4 D_8	4 C_2, 2 C_4, 2 C_8, 9 D_2, 3 D_4, 3 D_8	2 C_2, 2 C_4, 2 C_8, 9 D_2, 3 D_4, 3 D_8	4 C_2, 9 D_2
R11.10	3 C_2, 3 C_4, 4 C_8, 4 C_{16}, 4 D_2, 2 D_4, 2 D_8	3 C_2, 3 C_4, 2 C_8, 4 D_2, 2 D_4, 2 D_8	2 C_2, 3 C_4, 2 C_8, 4 D_2, 2 D_4, 2 D_8	3 C_2, 4 D_2
R11.11	C_2, 11 C_{23}, 11 C_{46}	C_2	C_2	C_2
R11.12	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_8, 4 C_{12}, 8 C_{24}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_8, 3 C_{12}, 2 C_{24}, 3 D_2	2 C_2, C_4, C_6, 3 D_2	3 C_2, C_3, C_4, C_6, C_{12}, 3 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R11.13	2 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 3 C_{12}, 4 C_{24}, 2 D_2	2 C_2, C_3, 2 C_4, 2 C_6, C_{12}, 2 D_2	2 C_2, C_4, C_6, 2 D_2	2 C_2, C_3, C_6, 2 D_2
R11.14	C_2, C_4, 5 C_{11}, 5 C_{22}, 10 C_{44}	C_2, C_4, C_{11}, C_{22}	C_2, C_4, C_{22}	C_2, C_{11}
Genus 12				
R12.1	**Tet**, **Oct**, 2 C_2, C_3, C_4, 2 C_5, 2 C_{10}, 4 C_{15}, 3 D_2, D_3, D_4, 2 D_5, 2 D_{10}, 4 D_{15}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_5, C_{10}, C_{15}, 3 D_2, D_3, D_4, D_5, D_{10}, D_{15}	**Tet**, **Oct**, 2 C_2, C_4, C_{10}, 3 D_2, D_3, D_4, D_5, D_{10}, D_{15}	**Tet**, 2 C_2, C_3, C_5, 3 D_2, D_3, D_5
R12.2	3 C_2, C_4, 6 C_{13}, 12 C_{26}, 4 D_2, D_4, 6 D_{13}, 6 D_{26}	3 C_2, C_4, C_{13}, 2 C_{26}, 4 D_2, D_4, D_{13}, D_{26}	3 C_2, C_4, C_{26}, 4 D_2, D_4, D_{13}, D_{26}	3 C_2, C_{13}, 4 D_2, D_{13}
R12.3	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 2 C_{12}, 2 C_{16}, 4 C_{24}, 4 C_{48}, 2 D_2, D_3, D_4, D_6, 2 D_8, 2 D_{12}, 4 D_{24}	2 C_2, C_3, 2 C_4, C_6, C_8, C_{12}, C_{24}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{24}	2 C_2, 2 C_4, C_6, C_8, C_{12}, C_{24}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{24}	2 C_2, C_3, 2 D_2, D_3
R12.4	3 C_2, C_3, C_6, 3 C_7, 3 C_{14}, 3 C_{21}, 3 D_2, 2 D_3, D_6, 6 D_7, 3 D_{14}, 3 D_{21}	3 C_2, C_3, C_6, C_7, C_{14}, C_{21}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, D_{21}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, D_{21}	3 C_2, C_3, C_7, 3 D_2, 2 D_3, 2 D_7
R12.5	3 C_2, C_4, 2 C_5, 2 C_8, 4 C_{10}, 2 C_{20}, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, 2 D_{20}	3 C_2, C_4, C_5, C_8, 2 C_{10}, C_{20}, 4 D_2, 2 D_4, D_5, D_8, D_{10}, D_{20}	3 C_2, C_{10}, 4 D_2, 2 D_4, D_5, D_8, D_{10}, D_{20}	3 C_2, C_4, C_5, 4 D_2, 2 D_4, D_5
R12.6	3 C_2, C_3, 2 C_5, C_6, 6 C_{10}, 2 C_{15}, 2 C_{30}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6	3 C_2, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6
R12.7	3 C_2, C_4, 3 C_7, 9 C_{14}, 3 C_{28}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R12.8	**Tet**, C_2, C_3, 2 C_5, 2 C_{10}, 4 C_{15}, D_2	**Tet**, C_2, C_3, C_5, C_{10}, C_{15}, D_2	**Tet**, C_2, C_{10}, D_2	**Tet**, C_2, C_3, C_5, D_2
R12.9	C_2, 2 C_5, 2 C_{10}, 10 C_{25}, 10 C_{50}	C_2	C_2	C_2
R12.10	3 C_2, 6 C_{13}, 18 C_{26}, 3 D_2	3 C_2, C_{13}, 3 C_{26}, 3 D_2	3 C_2, C_{26}, 3 D_2	3 C_2, C_{13}, 3 D_2
R12.11	C_2, C_3, C_4, C_6, 2 C_8, 2 C_{12}, 4 C_{16}, 4 C_{24}, 8 C_{48}	C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}	C_2, C_4, C_6, C_8, C_{12}, C_{24}	C_2, C_3
Genus 13				
R13.1	2 **Tet**, 2 **Ico**, 3 C_2, 3 C_3, 2 C_5, 2 C_6, 2 C_{10}, 2 C_{15}, 7 D_2, 5 D_3, 4 D_5, 3 D_6, 2 D_{10}, 2 D_{15}	2 **Tet**, **Ico**, 3 C_2, 3 C_3, C_5, 2 C_6, C_{10}, C_{15}, 7 D_2, 5 D_3, 2 D_5, 3 D_6, D_{10}, D_{15}	2 C_2, C_6, C_{10}, 6 D_2, 4 D_3, D_5, 3 D_6, D_{10}, D_{15}	2 **Tet**, 3 C_2, 3 C_3, C_5, C_6, 7 D_2, 5 D_3, D_5, 2 D_6

	Mapping	Immersion		Embedding
	necessary and sufficient	necessary	sufficient	necessary
R13.2	5 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 2 C_4, 3 C_6, C_{12}, 24 D_2, 2 D_3, 5 D_4, 2 D_6	5 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 2 C_4, 3 C_6, 24 D_2, 2 D_3, 5 D_4, 2 D_6	2 **Tet**, **Oct**, 2 C_2, C_4, C_6, 20 D_2, D_3, 5 D_4, 2 D_6	**Tet**, **Oct**, 5 C_2, C_3, C_4, C_6, 24 D_2, 2 D_3, 2 D_4, 2 D_6
R13.3	5 C_2, 2 C_3, 2 C_4, 4 C_6, C_{12}, 13 D_2, 6 D_3, 7 D_6	5 C_2, 2 C_3, 2 C_4, 4 C_6, 13 D_2, 6 D_3, 7 D_6	3 C_2, 2 C_4, 3 C_6, 11 D_2, 3 D_3, 6 D_6	5 C_2, 2 C_3, C_6, 13 D_2, 5 D_3, 2 D_6
R13.4	6 C_2, 6 C_4, 4 C_8, 4 C_{16}, 19 D_2, 4 D_4, 2 D_8	6 C_2, 6 C_4, 3 C_8, C_{16}, 19 D_2, 4 D_4, 2 D_8	3 C_2, 4 C_4, 17 D_2, 4 D_4, 2 D_8	6 C_2, 2 C_4, 19 D_2, 3 D_4
R13.5	4 C_2, 6 C_4, 2 C_8, 2 C_{16}, 12 D_2, 4 D_4, 2 D_8	4 C_2, 6 C_4, C_8, 12 D_2, 4 D_4, 2 D_8	3 C_2, 4 C_4, 12 D_2, 4 D_4, 2 D_8	4 C_2, 2 C_4, 12 D_2, 3 D_4
R13.6	5 C_2, 2 C_4, 3 C_7, 9 C_{14}, 6 C_{28}, 13 D_2, 6 D_7, 12 D_{14}	5 C_2, 2 C_4, C_7, 3 C_{14}, C_{28}, 13 D_2, 2 D_7, 4 D_{14}	3 C_2, 2 C_4, C_{14}, 11 D_2, D_7, 3 D_{14}	5 C_2, C_7, C_{14}, 13 D_2, 2 D_7, D_{14}
R13.7	3 C_2, 2 C_4, 6 C_{13}, 6 C_{26}, 6 C_{52}, 3 D_2, 12 D_{13}, 6 D_{26}	3 C_2, 2 C_4, C_{13}, C_{26}, 3 D_2, 2 D_{13}, D_{26}	2 C_2, 2 C_4, C_{26}, 3 D_2, D_{13}, D_{26}	3 C_2, C_{13}, 3 D_2, D_{13}
R13.8	**Tet**, 2 **Ico**, 3 C_2, C_3, 2 C_5, C_6, 2 C_{10}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_5, C_6, C_{10}, 7 D_2, 2 D_3, 2 D_5, D_6, D_{10}	2 C_2, C_6, C_{10}, 6 D_2, D_3, D_5, D_6, D_{10}	**Tet**, 3 C_2, C_3, C_5, 7 D_2, 2 D_3, D_5
R13.9	2 **Tet**, 7 C_2, 3 C_3, 7 C_6, 31 D_2, 4 D_3, 9 D_6	2 **Tet**, 7 C_2, 3 C_3, 7 C_6, 31 D_2, 4 D_3, 9 D_6	3 C_2, 4 C_6, 23 D_2, 2 D_3, 7 D_6	7 C_2, C_3, 2 C_6, 31 D_2, 4 D_3, 7 D_6
R13.10	**Tet**, 7 C_2, C_3, 2 C_4, 3 C_6, C_{12}, 34 D_2, 5 D_4	**Tet**, 7 C_2, C_3, 2 C_4, 3 C_6, 34 D_2, 5 D_4	3 C_2, C_4, 2 C_6, 27 D_2, 5 D_4	7 C_2, C_4, 34 D_2, 2 D_4
R13.11	5 C_2, C_3, 4 C_4, 3 C_6, 4 C_{12}, 13 D_2, 3 D_4	5 C_2, C_3, 4 C_4, 3 C_6, 3 C_{12}, 13 D_2, 3 D_4	3 C_2, 3 C_4, 2 C_6, 2 C_{12}, 13 D_2, 3 D_4	5 C_2, 13 D_2
R13.12	C_2, 3 C_3, 2 C_5, C_6, 10 C_{15}, D_3, 2 D_5, 4 D_{15}	C_2, 3 C_3, C_5, C_6, 4 C_{15}, D_3, D_5, 2 D_{15}	C_2, C_6, D_3, D_5, 2 D_{15}	C_2, C_3, C_5, D_3, D_5
R13.13	C_2, C_3, C_6, 6 C_{13}, 6 C_{39}, 6 D_{13}	C_2, C_3, C_6, C_{13}, D_{13}	C_2, C_6, D_{13}	C_2, C_{13}, D_{13}
R13.14	3 C_2, C_3, 3 C_6, 3 C_9, 3 C_{18}, 6 D_2	3 C_2, C_3, 3 C_6, 6 D_2	2 C_2, C_6, 5 D_2	3 C_2, 6 D_2
R13.15	3 C_2, 3 C_3, 2 C_4, 3 C_6, 2 C_{12}, 3 D_2, 6 D_3, 3 D_6	3 C_2, 3 C_3, 2 C_4, 3 C_6, 3 D_2, 6 D_3, 3 D_6	2 C_2, 2 C_4, 3 C_6, 3 D_2, 3 D_3, 3 D_6	3 C_2, 3 C_3, 3 D_2, 4 D_3
R13.16	3 C_2, 3 C_3, 2 C_4, 5 C_6, 7 C_{12}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, 2 C_4, 5 C_6, 5 C_{12}, 3 D_2, 2 D_3, D_6	2 C_2, 2 C_4, 4 C_6, 3 C_{12}, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, 2 D_3
R13.17	3 C_2, 3 C_4, 4 C_8, 6 C_{16}, 4 D_2, 2 D_4	3 C_2, 3 C_4, 2 C_8, 4 D_2, 2 D_4	2 C_2, 2 C_4, 4 D_2, 2 D_4	3 C_2, 4 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R13.18	3 C_2, 3 C_4, 3 C_8, 4 C_{16}, 6 D_2	3 C_2, 3 C_4, C_8, 6 D_2	2 C_2, 2 C_4, 6 D_2	3 C_2, C_4, 6 D_2
R13.19	5 C_2, 3 C_4, 6 C_8, 8 C_{16}, 13 D_2	5 C_2, 3 C_4, 4 C_8, 2 C_{16}, 13 D_2	2 C_2, 2 C_4, 11 D_2	5 C_2, C_4, 13 D_2
R13.20	C_2, C_3, C_6, 3 C_9, 3 C_{18}, 9 C_{27}, 9 C_{54}	C_2, C_3, C_6	C_2, C_6	C_2
R13.21	3 C_2, 2 C_4, 3 C_7, 9 C_{14}, 12 C_{28}, 3 D_2	3 C_2, 2 C_4, C_7, 3 C_{14}, 2 C_{28}, 3 D_2	2 C_2, 2 C_4, C_{14}, 3 D_2	3 C_2, C_7, C_{14}, 3 D_2
R13.22	C_2, C_4, 6 C_{13}, 6 C_{26}, 12 C_{52}	C_2, C_4, C_{13}, C_{26}	C_2, C_4, C_{26}	C_2, C_{13}
Genus 14				
R14.1	**Tet**, C_2, C_3, C_6, 3 C_7, C_{13}, D_2, D_3, D_6, 3 D_7, D_{13}	**Tet**, C_2, C_3, C_6, C_7, C_{13}, D_2, D_3, D_6, D_7, D_{13}	**Tet**, C_2, C_6, D_2, D_3, D_6, D_7, D_{13}	**Tet**, C_2, C_3, C_7, C_{13}, D_2, D_3, D_7, D_{13}
R14.2	**Tet**, C_2, C_3, C_6, 3 C_7, 2 C_{13}, D_2, 2 D_3, D_6, 3 D_7, 2 D_{13}	**Tet**, C_2, C_3, C_6, C_7, 2 C_{13}, D_2, 2 D_3, D_6, D_7, 2 D_{13}	**Tet**, C_2, C_6, D_2, 2 D_3, D_6, D_7, 2 D_{13}	**Tet**, C_2, C_3, C_7, 2 C_{13}, D_2, 2 D_3, D_7, 2 D_{13}
R14.3	**Tet**, C_2, C_3, C_6, 3 C_7, C_{13}, D_2, D_3, D_6, 3 D_7, D_{13}	**Tet**, C_2, C_3, C_6, C_7, C_{13}, D_2, D_3, D_6, D_7, D_{13}	**Tet**, C_2, C_6, D_2, D_3, D_6, D_7, D_{13}	**Tet**, C_2, C_3, C_7, C_{13}, D_2, D_3, D_7, D_{13}
R14.4	3 C_2, C_3, C_4, 2 C_5, 2 C_6, 4 C_{10}, 4 C_{15}, 8 C_{30}, 4 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 4 D_{15}, 4 D_{30}	3 C_2, C_3, C_4, C_5, 2 C_6, 2 C_{10}, C_{15}, 2 C_{30}, 4 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{15}, D_{30}	3 C_2, C_4, C_6, C_{10}, C_{30}, 4 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{15}, D_{30}	3 C_2, C_3, C_5, C_{15}, 4 D_2, D_3, D_5, D_{15}
R14.5	2 C_2, 2 C_4, 3 C_7, C_8, 3 C_{14}, 6 C_{28}, 6 C_{56}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 6 D_{28}	2 C_2, 2 C_4, C_7, C_{14}, C_{28}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, 2 C_4, C_{14}, C_{28}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, C_7, 2 D_2, D_7
R14.6	3 C_2, C_3, C_4, 2 C_6, 2 C_8, C_{12}, 4 C_{16}, 2 C_{24}, 4 D_2, D_3, 2 D_4, D_6, 4 D_8, D_{12}, 4 D_{16}, 2 D_{24}	3 C_2, C_3, C_4, 2 C_6, C_8, C_{12}, C_{16}, C_{24}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, D_{16}, D_{24}	3 C_2, C_6, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, D_{16}, D_{24}	3 C_2, C_3, C_4, C_8, 4 D_2, D_3, 2 D_4, 2 D_8
R14.7	3 C_2, C_3, 3 C_6, 3 C_7, 3 C_{14}, 3 C_{21}, 3 C_{42}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, C_3, 3 C_6, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}	3 C_2, C_6, 3 D_2, 2 D_7, D_{14}	3 C_2, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}
R14.8	2 C_2, 2 C_4, 2 C_5, C_8, 2 C_{10}, 4 C_{20}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 2 D_{20}	2 C_2, 2 C_4, C_5, C_{10}, C_{20}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, 2 C_4, C_{10}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, C_5, 2 D_2, D_5
R14.9	C_2, 2 C_5, 3 C_7, 2 C_{10}, 6 C_{35}, 3 D_7	C_2, C_5, C_7, C_{10}, D_7	C_2, C_{10}, D_7	C_2, C_7, D_7
R14.10	C_2, 14 C_{29}, 14 C_{58}	C_2	C_2	C_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R14.11	3 C_2, C_3, 2 C_5, 3 C_6, 6 C_{10}, 4 C_{15}, 12 C_{30}, 3 D_2	3 C_2, C_3, C_5, 3 C_6, 3 C_{10}, C_{15}, 3 C_{30}, 3 D_2	3 C_2, C_6, C_{10}, C_{30}, 3 D_2	3 C_2, C_3, C_5, C_{15}, 3 D_2
R14.12	C_2, C_4, 3 C_7, 2 C_8, 3 C_{14}, 6 C_{28}, 12 C_{56}	C_2, C_4, C_7, C_{14}, C_{28}	C_2, C_4, C_{14}, C_{28}	C_2, C_7
Genus 15				
R15.1	C_2, C_3, 3 C_7, 3 C_9, 3 D_2, D_3, 3 D_7, 3 D_9	C_2, C_3, 3 C_7, C_9, 3 D_2, D_3, 3 D_7, D_9	C_2, 3 D_2, D_3, 3 D_7, D_9	C_2, C_3, 3 C_7, 3 D_2, D_3, 3 D_7
R15.2	C_2, C_3, 7 C_7, 3 C_{14}, D_3, 3 D_7	C_2, C_3, 5 C_7, C_{14}, D_3, 3 D_7	C_2, C_{14}, D_3, 3 D_7	C_2, C_3, 4 C_7, D_3, 3 D_7
R15.3	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 2 C_{20}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_4, C_6, C_{10}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5
R15.4	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_6, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, 2 C_2, C_3, C_4, C_7, 3 D_2, 2 D_3, 2 D_4, D_7
R15.5	5 C_2, C_3, 2 C_4, 3 C_6, 3 C_9, 3 C_{18}, 16 D_2, 2 D_3, 4 D_4, 4 D_6, 6 D_9, 3 D_{18}	5 C_2, C_3, 2 C_4, 3 C_6, C_9, C_{18}, 16 D_2, 2 D_3, 4 D_4, 4 D_6, 2 D_9, D_{18}	3 C_2, 2 C_4, C_6, 16 D_2, D_3, 4 D_4, 4 D_6, D_9, D_{18}	5 C_2, C_3, C_6, 16 D_2, 2 D_3, D_6
R15.6	3 C_2, 4 C_4, 3 C_8, 4 C_{16}, 4 C_{32}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}	3 C_2, 4 C_4, 2 C_8, C_{16}, 4 D_2, 2 D_4, D_8, D_{16}	3 C_2, 3 C_4, 4 D_2, 2 D_4, D_8, D_{16}	3 C_2, C_4, C_8, 4 D_2, D_4, D_8
R15.7	5 C_2, 3 C_4, 4 C_8, 8 C_{16}, 8 C_{32}, 13 D_2, 3 D_4, 6 D_8, 12 D_{16}	5 C_2, 3 C_4, 3 C_8, 3 C_{16}, C_{32}, 13 D_2, 3 D_4, 4 D_8, 5 D_{16}	3 C_2, 2 C_4, 13 D_2, 2 D_4, 3 D_8, 3 D_{16}	5 C_2, C_4, C_8, C_{16}, 13 D_2, 2 D_4, 2 D_8, D_{16}
R15.8	3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 4 C_{15}, 2 C_{20}, 4 C_{30}, 4 C_{60}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 8 D_{15}, 4 D_{30}	3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{15}, C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	2 C_2, 2 C_4, C_6, C_{10}, C_{30}, 3 D_2, D_3, D_5, D_6, D_{10}, D_{15}, D_{30}	3 C_2, C_3, C_5, C_{15}, 3 D_2, D_3, D_5, D_{15}
R15.9	**Tet**, 2 **Ico**, 3 C_2, C_3, 2 C_5, C_6, 2 C_{10}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_5, C_6, C_{10}, 7 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 2 C_2, C_6, C_{10}, 7 D_2, D_3, D_5, D_6, D_{10}	**Tet**, 3 C_2, C_3, C_5, 7 D_2, D_3, D_5
R15.10	C_2, 15 C_7, 3 C_{14}, 3 D_7	C_2, 11 C_7, C_{14}, 3 D_7	C_2, C_{14}, 3 D_7	C_2, 9 C_7, 3 D_7
R15.11	3 C_2, C_3, 3 C_4, C_6, 3 C_8, C_{12}, 4 D_2, D_3, 3 D_4, D_6, 2 D_8	3 C_2, C_3, 3 C_4, C_6, 2 C_8, 4 D_2, D_3, 3 D_4, D_6, D_8	2 C_2, 3 C_4, C_6, 2 C_8, 4 D_2, D_3, 3 D_4, D_6, D_8	3 C_2, C_3, 4 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R15.12	4 C_2, C_3, 2 C_4, C_6, 2 C_8, 2 C_{12}, 12 D_2, 2 D_3, 4 D_4, 2 D_6, 2 D_8, 2 D_{12}	4 C_2, C_3, 2 C_4, C_6, C_8, C_{12}, 12 D_2, 2 D_3, 4 D_4, 2 D_6, D_8, D_{12}	2 C_2, 2 C_4, C_6, C_8, C_{12}, 12 D_2, D_3, 4 D_4, 2 D_6, D_8, D_{12}	4 C_2, C_3, 12 D_2, D_3
R15.13	5 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, 4 C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_{12}	5 C_2, C_3, 3 C_4, 3 C_6, C_8, 3 C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_{12}	3 C_2, 2 C_4, C_6, C_{12}, 13 D_2, D_3, 3 D_4, 4 D_6, 3 D_{12}	5 C_2, C_3, C_4, C_6, 13 D_2, 2 D_3, D_4, D_6
R15.14	3 C_2, C_3, 5 C_4, 2 C_6, C_8, 7 C_{12}, 4 D_2, D_3, 2 D_4, D_6, 2 D_{12}	3 C_2, C_3, 5 C_4, 2 C_6, 6 C_{12}, 4 D_2, D_3, 2 D_4, D_6, 2 D_{12}	3 C_2, 3 C_4, C_6, 2 C_{12}, 4 D_2, D_3, 2 D_4, D_6, 2 D_{12}	3 C_2, C_3, 4 D_2, D_3
R15.15	2 C_2, 2 C_4, 2 C_5, 2 C_8, 2 C_{10}, 2 C_{20}, 4 C_{40}, 2 D_2, 2 D_5, 2 D_{10}	2 C_2, 2 C_4, C_5, C_{10}, 2 D_2, D_5, D_{10}	2 C_2, C_4, C_{10}, 2 D_2, D_5, D_{10}	2 C_2, C_5, 2 D_2, D_5
R15.16	3 C_2, 2 C_4, 2 C_5, 4 C_8, 2 C_{10}, 2 C_{20}, 4 C_{40}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, 2 C_4, C_5, 2 C_8, C_{10}, 3 D_2, 2 D_5, D_{10}	2 C_2, C_4, C_{10}, 3 D_2, D_5, D_{10}	3 C_2, C_5, 3 D_2, D_5
R15.17	C_2, 2 C_5, 3 C_7, 3 C_{14}, 6 C_{35}, 2 D_5	C_2, C_5, C_7, C_{14}, D_5	C_2, C_{14}, D_5	C_2, C_5, D_5
R15.18	3 C_2, C_3, 3 C_6, 3 C_9, 3 C_{18}, 6 D_2	3 C_2, C_3, 3 C_6, C_9, C_{18}, 6 D_2	2 C_2, C_6, 6 D_2	3 C_2, C_3, C_6, 6 D_2
R15.19	C_2, C_3, 5 C_{11}, 5 C_{22}, 5 C_{33}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R15.20	C_2, 15 C_{31}, 15 C_{62}	C_2	C_2	C_2
R15.21	3 C_2, 2 C_4, 4 C_8, 8 C_{16}, 16 C_{32}, 3 D_2	3 C_2, 2 C_4, 3 C_8, 3 C_{16}, 2 C_{32}, 3 D_2	2 C_2, C_4, 3 D_2	3 C_2, C_4, C_8, C_{16}, 3 D_2
R15.22	2 C_2, 2 C_4, 3 C_8, 6 C_{16}, 8 C_{32}, 2 D_2	2 C_2, 2 C_4, 2 C_8, C_{16}, 2 D_2	2 C_2, C_4, 2 D_2	2 C_2, C_4, C_8, 2 D_2
R15.23	C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, 2 C_{12}, 4 C_{15}, 4 C_{20}, 4 C_{30}, 8 C_{60}	C_2, C_3, C_4, C_5, C_6, C_{10}, C_{15}, C_{30}	C_2, C_4, C_6, C_{10}, C_{30}	C_2, C_3, C_5, C_{15}
Genus 16				
R16.1	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, 2 C_8, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, 2 D_8, 2 D_{10}	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_8, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, D_8, 2 D_{10}	**Tet**, **Oct**, 2 **Ico**, 2 C_2, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, D_8, 2 D_{10}	**Tet**, **Oct**, 2 C_2, C_3, C_4, 2 C_5, C_8, 3 D_2, D_3, 2 D_4, 4 D_5, D_8
R16.2	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, 5 C_5, C_6, 2 C_{10}, 2 C_{15}, 3 D_2, 2 D_3, D_4, 3 D_5, D_6, 2 D_{10}, 2 D_{15}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, 4 C_5, C_6, 2 C_{10}, 2 C_{15}, 3 D_2, 2 D_3, D_4, 3 D_5, D_6, 2 D_{10}, 2 D_{15}	**Tet**, **Oct**, **Ico**, 2 C_2, C_4, C_6, 2 C_{10}, 3 D_2, 2 D_3, D_4, 3 D_5, D_6, 2 D_{10}, 2 D_{15}	2 C_2, C_3, 3 C_5, 2 C_{15}, 3 D_2, 2 D_3, 3 D_5, 2 D_{15}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R16.3	3 C_2, C_4, 5 C_5, 4 C_{10}, 4 D_2, D_4, 9 D_5, 4 D_{10}	3 C_2, C_4, 4 C_5, 3 C_{10}, 4 D_2, D_4, 7 D_5, 3 D_{10}	3 C_2, 2 C_{10}, 4 D_2, D_4, 7 D_5, 3 D_{10}	3 C_2, C_4, 4 C_5, 4 D_2, D_4, 7 D_5
R16.4	3 C_2, C_4, 8 C_{17}, 16 C_{34}, 4 D_2, D_4, 8 D_{17}, 8 D_{34}	3 C_2, C_4, C_{17}, 2 C_{34}, 4 D_2, D_4, D_{17}, D_{34}	3 C_2, C_4, C_{34}, 4 D_2, D_4, D_{17}, D_{34}	3 C_2, C_{17}, 4 D_2, D_{17}
R16.5	2 C_2, 2 C_4, 2 C_8, 4 C_{16}, 8 C_{32}, 8 C_{64}, 2 D_2, D_4, 2 D_8, 4 D_{16}, 8 D_{32}	2 C_2, 2 C_4, C_8, C_{16}, C_{32}, 2 D_2, D_4, D_8, D_{16}, D_{32}	2 C_2, 2 C_4, C_8, C_{16}, C_{32}, 2 D_2, D_4, D_8, D_{16}, D_{32}	2 C_2, 2 D_2
R16.6	**Tet**, 2 **Ico**, C_2, C_3, 8 C_5, 2 C_{10}, 2 C_{15}, D_2, D_3, 2 D_5	**Tet**, 2 **Ico**, C_2, C_3, 6 C_5, 2 C_{10}, 2 C_{15}, D_2, D_3, 2 D_5	**Tet**, 2 **Ico**, C_2, 2 C_{10}, D_2, D_3, 2 D_5	C_2, C_3, 4 C_5, 2 C_{15}, D_2, D_3, 2 D_5
R16.7	3 C_2, 2 C_3, C_4, 4 C_6, 2 C_8, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8	3 C_2, 2 C_3, C_4, 4 C_6, C_8, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8	3 C_2, C_4, 3 C_6, C_8, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8	3 C_2, 2 C_3, 4 D_2, 2 D_3
R16.8	3 C_2, 3 C_3, 2 C_6, 6 C_9, 3 C_{18}, 3 D_2, 5 D_3, 2 D_6, 9 D_9, 3 D_{18}	3 C_2, 3 C_3, 2 C_6, 4 C_9, C_{18}, 3 D_2, 5 D_3, 2 D_6, 5 D_9, D_{18}	3 C_2, 3 D_2, 5 D_3, 2 D_6, 5 D_9, D_{18}	3 C_2, 3 C_3, C_9, 3 D_2, 5 D_3, 2 D_9
R16.9	3 C_2, 3 C_3, 5 C_6, 6 C_9, 6 C_{18}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, 3 C_3, 5 C_6, 4 C_9, 4 C_{18}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, 3 C_6, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, 2 C_3, C_6, 3 D_2, 2 D_3, D_6
R16.10	3 C_2, C_3, C_4, 3 C_6, 2 C_8, C_{12}, 4 C_{16}, 2 C_{24}, 4 C_{48}, 4 D_2, 2 D_4, 4 D_8, 4 D_{16}	3 C_2, C_3, C_4, 3 C_6, C_8, C_{16}, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, C_6, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, C_4, C_8, C_{16}, 4 D_2, 2 D_4, 2 D_8, D_{16}
R16.11	3 C_2, 8 C_5, 12 C_{10}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, 6 C_5, 8 C_{10}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, 7 C_{10}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, 4 C_5, 3 D_2, 4 D_5
R16.12	3 C_2, 8 C_5, 4 C_{10}, 3 D_2, 12 D_5, 4 D_{10}	3 C_2, 6 C_5, 2 C_{10}, 3 D_2, 8 D_5, 2 D_{10}	3 C_2, 3 D_2, 8 D_5, 2 D_{10}	3 C_2, 6 C_5, 3 D_2, 8 D_5
R16.13	3 C_2, C_4, 2 C_5, 2 C_8, 6 C_{10}, 2 C_{20}, 4 C_{40}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_4, C_5, C_8, 3 C_{10}, 4 D_2, 2 D_4, D_8	3 C_2, C_{10}, 4 D_2, 2 D_4, D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8
R16.14	3 C_2, C_3, C_4, 3 C_6, 3 C_9, C_{12}, 9 C_{18}, 3 C_{36}, 4 D_2, D_4	3 C_2, C_3, C_4, 3 C_6, 4 D_2, D_4	3 C_2, C_6, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R16.15	C_2, C_3, C_6, 5 C_{11}, 5 C_{22}, 10 C_{33}, 10 C_{66}	C_2, C_3, C_6	C_2, C_6	C_2
R16.16	3 C_2, 8 C_{17}, 24 C_{34}, 3 D_2	3 C_2, C_{17}, 3 C_{34}, 3 D_2	3 C_2, C_{34}, 3 D_2	3 C_2, C_{17}, 3 D_2
R16.17	C_2, C_4, 2 C_8, 4 C_{16}, 8 C_{32}, 16 C_{64}	C_2, C_4, C_8, C_{16}, C_{32}	C_2, C_4, C_8, C_{16}, C_{32}	C_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 17				
R17.1	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 5 C_4, C_6, 2 C_8, 39 D_2, D_3, 11 D_4, D_6	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 5 C_4, C_6, C_8, 39 D_2, D_3, 11 D_4, D_6	3 **Oct**, 2 C_2, C_4, C_8, 23 D_2, D_3, 11 D_4, D_6	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 4 C_4, 39 D_2, D_3, 11 D_4
R17.2	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, C_7, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, 6 D_2, 2 D_3, 3 D_4, D_6	**Oct**, 2 C_2, C_6, 5 D_2, D_3, 2 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, 6 D_2, 2 D_3, 3 D_4
R17.3	2 **Tet**, 3 **Oct**, 7 C_2, C_3, 5 C_4, 3 C_6, C_8, 40 D_2, 2 D_3, 14 D_4, 4 D_6, D_8	2 **Tet**, 3 **Oct**, 7 C_2, C_3, 5 C_4, 3 C_6, C_8, 40 D_2, 2 D_3, 14 D_4, 4 D_6, D_8	**Tet**, 2 **Oct**, 3 C_2, C_4, C_6, 29 D_2, D_3, 12 D_4, 3 D_6, D_8	2 **Tet**, 2 **Oct**, 7 C_2, C_3, 4 C_4, C_8, 40 D_2, 2 D_3, 13 D_4, D_8
R17.4	2 **Tet**, **Oct**, 5 C_2, C_3, 6 C_4, 2 C_6, C_8, 20 D_2, D_3, 8 D_4, D_6, D_8	2 **Tet**, **Oct**, 5 C_2, C_3, 6 C_4, 2 C_6, C_8, 20 D_2, D_3, 8 D_4, D_6, D_8	**Tet**, **Oct**, 3 C_2, C_4, C_6, 17 D_2, D_3, 8 D_4, D_6, D_8	2 **Tet**, **Oct**, 5 C_2, C_3, 5 C_4, C_8, 20 D_2, D_3, 8 D_4, D_8
R17.5	3 **Tet**, 3 **Oct**, 9 C_2, C_3, 7 C_4, 2 C_6, 77 D_2, D_3, 18 D_4, D_6	3 **Tet**, 3 **Oct**, 9 C_2, C_3, 7 C_4, 2 C_6, 77 D_2, D_3, 18 D_4, D_6	3 **Oct**, 3 C_2, C_4, C_6, 43 D_2, D_3, 18 D_4, D_6	3 **Tet**, 3 **Oct**, 9 C_2, C_3, 6 C_4, 77 D_2, D_3, 18 D_4
R17.6	9 C_2, 7 C_4, 5 C_8, 47 D_2, 15 D_4, 12 D_8	9 C_2, 7 C_4, 4 C_8, 47 D_2, 15 D_4, 12 D_8	3 C_2, 3 C_4, C_8, 32 D_2, 10 D_4, 9 D_8	9 C_2, 4 C_4, 3 C_8, 47 D_2, 15 D_4, 12 D_8
R17.7	10 C_2, 7 C_4, 2 C_8, 78 D_2, 11 D_4	10 C_2, 7 C_4, C_8, 78 D_2, 11 D_4	3 C_2, 2 C_4, C_8, 43 D_2, 11 D_4	10 C_2, 5 C_4, 78 D_2, 11 D_4
R17.8	8 C_2, 8 C_4, 6 C_8, 36 D_2, 8 D_4, 4 D_8	8 C_2, 8 C_4, 5 C_8, 36 D_2, 8 D_4, 4 D_8	3 C_2, 4 C_4, 3 C_8, 27 D_2, 7 D_4, 4 D_8	8 C_2, 4 C_4, 2 C_8, 36 D_2, 8 D_4, 4 D_8
R17.9	4 C_2, 5 C_4, 6 C_8, 12 D_2, 8 D_4, 9 D_8	4 C_2, 5 C_4, 5 C_8, 12 D_2, 8 D_4, 9 D_8	3 C_2, 3 C_4, 2 C_8, 12 D_2, 8 D_4, 9 D_8	4 C_2, 2 C_4, 3 C_8, 12 D_2, 6 D_4, 6 D_8
R17.10	**Tet**, 2 **Oct**, 9 C_2, C_3, 6 C_4, 3 C_6, 2 C_{12}, 55 D_2, 2 D_3, 8 D_4, 4 D_6	**Tet**, 2 **Oct**, 9 C_2, C_3, 6 C_4, 3 C_6, C_{12}, 55 D_2, 2 D_3, 8 D_4, 4 D_6	**Oct**, 3 C_2, 3 C_4, C_6, C_{12}, 38 D_2, D_3, 5 D_4, 3 D_6	**Tet**, 2 **Oct**, 9 C_2, C_3, 3 C_4, 55 D_2, 2 D_3, 8 D_4
R17.11	4 C_2, C_3, 5 C_4, C_6, 2 C_8, 2 C_{12}, 10 D_2, D_3, 8 D_4, D_6, 2 D_8, D_{12}	4 C_2, C_3, 5 C_4, C_6, 2 C_8, C_{12}, 10 D_2, D_3, 8 D_4, D_6, 2 D_8, D_{12}	3 C_2, 4 C_4, C_6, 2 C_8, C_{12}, 10 D_2, D_3, 8 D_4, D_6, 2 D_8, D_{12}	4 C_2, C_3, C_4, 10 D_2, D_3, D_4
R17.12	5 C_2, C_3, 5 C_4, 4 C_6, 3 C_{12}, 16 D_2, D_3, 6 D_4, 3 D_6, 2 D_{12}	5 C_2, C_3, 5 C_4, 4 C_6, 2 C_{12}, 16 D_2, D_3, 6 D_4, 3 D_6, 2 D_{12}	3 C_2, 2 C_4, C_6, 14 D_2, D_3, 6 D_4, 3 D_6, 2 D_{12}	5 C_2, C_3, 3 C_4, 16 D_2, D_3, 6 D_4
R17.13	5 C_2, 3 C_4, 2 C_5, 8 C_{10}, 4 C_{20}, 13 D_2, 2 D_4, 2 D_5, 4 D_{10}	5 C_2, 3 C_4, C_5, 4 C_{10}, C_{20}, 13 D_2, 2 D_4, D_5, 2 D_{10}	3 C_2, 2 C_4, C_{10}, 11 D_2, 2 D_4, D_5, 2 D_{10}	5 C_2, C_4, C_5, 13 D_2, 2 D_4, D_5

	Mapping	Immersion		Embedding
	necessary and sufficient	necessary	sufficient	necessary
R17.14	5 C_2, C_3, 2 C_4, 3 C_6, 3 C_9, 2 C_{12}, 9 C_{18}, 6 C_{36}, 13 D_2, 2 D_3, 4 D_6, 6 D_9, 12 D_{18}	5 C_2, C_3, 2 C_4, 3 C_6, C_9, C_{12}, 3 C_{18}, C_{36}, 13 D_2, 2 D_3, 4 D_6, 2 D_9, 4 D_{18}	3 C_2, 2 C_4, C_6, C_{18}, 11 D_2, D_3, 3 D_6, D_9, 3 D_{18}	5 C_2, C_3, C_6, C_9, C_{18}, 13 D_2, 2 D_3, D_6, 2 D_9, D_{18}
R17.15	3 C_2, 2 C_4, 8 C_{17}, 8 C_{34}, 8 C_{68}, 3 D_2, 16 D_{17}, 8 D_{34}	3 C_2, 2 C_4, C_{17}, C_{34}, 3 D_2, 2 D_{17}, D_{34}	2 C_2, 2 C_4, C_{34}, 3 D_2, D_{17}, D_{34}	3 C_2, C_{17}, 3 D_2, D_{17}
R17.16	2 C_2, C_3, C_4, C_5, 2 C_6, C_8, C_{10}, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, C_4, 2 C_6, C_8, 2 D_2, D_3, D_4, D_6	C_2, C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, C_4, C_8, 2 D_2, D_3, D_4
R17.17	2 C_2, 2 C_4, 2 C_5, 2 C_{10}, 2 D_2, 2 D_4	2 C_2, 2 C_4, 2 D_2, 2 D_4	2 C_2, 2 C_4, 2 D_2, 2 D_4	2 C_2, 2 D_2
R17.18	7 C_2, 2 C_5, 2 C_{10}, 63 D_2	7 C_2, 63 D_2	2 C_2, 31 D_2	7 C_2, 63 D_2
R17.19	**Tet**, 7 C_2, C_3, 4 C_4, 3 C_6, 33 D_2, 14 D_4	**Tet**, 7 C_2, C_3, 4 C_4, 3 C_6, 33 D_2, 14 D_4	3 C_2, 2 C_6, 24 D_2, 10 D_4	**Tet**, 7 C_2, C_3, 4 C_4, 33 D_2, 14 D_4
R17.20	3 **Tet**, 9 C_2, C_3, 2 C_4, 3 C_6, 68 D_2, 8 D_4	3 **Tet**, 9 C_2, C_3, 2 C_4, 3 C_6, 68 D_2, 8 D_4	3 C_2, 2 C_6, 34 D_2, 8 D_4	3 **Tet**, 9 C_2, C_3, 2 C_4, 68 D_2, 8 D_4
R17.21	2 **Tet**, 5 C_2, C_3, 2 C_4, 3 C_6, 18 D_2, 4 D_4	2 **Tet**, 5 C_2, C_3, 2 C_4, 3 C_6, 18 D_2, 4 D_4	**Tet**, 2 C_2, C_6, 13 D_2, 4 D_4	2 **Tet**, 5 C_2, C_3, 2 C_4, 18 D_2, 4 D_4
R17.22	2 **Tet**, 5 C_2, C_3, 2 C_4, 3 C_6, 18 D_2, 4 D_4	2 **Tet**, 5 C_2, C_3, 2 C_4, 3 C_6, 18 D_2, 4 D_4	**Tet**, 3 C_2, 2 C_6, 15 D_2, 4 D_4	2 **Tet**, 5 C_2, C_3, 2 C_4, 18 D_2, 4 D_4
R17.23	**Tet**, 3 C_2, C_3, 2 C_5, C_6, 2 C_{10}, 2 C_{15}, 6 D_2, 4 D_5, 4 D_{10}	**Tet**, 3 C_2, C_3, C_5, C_6, C_{10}, 6 D_2, 2 D_5, 2 D_{10}	2 C_2, C_6, 5 D_2, 2 D_5, 2 D_{10}	3 C_2, C_5, 6 D_2, 2 D_5
R17.24	C_2, C_3, C_6, 8 C_{17}, 8 C_{51}, 8 D_{17}	C_2, C_3, C_6, C_{17}, D_{17}	C_2, C_6, D_{17}	C_2, C_{17}, D_{17}
R17.25	9 C_2, 7 C_4, 8 C_8, 45 D_2, 3 D_4	9 C_2, 7 C_4, 6 C_8, 45 D_2, 3 D_4	3 C_2, 4 C_4, 6 C_8, 33 D_2, 2 D_4	9 C_2, 3 C_4, 45 D_2, 3 D_4
R17.26	7 C_2, 5 C_4, 4 C_8, 37 D_2, 3 D_4	7 C_2, 5 C_4, 2 C_8, 37 D_2, 3 D_4	3 C_2, 4 C_4, 2 C_8, 30 D_2, 3 D_4	7 C_2, C_4, 37 D_2
R17.27	3 C_2, 5 C_4, 4 C_8, 6 D_2, 4 D_4	3 C_2, 5 C_4, 2 C_8, 6 D_2, 4 D_4	2 C_2, 3 C_4, 2 C_8, 6 D_2, 4 D_4	3 C_2, 2 C_4, 6 D_2, 2 D_4
R17.28	7 C_2, 6 C_4, 4 C_8, 37 D_2, 3 D_4	7 C_2, 6 C_4, 2 C_8, 37 D_2, 3 D_4	2 C_2, 2 C_4, 2 C_8, 24 D_2, 2 D_4	7 C_2, 4 C_4, 37 D_2, 3 D_4
R17.29	4 C_2, 4 C_4, 4 C_8, 10 D_2, 4 D_4	4 C_2, 4 C_4, 2 C_8, 10 D_2, 4 D_4	3 C_2, 4 C_4, 2 C_8, 10 D_2, 4 D_4	4 C_2, 10 D_2
R17.30	3 C_2, 6 C_4, 4 C_8, 4 D_2, 3 D_4	3 C_2, 6 C_4, 2 C_8, 4 D_2, 3 D_4	3 C_2, 5 C_4, C_8, 4 D_2, 3 D_4	3 C_2, C_4, 4 D_2
R17.31	11 C_2, 3 C_4, 4 C_8, 100 D_2	11 C_2, 3 C_4, 2 C_8, 100 D_2	3 C_2, 2 C_4, 2 C_8, 52 D_2	11 C_2, C_4, 100 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R17.32	4 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 3 C_{12}, 2 C_{24}, 10 D_2, 2 D_3, 2 D_4, 4 D_6, 3 D_{12}	4 C_2, C_3, 2 C_4, 2 C_6, 2 C_{12}, 10 D_2, 2 D_3, 2 D_4, 4 D_6, 2 D_{12}	2 C_2, 2 C_4, C_6, C_{12}, 8 D_2, D_3, 2 D_4, 3 D_6, 2 D_{12}	4 C_2, C_3, 10 D_2, 2 D_3
R17.33	5 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 13 D_2, 2 D_3, 4 D_6	5 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, C_{12}, 13 D_2, 2 D_3, 4 D_6	2 C_2, 3 C_4, C_6, 2 C_8, 11 D_2, D_3, 3 D_6	5 C_2, C_3, 13 D_2, 2 D_3
R17.34	**Tet**, 7 C_2, C_3, 4 C_4, 3 C_6, 4 C_{12}, 31 D_2	**Tet**, 7 C_2, C_3, 4 C_4, 3 C_6, 2 C_{12}, 31 D_2	2 C_2, 4 C_4, C_6, 2 C_{12}, 20 D_2	**Tet**, 7 C_2, C_3, 31 D_2
R17.35	4 C_2, C_3, 4 C_4, C_6, 3 C_{12}, 9 D_2, 6 D_4	4 C_2, C_3, 4 C_4, C_6, C_{12}, 9 D_2, 6 D_4	2 C_2, 4 C_4, C_6, C_{12}, 9 D_2, 6 D_4	4 C_2, C_3, 9 D_2
R17.36	5 C_2, C_3, 3 C_4, 5 C_6, 5 C_{12}, 13 D_2, 2 D_4	5 C_2, C_3, 3 C_4, 5 C_6, 3 C_{12}, 13 D_2, 2 D_4	3 C_2, 2 C_4, C_6, 11 D_2, 2 D_4	5 C_2, C_3, C_4, 13 D_2, 2 D_4
R17.37	5 C_2, 2 C_4, 2 C_5, 10 C_{10}, 8 C_{20}, 13 D_2	5 C_2, 2 C_4, C_5, 5 C_{10}, 2 C_{20}, 13 D_2	3 C_2, 2 C_4, C_{10}, 11 D_2	5 C_2, C_5, 13 D_2
R17.38	C_2, 2 C_5, 3 C_7, 2 C_{10}, 3 C_{14}, 12 C_{35}, 12 C_{70}	C_2	C_2	C_2
R17.39	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_9, 4 C_{12}, 9 C_{18}, 12 C_{36}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, C_9, 2 C_{12}, 3 C_{18}, 2 C_{36}, 3 D_2	2 C_2, 2 C_4, C_6, C_{18}, 3 D_2	3 C_2, C_3, C_6, C_9, C_{18}, 3 D_2
R17.40	C_2, C_4, 8 C_{17}, 8 C_{34}, 16 C_{68}	C_2, C_4, C_{17}, C_{34}	C_2, C_4, C_{34}	C_2, C_{17}
Genus 18				
R18.1	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 C_7, 3 C_{14}, 6 C_{21}, 3 D_2, D_3, D_4, 3 D_7, 3 D_{14}, 6 D_{21}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_7, C_{14}, C_{21}, 3 D_2, D_3, D_4, D_7, D_{14}, D_{21}	**Tet**, **Oct**, 2 C_2, C_4, C_{14}, 3 D_2, D_3, D_4, D_7, D_{14}, D_{21}	**Tet**, 2 C_2, C_3, C_7, 3 D_2, D_3, D_7
R18.2	3 C_2, C_4, 9 C_{19}, 18 C_{38}, 4 D_2, D_4, 9 D_{19}, 9 D_{38}	3 C_2, C_4, C_{19}, 2 C_{38}, 4 D_2, D_4, D_{19}, D_{38}	3 C_2, C_4, C_{38}, 4 D_2, D_4, D_{19}, D_{38}	3 C_2, C_{19}, 4 D_2, D_{19}
R18.3	2 C_2, C_3, 2 C_4, C_6, C_8, 3 C_9, 2 C_{12}, 3 C_{18}, 2 C_{24}, 6 C_{36}, 6 C_{72}, 2 D_2, D_3, D_4, D_6, 3 D_9, 2 D_{12}, 3 D_{18}, 6 D_{36}	2 C_2, C_3, 2 C_4, C_6, C_9, C_{12}, C_{18}, C_{36}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{36}	2 C_2, 2 C_4, C_6, C_{12}, C_{18}, C_{36}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{36}	2 C_2, C_3, C_9, 2 D_2, D_3, D_9
R18.4	3 C_2, C_3, C_4, 2 C_5, 2 C_6, 2 C_{10}, 2 C_{15}, 4 C_{20}, 2 C_{30}, 4 D_2, D_3, D_4, 4 D_5, D_6, 4 D_{10}, 2 D_{15}, 4 D_{20}, 2 D_{30}	3 C_2, C_3, C_4, C_5, 2 C_6, C_{10}, C_{15}, C_{20}, C_{30}, 4 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, D_{15}, D_{20}, D_{30}	3 C_2, C_4, C_6, 4 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, D_{15}, D_{20}, D_{30}	3 C_2, C_3, C_5, C_{10}, 4 D_2, D_3, 2 D_5, 2 D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R18.5	3 C_2, C_4, 3 C_7, 2 C_8, 6 C_{14}, 3 C_{28}, 4 D_2, 2 D_4, 3 D_7, 2 D_8, 3 D_{14}, 3 D_{28}	3 C_2, C_4, C_7, C_8, 2 C_{14}, C_{28}, 4 D_2, 2 D_4, D_7, D_8, D_{14}, D_{28}	3 C_2, C_{14}, 4 D_2, 2 D_4, D_7, D_8, D_{14}, D_{28}	3 C_2, C_4, C_7, 4 D_2, 2 D_4, D_7
R18.6	C_2, C_3, 2 C_5, 3 C_9, 2 C_{10}, 2 C_{15}, 6 C_{45}, D_3, 3 D_9	C_2, C_3, C_9, D_3, D_9	C_2, D_3, D_9	C_2, C_3, C_9, D_3, D_9
R18.7	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 2 C_{12}, 2 C_{16}, 2 C_{24}, 2 D_2, D_3, D_4, D_6, 2 D_8, D_{12}, 2 D_{24}	2 C_2, C_3, 2 C_4, C_6, C_8, C_{12}, C_{24}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{24}	2 C_2, 2 C_4, C_6, C_8, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{24}	2 C_2, C_3, 2 D_2, D_3
R18.8	3 C_2, C_3, C_6, 3 C_7, 9 C_{14}, 3 C_{21}, 3 C_{42}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6	3 C_2, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6
R18.9	2 C_2, 2 C_4, 2 C_5, C_8, 4 C_{10}, 4 C_{20}, 4 C_{40}, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 D_2
R18.10	**Tet**, C_2, C_3, 3 C_7, 3 C_{14}, 6 C_{21}, D_2	**Tet**, C_2, C_3, C_7, C_{14}, C_{21}, D_2	**Tet**, C_2, C_{14}, D_2	**Tet**, C_2, C_3, C_7, D_2
R18.11	C_2, C_3, 6 C_{13}, 6 C_{26}, 6 C_{39}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R18.12	C_2, 18 C_{37}, 18 C_{74}	C_2	C_2	C_2
R18.13	3 C_2, 9 C_{19}, 27 C_{38}, 3 D_2	3 C_2, C_{19}, 3 C_{38}, 3 D_2	3 C_2, C_{38}, 3 D_2	3 C_2, C_{19}, 3 D_2
R18.14	C_2, C_3, C_4, C_6, 2 C_8, 3 C_9, 2 C_{12}, 3 C_{18}, 4 C_{24}, 6 C_{36}, 12 C_{72}	C_2, C_3, C_4, C_6, C_9, C_{12}, C_{18}, C_{36}	C_2, C_4, C_6, C_{12}, C_{18}, C_{36}	C_2, C_3, C_9
Genus 19				
R19.1	2 C_2, 4 C_3, 2 C_4, 4 C_6, 5 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, 3 D_{12}	2 C_2, 4 C_3, 2 C_4, 4 C_6, 4 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, 3 D_{12}	2 C_2, 2 C_4, 4 C_6, 4 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, 3 D_{12}	2 C_2, 2 C_3, 2 D_2, 3 D_3
R19.2	2 **Tet**, **Oct**, 2 C_2, 3 C_3, 3 C_4, 2 C_6, C_8, 4 C_{12}, 2 C_{24}, 3 D_2, D_3, 2 D_4	2 **Tet**, **Oct**, 2 C_2, 3 C_3, 3 C_4, 2 C_6, 3 C_{12}, 3 D_2, D_3, 2 D_4	2 **Tet**, **Oct**, 2 C_2, 2 C_4, C_6, 3 D_2, D_3, 2 D_4	**Tet**, 2 C_2, C_3, 3 D_2, D_3
R19.3	**Tet**, 2 **Oct**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, 6 D_2, 2 D_3, 3 D_4, 4 D_5, D_6, 2 D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 2 C_2, C_4, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, **Oct**, **Ico**, 3 C_2, C_3, C_4, C_5, C_6, 6 D_2, 2 D_3, D_4, 2 D_5, D_6
R19.4	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, C_7, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 2 C_2, C_4, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, **Oct**, 3 C_2, C_3, C_4, C_6, 6 D_2, 2 D_3, D_4, D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R19.5	5 C_2, 2 C_3, 3 C_4, 5 C_6, 2 C_8, 2 C_{12}, 13 D_2, 7 D_3, 3 D_4, 11 D_6, 2 D_{12}	5 C_2, 2 C_3, 3 C_4, 5 C_6, C_8, 2 C_{12}, 13 D_2, 7 D_3, 3 D_4, 11 D_6, 2 D_{12}	3 C_2, 3 C_4, 2 C_6, C_8, 2 C_{12}, 13 D_2, 5 D_3, 3 D_4, 11 D_6, 2 D_{12}	5 C_2, 2 C_3, 3 C_6, 13 D_2, 7 D_3, 6 D_6
R19.6	3 C_2, 2 C_3, 5 C_4, 2 C_6, C_8, 5 C_{12}, 4 D_2, 5 D_3, 2 D_4, 5 D_6, 5 D_{12}	3 C_2, 2 C_3, 5 C_4, 2 C_6, 5 C_{12}, 4 D_2, 5 D_3, 2 D_4, 5 D_6, 5 D_{12}	3 C_2, 4 C_4, 2 C_6, 5 C_{12}, 4 D_2, 5 D_3, 2 D_4, 5 D_6, 5 D_{12}	3 C_2, 2 C_3, 4 D_2, 5 D_3
R19.7	**Tet**, 2 **Oct**, **Ico**, 5 C_2, C_3, 2 C_4, C_5, 3 C_6, C_{10}, 16 D_2, 4 D_3, 4 D_4, 2 D_5, 6 D_6, D_{10}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, 16 D_2, 4 D_3, 4 D_4, 6 D_6	**Tet**, **Oct**, 3 C_2, C_4, 2 C_6, 16 D_2, 2 D_3, 4 D_4, 6 D_6	**Tet**, **Oct**, 5 C_2, C_3, C_4, C_6, 16 D_2, 4 D_3, 2 D_4, 2 D_6
R19.8	3 C_2, 3 C_3, 2 C_4, 5 C_6, 4 C_{12}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 3 C_3, 2 C_4, 5 C_6, 3 C_{12}, 3 D_2, 4 D_3, 2 D_6	2 C_2, 2 C_4, 2 C_6, C_{12}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 2 C_3, 2 C_6, 3 D_2, 4 D_3, 2 D_6
R19.9	3 C_2, 5 C_3, 2 C_4, 3 C_6, C_{12}, 3 D_2, 8 D_3, 3 D_6	3 C_2, 5 C_3, 2 C_4, 3 C_6, 3 D_2, 8 D_3, 3 D_6	2 C_2, 2 C_4, C_6, 3 D_2, 7 D_3, 3 D_6	3 C_2, 5 C_3, 2 C_6, 3 D_2, 7 D_3, 2 D_6
R19.10	5 C_2, 3 C_4, 2 C_5, 2 C_8, 6 C_{10}, 8 C_{20}, 8 C_{40}, 13 D_2, 3 D_4, 4 D_5, 8 D_{10}, 12 D_{20}	5 C_2, 3 C_4, C_5, C_8, 3 C_{10}, 3 C_{20}, C_{40}, 13 D_2, 3 D_4, 2 D_5, 4 D_{10}, 5 D_{20}	3 C_2, 2 C_4, C_{10}, 13 D_2, 3 D_4, D_5, 3 D_{10}, 3 D_{20}	5 C_2, C_4, C_5, C_{10}, C_{20}, 13 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}
R19.11	3 C_2, 5 C_4, 2 C_5, C_8, 4 C_{10}, 4 C_{20}, 4 C_{40}, 4 D_2, 2 D_4, 2 D_5, 2 D_{10}, 2 D_{20}	3 C_2, 5 C_4, C_5, 2 C_{10}, C_{20}, 4 D_2, 2 D_4, D_5, D_{10}, D_{20}	3 C_2, 4 C_4, C_{10}, 4 D_2, 2 D_4, D_5, D_{10}, D_{20}	3 C_2, C_5, C_{10}, 4 D_2, D_5, D_{10}
R19.12	3 C_2, 2 C_4, 9 C_{19}, 9 C_{38}, 9 C_{76}, 3 D_2, 18 D_{19}, 9 D_{38}	3 C_2, 2 C_4, C_{19}, C_{38}, 3 D_2, 2 D_{19}, D_{38}	2 C_2, 2 C_4, C_{38}, 3 D_2, D_{19}, D_{38}	3 C_2, C_{19}, 3 D_2, D_{19}
R19.13	**Tet**, **Oct**, 2 **Ico**, C_2, C_3, C_4, 2 C_5, D_2, D_3, D_4, 2 D_5	**Tet**, **Oct**, **Ico**, C_2, C_3, C_4, C_5, D_2, D_3, D_4, D_5	**Tet**, **Oct**, **Ico**, C_2, C_4, D_2, D_3, D_4, D_5	**Tet**, **Ico**, C_2, C_3, C_5, D_2, D_3, D_5
R19.14	C_2, 5 C_3, C_6, 6 C_9, 3 D_3, 3 D_9	C_2, 5 C_3, C_6, 4 C_9, 3 D_3, 3 D_9	C_2, C_6, 3 D_3, 3 D_9	C_2, 4 C_3, 3 D_3
R19.15	C_2, 6 C_3, C_6, C_9, 5 D_3	C_2, 6 C_3, C_6, 5 D_3	C_2, C_6, 5 D_3	C_2, 5 C_3, 5 D_3
R19.16	C_2, 3 C_3, C_6, 4 C_9, 2 D_3, 3 D_9	C_2, 3 C_3, C_6, 3 C_9, 2 D_3, 3 D_9	C_2, C_6, 2 D_3, 3 D_9	C_2, 2 C_3, 2 D_3
R19.17	C_2, 6 C_3, 4 C_6, C_9, 2 D_3	C_2, 6 C_3, 4 C_6, 2 D_3	C_2, 4 C_6, 2 D_3	C_2, 4 C_3, 2 D_3
R19.18	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 2 C_4, 7 C_6, 2 C_{12}, 16 D_2, 2 D_3, 4 D_4, D_6	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 2 C_4, 7 C_6, C_{12}, 16 D_2, 2 D_3, 4 D_4, D_6	2 **Tet**, **Oct**, 3 C_2, C_4, 4 C_6, 16 D_2, D_3, 4 D_4, D_6	**Tet**, **Oct**, 5 C_2, C_3, C_4, 16 D_2, 2 D_3, 2 D_4
R19.19	2 **Tet**, 3 **Oct**, 5 C_2, 3 C_3, 2 C_4, 3 C_6, C_{12}, 16 D_2, 6 D_3, 4 D_4, 6 D_6, D_{12}	2 **Tet**, 3 **Oct**, 5 C_2, 3 C_3, 2 C_4, 3 C_6, 16 D_2, 6 D_3, 4 D_4, 6 D_6	2 **Tet**, 2 **Oct**, 3 C_2, C_4, C_6, 16 D_2, 4 D_3, 4 D_4, 5 D_6	2 **Tet**, 5 C_2, 3 C_3, C_4, 16 D_2, 5 D_3, 2 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R19.20	2 C_2, 3 C_3, 2 C_4, 3 C_6, 3 C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 3 C_3, 2 C_4, 3 C_6, 2 C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_4, 3 C_6, 2 C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, C_3, 2 D_2, D_3
R19.21	C_2, 3 C_3, C_6, 3 C_7, 15 C_{21}, D_3, 3 D_7, 6 D_{21}	C_2, 3 C_3, C_6, C_7, 4 C_{21}, D_3, D_7, 2 D_{21}	C_2, C_6, D_3, D_7, 2 D_{21}	C_2, C_3, C_7, D_3, D_7
R19.22	C_2, C_3, C_6, 9 C_{19}, 9 C_{57}, 9 D_{19}	C_2, C_3, C_6, C_{19}, D_{19}	C_2, C_6, D_{19}	C_2, C_{19}, D_{19}
R19.23	**Tet**, **Oct**, C_2, C_3, C_4, C_7, D_2, D_3, D_4	**Tet**, **Oct**, C_2, C_3, C_4, D_2, D_3, D_4	**Tet**, **Oct**, C_2, C_4, D_2, D_3, D_4	**Tet**, C_2, C_3, D_2, D_3
R19.24	2 C_2, 2 C_3, 2 C_4, 2 C_6, 2 C_8, 2 C_{12}, 2 D_2, 3 D_3, 2 D_6	2 C_2, 2 C_3, 2 C_4, 2 C_6, 2 C_{12}, 2 D_2, 3 D_3, 2 D_6	2 C_2, 2 C_4, 2 C_6, 2 C_{12}, 2 D_2, 3 D_3, 2 D_6	2 C_2, 2 C_3, 2 D_2, 3 D_3
R19.25	3 C_2, 2 C_3, 2 C_4, 2 C_6, 4 C_8, 2 C_{12}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 2 C_3, 2 C_4, 2 C_6, 2 C_8, 2 C_{12}, 3 D_2, 4 D_3, 2 D_6	2 C_2, 2 C_4, 2 C_6, 2 C_8, 2 C_{12}, 3 D_2, 2 D_3, 2 D_6	3 C_2, 2 C_3, 3 D_2, 4 D_3
R19.26	**Tet**, 2 **Ico**, 3 C_2, C_3, 2 C_5, C_6, 2 C_{10}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, 3 C_2, C_3, C_6, 7 D_2, 2 D_3, D_6	**Tet**, 2 C_2, C_6, 7 D_2, D_3, D_6	**Tet**, 3 C_2, C_3, 7 D_2, 2 D_3
R19.27	C_2, 5 C_3, C_4, C_6, 2 C_{12}, 2 D_3	C_2, 5 C_3, C_4, C_6, 2 D_3	C_2, C_4, C_6, 2 D_3	C_2, 5 C_3, 2 D_3
R19.28	C_2, 3 C_3, C_4, C_6, 2 C_{12}, 2 D_3	C_2, 3 C_3, C_4, C_6, C_{12}, 2 D_3	C_2, C_4, C_6, C_{12}, 2 D_3	C_2, 2 C_3, 2 D_3
R19.29	5 C_2, C_3, 3 C_4, 5 C_6, 2 C_8, 4 C_{12}, 4 C_{24}, 13 D_2, 3 D_4	5 C_2, C_3, 3 C_4, 5 C_6, C_8, 2 C_{12}, 13 D_2, 3 D_4	3 C_2, 2 C_4, C_6, 13 D_2, 3 D_4	5 C_2, C_4, 13 D_2, D_4
R19.30	3 C_2, C_3, 5 C_4, 3 C_6, C_8, 8 C_{12}, 2 C_{24}, 4 D_2, 2 D_4	3 C_2, C_3, 5 C_4, 3 C_6, 6 C_{12}, 4 D_2, 2 D_4	3 C_2, 3 C_4, C_6, 4 D_2, 2 D_4	3 C_2, 4 D_2
R19.31	C_2, 3 C_3, 2 C_5, C_6, 2 C_{10}, 10 C_{15}, 4 C_{30}, D_3	C_2, 3 C_3, C_6, D_3	C_2, C_6, D_3	C_2, C_3, D_3
R19.32	C_2, C_3, C_6, 6 C_{13}, 6 C_{26}, 12 C_{39}, 12 C_{78}	C_2, C_3, C_6	C_2, C_6	C_2
R19.33	2 C_2, 2 C_4, 2 C_5, 2 C_8, 4 C_{10}, 6 C_{20}, 8 C_{40}, 2 D_2	2 C_2, 2 C_4, C_5, 2 C_{10}, C_{20}, 2 D_2	2 C_2, C_4, C_{10}, 2 D_2	2 C_2, C_5, C_{10}, 2 D_2
R19.34	3 C_2, 2 C_4, 2 C_5, 4 C_8, 6 C_{10}, 8 C_{20}, 16 C_{40}, 3 D_2	3 C_2, 2 C_4, C_5, 2 C_8, 3 C_{10}, 3 C_{20}, 2 C_{40}, 3 D_2	2 C_2, C_4, C_{10}, 3 D_2	3 C_2, C_4, C_5, C_{10}, C_{20}, 3 D_2
R19.35	C_2, C_4, 9 C_{19}, 9 C_{38}, 18 C_{76}	C_2, C_4, C_{19}, C_{38}	C_2, C_4, C_{38}	C_2, C_{19}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 20				
R20.1	3 C_2, C_3, C_4, 2 C_6, 3 C_7, 6 C_{14}, 6 C_{21}, 12 C_{42}, 4 D_2, D_3, D_4, D_6, 3 D_7, 3 D_{14}, 6 D_{21}, 6 D_{42}	3 C_2, C_3, C_4, 2 C_6, C_7, 2 C_{14}, C_{21}, 2 C_{42}, 4 D_2, D_3, D_4, D_6, D_7, D_{14}, D_{21}, D_{42}	3 C_2, C_4, C_6, C_{14}, C_{42}, 4 D_2, D_3, D_4, D_6, D_7, D_{14}, D_{21}, D_{42}	3 C_2, C_3, C_7, C_{21}, 4 D_2, D_3, D_7, D_{21}
R20.2	2 C_2, 2 C_4, 2 C_5, 2 C_8, 2 C_{10}, 2 C_{16}, 4 C_{20}, 8 C_{40}, 8 C_{80}, 2 D_2, D_4, 2 D_5, 2 D_8, 2 D_{10}, 4 D_{20}, 8 D_{40}	2 C_2, 2 C_4, C_5, C_8, C_{10}, C_{20}, C_{40}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{20}, D_{40}	2 C_2, 2 C_4, C_8, C_{10}, C_{20}, C_{40}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{20}, D_{40}	2 C_2, C_5, 2 D_2, D_5
R20.3	3 C_2, C_3, C_6, 5 C_{11}, 5 C_{22}, 5 C_{33}, 3 D_2, 2 D_3, D_6, 10 D_{11}, 5 D_{22}, 5 D_{33}	3 C_2, C_3, C_6, C_{11}, C_{22}, C_{33}, 3 D_2, 2 D_3, D_6, 2 D_{11}, D_{22}, D_{33}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_{11}, D_{22}, D_{33}	3 C_2, C_3, C_{11}, 3 D_2, 2 D_3, 2 D_{11}
R20.4	3 C_2, C_3, C_4, 2 C_5, 3 C_6, 2 C_{10}, C_{12}, 2 C_{15}, 4 C_{20}, 2 C_{30}, 4 C_{60}, 4 D_2, D_4, 4 D_5, 4 D_{10}, 4 D_{20}	3 C_2, C_3, C_4, C_5, 3 C_6, C_{10}, C_{20}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}	3 C_2, C_6, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}	3 C_2, C_4, C_5, C_{10}, C_{20}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}
R20.5	2 C_2, C_3, C_4, C_6, C_8, 3 C_9, C_{12}, 3 C_{18}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}	2 C_2, C_3, C_4, C_6, C_9, C_{12}, C_{18}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}	2 C_2, C_4, C_6, C_{12}, C_{18}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}	2 C_2, C_3, 2 D_2, D_3
R20.6	2 C_2, 2 C_4, 3 C_7, C_8, 3 C_{14}, 6 C_{28}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 3 D_{28}	2 C_2, 2 C_4, C_7, C_{14}, C_{28}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, 2 C_4, C_{14}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, C_7, 2 D_2, D_7
R20.7	3 C_2, C_3, C_4, 2 C_5, C_6, 4 C_{10}, 2 C_{12}, 2 C_{15}, 2 C_{30}, 4 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, 2 D_{10}, 2 D_{12}, 2 D_{15}, 2 D_{30}	3 C_2, C_3, C_4, C_5, C_6, 2 C_{10}, C_{12}, C_{15}, C_{30}, 4 D_2, 2 D_3, D_4, D_5, 2 D_6, D_{10}, D_{12}, D_{15}, D_{30}	3 C_2, C_4, C_{10}, 4 D_2, 2 D_3, D_4, D_5, 2 D_6, D_{10}, D_{12}, D_{15}, D_{30}	3 C_2, C_3, C_5, C_6, 4 D_2, 2 D_3, D_5, 2 D_6
R20.8	2 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 2 C_{12}, 2 C_{16}, 2 C_{24}, 4 C_{48}, 2 D_2, D_4, 2 D_8	2 C_2, C_3, 2 C_4, 2 C_6, C_8, 2 D_2, D_4, D_8	2 C_2, 2 C_4, C_6, C_8, 2 D_2, D_4, D_8	2 C_2, 2 D_2
R20.9	C_2, C_3, 2 C_5, C_6, 3 C_9, 2 C_{15}, 3 C_{18}, 6 C_{45}, 2 D_5	C_2, C_3, C_5, C_6, D_5	C_2, C_6, D_5	C_2, C_5, D_5
R20.10	3 C_2, C_4, 5 C_{11}, 15 C_{22}, 5 C_{44}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R20.11	C_2, 20 C_{41}, 20 C_{82}	C_2	C_2	C_2
R20.12	3 C_2, C_3, 3 C_6, 3 C_7, 9 C_{14}, 6 C_{21}, 18 C_{42}, 3 D_2	3 C_2, C_3, 3 C_6, C_7, 3 C_{14}, C_{21}, 3 C_{42}, 3 D_2	3 C_2, C_6, C_{14}, C_{42}, 3 D_2	3 C_2, C_3, C_7, C_{21}, 3 D_2
R20.13	C_2, C_4, 2 C_5, 2 C_8, 2 C_{10}, 4 C_{16}, 4 C_{20}, 8 C_{40}, 16 C_{80}	C_2, C_4, C_5, C_8, C_{10}, C_{20}, C_{40}	C_2, C_4, C_8, C_{10}, C_{20}, C_{40}	C_2, C_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 21				
R21.1	**Tet**, **Oct**, 2 C_2, C_3, 3 C_4, 7 C_8, 2 C_{16}, 3 D_2, D_3, 2 D_4, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, 3 C_4, 6 C_8, 3 D_2, D_3, 2 D_4, 2 D_8	**Tet**, **Oct**, 2 C_2, 2 C_4, 3 C_8, 3 D_2, D_3, 2 D_4, 2 D_8	**Tet**, 2 C_2, C_3, 3 D_2, D_3
R21.2	**Tet**, **Oct**, 3 C_2, C_3, 3 C_4, C_6, 2 C_8, 2 C_{12}, 2 C_{16}, 9 D_2, D_3, 3 D_4, D_6, 2 D_8, 2 D_{12}	**Tet**, **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_8, 2 C_{12}, 9 D_2, D_3, 3 D_4, D_6, 2 D_8, 2 D_{12}	**Oct**, 2 C_2, 2 C_4, C_6, C_8, 2 C_{12}, 8 D_2, D_3, 3 D_4, D_6, 2 D_8, 2 D_{12}	**Tet**, **Oct**, 3 C_2, C_3, C_4, 9 D_2, D_3, D_4
R21.3	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 3 C_4, C_5, 3 C_6, 2 C_{10}, C_{12}, 26 D_2, 4 D_3, 5 D_4, 3 D_5, 7 D_6, 4 D_{10}, D_{12}	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 3 C_4, C_5, 3 C_6, 2 C_{10}, C_{12}, 26 D_2, 4 D_3, 5 D_4, 3 D_5, 7 D_6, 4 D_{10}, D_{12}	**Oct**, 3 C_2, C_4, 23 D_2, 3 D_3, 5 D_4, 2 D_5, 7 D_6, 4 D_{10}, D_{12}	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 2 C_4, C_5, 2 C_{10}, 26 D_2, 4 D_3, 4 D_4, 3 D_5, 4 D_{10}
R21.4	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, 2 C_4, C_6, C_{10}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, 3 C_2, C_3, C_5, 6 D_2, 2 D_3, 2 D_5
R21.5	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	2 C_2, 2 C_4, C_6, C_{10}, 5 D_2, D_3, D_5, D_6, D_{10}	**Tet**, 3 C_2, C_3, C_5, 6 D_2, D_3, 2 D_5
R21.6	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 2 C_8, 2 C_{12}, 2 C_{24}, 12 D_2, D_3, 4 D_4, D_6, 2 D_{12}	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, C_8, C_{12}, 12 D_2, D_3, 4 D_4, D_6, D_{12}	**Oct**, 3 C_2, 3 C_4, C_6, 11 D_2, D_3, 4 D_4, D_6, D_{12}	**Tet**, 4 C_2, C_3, 2 C_4, 12 D_2, D_3, 3 D_4
R21.7	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 18 D_2, 2 D_3, 8 D_4, 2 D_6, 4 D_8, 4 D_{12}, 4 D_{24}	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_6, 3 C_8, C_{12}, C_{24}, 18 D_2, 2 D_3, 8 D_4, 2 D_6, 3 D_8, 2 D_{12}, D_{24}	**Tet**, 2 **Oct**, 3 C_2, 3 C_4, C_6, 16 D_2, D_3, 7 D_4, 2 D_6, 3 D_8, D_{12}, D_{24}	**Tet**, 5 C_2, C_3, C_4, C_8, 18 D_2, D_3, 2 D_4, D_8
R21.8	3 C_2, C_3, 5 C_4, C_6, 7 C_8, C_{12}, 2 C_{24}, 4 D_2, D_3, 3 D_4, D_6, 2 D_8	3 C_2, C_3, 5 C_4, C_6, 6 C_8, 4 D_2, D_3, 3 D_4, D_6, 2 D_8	3 C_2, 3 C_4, C_6, 3 C_8, 4 D_2, D_3, 3 D_4, D_6, 2 D_8	3 C_2, C_3, 4 D_2, D_3
R21.9	3 C_2, C_3, 4 C_4, C_6, 5 C_8, C_{12}, 2 C_{24}, 4 D_2, D_3, 3 D_4, D_6, D_8	3 C_2, C_3, 4 C_4, C_6, 4 C_8, 4 D_2, D_3, 3 D_4, D_6, D_8	3 C_2, 3 C_4, C_6, 2 C_8, 4 D_2, D_3, 3 D_4, D_6, D_8	3 C_2, C_3, 4 D_2, D_3
R21.10	6 C_2, C_3, 5 C_4, 5 C_6, 2 C_8, 4 C_{12}, 4 C_{24}, 19 D_2, D_3, 3 D_4, 3 D_6, 2 D_{12}	6 C_2, C_3, 5 C_4, 5 C_6, C_8, 3 C_{12}, C_{24}, 19 D_2, D_3, 3 D_4, 3 D_6, 2 D_{12}	3 C_2, 4 C_4, C_6, C_8, 17 D_2, D_3, 3 D_4, 3 D_6, 2 D_{12}	6 C_2, C_3, C_4, C_6, 19 D_2, D_3, 2 D_4, D_6
R21.11	6 C_2, C_3, 3 C_4, 4 C_6, C_8, C_{12}, 2 C_{24}, 27 D_2, 2 D_3, 3 D_4, 7 D_6	6 C_2, C_3, 3 C_4, 4 C_6, 27 D_2, 2 D_3, 3 D_4, 7 D_6	3 C_2, 2 C_4, C_6, 21 D_2, D_3, 3 D_4, 5 D_6	6 C_2, C_3, C_4, C_6, 27 D_2, 2 D_3, 2 D_4, D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R21.12	5 C_2, 2 C_4, 5 C_{11}, 15 C_{22}, 10 C_{44}, 13 D_2, 10 D_{11}, 20 D_{22}	5 C_2, 2 C_4, C_{11}, 3 C_{22}, C_{44}, 13 D_2, 2 D_{11}, 4 D_{22}	3 C_2, 2 C_4, C_{22}, 11 D_2, D_{11}, 3 D_{22}	5 C_2, C_{11}, C_{22}, 13 D_2, 2 D_{11}, D_{22}
R21.13	3 C_2, C_3, 2 C_4, C_6, 3 C_7, C_{12}, 3 C_{14}, 6 C_{21}, 3 C_{28}, 6 C_{42}, 6 C_{84}, 3 D_2, 2 D_3, D_6, 6 D_7, 3 D_{14}, 12 D_{21}, 6 D_{42}	3 C_2, C_3, 2 C_4, C_6, C_7, C_{14}, C_{21}, C_{42}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 2 D_{21}, D_{42}	2 C_2, 2 C_4, C_6, C_{14}, C_{42}, 3 D_2, D_3, D_6, D_7, D_{14}, D_{21}, D_{42}	3 C_2, C_3, C_7, C_{21}, 3 D_2, D_3, D_7, D_{21}
R21.14	**Tet**, 2 **Oct**, **Ico**, 5 C_2, C_3, 2 C_4, C_5, 3 C_6, C_{10}, 16 D_2, 4 D_3, 4 D_4, 2 D_5, 6 D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 5 C_2, C_3, 2 C_4, C_5, 3 C_6, C_{10}, 16 D_2, 4 D_3, 4 D_4, 2 D_5, 6 D_6, D_{10}	2 **Oct**, 3 C_2, 15 D_2, 3 D_3, 4 D_4, D_5, 6 D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 5 C_2, C_3, 2 C_4, C_5, C_{10}, 16 D_2, 4 D_3, 4 D_4, 2 D_5, D_{10}
R21.15	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_6, 2 C_8, 17 D_2, 2 D_3, 12 D_4, D_6, 2 D_8	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_6, C_8, 17 D_2, 2 D_3, 12 D_4, D_6, D_8	**Tet**, 2 **Oct**, 3 C_2, 3 C_4, C_6, C_8, 17 D_2, D_3, 11 D_4, D_6, D_8	**Tet**, 5 C_2, C_3, C_4, 17 D_2, D_3, 3 D_4
R21.16	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, C_6, 2 C_8, 16 D_2, 2 D_3, 7 D_4, D_6	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, C_6, C_8, 16 D_2, 2 D_3, 7 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, 5 C_4, C_6, 16 D_2, D_3, 7 D_4, D_6	**Tet**, 5 C_2, C_3, 16 D_2, D_3
R21.17	6 C_2, C_3, 4 C_4, 5 C_6, 2 C_8, 19 D_2, D_3, 4 D_4, 3 D_6	6 C_2, C_3, 4 C_4, 5 C_6, C_8, 19 D_2, D_3, 4 D_4, 3 D_6	3 C_2, 3 C_4, 2 C_6, C_8, 17 D_2, D_3, 4 D_4, 3 D_6	6 C_2, C_3, C_4, 19 D_2, D_3, 2 D_4
R21.18	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_6, 4 C_8, C_{12}, 26 D_2, D_3, 8 D_4, D_6, 6 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_6, 3 C_8, C_{12}, 26 D_2, D_3, 8 D_4, D_6, 5 D_8, D_{12}	**Oct**, 3 C_2, 2 C_4, 2 C_6, 3 C_8, C_{12}, 19 D_2, D_3, 8 D_4, D_6, 5 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, C_4, 26 D_2, D_3, 2 D_4
R21.19	**Tet**, **Oct**, 4 C_2, C_3, 3 C_4, C_6, 2 C_8, 12 D_2, D_3, 3 D_4, D_6	**Tet**, **Oct**, 4 C_2, C_3, 3 C_4, C_6, C_8, 12 D_2, D_3, 3 D_4, D_6	**Oct**, 3 C_2, 2 C_4, C_6, C_8, 11 D_2, D_3, 3 D_4, D_6	**Tet**, 4 C_2, C_3, C_4, 12 D_2, D_3, 2 D_4
R21.20	5 C_2, 5 C_4, 8 C_8, 4 C_{16}, 15 D_2, 7 D_4, 8 D_8	5 C_2, 5 C_4, 6 C_8, C_{16}, 15 D_2, 7 D_4, 7 D_8	3 C_2, 2 C_4, 2 C_8, 13 D_2, 6 D_4, 7 D_8	5 C_2, 3 C_4, C_8, 15 D_2, 4 D_4, D_8
R21.21	5 C_2, 6 C_4, 8 C_8, 8 C_{16}, 13 D_2, 3 D_4, 6 D_8	5 C_2, 6 C_4, 6 C_8, 3 C_{16}, 13 D_2, 3 D_4, 6 D_8	3 C_2, 3 C_4, 4 C_8, 13 D_2, 3 D_4, 6 D_8	5 C_2, 2 C_4, 13 D_2, D_4
R21.22	4 C_2, 4 C_4, 4 C_8, 2 C_{16}, 12 D_2, 3 D_4, 2 D_8	4 C_2, 4 C_4, 2 C_8, 12 D_2, 3 D_4, 2 D_8	2 C_2, 3 C_4, 2 C_8, 10 D_2, 3 D_4, 2 D_8	4 C_2, C_4, 12 D_2, D_4
R21.23	5 C_2, 4 C_4, 6 C_8, 4 C_{16}, 15 D_2, 3 D_4, 2 D_8	5 C_2, 4 C_4, 4 C_8, C_{16}, 15 D_2, 3 D_4, 2 D_8	2 C_2, 3 C_4, 4 C_8, C_{16}, 11 D_2, 3 D_4, 2 D_8	5 C_2, C_4, 15 D_2, D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R21.24	5 C_2, 5 C_4, 6 C_8, 4 C_{16}, 13 D_2, 3 D_4, 3 D_8	5 C_2, 5 C_4, 4 C_8, C_{16}, 13 D_2, 3 D_4, 3 D_8	3 C_2, 2 C_4, 3 C_8, 13 D_2, 3 D_4, 3 D_8	5 C_2, 3 C_4, 13 D_2, D_4
R21.25	4 C_2, 5 C_4, 6 C_8, 4 C_{16}, 9 D_2, 2 D_4, 2 D_8	4 C_2, 5 C_4, 4 C_8, 9 D_2, 2 D_4, 2 D_8	3 C_2, 3 C_4, 3 C_8, 9 D_2, 2 D_4, 2 D_8	4 C_2, 2 C_4, 9 D_2, D_4
R21.26	3 C_2, 5 C_4, 9 C_8, 2 C_{16}, 4 D_2, 2 D_4, D_8	3 C_2, 5 C_4, 7 C_8, 4 D_2, 2 D_4, D_8	3 C_2, 3 C_4, 4 C_8, 4 D_2, 2 D_4, D_8	3 C_2, 4 D_2
R21.27	3 C_2, 5 C_4, 15 C_8, 2 C_{16}, 4 D_2, 2 D_4, 2 D_8	3 C_2, 5 C_4, 13 C_8, 4 D_2, 2 D_4, 2 D_8	3 C_2, 3 C_4, 7 C_8, 4 D_2, 2 D_4, 2 D_8	3 C_2, 4 D_2
R21.28	2 C_2, 2 C_4, 3 C_7, 2 C_8, 3 C_{14}, 3 C_{28}, 6 C_{56}, 2 D_2, 3 D_7, 3 D_{14}	2 C_2, 2 C_4, C_7, C_{14}, 2 D_2, D_7, D_{14}	2 C_2, C_4, C_{14}, 2 D_2, D_7, D_{14}	2 C_2, C_7, 2 D_2, D_7
R21.29	3 C_2, 2 C_4, 3 C_7, 4 C_8, 3 C_{14}, 3 C_{28}, 6 C_{56}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, 2 C_4, C_7, 2 C_8, C_{14}, 3 D_2, 2 D_7, D_{14}	2 C_2, C_4, C_{14}, 3 D_2, D_7, D_{14}	3 C_2, C_7, 3 D_2, D_7
R21.30	2 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, 4 C_{16}, 2 C_{24}, 4 C_{48}, 2 D_2, D_3, D_6	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 2 D_2, D_3, D_6	2 C_2, C_4, C_6, 2 D_2, D_3, D_6	2 C_2, C_3, 2 D_2, D_3
R21.31	3 C_2, C_3, 2 C_4, C_6, 4 C_8, C_{12}, 8 C_{16}, 2 C_{24}, 4 C_{48}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 2 C_8, 3 D_2, 2 D_3, D_6	2 C_2, C_4, C_6, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, D_3
R21.32	2 C_2, C_3, 2 C_4, C_6, 3 C_8, 2 C_{12}, 4 C_{24}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 2 D_2, D_4	2 C_2, C_4, C_6, 2 D_2, D_4	2 C_2, C_3, 2 D_2
R21.33	2 C_2, C_3, 2 C_4, C_6, 3 C_8, 2 C_{12}, 4 C_{24}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, C_6, C_8, 2 D_2, D_4	2 C_2, C_4, C_6, 2 D_2, D_4	2 C_2, C_3, 2 D_2
R21.34	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 6 D_2	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 2 C_8, C_{12}, 6 D_2	2 C_2, C_4, C_6, 5 D_2	**Tet**, 3 C_2, C_3, C_4, 6 D_2
R21.35	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 6 D_2	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, C_{24}, 6 D_2	**Tet**, 2 C_2, C_4, C_6, 6 D_2	**Tet**, 3 C_2, C_3, C_4, C_8, 6 D_2
R21.36	5 C_2, C_3, 3 C_4, 5 C_6, 4 C_8, 6 C_{12}, 8 C_{24}, 13 D_2	5 C_2, C_3, 3 C_4, 5 C_6, 2 C_8, 4 C_{12}, 2 C_{24}, 13 D_2	2 C_2, 3 C_4, C_6, 2 C_8, 11 D_2	5 C_2, C_3, C_6, 13 D_2
R21.37	4 C_2, C_3, 2 C_4, 4 C_6, 2 C_8, 2 C_{12}, 4 C_{24}, 10 D_2, 2 D_4	4 C_2, C_3, 2 C_4, 4 C_6, 10 D_2, 2 D_4	2 C_2, 2 C_4, C_6, 8 D_2, 2 D_4	4 C_2, C_3, C_6, 10 D_2
R21.38	C_2, 21 C_{43}, 21 C_{86}	C_2	C_2	C_2
R21.39	3 C_2, 2 C_4, 5 C_{11}, 15 C_{22}, 20 C_{44}, 3 D_2	3 C_2, 2 C_4, C_{11}, 3 C_{22}, 2 C_{44}, 3 D_2	2 C_2, 2 C_4, C_{22}, 3 D_2	3 C_2, C_{11}, C_{22}, 3 D_2
R21.40	C_2, C_3, C_4, C_6, 3 C_7, 2 C_{12}, 3 C_{14}, 6 C_{21}, 6 C_{28}, 6 C_{42}, 12 C_{84}	C_2, C_3, C_4, C_6, C_7, C_{14}, C_{21}, C_{42}	C_2, C_4, C_6, C_{14}, C_{42}	C_2, C_3, C_7, C_{21}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 22				
R22.1	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, C_7, 2 C_8, C_{12}, 2 C_{21}, 3 D_2, 4 D_3, 2 D_4, 2 D_6, D_7, 2 D_8, D_{12}, 2 D_{21}	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, C_7, C_8, C_{12}, 2 C_{21}, 3 D_2, 4 D_3, 2 D_4, 2 D_6, D_7, D_8, D_{12}, 2 D_{21}	2 **Tet**, **Oct**, 2 C_2, 2 C_6, 3 D_2, 4 D_3, 2 D_4, 2 D_6, D_7, D_8, D_{12}, 2 D_{21}	**Tet**, 2 C_2, 3 C_3, C_4, C_7, 2 C_{21}, 3 D_2, 4 D_3, 2 D_4, D_7, 2 D_{21}
R22.2	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, C_7, 2 C_8, C_{12}, C_{21}, 3 D_2, 4 D_3, 2 D_4, 2 D_6, D_7, 2 D_8, D_{12}, D_{21}	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, C_7, C_8, C_{12}, C_{21}, 3 D_2, 4 D_3, 2 D_4, 2 D_6, D_7, D_8, D_{12}, D_{21}	2 **Tet**, **Oct**, 2 C_2, 2 C_6, 3 D_2, 4 D_3, 2 D_4, 2 D_6, D_7, D_8, D_{12}, D_{21}	**Tet**, 2 C_2, 3 C_3, C_4, C_7, C_{21}, 3 D_2, 4 D_3, 2 D_4, D_7, D_{21}
R22.3	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	**Tet**, **Oct**, 2 C_2, C_6, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	2 C_2, C_3, C_4, C_7, 3 D_2, 2 D_3, 2 D_4, D_7
R22.4	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	**Tet**, **Oct**, 2 C_2, C_6, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	2 C_2, C_3, C_4, C_7, 3 D_2, 2 D_3, 2 D_4, D_7
R22.5	3 C_2, C_4, 11 C_{23}, 22 C_{46}, 4 D_2, D_4, 11 D_{23}, 11 D_{46}	3 C_2, C_4, C_{23}, 2 C_{46}, 4 D_2, D_4, D_{23}, D_{46}	3 C_2, C_4, C_{46}, 4 D_2, D_4, D_{23}, D_{46}	3 C_2, C_{23}, 4 D_2, D_{23}
R22.6	2 C_2, 2 C_4, C_8, 5 C_{11}, 5 C_{22}, 10 C_{44}, 10 C_{88}, 2 D_2, D_4, 5 D_{11}, 5 D_{22}, 10 D_{44}	2 C_2, 2 C_4, C_{11}, C_{22}, C_{44}, 2 D_2, D_4, D_{11}, D_{22}, D_{44}	2 C_2, 2 C_4, C_{22}, C_{44}, 2 D_2, D_4, D_{11}, D_{22}, D_{44}	2 C_2, C_{11}, 2 D_2, D_{11}
R22.7	2 C_2, C_3, C_4, C_5, 2 C_6, C_8, C_{10}, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, C_4, 2 C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, 2 C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, 2 D_2, D_3
R22.8	3 C_2, 3 C_3, C_4, 4 C_6, 2 C_8, 5 C_{12}, 4 C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_8, 7 D_{12}, 4 D_{24}	3 C_2, 3 C_3, C_4, 4 C_6, C_8, 4 C_{12}, C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 5 D_{12}, D_{24}	3 C_2, 2 C_6, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 5 D_{12}, D_{24}	3 C_2, 3 C_3, C_4, C_6, C_{12}, 4 D_2, 4 D_3, 2 D_4, 2 D_6, 2 D_{12}
R22.9	3 C_2, 3 C_3, C_4, 8 C_6, 2 C_8, 3 C_{12}, 2 C_{24}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}	3 C_2, 3 C_3, C_4, 8 C_6, C_8, 2 C_{12}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}	3 C_2, 6 C_6, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}	3 C_2, C_3, C_4, 4 D_2, D_3, 2 D_4
R22.10	3 C_2, 3 C_3, C_4, 5 C_6, 2 C_8, 5 C_{12}, 10 C_{24}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 4 D_{12}, 4 D_{24}	3 C_2, 3 C_3, C_4, 5 C_6, C_8, 4 C_{12}, 4 C_{24}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 4 D_{12}, 2 D_{24}	3 C_2, 4 C_6, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 4 D_{12}, 2 D_{24}	3 C_2, C_3, C_4, C_8, 4 D_2, 2 D_3, 2 D_4, D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R22.11	2 C_2, 3 C_3, C_4, 4 C_6, C_8, C_{12}, 2 C_{24}, 2 D_2, D_3, D_4, D_6	2 C_2, 3 C_3, C_4, 4 C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, 4 C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, 2 D_2, D_3
R22.12	3 C_2, C_3, 3 C_6, 5 C_{11}, 5 C_{22}, 5 C_{33}, 5 C_{66}, 3 D_2, 10 D_{11}, 5 D_{22}	3 C_2, C_3, 3 C_6, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	3 C_2, C_6, 3 D_2, 2 D_{11}, D_{22}	3 C_2, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}
R22.13	2 C_2, 2 C_3, 2 C_4, 3 C_6, C_8, 2 C_{12}, 2 D_2, D_3, D_4, D_6	2 C_2, 2 C_3, 2 C_4, 3 C_6, C_{12}, 2 D_2, D_3, D_4, D_6	2 C_2, 2 C_4, 3 C_6, C_{12}, 2 D_2, D_3, D_4, D_6	2 C_2, 2 C_3, 2 D_2, D_3
R22.14	C_2, 2 C_5, 2 C_{10}, 5 C_{11}, 10 C_{55}, 5 D_{11}	C_2, C_{11}, D_{11}	C_2, D_{11}	C_2, C_{11}, D_{11}
R22.15	3 C_2, 3 C_3, 5 C_6, 6 C_9, 12 C_{18}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, 5 C_6, 2 C_9, 4 C_{18}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_6, C_{18}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, 3 D_2, 2 D_3
R22.16	C_2, C_3, 2 C_5, C_6, 3 C_9, 2 C_{10}, 4 C_{15}, 3 C_{18}, 4 C_{30}, 12 C_{45}, 12 C_{90}	C_2, C_3, C_6	C_2, C_6	C_2
R22.17	3 C_2, 11 C_{23}, 33 C_{46}, 3 D_2	3 C_2, C_{23}, 3 C_{46}, 3 D_2	3 C_2, C_{46}, 3 D_2	3 C_2, C_{23}, 3 D_2
R22.18	C_2, C_4, 2 C_8, 5 C_{11}, 5 C_{22}, 10 C_{44}, 20 C_{88}	C_2, C_4, C_{11}, C_{22}, C_{44}	C_2, C_4, C_{22}, C_{44}	C_2, C_{11}
Genus 23				
R23.1	5 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 4 C_{12}, 4 C_{16}, 8 C_{24}, 8 C_{48}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_8, 6 D_{12}, 12 D_{24}	5 C_2, C_3, 3 C_4, 3 C_6, 3 C_8, 3 C_{12}, C_{16}, 3 C_{24}, C_{48}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 5 D_8, 4 D_{12}, 5 D_{24}	3 C_2, 2 C_4, C_6, 13 D_2, D_3, 2 D_4, 3 D_6, 3 D_8, 3 D_{12}, 3 D_{24}	5 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}, 13 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}, D_{24}
R23.2	3 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, 3 C_{12}, 2 C_{16}, 4 C_{24}, 4 C_{48}, 4 D_2, D_3, 2 D_4, D_6, D_8, 2 D_{12}, 2 D_{24}	3 C_2, C_3, 4 C_4, 2 C_6, C_8, 2 C_{12}, C_{24}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, D_{24}	3 C_2, 3 C_4, C_6, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, D_{24}	3 C_2, C_3, C_4, C_6, C_{12}, 4 D_2, D_3, D_4, D_6, D_{12}
R23.3	3 C_2, 2 C_4, 11 C_{23}, 11 C_{46}, 11 C_{92}, 3 D_2, 22 D_{23}, 11 D_{46}	3 C_2, 2 C_4, C_{23}, C_{46}, 3 D_2, 2 D_{23}, D_{46}	2 C_2, 2 C_4, C_{46}, 3 D_2, D_{23}, D_{46}	3 C_2, C_{23}, 3 D_2, D_{23}
R23.4	C_2, C_3, C_6, 11 C_{23}, 11 C_{69}, 11 D_{23}	C_2, C_3, C_6, C_{23}, D_{23}	C_2, C_6, D_{23}	C_2, C_{23}, D_{23}
R23.5	4 C_2, 2 C_4, 4 C_8, 6 C_{16}, 4 C_{32}, 9 D_2, 3 D_4, 5 D_8, 8 D_{16}	4 C_2, 2 C_4, 2 C_8, 2 C_{16}, 9 D_2, 3 D_4, 3 D_8, 3 D_{16}	2 C_2, 2 C_4, 2 C_8, 2 C_{16}, 9 D_2, 3 D_4, 3 D_8, 3 D_{16}	4 C_2, 9 D_2
R23.6	3 C_2, 3 C_4, 4 C_8, 6 C_{16}, 8 C_{32}, 4 D_2, 2 D_4, 2 D_8, 4 D_{16}	3 C_2, 3 C_4, 2 C_8, 2 C_{16}, 4 D_2, 2 D_4, D_8, 2 D_{16}	2 C_2, 3 C_4, 2 C_8, 2 C_{16}, 4 D_2, 2 D_4, D_8, 2 D_{16}	3 C_2, 4 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R23.7	3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 4 D_{15}, 2 D_{30}	3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{15}, C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	2 C_2, 2 C_4, C_6, C_{10}, 3 D_2, D_3, D_5, D_6, D_{10}, D_{15}, D_{30}	3 C_2, C_3, C_5, 3 D_2, D_3, D_5
R23.8	C_2, 23 C_{47}, 23 C_{94}	C_2	C_2	C_2
R23.9	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_8, 3 C_{12}, 4 C_{16}, 6 C_{24}, 8 C_{48}, 2 D_2	2 C_2, C_3, 2 C_4, 2 C_6, C_8, 2 C_{12}, C_{24}, 2 D_2	2 C_2, C_4, C_6, 2 D_2	2 C_2, C_3, C_4, C_6, C_{12}, 2 D_2
R23.10	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_8, 4 C_{12}, 8 C_{16}, 8 C_{24}, 16 C_{48}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_8, 3 C_{12}, 2 C_{16}, 3 C_{24}, 2 C_{48}, 3 D_2	2 C_2, C_4, C_6, 3 D_2	3 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}, 3 D_2
R23.11	C_2, C_4, 11 C_{23}, 11 C_{46}, 22 C_{92}	C_2, C_4, C_{23}, C_{46}	C_2, C_4, C_{46}	C_2, C_{23}
Genus 24				
R24.1	2 C_2, C_3, C_4, C_6, 3 C_9, 3 C_{18}, 9 C_{27}, 3 D_2, D_3, D_4, D_6, 3 D_9, 3 D_{18}, 9 D_{27}	2 C_2, C_3, C_4, C_6, C_9, C_{18}, C_{27}, 3 D_2, D_3, D_4, D_6, D_9, D_{18}, D_{27}	2 C_2, C_4, C_6, C_{18}, 3 D_2, D_3, D_4, D_6, D_9, D_{18}, D_{27}	2 C_2, C_3, C_9, 3 D_2, D_3, D_9
R24.2	3 C_2, C_4, 2 C_5, 4 C_{10}, 10 C_{25}, 20 C_{50}, 4 D_2, D_4, 2 D_5, 2 D_{10}, 10 D_{25}, 10 D_{50}	3 C_2, C_4, C_5, 2 C_{10}, C_{25}, 2 C_{50}, 4 D_2, D_4, D_5, D_{10}, D_{25}, D_{50}	3 C_2, C_4, C_{10}, C_{50}, 4 D_2, D_4, D_5, D_{10}, D_{25}, D_{50}	3 C_2, C_5, C_{25}, 4 D_2, D_5, D_{25}
R24.3	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 2 C_{12}, 4 C_{16}, 4 C_{24}, 4 C_{32}, 8 C_{48}, 8 C_{96}, 2 D_2, D_3, D_4, D_6, 2 D_8, 2 D_{12}, 4 D_{16}, 4 D_{24}, 8 D_{48}	2 C_2, C_3, 2 C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{48}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{48}	2 C_2, 2 C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{48}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{48}	2 C_2, C_3, 2 D_2, D_3
R24.4	3 C_2, C_3, C_6, 6 C_{13}, 6 C_{26}, 6 C_{39}, 3 D_2, 2 D_3, D_6, 12 D_{13}, 6 D_{26}, 6 D_{39}	3 C_2, C_3, C_6, C_{13}, C_{26}, C_{39}, 3 D_2, 2 D_3, D_6, 2 D_{13}, D_{26}, D_{39}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_{13}, D_{26}, D_{39}	3 C_2, C_3, C_{13}, 3 D_2, 2 D_3, 2 D_{13}
R24.5	2 C_2, C_3, C_4, C_6, C_8, 3 C_9, C_{12}, 3 C_{18}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}	2 C_2, C_3, C_4, C_6, C_9, C_{12}, C_{18}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}	2 C_2, C_4, C_6, C_{12}, C_{18}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}	2 C_2, C_3, 2 D_2, D_3
R24.6	3 C_2, C_3, C_4, 2 C_6, 2 C_8, 3 C_9, C_{12}, 6 C_{18}, 3 C_{36}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	3 C_2, C_3, C_4, 2 C_6, C_8, C_9, C_{12}, 2 C_{18}, C_{36}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_9, D_{12}, D_{18}, D_{36}	3 C_2, C_6, C_{18}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_9, D_{12}, D_{18}, D_{36}	3 C_2, C_3, C_4, C_9, 4 D_2, D_3, 2 D_4, D_9

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R24.7	3 C_2, 2 C_5, 3 C_7, 2 C_{10}, 3 C_{14}, 6 C_{35}, 3 D_2, 4 D_5, 6 D_7, 2 D_{10}, 3 D_{14}, 6 D_{35}	3 C_2, C_5, C_7, C_{10}, C_{14}, C_{35}, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, D_{35}	3 C_2, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, D_{35}	3 C_2, C_5, C_7, 3 D_2, 2 D_5, 2 D_7
R24.8	3 C_2, C_3, C_4, 2 C_5, C_6, 6 C_{10}, 2 C_{12}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 4 C_{60}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, C_3, C_4, C_5, C_6, 3 C_{10}, C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}	3 C_2, C_{10}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}	3 C_2, C_3, C_4, C_6, C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}
R24.9	3 C_2, C_3, C_4, 2 C_5, 3 C_6, 4 C_{10}, C_{12}, 2 C_{15}, 6 C_{30}, 4 D_2, D_4, 2 D_5, 2 D_{10}	3 C_2, C_3, C_4, C_5, 3 C_6, 2 C_{10}, 4 D_2, D_4, D_5, D_{10}	3 C_2, C_4, C_6, C_{10}, 4 D_2, D_4, D_5, D_{10}	3 C_2, C_5, 4 D_2, D_5
R24.10	3 C_2, C_4, 3 C_7, 2 C_8, 9 C_{14}, 3 C_{28}, 6 C_{56}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8	3 C_2, 4 D_2, 2 D_4, D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8
R24.11	**Tet**, **Oct**, 2 C_2, C_3, C_4, 2 C_5, 4 C_{10}, 2 C_{15}, 2 C_{20}, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 D_2, D_3, D_4
R24.12	3 C_2, C_4, 6 C_{13}, 18 C_{26}, 6 C_{52}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R24.13	C_2, C_3, C_6, 3 C_9, 3 C_{18}, 9 C_{27}, D_2	C_2, C_3, C_6, C_9, C_{18}, C_{27}, D_2	C_2, C_6, C_{18}, D_2	C_2, C_3, C_9, D_2
R24.14	C_2, C_3, 8 C_{17}, 8 C_{34}, 8 C_{51}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R24.15	C_2, 3 C_7, 3 C_{14}, 21 C_{49}, 21 C_{98}	C_2	C_2	C_2
R24.16	3 C_2, 2 C_5, 6 C_{10}, 10 C_{25}, 30 C_{50}, 3 D_2	3 C_2, C_5, 3 C_{10}, C_{25}, 3 C_{50}, 3 D_2	3 C_2, C_{10}, C_{50}, 3 D_2	3 C_2, C_5, C_{25}, 3 D_2
R24.17	C_2, C_3, C_4, C_6, 2 C_8, 2 C_{12}, 4 C_{16}, 4 C_{24}, 8 C_{32}, 8 C_{48}, 16 C_{96}	C_2, C_3, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{48}	C_2, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{48}	C_2, C_3
Genus 25				
R25.1	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, 2 C_8, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, 2 D_8, 2 D_{10}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, 2 C_8, C_{10}, 3 D_2, D_3, 2 D_4, 2 D_5, 2 D_8, D_{10}	C_2, C_{10}, 2 D_2, D_4, D_5, 2 D_8, D_{10}	**Tet**, 2 C_2, C_3, C_4, C_5, 2 C_8, 3 D_2, 2 D_4, D_5, 2 D_8
R25.2	2 **Tet**, 5 C_2, 3 C_3, 3 C_4, 5 C_6, 5 C_{12}, 23 D_2, 2 D_3, 6 D_4, 7 D_6, 10 D_{12}	2 **Tet**, 5 C_2, 3 C_3, 3 C_4, 5 C_6, 4 C_{12}, 23 D_2, 2 D_3, 6 D_4, 7 D_6, 10 D_{12}	2 C_2, C_4, 3 C_6, C_{12}, 16 D_2, D_3, 4 D_4, 5 D_6, 7 D_{12}	5 C_2, C_3, 2 C_4, 2 C_6, 3 C_{12}, 23 D_2, 2 D_3, 6 D_4, 6 D_6, 10 D_{12}
R25.3	2 **Tet**, **Oct**, 4 C_2, 3 C_3, 5 C_4, 5 C_6, 5 C_{12}, 12 D_2, D_3, 4 D_4, D_6, D_{12}	2 **Tet**, **Oct**, 4 C_2, 3 C_3, 5 C_4, 5 C_6, 4 C_{12}, 12 D_2, D_3, 4 D_4, D_6, D_{12}	**Oct**, 2 C_2, C_4, C_6, C_{12}, 11 D_2, D_3, 4 D_4, D_6, D_{12}	**Tet**, **Oct**, 4 C_2, C_3, 4 C_4, C_6, C_{12}, 12 D_2, D_3, 4 D_4, D_6, D_{12}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R25.4	**Tet**, 3 C_2, C_3, 3 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 9 D_2, 2 D_4, 2 D_8	**Tet**, 3 C_2, C_3, 3 C_4, C_6, 3 C_8, C_{12}, C_{24}, 9 D_2, 2 D_4, 2 D_8	2 C_2, 2 C_4, C_6, 2 C_8, 8 D_2, 2 D_4, 2 D_8	3 C_2, 9 D_2
R25.5	2 **Tet**, 2 **Ico**, 3 C_2, 3 C_3, 2 C_5, 5 C_6, 2 C_{10}, 2 C_{15}, 2 C_{30}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	2 **Tet**, **Ico**, 3 C_2, 3 C_3, C_5, 5 C_6, C_{10}, 7 D_2, 2 D_3, 2 D_5, D_6, D_{10}	2 C_2, 3 C_6, C_{10}, 6 D_2, D_3, D_5, D_6, D_{10}	**Tet**, 3 C_2, C_3, C_5, 7 D_2, 2 D_3, D_5
R25.6	3 C_2, 3 C_4, 2 C_5, 2 C_8, 2 C_{10}, 8 D_2, 4 D_4, 2 D_5, 2 D_8, 2 D_{10}	3 C_2, 3 C_4, C_5, 2 C_8, C_{10}, 8 D_2, 4 D_4, D_5, 2 D_8, D_{10}	3 C_2, 3 C_4, 2 C_8, C_{10}, 8 D_2, 4 D_4, D_5, 2 D_8, D_{10}	3 C_2, C_5, 8 D_2, D_5
R25.7	9 C_2, 6 C_4, 2 C_5, 2 C_{10}, 87 D_2, 24 D_4, 4 D_5, 2 D_{10}	9 C_2, 6 C_4, C_5, C_{10}, 87 D_2, 24 D_4, 2 D_5, D_{10}	3 C_2, 2 C_4, C_{10}, 53 D_2, 18 D_4, D_5, D_{10}	9 C_2, 4 C_4, C_5, 87 D_2, 16 D_4, D_5
R25.8	5 C_2, 2 C_3, 3 C_4, 6 C_6, 3 C_{12}, 13 D_2, 5 D_3, 2 D_4, 9 D_6, D_{12}	5 C_2, 2 C_3, 3 C_4, 6 C_6, 2 C_{12}, 13 D_2, 5 D_3, 2 D_4, 9 D_6, D_{12}	3 C_2, 2 C_4, 3 C_6, 11 D_2, 3 D_3, 2 D_4, 7 D_6, D_{12}	5 C_2, 2 C_3, C_4, 2 C_6, C_{12}, 13 D_2, 5 D_3, 2 D_4, 4 D_6, D_{12}
R25.9	9 C_2, 8 C_4, 4 C_8, 4 C_{16}, 54 D_2, 14 D_4, 6 D_8	9 C_2, 8 C_4, 3 C_8, C_{16}, 54 D_2, 14 D_4, 6 D_8	3 C_2, 5 C_4, 2 C_8, 39 D_2, 12 D_4, 6 D_8	9 C_2, 3 C_4, 54 D_2, 9 D_4
R25.10	6 C_2, 11 C_4, 2 C_8, 2 C_{16}, 29 D_2, 8 D_4, D_8	6 C_2, 11 C_4, C_8, 29 D_2, 8 D_4, D_8	3 C_2, 6 C_4, C_8, 23 D_2, 8 D_4, D_8	6 C_2, 4 C_4, 29 D_2, 4 D_4
R25.11	5 C_2, 7 C_4, 5 C_8, 4 C_{16}, 16 D_2, 6 D_4, 3 D_8	5 C_2, 7 C_4, 4 C_8, C_{16}, 16 D_2, 6 D_4, 3 D_8	3 C_2, 6 C_4, 3 C_8, 14 D_2, 6 D_4, 3 D_8	5 C_2, 16 D_2
R25.12	6 C_2, 6 C_4, 5 C_8, 2 C_{16}, 27 D_2, 8 D_4, 10 D_8	6 C_2, 6 C_4, 4 C_8, 27 D_2, 8 D_4, 10 D_8	3 C_2, 5 C_4, 4 C_8, 23 D_2, 8 D_4, 10 D_8	6 C_2, C_4, 27 D_2, D_4
R25.13	4 C_2, 6 C_4, 4 C_8, 2 C_{16}, 12 D_2, 6 D_4, 4 D_8	4 C_2, 6 C_4, 3 C_8, 12 D_2, 6 D_4, 4 D_8	3 C_2, 3 C_4, C_8, 12 D_2, 6 D_4, 4 D_8	4 C_2, 3 C_4, 2 C_8, 12 D_2, 4 D_4, 4 D_8
R25.14	6 C_2, 5 C_4, 5 C_8, 2 C_{16}, 27 D_2, 11 D_4, 7 D_8	6 C_2, 5 C_4, 4 C_8, 27 D_2, 11 D_4, 6 D_8	3 C_2, 2 C_4, 2 C_8, 21 D_2, 7 D_4, 6 D_8	6 C_2, 3 C_4, 2 C_8, 27 D_2, 9 D_4, 4 D_8
R25.15	5 C_2, 3 C_4, 3 C_7, 12 C_{14}, 6 C_{28}, 13 D_2, 2 D_4, 3 D_7, 6 D_{14}	5 C_2, 3 C_4, C_7, 4 C_{14}, C_{28}, 13 D_2, 2 D_4, D_7, 2 D_{14}	3 C_2, 2 C_4, C_{14}, 11 D_2, 2 D_4, D_7, 2 D_{14}	5 C_2, C_4, C_7, 13 D_2, 2 D_4, D_7
R25.16	5 C_2, 2 C_4, 6 C_{13}, 18 C_{26}, 12 C_{52}, 13 D_2, 12 D_{13}, 24 D_{26}	5 C_2, 2 C_4, C_{13}, 3 C_{26}, C_{52}, 13 D_2, 2 D_{13}, 4 D_{26}	3 C_2, 2 C_4, C_{26}, 11 D_2, D_{13}, 3 D_{26}	5 C_2, C_{13}, C_{26}, 13 D_2, 2 D_{13}, D_{26}
R25.17	3 C_2, 2 C_4, 2 C_5, 2 C_{10}, 2 C_{20}, 10 C_{25}, 10 C_{50}, 10 C_{100}, 3 D_2, 4 D_5, 2 D_{10}, 20 D_{25}, 10 D_{50}	3 C_2, 2 C_4, C_5, C_{10}, C_{25}, C_{50}, 3 D_2, 2 D_5, D_{10}, 2 D_{25}, D_{50}	2 C_2, 2 C_4, C_{10}, C_{50}, 3 D_2, D_5, D_{10}, D_{25}, D_{50}	3 C_2, C_5, C_{25}, 3 D_2, D_5, D_{25}
R25.18	5 **Tet**, **Oct**, 3 C_2, 3 C_3, C_4, 2 C_6, 9 D_2, D_3, 2 D_4	5 **Tet**, **Oct**, 3 C_2, 3 C_3, C_4, 2 C_6, 9 D_2, D_3, 2 D_4	3 **Tet**, **Oct**, 2 C_2, 2 C_6, 7 D_2, D_3, 2 D_4	2 **Tet**, **Oct**, 3 C_2, C_3, C_4, 9 D_2, D_3, 2 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R25.19	4 C_2, 3 C_3, 4 C_4, 8 C_6, 3 C_{12}, 6 D_2, 2 D_3, 4 D_4, 2 D_6, 2 D_{12}	4 C_2, 3 C_3, 4 C_4, 8 C_6, 3 C_{12}, 6 D_2, 2 D_3, 4 D_4, 2 D_6, 2 D_{12}	3 C_2, 5 C_6, 6 D_2, 2 D_3, 4 D_4, 2 D_6, 2 D_{12}	4 C_2, C_3, 4 C_4, C_6, 2 C_{12}, 6 D_2, 2 D_3, 4 D_4, 2 D_6, 2 D_{12}
R25.20	2 **Tet**, 3 C_2, 3 C_3, 2 C_6, 6 C_9, 3 C_{18}, 6 D_2, 2 D_3, 2 D_6, 6 D_9, 6 D_{18}	2 **Tet**, 3 C_2, 3 C_3, 2 C_6, 4 C_9, 3 C_{18}, 6 D_2, 2 D_3, 2 D_6, 6 D_9, 6 D_{18}	2 C_2, C_6, 5 D_2, 2 D_3, 2 D_6, 6 D_9, 6 D_{18}	**Tet**, 3 C_2, 2 C_3, 6 D_2, 2 D_3
R25.21	6 C_2, C_3, 6 C_4, 5 C_6, 4 C_{12}, 19 D_2, 4 D_4	6 C_2, C_3, 6 C_4, 5 C_6, 3 C_{12}, 19 D_2, 4 D_4	3 C_2, C_4, 2 C_6, C_{12}, 17 D_2, 4 D_4	6 C_2, 5 C_4, 19 D_2, 4 D_4
R25.22	**Tet**, 5 C_2, C_3, 3 C_4, C_6, 2 C_{12}, 23 D_2, 6 D_4	**Tet**, 5 C_2, C_3, 3 C_4, C_6, C_{12}, 23 D_2, 6 D_4	2 C_2, C_4, C_6, C_{12}, 16 D_2, 4 D_4	5 C_2, 2 C_4, 23 D_2, 6 D_4
R25.23	**Tet**, 3 C_2, C_3, C_6, 3 C_7, 3 C_{14}, 3 C_{21}, 6 D_2, 6 D_7, 6 D_{14}	**Tet**, 3 C_2, C_3, C_6, C_7, C_{14}, 6 D_2, 2 D_7, 2 D_{14}	2 C_2, C_6, 5 D_2, 2 D_7, 2 D_{14}	3 C_2, C_7, 6 D_2, 2 D_7
R25.24	C_2, 3 C_3, C_6, 6 C_9, 18 C_{27}, D_3, 3 D_9, 9 D_{27}	C_2, 3 C_3, C_6, 4 C_9, 4 C_{27}, D_3, D_9, 3 D_{27}	C_2, C_6, D_3, D_9, 3 D_{27}	C_2, 2 C_3, C_9, D_3, D_9
R25.25	C_2, C_3, 2 C_5, C_6, 2 C_{15}, 10 C_{25}, 10 C_{75}, 2 D_5, 10 D_{25}	C_2, C_3, C_5, C_6, C_{25}, D_5, D_{25}	C_2, C_6, D_5, D_{25}	C_2, C_5, C_{25}, D_5, D_{25}
R25.26	7 C_2, 2 C_5, 2 C_{10}, 63 D_2	7 C_2, C_5, C_{10}, 63 D_2	2 C_2, C_{10}, 33 D_2	7 C_2, C_5, 63 D_2
R25.27	2 C_2, 2 C_4, 2 C_5, 2 C_{10}, 2 D_2, 2 D_4	2 C_2, 2 C_4, C_5, C_{10}, 2 D_2, 2 D_4	2 C_2, 2 C_4, C_{10}, 2 D_2, 2 D_4	2 C_2, C_5, 2 D_2
R25.28	5 C_2, 3 C_3, 2 C_4, 11 C_6, 10 C_{12}, 13 D_2, 2 D_3, 4 D_6	5 C_2, 3 C_3, 2 C_4, 11 C_6, 8 C_{12}, 13 D_2, 2 D_3, 4 D_6	3 C_2, 2 C_4, 6 C_6, 5 C_{12}, 11 D_2, D_3, 3 D_6	5 C_2, C_3, C_6, 13 D_2, 2 D_3, 2 D_6
R25.29	5 C_2, 3 C_3, 2 C_4, 9 C_6, 4 C_{12}, 13 D_2, 6 D_3, 12 D_6	5 C_2, 3 C_3, 2 C_4, 9 C_6, 2 C_{12}, 13 D_2, 6 D_3, 12 D_6	3 C_2, 2 C_4, 4 C_6, 11 D_2, 3 D_3, 9 D_6	5 C_2, 3 C_3, 3 C_6, 13 D_2, 6 D_3, 4 D_6
R25.30	3 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 2 C_{10}, 4 C_{12}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 4 C_{60}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_3, 2 C_4, C_5, 3 C_6, C_{10}, 2 C_{12}, 3 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_6, C_{10}, 3 D_2, D_5, D_{10}	3 C_2, C_5, 3 D_2, D_5
R25.31	**Tet**, 3 C_2, C_3, 2 C_5, C_6, 6 C_{10}, 4 C_{15}, 4 C_{30}, 6 D_2	**Tet**, 3 C_2, C_3, C_6, 6 D_2	2 C_2, C_6, 5 D_2	3 C_2, 6 D_2
R25.32	4 C_2, 5 C_4, 5 C_8, 8 C_{16}, 9 D_2, D_4	4 C_2, 5 C_4, 3 C_8, C_{16}, 9 D_2, D_4	2 C_2, 3 C_4, 3 C_8, C_{16}, 9 D_2, D_4	4 C_2, 2 C_4, 9 D_2, D_4
R25.33	5 C_2, 6 C_4, 8 C_8, 12 C_{16}, 13 D_2, 3 D_4	5 C_2, 6 C_4, 6 C_8, 4 C_{16}, 13 D_2, 3 D_4	2 C_2, 3 C_4, 6 C_8, 4 C_{16}, 11 D_2, 2 D_4	5 C_2, 3 C_4, 13 D_2, 3 D_4
R25.34	4 C_2, 4 C_4, 6 C_8, 4 C_{16}, 10 D_2, 8 D_4, 6 D_8	4 C_2, 4 C_4, 4 C_8, 10 D_2, 8 D_4, 4 D_8	2 C_2, 2 C_4, 4 C_8, 8 D_2, 6 D_4, 4 D_8	4 C_2, 2 C_4, 10 D_2, 4 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R25.35	3 C_2, 5 C_4, 4 C_8, 4 C_{16}, 6 D_2, 4 D_4	3 C_2, 5 C_4, 2 C_8, 6 D_2, 4 D_4	2 C_2, 3 C_4, 2 C_8, 6 D_2, 4 D_4	3 C_2, 2 C_4, 6 D_2, 2 D_4
R25.36	5 C_2, 4 C_4, 3 C_8, 4 C_{16}, 23 D_2	5 C_2, 4 C_4, C_8, 23 D_2	2 C_2, 3 C_4, C_8, 17 D_2	5 C_2, 23 D_2
R25.37	4 C_2, 4 C_4, 4 C_8, 4 C_{16}, 12 D_2, 2 D_4	4 C_2, 4 C_4, 2 C_8, 12 D_2, 2 D_4	2 C_2, 3 C_4, 2 C_8, 10 D_2, 2 D_4	4 C_2, C_4, 12 D_2
R25.38	7 C_2, 4 C_4, 6 C_8, 8 C_{16}, 30 D_2	7 C_2, 4 C_4, 4 C_8, 2 C_{16}, 30 D_2	2 C_2, 3 C_4, 2 C_8, 19 D_2	7 C_2, C_4, 30 D_2
R25.39	5 C_2, 4 C_4, 5 C_8, 8 C_{16}, 15 D_2, 2 D_4	5 C_2, 4 C_4, 3 C_8, 2 C_{16}, 15 D_2, 2 D_4	2 C_2, 3 C_4, C_8, 11 D_2, 2 D_4	5 C_2, 15 D_2
R25.40	C_2, 2 C_5, 5 C_{11}, 5 C_{22}, 10 C_{55}, 2 D_5	C_2, C_5, D_5	C_2, D_5	C_2, C_5, D_5
R25.41	5 C_2, 2 C_4, 3 C_7, 15 C_{14}, 12 C_{28}, 13 D_2	5 C_2, 2 C_4, C_7, 5 C_{14}, 2 C_{28}, 13 D_2	3 C_2, 2 C_4, C_{14}, 11 D_2	5 C_2, C_7, 13 D_2
R25.42	C_2, C_3, C_6, 8 C_{17}, 8 C_{34}, 16 C_{51}, 16 C_{102}	C_2, C_3, C_6	C_2, C_6	C_2
R25.43	3 C_2, 2 C_4, 6 C_{13}, 18 C_{26}, 24 C_{52}, 3 D_2	3 C_2, 2 C_4, C_{13}, 3 C_{26}, 2 C_{52}, 3 D_2	2 C_2, 2 C_4, C_{26}, 3 D_2	3 C_2, C_{13}, C_{26}, 3 D_2
R25.44	C_2, C_4, 2 C_5, 2 C_{10}, 4 C_{20}, 10 C_{25}, 10 C_{50}, 20 C_{100}	C_2, C_4, C_5, C_{10}, C_{25}, C_{50}	C_2, C_4, C_{10}, C_{50}	C_2, C_5, C_{25}
Genus 26				
R26.1	C_2, C_3, 6 C_5, 2 C_{10}, 4 C_{15}, D_3, 4 D_5, 4 D_{15}	C_2, C_3, 5 C_5, C_{10}, 4 C_{15}, D_3, 4 D_5, 4 D_{15}	C_2, C_{10}, D_3, 4 D_5, 4 D_{15}	C_2, C_3, 4 C_5, D_3, 4 D_5
R26.2	**Tet**, 2 **Ico**, C_2, C_3, 2 C_5, C_6, C_{11}, D_2, D_3, 2 D_5, D_6	**Tet**, 2 **Ico**, C_2, C_3, 2 C_5, C_6, D_2, D_3, 2 D_5, D_6	**Tet**, 2 **Ico**, C_2, C_6, D_2, D_3, 2 D_5, D_6	**Tet**, C_2, C_3, 2 C_5, D_2, D_3, 2 D_5
R26.3	3 C_2, C_3, C_4, 2 C_6, 3 C_9, 6 C_{18}, 9 C_{27}, 18 C_{54}, 4 D_2, D_3, D_4, D_6, 3 D_9, 3 D_{18}, 9 D_{27}, 9 D_{54}	3 C_2, C_3, C_4, 2 C_6, C_9, 2 C_{18}, C_{27}, 2 C_{54}, 4 D_2, D_3, D_4, D_6, D_9, D_{18}, D_{27}, D_{54}	3 C_2, C_4, C_6, C_{18}, C_{54}, 4 D_2, D_3, D_4, D_6, D_9, D_{18}, D_{27}, D_{54}	3 C_2, C_3, C_9, C_{27}, 4 D_2, D_3, D_9, D_{27}
R26.4	2 C_2, 2 C_4, C_8, 6 C_{13}, 6 C_{26}, 12 C_{52}, 12 C_{104}, 2 D_2, D_4, 6 D_{13}, 6 D_{26}, 12 D_{52}	2 C_2, 2 C_4, C_{13}, C_{26}, C_{52}, 2 D_2, D_4, D_{13}, D_{26}, D_{52}	2 C_2, 2 C_4, C_{26}, C_{52}, 2 D_2, D_4, D_{13}, D_{26}, D_{52}	2 C_2, C_{13}, 2 D_2, D_{13}
R26.5	C_2, 10 C_5, 2 C_{10}, 4 D_5	C_2, 8 C_5, C_{10}, 4 D_5	C_2, C_{10}, 4 D_5	C_2, 6 C_5, 4 D_5
R26.6	3 C_2, C_3, 4 C_5, 3 C_6, 4 C_{10}, 3 D_2, 8 D_5, 4 D_{10}	3 C_2, C_3, 4 C_5, 3 C_6, 4 C_{10}, 3 D_2, 8 D_5, 4 D_{10}	3 C_2, 2 C_6, 4 C_{10}, 3 D_2, 8 D_5, 4 D_{10}	3 C_2, C_3, 4 C_5, 3 D_2, 8 D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R26.7	3 C_2, C_3, C_4, 2 C_6, 3 C_7, 3 C_{14}, 3 C_{21}, 6 C_{28}, 3 C_{42}, 4 D_2, D_3, D_4, D_6, 6 D_7, 6 D_{14}, 3 D_{21}, 6 D_{28}, 3 D_{42}	3 C_2, C_3, C_4, 2 C_6, C_7, C_{14}, C_{21}, C_{28}, C_{42}, 4 D_2, D_3, D_4, D_6, 2 D_7, 2 D_{14}, D_{21}, D_{28}, D_{42}	3 C_2, C_4, C_6, 4 D_2, D_3, D_4, D_6, 2 D_7, 2 D_{14}, D_{21}, D_{28}, D_{42}	3 C_2, C_3, C_7, C_{14}, 4 D_2, D_3, 2 D_7, 2 D_{14}
R26.8	3 C_2, C_3, 3 C_6, 6 C_{13}, 6 C_{26}, 6 C_{39}, 6 C_{78}, 3 D_2, 12 D_{13}, 6 D_{26}	3 C_2, C_3, 3 C_6, C_{13}, C_{26}, 3 D_2, 2 D_{13}, D_{26}	3 C_2, C_6, 3 D_2, 2 D_{13}, D_{26}	3 C_2, C_{13}, C_{26}, 3 D_2, 2 D_{13}, D_{26}
R26.9	2 C_2, C_3, 2 C_4, C_6, C_8, 3 C_9, 2 C_{12}, 3 C_{18}, 6 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, C_3, 2 C_4, C_6, C_9, C_{12}, C_{18}, C_{36}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{36}	2 C_2, 2 C_4, C_6, C_{18}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{36}	2 C_2, C_3, C_9, 2 D_2, D_3, D_9
R26.10	C_2, C_3, 8 C_5, 2 C_{10}, 14 C_{15}, D_3, 2 D_5, 4 D_{15}	C_2, C_3, 6 C_5, C_{10}, 10 C_{15}, D_3, 2 D_5, 4 D_{15}	C_2, C_{10}, D_3, 2 D_5, 4 D_{15}	C_2, C_3, 4 C_5, D_3, 2 D_5
R26.11	C_2, 2 C_5, 2 C_{10}, 6 C_{13}, 12 C_{65}, 6 D_{13}	C_2, C_5, C_{10}, C_{13}, D_{13}	C_2, C_{10}, D_{13}	C_2, C_{13}, D_{13}
R26.12	3 C_2, C_3, C_4, 2 C_5, 2 C_6, 6 C_{10}, 2 C_{15}, 2 C_{20}, 6 C_{30}, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, C_4, C_5, 2 C_6, 3 C_{10}, 4 D_2, D_3, D_4, D_6	3 C_2, C_4, C_6, C_{10}, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, 4 D_2, D_3
R26.13	2 C_2, 2 C_4, 3 C_7, C_8, 6 C_{14}, 6 C_{28}, 6 C_{56}, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 D_2
R26.14	C_2, 26 C_{53}, 26 C_{106}	C_2	C_2	C_2
R26.15	3 C_2, C_3, 3 C_6, 3 C_9, 9 C_{18}, 9 C_{27}, 27 C_{54}, 3 D_2	3 C_2, C_3, 3 C_6, C_9, 3 C_{18}, C_{27}, 3 C_{54}, 3 D_2	3 C_2, C_6, C_{18}, C_{54}, 3 D_2	3 C_2, C_3, C_9, C_{27}, 3 D_2
R26.16	C_2, C_4, 2 C_8, 6 C_{13}, 6 C_{26}, 12 C_{52}, 24 C_{104}	C_2, C_4, C_{13}, C_{26}, C_{52}	C_2, C_4, C_{26}, C_{52}	C_2, C_{13}
Genus 27				
R27.1	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 2 C_5, C_6, 6 C_{10}, 4 C_{15}, 4 C_{30}, 16 D_2, 2 D_3, 4 D_4, 4 D_5, D_6, 8 D_{10}, 8 D_{15}, 4 D_{30}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_5, C_6, 3 C_{10}, C_{15}, C_{30}, 16 D_2, 2 D_3, 4 D_4, 2 D_5, D_6, 4 D_{10}, 2 D_{15}, D_{30}	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, C_6, C_{10}, 16 D_2, D_3, 4 D_4, D_5, D_6, 4 D_{10}, D_{15}, D_{30}	**Tet**, 5 C_2, C_3, C_5, C_{10}, 16 D_2, D_3, 2 D_5, D_{10}
R27.2	5 C_2, 3 C_4, 3 C_7, 2 C_8, 9 C_{14}, 12 C_{28}, 12 C_{56}, 13 D_2, 3 D_4, 6 D_7, 12 D_{14}, 18 D_{28}	5 C_2, 3 C_4, C_7, C_8, 3 C_{14}, 3 C_{28}, C_{56}, 13 D_2, 3 D_4, 2 D_7, 4 D_{14}, 5 D_{28}	3 C_2, 2 C_4, C_{14}, 13 D_2, 3 D_4, D_7, 3 D_{14}, 3 D_{28}	5 C_2, C_4, C_7, C_{14}, C_{28}, 13 D_2, D_4, 2 D_7, 2 D_{14}, D_{28}
R27.3	3 C_2, 5 C_4, 3 C_7, C_8, 6 C_{14}, 6 C_{28}, 6 C_{56}, 4 D_2, 2 D_4, 3 D_7, 3 D_{14}, 3 D_{28}	3 C_2, 5 C_4, C_7, 2 C_{14}, C_{28}, 4 D_2, 2 D_4, D_7, D_{14}, D_{28}	3 C_2, 4 C_4, C_{14}, 4 D_2, 2 D_4, D_7, D_{14}, D_{28}	3 C_2, C_7, C_{14}, 4 D_2, D_7, D_{14}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R27.4	3 C_2, C_3, 2 C_4, C_6, 3 C_9, C_{12}, 3 C_{18}, 9 C_{27}, 3 C_{36}, 9 C_{54}, 9 C_{108}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}, 18 D_{27}, 9 D_{54}	3 C_2, C_3, 2 C_4, C_6, C_9, C_{18}, C_{27}, C_{54}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}, 2 D_{27}, D_{54}	2 C_2, 2 C_4, C_6, C_{18}, C_{54}, 3 D_2, D_3, D_6, D_9, D_{18}, D_{27}, D_{54}	3 C_2, C_3, C_9, C_{27}, 3 D_2, D_3, D_9, D_{27}
R27.5	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 2 C_{20}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{20}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_4, C_6, C_{10}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5
R27.6	5 C_2, 3 C_4, 2 C_5, 2 C_8, 6 C_{10}, 8 C_{20}, 13 D_2, 3 D_4, 4 D_5, 8 D_{10}, 6 D_{20}	5 C_2, 3 C_4, C_5, C_8, 3 C_{10}, 3 C_{20}, 13 D_2, 3 D_4, 2 D_5, 4 D_{10}, 3 D_{20}	3 C_2, 2 C_4, C_{10}, C_{20}, 13 D_2, 3 D_4, D_5, 4 D_{10}, 3 D_{20}	5 C_2, C_4, C_5, C_{10}, 13 D_2, D_4, 2 D_5, D_{10}
R27.7	3 C_2, 5 C_4, 2 C_5, C_8, 4 C_{10}, 14 C_{20}, 4 D_2, 2 D_4, 2 D_5, 2 D_{10}, 4 D_{20}	3 C_2, 5 C_4, C_5, 2 C_{10}, 6 C_{20}, 4 D_2, 2 D_4, D_5, D_{10}, 2 D_{20}	3 C_2, 3 C_4, C_{10}, 2 C_{20}, 4 D_2, 2 D_4, D_5, D_{10}, 2 D_{20}	3 C_2, C_5, 4 D_2, D_5
R27.8	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 3 C_9, C_{12}, 3 C_{18}, 2 C_{24}, 3 C_{36}, 6 C_{72}, 2 D_2, D_3, D_6, 3 D_9, 3 D_{18}	2 C_2, C_3, 2 C_4, C_6, C_9, C_{18}, 2 D_2, D_3, D_6, D_9, D_{18}	2 C_2, C_4, C_6, C_{18}, 2 D_2, D_3, D_6, D_9, D_{18}	2 C_2, C_3, C_9, 2 D_2, D_3, D_9
R27.9	3 C_2, C_3, 2 C_4, C_6, 4 C_8, 3 C_9, C_{12}, 3 C_{18}, 2 C_{24}, 3 C_{36}, 6 C_{72}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, C_3, 2 C_4, C_6, 2 C_8, C_9, C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	2 C_2, C_4, C_6, C_{18}, 3 D_2, D_3, D_6, D_9, D_{18}	3 C_2, C_3, C_9, 3 D_2, D_3, D_9
R27.10	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_9, 3 C_{12}, 3 C_{18}, 6 C_{36}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, 2 C_6, 2 C_{12}, 2 D_2, D_4	2 C_2, C_4, C_6, 2 D_2, D_4	2 C_2, 2 D_2
R27.11	C_2, C_3, 3 C_7, 3 C_9, 3 C_{14}, 3 C_{21}, 9 C_{63}, D_3, 3 D_9	C_2, C_3, C_7, C_9, C_{14}, D_3, D_9	C_2, C_{14}, D_3, D_9	C_2, C_3, C_9, D_3, D_9
R27.12	3 C_2, C_3, 2 C_4, 2 C_5, C_6, 6 C_{10}, C_{12}, 2 C_{15}, 8 C_{20}, 2 C_{30}, 4 C_{60}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 3 D_2, 2 D_3, D_6	2 C_2, 2 C_4, C_6, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, D_3
R27.13	**Tet**, 3 C_2, C_3, 2 C_5, C_6, 6 C_{10}, 4 C_{15}, 4 C_{30}, 6 D_2	**Tet**, 3 C_2, C_3, C_5, C_6, 3 C_{10}, C_{15}, C_{30}, 6 D_2	**Tet**, 2 C_2, C_6, C_{10}, 6 D_2	**Tet**, 3 C_2, C_3, C_5, C_{10}, 6 D_2
R27.14	C_2, C_3, 9 C_{19}, 9 C_{38}, 9 C_{57}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R27.15	C_2, 2 C_5, 2 C_{10}, 5 C_{11}, 5 C_{22}, 20 C_{55}, 20 C_{110}	C_2	C_2	C_2
R27.16	2 C_2, 2 C_4, 3 C_7, 2 C_8, 6 C_{14}, 9 C_{28}, 12 C_{56}, 2 D_2	2 C_2, 2 C_4, C_7, 2 C_{14}, C_{28}, 2 D_2	2 C_2, C_4, C_{14}, 2 D_2	2 C_2, C_7, C_{14}, 2 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R27.17	3 C_2, 2 C_4, 3 C_7, 4 C_8, 9 C_{14}, 12 C_{28}, 24 C_{56}, 3 D_2	3 C_2, 2 C_4, C_7, 2 C_8, 3 C_{14}, 3 C_{28}, 2 C_{56}, 3 D_2	2 C_2, C_4, C_{14}, 3 D_2	3 C_2, C_4, C_7, C_{14}, C_{28}, 3 D_2
R27.18	C_2, C_3, C_4, C_6, 3 C_9, 2 C_{12}, 3 C_{18}, 9 C_{27}, 6 C_{36}, 9 C_{54}, 18 C_{108}	C_2, C_3, C_4, C_6, C_9, C_{18}, C_{27}, C_{54}	C_2, C_4, C_6, C_{18}, C_{54}	C_2, C_3, C_9, C_{27}
Genus 28				
R28.1	**Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 2 C_6, 2 C_9, 2 C_{12}, 3 D_2, 6 D_3, D_4, 3 D_6, 2 D_9, 2 D_{12}	**Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 2 C_6, 2 C_9, C_{12}, 3 D_2, 6 D_3, D_4, 3 D_6, 2 D_9, D_{12}	**Tet**, **Oct**, 2 C_2, C_6, 3 D_2, 6 D_3, D_4, 3 D_6, 2 D_9, D_{12}	**Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 2 C_9, 3 D_2, 6 D_3, D_4, 2 D_9
R28.2	**Tet**, 2 C_2, 4 C_3, C_4, 5 C_6, 3 C_9, C_{12}, 3 D_2, 2 D_3, D_4, 2 D_6, 3 D_9	**Tet**, 2 C_2, 4 C_3, C_4, 5 C_6, 3 C_9, 3 D_2, 2 D_3, D_4, 2 D_6, 3 D_9	**Tet**, 2 C_2, C_4, 5 C_6, 3 D_2, 2 D_3, D_4, 2 D_6, 3 D_9	2 C_2, 2 C_3, 3 C_9, 3 D_2, 2 D_3, 3 D_9
R28.3	C_2, 7 C_3, C_6, 6 C_9, 3 C_{18}, 2 D_3, 3 D_9	C_2, 7 C_3, C_6, 4 C_9, C_{18}, 2 D_3, 3 D_9	C_2, C_6, C_{18}, 2 D_3, 3 D_9	C_2, 5 C_3, 3 C_9, 2 D_3, 3 D_9
R28.4	C_2, 4 C_3, C_6, 9 C_9, 3 C_{18}, 2 D_3, 3 D_9	C_2, 4 C_3, C_6, 7 C_9, C_{18}, 2 D_3, 3 D_9	C_2, C_6, C_{18}, 2 D_3, 3 D_9	C_2, 2 C_3, 3 C_9, 2 D_3, 3 D_9
R28.5	2 C_2, 4 C_3, C_4, 5 C_6, C_8, 3 C_{12}, 2 C_{24}, 2 D_2, 2 D_3, D_4, 2 D_6, D_{12}	2 C_2, 4 C_3, C_4, 5 C_6, 2 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, D_{12}	2 C_2, C_4, 5 C_6, 2 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_3, 2 D_2, 2 D_3
R28.6	3 C_2, 7 C_3, C_4, 7 C_6, 2 C_{12}, 4 D_2, 9 D_3, D_4, 6 D_6, 2 D_{12}	3 C_2, 7 C_3, C_4, 7 C_6, 2 C_{12}, 4 D_2, 9 D_3, D_4, 6 D_6, 2 D_{12}	3 C_2, C_4, 7 C_6, 2 C_{12}, 4 D_2, 9 D_3, D_4, 6 D_6, 2 D_{12}	3 C_2, 6 C_3, 4 D_2, 9 D_3
R28.7	3 C_2, C_4, 14 C_{29}, 28 C_{58}, 4 D_2, D_4, 14 D_{29}, 14 D_{58}	3 C_2, C_4, C_{29}, 2 C_{58}, 4 D_2, D_4, D_{29}, D_{58}	3 C_2, C_4, C_{58}, 4 D_2, D_4, D_{29}, D_{58}	3 C_2, C_{29}, 4 D_2, D_{29}
R28.8	2 C_2, 2 C_4, 3 C_7, 2 C_8, 3 C_{14}, 2 C_{16}, 6 C_{28}, 12 C_{56}, 12 C_{112}, 2 D_2, D_4, 3 D_7, 2 D_8, 3 D_{14}, 6 D_{28}, 12 D_{56}	2 C_2, 2 C_4, C_7, C_8, C_{14}, C_{28}, C_{56}, 2 D_2, D_4, D_7, D_8, D_{14}, D_{28}, D_{56}	2 C_2, 2 C_4, C_8, C_{14}, C_{28}, C_{56}, 2 D_2, D_4, D_7, D_8, D_{14}, D_{28}, D_{56}	2 C_2, C_7, 2 D_2, D_7
R28.9	3 C_2, 9 C_3, 8 C_6, 3 D_2, 8 D_3, 3 D_6	3 C_2, 9 C_3, 8 C_6, 3 D_2, 8 D_3, 3 D_6	3 C_2, 8 C_6, 3 D_2, 8 D_3, 3 D_6	3 C_2, 7 C_3, 3 D_2, 8 D_3
R28.10	3 C_2, 9 C_3, 9 C_6, 3 D_2, 7 D_3, 3 D_6	3 C_2, 9 C_3, 9 C_6, 3 D_2, 7 D_3, 3 D_6	3 C_2, 9 C_6, 3 D_2, 7 D_3, 3 D_6	3 C_2, 7 C_3, 3 D_2, 7 D_3
R28.11	3 C_2, 6 C_3, 6 C_6, C_9, 3 D_2, 12 D_3, 6 D_6, D_9	3 C_2, 6 C_3, 6 C_6, C_9, 3 D_2, 12 D_3, 6 D_6, D_9	3 C_2, 4 C_6, 3 D_2, 12 D_3, 6 D_6, D_9	3 C_2, 6 C_3, C_9, 3 D_2, 12 D_3, D_9

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R28.12	3 C_2, 4 C_3, 6 C_6, 3 C_9, 3 C_{18}, 3 D_2, 4 D_3, 2 D_6, 6 D_9, 3 D_{18}	3 C_2, 4 C_3, 6 C_6, 3 C_9, 3 C_{18}, 3 D_2, 4 D_3, 2 D_6, 6 D_9, 3 D_{18}	3 C_2, 5 C_6, 3 C_{18}, 3 D_2, 4 D_3, 2 D_6, 6 D_9, 3 D_{18}	3 C_2, 2 C_3, 3 C_9, 3 D_2, 4 D_3, 6 D_9
R28.13	3 C_2, 5 C_3, C_4, 7 C_6, C_{12}, 4 D_2, 4 D_3, D_4, 2 D_6	3 C_2, 5 C_3, C_4, 7 C_6, 4 D_2, 4 D_3, D_4, 2 D_6	3 C_2, 6 C_6, 4 D_2, 4 D_3, D_4, 2 D_6	3 C_2, 3 C_3, C_4, 4 D_2, 4 D_3, D_4
R28.14	3 C_2, 5 C_3, C_4, 3 C_6, 2 C_{12}, 4 D_2, 8 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 5 C_3, C_4, 3 C_6, C_{12}, 4 D_2, 8 D_3, D_4, 4 D_6, D_{12}	3 C_2, C_6, 4 D_2, 8 D_3, D_4, 4 D_6, D_{12}	3 C_2, 5 C_3, C_4, 4 D_2, 8 D_3, D_4
R28.15	3 C_2, 3 C_3, C_4, 3 C_6, 2 C_{12}, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 3 C_3, C_4, 3 C_6, C_{12}, 4 D_2, 6 D_3, D_4, 4 D_6, D_{12}	3 C_2, C_6, 4 D_2, 6 D_3, D_4, 4 D_6, D_{12}	3 C_2, 3 C_3, C_4, 4 D_2, 6 D_3, D_4
R28.16	3 C_2, 3 C_3, C_4, 3 C_6, 2 C_{12}, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 3 C_3, C_4, 3 C_6, C_{12}, 4 D_2, 6 D_3, D_4, 4 D_6, D_{12}	3 C_2, C_6, 4 D_2, 6 D_3, D_4, 4 D_6, D_{12}	3 C_2, 3 C_3, C_4, 4 D_2, 6 D_3, D_4
R28.17	3 C_2, 4 C_3, C_4, 10 C_6, C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6	3 C_2, 4 C_3, C_4, 10 C_6, 4 D_2, 2 D_3, D_4, 2 D_6	3 C_2, C_4, 10 C_6, 4 D_2, 2 D_3, D_4, 2 D_6	3 C_2, 2 C_3, 4 D_2, 2 D_3
R28.18	3 C_2, 7 C_3, C_4, 12 C_6, 5 C_{12}, 4 D_2, 4 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 7 C_3, C_4, 12 C_6, 4 C_{12}, 4 D_2, 4 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, C_4, 11 C_6, 4 C_{12}, 4 D_2, 4 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 5 C_3, 4 D_2, 4 D_3
R28.19	3 C_2, 4 C_3, C_4, 6 C_6, 6 C_{12}, 4 D_2, 4 D_3, D_4, 4 D_6, 3 D_{12}	3 C_2, 4 C_3, C_4, 6 C_6, 5 C_{12}, 4 D_2, 4 D_3, D_4, 4 D_6, 3 D_{12}	3 C_2, 5 C_6, 4 D_2, 4 D_3, D_4, 4 D_6, 3 D_{12}	3 C_2, 2 C_3, C_4, 4 D_2, 4 D_3, D_4
R28.20	3 C_2, 4 C_3, C_4, 6 C_6, 2 C_{12}, 4 D_2, 5 D_3, D_4, 5 D_6, 2 D_{12}	3 C_2, 4 C_3, C_4, 6 C_6, C_{12}, 4 D_2, 5 D_3, D_4, 5 D_6, D_{12}	3 C_2, C_4, 5 C_6, C_{12}, 4 D_2, 5 D_3, D_4, 5 D_6, D_{12}	3 C_2, 4 C_3, 4 D_2, 5 D_3
R28.21	3 C_2, 3 C_3, 2 C_5, 5 C_6, 2 C_{10}, 6 C_{15}, 2 C_{30}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 2 D_{15}	3 C_2, 3 C_3, C_5, 5 C_6, C_{10}, 2 C_{15}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}	3 C_2, 4 C_6, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}	3 C_2, C_3, C_5, 3 D_2, 2 D_3, 2 D_5
R28.22	3 C_2, 3 C_3, 2 C_5, 5 C_6, 2 C_{10}, 10 C_{15}, 10 C_{30}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 8 D_{15}, 4 D_{30}	3 C_2, 3 C_3, C_5, 5 C_6, C_{10}, 4 C_{15}, 4 C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 4 D_{15}, 2 D_{30}	3 C_2, 4 C_6, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 4 D_{15}, 2 D_{30}	3 C_2, C_3, C_5, C_{10}, 3 D_2, 2 D_3, 2 D_5, D_{10}
R28.23	3 C_2, 3 C_3, 2 C_5, 2 C_6, 2 C_{10}, 10 C_{15}, 4 C_{30}, 3 D_2, 5 D_3, 4 D_5, 2 D_6, 2 D_{10}, 14 D_{15}, 4 D_{30}	3 C_2, 3 C_3, C_5, 2 C_6, C_{10}, 4 C_{15}, C_{30}, 3 D_2, 5 D_3, 2 D_5, 2 D_6, D_{10}, 5 D_{15}, D_{30}	3 C_2, 3 D_2, 5 D_3, 2 D_5, 2 D_6, D_{10}, 5 D_{15}, D_{30}	3 C_2, 3 C_3, C_5, C_{15}, 3 D_2, 5 D_3, 2 D_5, 2 D_{15}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R28.24	3 C_2, C_3, C_4, 3 C_6, 3 C_7, C_{12}, 3 C_{14}, 3 C_{21}, 6 C_{28}, 3 C_{42}, 6 C_{84}, 4 D_2, D_4, 6 D_7, 6 D_{14}, 6 D_{28}	3 C_2, C_3, C_4, 3 C_6, C_7, C_{14}, C_{28}, 4 D_2, D_4, 2 D_7, 2 D_{14}, D_{28}	3 C_2, C_6, 4 D_2, D_4, 2 D_7, 2 D_{14}, D_{28}	3 C_2, C_4, C_7, C_{14}, C_{28}, 4 D_2, D_4, 2 D_7, 2 D_{14}, D_{28}
R28.25	C_2, 3 C_3, C_6, 21 C_9, 3 C_{18}, D_3, 3 D_9	C_2, 3 C_3, C_6, 17 C_9, C_{18}, D_3, 3 D_9	C_2, C_6, C_{18}, D_3, 3 D_9	C_2, C_3, 6 C_9, D_3, 3 D_9
R28.26	C_2, 5 C_3, C_6, 6 C_9, 3 C_{18}, 2 D_3	C_2, 5 C_3, C_6, 2 C_9, C_{18}, 2 D_3	C_2, C_6, C_{18}, 2 D_3	C_2, 4 C_3, 2 D_3
R28.27	C_2, 3 C_3, C_6, 4 C_9, 3 C_{18}, 2 D_3	C_2, 3 C_3, C_6, C_9, C_{18}, 2 D_3	C_2, C_6, C_{18}, 2 D_3	C_2, 2 C_3, 2 D_3
R28.28	3 C_2, C_4, 2 C_5, 2 C_8, 4 C_{10}, 4 C_{16}, 2 C_{20}, 4 C_{40}, 4 D_2, 2 D_4, 2 D_5, 4 D_8, 2 D_{10}, 4 D_{16}, 2 D_{20}, 4 D_{40}	3 C_2, C_4, C_5, C_8, 2 C_{10}, C_{16}, C_{20}, C_{40}, 4 D_2, 2 D_4, D_5, 2 D_8, D_{10}, D_{16}, D_{20}, D_{40}	3 C_2, C_{10}, 4 D_2, 2 D_4, D_5, 2 D_8, D_{10}, D_{16}, D_{20}, D_{40}	3 C_2, C_4, C_5, C_8, 4 D_2, 2 D_4, D_5, 2 D_8
R28.29	3 C_2, 2 C_5, 3 C_7, 6 C_{10}, 3 C_{14}, 6 C_{35}, 6 C_{70}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}	3 C_2, 3 D_2, 2 D_7, D_{14}	3 C_2, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}
R28.30	2 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, 6 C_{12}, 8 C_{24}, 2 D_2, D_3, D_4, D_6, 2 D_{12}	2 C_2, 3 C_3, 2 C_4, 4 C_6, 4 C_{12}, 2 D_2, D_3, D_4, D_6, 2 D_{12}	2 C_2, 2 C_4, 4 C_6, 3 C_{12}, 2 D_2, D_3, D_4, D_6, 2 D_{12}	2 C_2, C_3, 2 D_2, D_3
R28.31	2 C_2, 3 C_3, 2 C_4, 3 C_6, C_8, 6 C_{12}, 2 C_{24}, 2 D_2, 3 D_3, D_4, 3 D_6, 5 D_{12}	2 C_2, 3 C_3, 2 C_4, 3 C_6, 4 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, 4 D_{12}	2 C_2, 2 C_4, 3 C_6, 3 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, 4 D_{12}	2 C_2, 3 C_3, 2 D_2, 3 D_3
R28.32	2 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, 7 C_{12}, 2 C_{24}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 3 C_3, 2 C_4, 4 C_6, 5 C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_4, 4 C_6, 5 C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, C_3, 2 D_2, D_3
R28.33	C_2, C_3, C_6, 3 C_7, 3 C_9, 3 C_{18}, 3 C_{21}, 9 C_{63}, 3 D_7	C_2, C_3, C_6, C_7, C_9, C_{18}, D_7	C_2, C_6, C_{18}, D_7	C_2, C_7, D_7
R28.34	C_2, 3 C_3, C_6, 3 C_7, 3 C_{14}, 15 C_{21}, 6 C_{42}, D_3	C_2, 3 C_3, C_6, D_3	C_2, C_6, D_3	C_2, C_3, D_3
R28.35	3 C_2, C_3, C_4, 2 C_5, 3 C_6, 6 C_{10}, C_{12}, 4 C_{15}, 2 C_{20}, 12 C_{30}, 4 C_{60}, 4 D_2, D_4	3 C_2, C_3, C_4, 3 C_6, 4 D_2, D_4	3 C_2, C_6, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R28.36	C_2, C_3, C_6, 9 C_{19}, 9 C_{38}, 18 C_{57}, 18 C_{114}	C_2, C_3, C_6	C_2, C_6	C_2
R28.37	3 C_2, 14 C_{29}, 42 C_{58}, 3 D_2	3 C_2, C_{29}, 3 C_{58}, 3 D_2	3 C_2, C_{58}, 3 D_2	3 C_2, C_{29}, 3 D_2
R28.38	C_2, C_4, 3 C_7, 2 C_8, 3 C_{14}, 4 C_{16}, 6 C_{28}, 12 C_{56}, 24 C_{112}	C_2, C_4, C_7, C_8, C_{14}, C_{28}, C_{56}	C_2, C_4, C_8, C_{14}, C_{28}, C_{56}	C_2, C_7

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 29				
R29.1	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, **Oct**, 3 C_2, C_4, C_6, 4 C_8, 16 D_2, 3 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, **Oct**, 5 C_2, C_3, C_4, C_6, C_7, C_{14}, 16 D_2, 4 D_3, 2 D_4, 2 D_6, 2 D_7, D_{14}
R29.2	6 C_2, C_3, 3 C_4, 5 C_6, 3 C_9, 6 C_{18}, 26 D_2, D_3, 5 D_4, 3 D_6, 3 D_9, 3 D_{18}	6 C_2, C_3, 3 C_4, 5 C_6, C_9, 2 C_{18}, 26 D_2, D_3, 5 D_4, 3 D_6, D_9, D_{18}	3 C_2, C_4, C_6, 21 D_2, D_3, 5 D_4, 3 D_6, D_9, D_{18}	6 C_2, C_3, 2 C_4, 26 D_2, D_3, 4 D_4
R29.3	6 C_2, 6 C_4, 6 C_8, 8 C_{16}, 8 C_{32}, 19 D_2, 4 D_4, 4 D_8, 4 D_{16}	6 C_2, 6 C_4, 5 C_8, 3 C_{16}, C_{32}, 19 D_2, 4 D_4, 3 D_8, 2 D_{16}	3 C_2, 4 C_4, 17 D_2, 4 D_4, 3 D_8, 2 D_{16}	6 C_2, 2 C_4, C_8, 19 D_2, 3 D_4, D_8
R29.4	4 C_2, 6 C_4, 4 C_8, 4 C_{16}, 4 C_{32}, 12 D_2, 4 D_4, 4 D_8, 4 D_{16}	4 C_2, 6 C_4, 3 C_8, C_{16}, 12 D_2, 4 D_4, 3 D_8, 2 D_{16}	3 C_2, 4 C_4, 12 D_2, 4 D_4, 3 D_8, 2 D_{16}	4 C_2, 2 C_4, C_8, 12 D_2, 3 D_4, D_8
R29.5	5 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 6 C_{10}, 2 C_{12}, 4 C_{15}, 4 C_{20}, 12 C_{30}, 8 C_{60}, 13 D_2, 2 D_3, 4 D_5, 4 D_6, 8 D_{10}, 8 D_{15}, 16 D_{30}	5 C_2, C_3, 2 C_4, C_5, 3 C_6, 3 C_{10}, C_{12}, C_{15}, C_{20}, 3 C_{30}, C_{60}, 13 D_2, 2 D_3, 2 D_5, 4 D_6, 4 D_{10}, 2 D_{15}, 4 D_{30}	3 C_2, 2 C_4, C_6, C_{10}, C_{30}, 11 D_2, D_3, D_5, 3 D_6, 3 D_{10}, D_{15}, 3 D_{30}	5 C_2, C_3, C_5, C_6, C_{10}, C_{15}, C_{30}, 13 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}
R29.6	3 C_2, 2 C_4, 14 C_{29}, 14 C_{58}, 14 C_{116}, 3 D_2, 28 D_{29}, 14 D_{58}	3 C_2, 2 C_4, C_{29}, C_{58}, 3 D_2, 2 D_{29}, D_{58}	2 C_2, 2 C_4, C_{58}, 3 D_2, D_{29}, D_{58}	3 C_2, C_{29}, 3 D_2, D_{29}
R29.7	3 C_2, 3 C_4, 2 C_5, 2 C_8, 2 C_{10}, 8 D_2, 4 D_4, 2 D_5, 2 D_8, 2 D_{10}	3 C_2, 3 C_4, C_5, C_8, C_{10}, 8 D_2, 4 D_4, D_5, D_8, D_{10}	2 C_2, 2 C_4, C_8, C_{10}, 8 D_2, 4 D_4, D_5, D_8, D_{10}	3 C_2, C_4, C_5, 8 D_2, D_5
R29.8	3 C_2, 3 C_4, 2 C_5, 2 C_8, 2 C_{10}, 8 D_2, 4 D_4, 4 D_5, 2 D_8, 2 D_{10}	3 C_2, 3 C_4, C_5, C_8, C_{10}, 8 D_2, 4 D_4, 2 D_5, D_8, D_{10}	2 C_2, 2 C_4, C_8, C_{10}, 8 D_2, 4 D_4, 2 D_5, D_8, D_{10}	3 C_2, C_4, C_5, 8 D_2, 2 D_5
R29.9	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_4, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, 2 C_2, C_3, C_6, C_7, 3 D_2, 2 D_3, D_6, D_7
R29.10	**Tet**, 2 **Ico**, 7 C_2, C_3, 2 C_5, 3 C_6, 6 C_{10}, 37 D_2, 4 D_3, 8 D_5, 6 D_6, 12 D_{10}	**Tet**, **Ico**, 7 C_2, C_3, C_5, 3 C_6, 3 C_{10}, 37 D_2, 4 D_3, 4 D_5, 6 D_6, 6 D_{10}	3 C_2, 2 C_6, 2 C_{10}, 27 D_2, D_3, D_5, 5 D_6, 5 D_{10}	**Tet**, **Ico**, 7 C_2, C_3, C_5, 37 D_2, 4 D_3, 4 D_5
R29.11	**Tet**, 2 **Oct**, **Ico**, 5 C_2, C_3, 2 C_4, C_5, 3 C_6, C_{10}, 16 D_2, 4 D_3, 4 D_4, 2 D_5, 6 D_6, D_{10}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, 16 D_2, 4 D_3, 4 D_4, 6 D_6	2 **Oct**, 3 C_2, 2 C_6, 13 D_2, 2 D_3, 4 D_4, 6 D_6	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, 16 D_2, 4 D_3, 4 D_4, 2 D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R29.12	2 C_2, C_3, C_4, C_5, 2 C_6, C_8, C_{10}, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, C_4, 2 C_6, C_8, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, 2 C_6, C_8, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, 2 D_2, D_3
R29.13	**Tet**, 7 C_2, C_3, 2 C_4, 3 C_6, 4 C_8, C_{12}, 2 C_{24}, 34 D_2, 8 D_4, 10 D_8	**Tet**, 7 C_2, C_3, 2 C_4, 3 C_6, 3 C_8, 34 D_2, 8 D_4, 8 D_8	3 C_2, C_4, 2 C_6, 27 D_2, 6 D_4, 6 D_8	7 C_2, C_4, C_8, 34 D_2, 4 D_4, 2 D_8
R29.14	4 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, 2 C_{12}, 2 C_{24}, 8 D_2, 6 D_4, D_8	4 C_2, C_3, 4 C_4, 2 C_6, C_8, C_{12}, 8 D_2, 6 D_4, D_8	3 C_2, 3 C_4, 2 C_6, C_{12}, 8 D_2, 6 D_4, D_8	4 C_2, C_4, 8 D_2, 2 D_4
R29.15	C_2, C_3, C_6, 14 C_{29}, 14 C_{87}, 14 D_{29}	C_2, C_3, C_6, C_{29}, D_{29}	C_2, C_6, D_{29}	C_2, C_{29}, D_{29}
R29.16	5 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 4 C_{12}, 15 D_2, 2 D_3, 8 D_4, 6 D_6, 4 D_{12}	5 C_2, C_3, 5 C_4, 3 C_6, C_8, 3 C_{12}, 15 D_2, 2 D_3, 8 D_4, 6 D_6, 3 D_{12}	3 C_2, 3 C_4, 2 C_6, C_8, 2 C_{12}, 13 D_2, D_3, 8 D_4, 5 D_6, 3 D_{12}	5 C_2, C_3, 2 C_4, 15 D_2, 2 D_3, 3 D_4
R29.17	5 C_2, C_3, 6 C_4, 3 C_6, 4 C_8, 2 C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	5 C_2, C_3, 6 C_4, 3 C_6, 3 C_8, C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	3 C_2, 4 C_4, 2 C_6, 3 C_8, C_{12}, 13 D_2, D_3, 3 D_4, 4 D_6	5 C_2, C_3, C_4, 13 D_2, 2 D_3
R29.18	4 C_2, C_3, 5 C_4, 3 C_6, 3 C_8, 2 C_{12}, 9 D_2, D_3, 2 D_4, 3 D_6	4 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, C_{12}, 9 D_2, D_3, 2 D_4, 3 D_6	3 C_2, 4 C_4, 2 C_6, 2 C_8, C_{12}, 9 D_2, D_3, 2 D_4, 3 D_6	4 C_2, C_3, C_4, 9 D_2, D_3
R29.19	5 C_2, C_3, 5 C_4, 3 C_6, 3 C_8, 2 C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	5 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	3 C_2, 3 C_4, 2 C_6, 2 C_8, C_{12}, 13 D_2, D_3, 3 D_4, 4 D_6	5 C_2, C_3, 2 C_4, 13 D_2, 2 D_3
R29.20	5 C_2, C_3, 4 C_4, 3 C_6, 3 C_8, 2 C_{12}, 15 D_2, D_3, 6 D_4, 3 D_6, 2 D_8	5 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, C_{12}, 15 D_2, D_3, 6 D_4, 3 D_6, D_8	2 C_2, 3 C_4, C_6, 2 C_8, C_{12}, 11 D_2, D_3, 6 D_4, 3 D_6, D_8	5 C_2, C_3, C_4, 15 D_2, D_3, 2 D_4
R29.21	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 2 C_8, 2 C_{12}, 12 D_2, D_3, 4 D_4, D_6, D_{12}	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, C_8, C_{12}, 12 D_2, D_3, 4 D_4, D_6, D_{12}	**Oct**, 2 C_2, 4 C_4, C_6, C_8, C_{12}, 9 D_2, D_3, 4 D_4, D_6, D_{12}	**Tet**, **Oct**, 4 C_2, C_3, C_4, 12 D_2, D_3, 2 D_4
R29.22	6 C_2, C_3, 5 C_4, 5 C_6, 2 C_8, 7 C_{12}, 19 D_2, D_3, 3 D_4, 3 D_6, 2 D_{12}	6 C_2, C_3, 5 C_4, 5 C_6, C_8, 6 C_{12}, 19 D_2, D_3, 3 D_4, 3 D_6, 2 D_{12}	3 C_2, 4 C_4, C_6, C_8, 3 C_{12}, 17 D_2, D_3, 3 D_4, 3 D_6, 2 D_{12}	6 C_2, C_3, C_4, 19 D_2, D_3, 2 D_4
R29.23	6 C_2, C_3, 3 C_4, 4 C_6, C_8, 3 C_{12}, 27 D_2, 2 D_3, 3 D_4, 7 D_6	6 C_2, C_3, 3 C_4, 4 C_6, 2 C_{12}, 27 D_2, 2 D_3, 3 D_4, 7 D_6	3 C_2, 2 C_4, C_6, C_{12}, 21 D_2, D_3, 3 D_4, 5 D_6	6 C_2, C_3, C_4, 27 D_2, 2 D_3, 2 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R29.24	4 C_2, 2 C_4, 2 C_5, 2 C_8, 4 C_{10}, 6 C_{20}, 4 C_{40}, 10 D_2, 2 D_4, 4 D_5, 8 D_{10}, 6 D_{20}	4 C_2, 2 C_4, C_5, 2 C_{10}, 2 C_{20}, 10 D_2, 2 D_4, 2 D_5, 4 D_{10}, 2 D_{20}	2 C_2, 2 C_4, C_{10}, C_{20}, 8 D_2, 2 D_4, D_5, 3 D_{10}, 2 D_{20}	4 C_2, C_5, 10 D_2, 2 D_5
R29.25	5 C_2, 3 C_4, 2 C_5, 4 C_8, 6 C_{10}, 4 C_{20}, 8 C_{40}, 13 D_2, 4 D_5, 8 D_{10}	5 C_2, 3 C_4, C_5, 2 C_8, 3 C_{10}, C_{20}, 13 D_2, 2 D_5, 4 D_{10}	2 C_2, 3 C_4, 2 C_8, C_{10}, 11 D_2, D_5, 3 D_{10}	5 C_2, C_5, 13 D_2, 2 D_5
R29.26	7 C_2, C_3, 7 C_6, 3 C_9, 9 C_{18}, 31 D_2	7 C_2, C_3, 7 C_6, C_9, 3 C_{18}, 31 D_2	3 C_2, C_6, 23 D_2	7 C_2, C_3, 31 D_2
R29.27	5 C_2, 3 C_4, 6 C_8, 12 C_{16}, 16 C_{32}, 13 D_2	5 C_2, 3 C_4, 5 C_8, 4 C_{16}, 2 C_{32}, 13 D_2	2 C_2, 2 C_4, 11 D_2	5 C_2, C_4, C_8, 13 D_2
R29.28	3 C_2, 3 C_4, 4 C_8, 8 C_{16}, 12 C_{32}, 4 D_2, 2 D_4	3 C_2, 3 C_4, 2 C_8, 4 D_2, 2 D_4	2 C_2, 2 C_4, 4 D_2, 2 D_4	3 C_2, C_4, 4 D_2
R29.29	3 C_2, 3 C_4, 4 C_8, 6 C_{16}, 8 C_{32}, 6 D_2	3 C_2, 3 C_4, 3 C_8, C_{16}, 6 D_2	2 C_2, 2 C_4, 6 D_2	3 C_2, C_4, C_8, 6 D_2
R29.30	C_2, 29 C_{59}, 29 C_{118}	C_2	C_2	C_2
R29.31	3 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 6 C_{10}, 4 C_{12}, 4 C_{15}, 8 C_{20}, 12 C_{30}, 16 C_{60}, 3 D_2	3 C_2, C_3, 2 C_4, C_5, 3 C_6, 3 C_{10}, 2 C_{12}, C_{15}, 2 C_{20}, 3 C_{30}, 2 C_{60}, 3 D_2	2 C_2, 2 C_4, C_6, C_{10}, C_{30}, 3 D_2	3 C_2, C_3, C_5, C_6, C_{10}, C_{15}, C_{30}, 3 D_2
R29.32	C_2, C_4, 14 C_{29}, 14 C_{58}, 28 C_{116}	C_2, C_4, C_{29}, C_{58}	C_2, C_4, C_{58}	C_2, C_{29}
Genus 30				
R30.1	**Tet**, **Oct**, 2 C_2, C_3, C_4, 5 C_{11}, 5 C_{22}, 10 C_{33}, 3 D_2, D_3, D_4, 5 D_{11}, 5 D_{22}, 10 D_{33}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_{11}, C_{22}, C_{33}, 3 D_2, D_3, D_4, D_{11}, D_{22}, D_{33}	**Tet**, **Oct**, 2 C_2, C_4, C_{22}, 3 D_2, D_3, D_4, D_{11}, D_{22}, D_{33}	**Tet**, 2 C_2, C_3, C_{11}, 3 D_2, D_3, D_{11}
R30.2	3 C_2, C_4, 15 C_{31}, 30 C_{62}, 4 D_2, D_4, 15 D_{31}, 15 D_{62}	3 C_2, C_4, C_{31}, 2 C_{62}, 4 D_2, D_4, D_{31}, D_{62}	3 C_2, C_4, C_{62}, 4 D_2, D_4, D_{31}, D_{62}	3 C_2, C_{31}, 4 D_2, D_{31}
R30.3	2 C_2, C_3, 2 C_4, 2 C_5, C_6, C_8, 2 C_{10}, 2 C_{12}, 4 C_{15}, 4 C_{20}, 2 C_{24}, 4 C_{30}, 4 C_{40}, 8 C_{60}, 8 C_{120}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 2 D_{12}, 4 D_{15}, 4 D_{20}, 4 D_{30}, 8 D_{60}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, C_{15}, C_{20}, C_{30}, C_{60}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{12}, D_{15}, D_{20}, D_{30}, D_{60}	2 C_2, 2 C_4, C_6, C_{10}, C_{12}, C_{20}, C_{30}, C_{60}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{12}, D_{15}, D_{20}, D_{30}, D_{60}	2 C_2, C_3, C_5, C_{15}, 2 D_2, D_3, D_5, D_{15}
R30.4	3 C_2, C_3, C_4, 2 C_6, 2 C_8, C_{12}, 4 C_{16}, 2 C_{24}, 8 C_{32}, 4 C_{48}, 4 D_2, D_3, 2 D_4, D_6, 4 D_8, D_{12}, 8 D_{16}, 2 D_{24}, 8 D_{32}, 4 D_{48}	3 C_2, C_3, C_4, 2 C_6, C_8, C_{12}, C_{16}, C_{24}, C_{32}, C_{48}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{16}, D_{24}, D_{32}, D_{48}	3 C_2, C_6, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{16}, D_{24}, D_{32}, D_{48}	3 C_2, C_3, C_4, C_8, C_{16}, 4 D_2, D_3, 2 D_4, 2 D_8, 2 D_{16}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R30.5	3 C_2, C_4, 2 C_8, 5 C_{11}, 10 C_{22}, 5 C_{44}, 4 D_2, 2 D_4, 2 D_8, 5 D_{11}, 5 D_{22}, 5 D_{44}	3 C_2, C_4, C_8, C_{11}, 2 C_{22}, C_{44}, 4 D_2, 2 D_4, D_8, D_{11}, D_{22}, D_{44}	3 C_2, C_{22}, 4 D_2, 2 D_4, D_8, D_{11}, D_{22}, D_{44}	3 C_2, C_4, C_{11}, 4 D_2, 2 D_4, D_{11}
R30.6	3 C_2, C_3, C_4, C_6, 3 C_7, 2 C_{12}, 6 C_{14}, 3 C_{21}, 3 C_{42}, 4 D_2, 2 D_3, D_4, 2 D_6, 3 D_7, 2 D_{12}, 3 D_{14}, 3 D_{21}, 3 D_{42}	3 C_2, C_3, C_4, C_6, C_7, C_{12}, 2 C_{14}, C_{21}, C_{42}, 4 D_2, 2 D_3, D_4, 2 D_6, D_7, D_{12}, D_{14}, D_{21}, D_{42}	3 C_2, C_4, C_{14}, 4 D_2, 2 D_3, D_4, 2 D_6, D_7, D_{12}, D_{14}, D_{21}, D_{42}	3 C_2, C_3, C_6, C_7, 4 D_2, 2 D_3, 2 D_6, D_7
R30.7	3 C_2, 2 C_5, 3 C_7, 2 C_{10}, 9 C_{14}, 6 C_{35}, 6 C_{70}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}	3 C_2, 3 D_2, 2 D_5, D_{10}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}
R30.8	3 C_2, C_3, C_6, 5 C_{11}, 15 C_{22}, 5 C_{33}, 5 C_{66}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6	3 C_2, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6
R30.9	C_2, 2 C_5, 6 C_{13}, 6 C_{26}, 12 C_{65}, 2 D_5	C_2, C_5, D_5	C_2, D_5	C_2, C_5, D_5
R30.10	**Tet**, C_2, C_3, 5 C_{11}, 5 C_{22}, 10 C_{33}, D_2	**Tet**, C_2, C_3, C_{11}, C_{22}, C_{33}, D_2	**Tet**, C_2, C_{22}, D_2	**Tet**, C_2, C_3, C_{11}, D_2
R30.11	C_2, 30 C_{61}, 30 C_{122}	C_2	C_2	C_2
R30.12	3 C_2, 15 C_{31}, 45 C_{62}, 3 D_2	3 C_2, C_{31}, 3 C_{62}, 3 D_2	3 C_2, C_{62}, 3 D_2	3 C_2, C_{31}, 3 D_2
R30.13	C_2, C_3, C_4, 2 C_5, C_6, 2 C_8, 2 C_{10}, 2 C_{12}, 4 C_{15}, 4 C_{20}, 4 C_{24}, 4 C_{30}, 8 C_{40}, 8 C_{60}, 16 C_{120}	C_2, C_3, C_4, C_5, C_6, C_{10}, C_{12}, C_{15}, C_{20}, C_{30}, C_{60}	C_2, C_4, C_6, C_{10}, C_{12}, C_{20}, C_{30}, C_{60}	C_2, C_3, C_5, C_{15}
Genus 31				
R31.1	2 **Tet**, **Oct**, C_2, 3 C_3, C_4, C_6, C_7, C_{12}, 2 C_{21}, D_2, D_3, D_4	2 **Tet**, **Oct**, C_2, 3 C_3, C_4, C_6, C_{12}, D_2, D_3, D_4	2 **Tet**, **Oct**, C_2, C_4, C_6, C_{12}, D_2, D_3, D_4	**Tet**, C_2, C_3, D_2, D_3
R31.2	C_2, 3 C_3, 4 C_5, C_6, 2 C_{10}, 6 C_{15}, 4 C_{30}, D_3, 2 D_5	C_2, 3 C_3, 3 C_5, C_6, C_{10}, 3 C_{15}, C_{30}, D_3, 2 D_5	C_2, C_6, C_{10}, C_{30}, D_3, 2 D_5	C_2, C_3, 2 C_5, D_3, 2 D_5
R31.3	2 **Tet**, 3 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 6 C_6, C_{10}, C_{12}, C_{15}, 16 D_2, 9 D_3, 4 D_4, 2 D_5, 12 D_6, D_{10}, D_{12}, D_{15}	2 **Tet**, 3 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 6 C_6, C_{10}, C_{12}, C_{15}, 16 D_2, 9 D_3, 4 D_4, 2 D_5, 12 D_6, D_{10}, D_{12}, D_{15}	2 **Tet**, 3 **Oct**, **Ico**, 3 C_2, 2 C_4, 4 C_6, C_{12}, 16 D_2, 5 D_3, 4 D_4, 2 D_5, 12 D_6, D_{10}, D_{12}, D_{15}	2 **Tet**, **Ico**, 5 C_2, 3 C_3, C_5, 2 C_6, C_{10}, C_{15}, 16 D_2, 8 D_3, 2 D_5, 4 D_6, D_{10}, D_{15}
R31.4	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, C_7, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_4, C_6, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, **Oct**, 3 C_2, C_3, C_4, 6 D_2, 2 D_3, 2 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R31.5	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, C_7, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 2 C_2, 2 C_4, C_6, 6 D_2, D_3, 3 D_4, D_6	**Tet**, 3 C_2, C_3, 6 D_2, 2 D_3
R31.6	5 C_2, 2 C_3, 3 C_4, 4 C_6, 2 C_8, 2 C_{12}, 2 C_{24}, 13 D_2, 6 D_3, 3 D_4, 8 D_6, D_{12}	5 C_2, 2 C_3, 3 C_4, 4 C_6, C_8, C_{12}, 13 D_2, 6 D_3, 3 D_4, 8 D_6, D_{12}	3 C_2, 2 C_4, 3 C_6, 13 D_2, 3 D_3, 3 D_4, 8 D_6, D_{12}	5 C_2, 2 C_3, C_4, C_6, 13 D_2, 5 D_3, D_4, 2 D_6
R31.7	3 C_2, 2 C_3, 5 C_4, 3 C_6, C_8, 4 C_{12}, 2 C_{24}, 4 D_2, 3 D_3, 2 D_4, 3 D_6, 2 D_{12}	3 C_2, 2 C_3, 5 C_4, 3 C_6, 3 C_{12}, 4 D_2, 3 D_3, 2 D_4, 3 D_6, 2 D_{12}	3 C_2, 3 C_4, 3 C_6, 2 C_{12}, 4 D_2, 3 D_3, 2 D_4, 3 D_6, 2 D_{12}	3 C_2, 2 C_3, 4 D_2, 3 D_3
R31.8	5 C_2, 3 C_4, 4 C_8, 8 C_{16}, 16 C_{32}, 16 C_{64}, 13 D_2, 3 D_4, 6 D_8, 12 D_{16}, 24 D_{32}	5 C_2, 3 C_4, 3 C_8, 3 C_{16}, 3 C_{32}, C_{64}, 13 D_2, 3 D_4, 4 D_8, 4 D_{16}, 5 D_{32}	3 C_2, 2 C_4, 13 D_2, 2 D_4, 3 D_8, 3 D_{16}, 3 D_{32}	5 C_2, C_4, C_8, C_{16}, C_{32}, 13 D_2, 2 D_4, 2 D_8, 2 D_{16}, D_{32}
R31.9	3 C_2, 4 C_4, 3 C_8, 6 C_{16}, 8 C_{32}, 8 C_{64}, 4 D_2, 2 D_4, 2 D_8, 4 D_{16}, 4 D_{32}	3 C_2, 4 C_4, 2 C_8, 2 C_{16}, C_{32}, 4 D_2, 2 D_4, D_8, D_{16}, D_{32}	3 C_2, 3 C_4, 4 D_2, 2 D_4, D_8, D_{16}, D_{32}	3 C_2, C_4, C_8, C_{16}, 4 D_2, D_4, D_8, D_{16}
R31.10	3 C_2, 2 C_4, 15 C_{31}, 15 C_{62}, 15 C_{124}, 3 D_2, 30 D_{31}, 15 D_{62}	3 C_2, 2 C_4, C_{31}, C_{62}, 3 D_2, 2 D_{31}, D_{62}	2 C_2, 2 C_4, C_{62}, 3 D_2, D_{31}, D_{62}	3 C_2, C_{31}, 3 D_2, D_{31}
R31.11	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 2 C_{20}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}	2 C_2, C_3, 2 C_4, C_6, C_{12}, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, 2 D_2, D_3
R31.12	2 **Tet**, **Oct**, **Ico**, 2 C_2, 3 C_3, C_4, C_5, 4 C_6, C_{12}, C_{15}, 3 D_2, 2 D_3, D_4, D_5, D_6	2 **Tet**, **Oct**, **Ico**, 2 C_2, 3 C_3, C_4, C_5, 4 C_6, C_{12}, C_{15}, 3 D_2, 2 D_3, D_4, D_5, D_6	2 **Tet**, **Oct**, **Ico**, 2 C_2, C_4, 4 C_6, C_{12}, 3 D_2, 2 D_3, D_4, D_5, D_6	2 **Tet**, **Ico**, 2 C_2, 3 C_3, C_5, C_{15}, 3 D_2, 2 D_3, D_5
R31.13	C_2, 3 C_3, C_6, 5 C_{11}, 25 C_{33}, D_3, 5 D_{11}, 10 D_{33}	C_2, 3 C_3, C_6, C_{11}, 4 C_{33}, D_3, D_{11}, 2 D_{33}	C_2, C_6, D_3, D_{11}, 2 D_{33}	C_2, C_3, C_{11}, D_3, D_{11}
R31.14	C_2, C_3, C_6, 15 C_{31}, 15 C_{93}, 15 D_{31}	C_2, C_3, C_6, C_{31}, D_{31}	C_2, C_6, D_{31}	C_2, C_{31}, D_{31}
R31.15	C_2, C_3, 8 C_5, C_6, 2 C_{10}, 14 C_{15}, 4 C_{30}, 2 D_5	C_2, C_3, 6 C_5, C_6, C_{10}, 8 C_{15}, C_{30}, 2 D_5	C_2, C_6, C_{10}, C_{30}, 2 D_5	C_2, 4 C_5, 2 D_5
R31.16	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_9, 3 C_{12}, 3 C_{18}, 6 C_{36}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, 2 C_6, 2 C_{12}, 2 D_2, D_4	2 C_2, 2 C_4, C_6, 2 D_2, D_4	2 C_2, 2 D_2
R31.17	2 C_2, 3 C_3, 2 C_4, 4 C_6, 2 C_8, 6 C_{12}, 10 C_{24}, 2 D_2, D_3, D_6	2 C_2, 3 C_3, 2 C_4, 4 C_6, 4 C_{12}, 2 D_2, D_3, D_6	2 C_2, C_4, 4 C_6, C_{12}, 2 D_2, D_3, D_6	2 C_2, C_3, 2 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R31.18	2 C_2, 3 C_3, 2 C_4, 3 C_6, 2 C_8, 3 C_{12}, 4 C_{24}, 2 D_2, 3 D_3, 3 D_6	2 C_2, 3 C_3, 2 C_4, 3 C_6, C_{12}, 2 D_2, 3 D_3, 3 D_6	2 C_2, C_4, 3 C_6, 2 D_2, 3 D_3, 3 D_6	2 C_2, 3 C_3, 2 D_2, 3 D_3
R31.19	3 C_2, 3 C_3, 2 C_4, 3 C_6, 4 C_8, 3 C_{12}, 4 C_{24}, 3 D_2, 6 D_3, 3 D_6	3 C_2, 3 C_3, 2 C_4, 3 C_6, 2 C_8, C_{12}, 3 D_2, 6 D_3, 3 D_6	2 C_2, C_4, 3 C_6, 3 D_2, 3 D_3, 3 D_6	3 C_2, 3 C_3, C_4, 3 D_2, 4 D_3
R31.20	3 C_2, 3 C_3, 2 C_4, 5 C_6, 4 C_8, 7 C_{12}, 14 C_{24}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, 2 C_4, 5 C_6, 2 C_8, 5 C_{12}, 4 C_{24}, 3 D_2, 2 D_3, D_6	2 C_2, C_4, 4 C_6, 2 C_{12}, 3 D_2, D_3, D_6	3 C_2, C_3, C_4, 3 D_2, 2 D_3
R31.21	C_2, C_3, C_6, 3 C_7, 3 C_9, 3 C_{14}, 3 C_{18}, 6 C_{21}, 6 C_{42}, 18 C_{63}, 18 C_{126}	C_2, C_3, C_6	C_2, C_6	C_2
R31.22	2 C_2, 2 C_4, 3 C_8, 6 C_{16}, 12 C_{32}, 16 C_{64}, 2 D_2	2 C_2, 2 C_4, 2 C_8, 2 C_{16}, C_{32}, 2 D_2	2 C_2, C_4, 2 D_2	2 C_2, C_4, C_8, C_{16}, 2 D_2
R31.23	3 C_2, 2 C_4, 4 C_8, 8 C_{16}, 16 C_{32}, 32 C_{64}, 3 D_2	3 C_2, 2 C_4, 3 C_8, 3 C_{16}, 3 C_{32}, 2 C_{64}, 3 D_2	2 C_2, C_4, 3 D_2	3 C_2, C_4, C_8, C_{16}, C_{32}, 3 D_2
R31.24	C_2, C_4, 15 C_{31}, 15 C_{62}, 30 C_{124}	C_2, C_4, C_{31}, C_{62}	C_2, C_4, C_{62}	C_2, C_{31}
Genus 32				
R32.1	3 C_2, C_3, C_4, 2 C_6, 5 C_{11}, 10 C_{22}, 10 C_{33}, 20 C_{66}, 4 D_2, D_3, D_4, D_6, 5 D_{11}, 5 D_{22}, 10 D_{33}, 10 D_{66}	3 C_2, C_3, C_4, 2 C_6, C_{11}, 2 C_{22}, C_{33}, 2 C_{66}, 4 D_2, D_3, D_4, D_6, D_{11}, D_{22}, D_{33}, D_{66}	3 C_2, C_4, C_6, C_{22}, C_{66}, 4 D_2, D_3, D_4, D_6, D_{11}, D_{22}, D_{33}, D_{66}	3 C_2, C_3, C_{11}, C_{33}, 4 D_2, D_3, D_{11}, D_{33}
R32.2	2 C_2, 2 C_4, 2 C_8, 4 C_{16}, 8 C_{32}, 16 C_{64}, 16 C_{128}, 2 D_2, D_4, 2 D_8, 4 D_{16}, 8 D_{32}, 16 D_{64}	2 C_2, 2 C_4, C_8, C_{16}, C_{32}, C_{64}, 2 D_2, D_4, D_8, D_{16}, D_{32}, D_{64}	2 C_2, 2 C_4, C_8, C_{16}, C_{32}, C_{64}, 2 D_2, D_4, D_8, D_{16}, D_{32}, D_{64}	2 C_2, 2 D_2
R32.3	3 C_2, C_3, C_6, 8 C_{17}, 8 C_{34}, 8 C_{51}, 3 D_2, 2 D_3, D_6, 16 D_{17}, 8 D_{34}, 8 D_{51}	3 C_2, C_3, C_6, C_{17}, C_{34}, C_{51}, 3 D_2, 2 D_3, D_6, 2 D_{17}, D_{34}, D_{51}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_{17}, D_{34}, D_{51}	3 C_2, C_3, C_{17}, 3 D_2, 2 D_3, 2 D_{17}
R32.4	3 C_2, C_3, C_4, 3 C_6, 2 C_8, C_{12}, 4 C_{16}, 2 C_{24}, 8 C_{32}, 4 C_{48}, 8 C_{96}, 4 D_2, 2 D_4, 4 D_8, 8 D_{16}, 8 D_{32}	3 C_2, C_3, C_4, 3 C_6, C_8, C_{16}, C_{32}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}, D_{32}	3 C_2, C_6, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}, D_{32}	3 C_2, C_4, C_8, C_{16}, C_{32}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}, D_{32}
R32.5	2 C_2, 2 C_4, C_8, 5 C_{11}, 5 C_{22}, 10 C_{44}, 2 D_2, D_4, 5 D_{11}, 5 D_{22}, 5 D_{44}	2 C_2, 2 C_4, C_{11}, C_{22}, C_{44}, 2 D_2, D_4, D_{11}, D_{22}, D_{44}	2 C_2, 2 C_4, C_{22}, 2 D_2, D_4, D_{11}, D_{22}, D_{44}	2 C_2, C_{11}, 2 D_2, D_{11}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R32.6	3 C_2, C_3, 2 C_5, C_6, 3 C_9, 2 C_{10}, 2 C_{15}, 3 C_{18}, 6 C_{45}, 3 D_2, 2 D_3, 4 D_5, D_6, 6 D_9, 2 D_{10}, 2 D_{15}, 3 D_{18}, 6 D_{45}	3 C_2, C_3, C_5, C_6, C_9, C_{10}, C_{15}, C_{18}, C_{45}, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_9, D_{10}, D_{15}, D_{18}, D_{45}	3 C_2, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_9, D_{10}, D_{15}, D_{18}, D_{45}	3 C_2, C_3, C_5, C_9, 3 D_2, 2 D_3, 2 D_5, 2 D_9
R32.7	3 C_2, C_4, 2 C_5, 2 C_8, 6 C_{10}, 4 C_{16}, 2 C_{20}, 4 C_{40}, 8 C_{80}, 4 D_2, 2 D_4, 4 D_8, 4 D_{16}	3 C_2, C_4, C_8, C_{16}, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, C_4, C_8, C_{16}, 4 D_2, 2 D_4, 2 D_8, D_{16}
R32.8	2 C_2, 2 C_4, 2 C_5, 2 C_8, 2 C_{10}, 2 C_{16}, 4 C_{20}, 4 C_{40}, 2 D_2, D_4, 2 D_5, 2 D_8, 2 D_{10}, 2 D_{20}, 4 D_{40}	2 C_2, 2 C_4, C_5, C_8, C_{10}, C_{20}, C_{40}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{20}, D_{40}	2 C_2, 2 C_4, C_8, C_{10}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{20}, D_{40}	2 C_2, C_5, 2 D_2, D_5
R32.9	3 C_2, C_3, C_4, 3 C_6, 2 C_8, 3 C_9, C_{12}, 9 C_{18}, 2 C_{24}, 3 C_{36}, 6 C_{72}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_3, C_4, 3 C_6, C_8, 4 D_2, 2 D_4, D_8	3 C_2, C_6, 4 D_2, 2 D_4, D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8
R32.10	3 C_2, C_4, 8 C_{17}, 24 C_{34}, 8 C_{68}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R32.11	C_2, 2 C_5, 2 C_{10}, 6 C_{13}, 6 C_{26}, 24 C_{65}, 24 C_{130}	C_2	C_2	C_2
R32.12	3 C_2, C_3, 3 C_6, 5 C_{11}, 15 C_{22}, 10 C_{33}, 30 C_{66}, 3 D_2	3 C_2, C_3, 3 C_6, C_{11}, 3 C_{22}, C_{33}, 3 C_{66}, 3 D_2	3 C_2, C_6, C_{22}, C_{66}, 3 D_2	3 C_2, C_3, C_{11}, C_{33}, 3 D_2
R32.13	C_2, C_4, 2 C_8, 4 C_{16}, 8 C_{32}, 16 C_{64}, 32 C_{128}	C_2, C_4, C_8, C_{16}, C_{32}, C_{64}	C_2, C_4, C_8, C_{16}, C_{32}, C_{64}	C_2
Genus 33				
R33.1	**Tet**, **Oct**, 5 C_2, C_3, 5 C_4, C_6, 4 C_8, 2 C_{12}, 24 D_2, D_3, 12 D_4, D_6, 4 D_8, 2 D_{12}	**Tet**, **Oct**, 5 C_2, C_3, 5 C_4, C_6, 3 C_8, 2 C_{12}, 24 D_2, D_3, 12 D_4, D_6, 4 D_8, 2 D_{12}	**Oct**, 2 C_2, C_4, C_8, 17 D_2, D_3, 11 D_4, D_6, 4 D_8, 2 D_{12}	**Tet**, **Oct**, 5 C_2, C_3, 4 C_4, 2 C_8, 24 D_2, D_3, 12 D_4, 4 D_8
R33.2	**Tet**, 5 C_2, C_3, 5 C_4, C_6, 6 C_8, 2 C_{12}, 23 D_2, 12 D_4, 20 D_8	**Tet**, 5 C_2, C_3, 5 C_4, C_6, 6 C_8, C_{12}, 23 D_2, 12 D_4, 20 D_8	2 C_2, C_4, C_6, C_{12}, 16 D_2, 8 D_4, 14 D_8	5 C_2, 4 C_4, 6 C_8, 23 D_2, 12 D_4, 20 D_8
R33.3	3 **Tet**, 7 C_2, C_3, 5 C_4, C_6, 2 C_{12}, 60 D_2, 18 D_4	3 **Tet**, 7 C_2, C_3, 5 C_4, C_6, C_{12}, 60 D_2, 18 D_4	2 C_2, C_4, C_6, C_{12}, 31 D_2, 12 D_4	7 C_2, 4 C_4, 60 D_2, 18 D_4
R33.4	**Tet**, 3 C_2, C_3, 6 C_4, C_6, 2 C_8, 2 C_{12}, 7 D_2, 6 D_4, 4 D_8	**Tet**, 3 C_2, C_3, 6 C_4, C_6, 2 C_8, C_{12}, 7 D_2, 6 D_4, 4 D_8	2 C_2, C_4, C_6, 6 D_2, 6 D_4, 4 D_8	3 C_2, 4 C_4, 2 C_8, 7 D_2, 6 D_4, 4 D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R33.5	3 **Tet**, 3 **Oct**, 5 C_2, C_3, 5 C_4, C_6, 5 C_8, 18 D_2, 2 D_3, 13 D_4, D_6, 7 D_8	3 **Tet**, 3 **Oct**, 5 C_2, C_3, 5 C_4, C_6, 5 C_8, 18 D_2, 2 D_3, 13 D_4, D_6, 7 D_8	2 **Tet**, 2 **Oct**, 3 C_2, C_4, C_6, 15 D_2, D_3, 11 D_4, D_6, 7 D_8	3 **Tet**, 5 C_2, C_3, 4 C_4, 5 C_8, 18 D_2, D_3, 12 D_4, 7 D_8
R33.6	2 **Tet**, **Oct**, 10 C_2, C_3, 7 C_4, 5 C_6, 2 C_8, 74 D_2, D_3, 24 D_4, 3 D_6, 4 D_8	2 **Tet**, **Oct**, 10 C_2, C_3, 7 C_4, 5 C_6, 2 C_8, 74 D_2, D_3, 24 D_4, 3 D_6, 4 D_8	**Oct**, 3 C_2, C_4, C_6, 47 D_2, D_3, 20 D_4, 3 D_6, 4 D_8	2 **Tet**, **Oct**, 10 C_2, C_3, 6 C_4, 2 C_8, 74 D_2, D_3, 24 D_4, 4 D_8
R33.7	2 **Tet**, 3 **Oct**, 6 C_2, C_3, 9 C_4, 2 C_6, 3 C_8, C_{12}, 34 D_2, D_3, 19 D_4, D_6, 4 D_8, D_{12}	2 **Tet**, 3 **Oct**, 6 C_2, C_3, 9 C_4, 2 C_6, 3 C_8, C_{12}, 34 D_2, D_3, 19 D_4, D_6, 4 D_8, D_{12}	3 **Oct**, 3 C_2, C_4, C_6, 26 D_2, D_3, 17 D_4, D_6, 4 D_8, D_{12}	2 **Tet**, 3 **Oct**, 6 C_2, C_3, 8 C_4, 3 C_8, 34 D_2, D_3, 19 D_4, 4 D_8
R33.8	**Tet**, **Oct**, 7 C_2, C_3, 8 C_4, 2 C_6, 4 C_8, C_{12}, 39 D_2, D_3, 18 D_4, D_6, 7 D_8, D_{12}	**Tet**, **Oct**, 7 C_2, C_3, 8 C_4, 2 C_6, 4 C_8, C_{12}, 39 D_2, D_3, 18 D_4, D_6, 7 D_8, D_{12}	**Oct**, 3 C_2, 2 C_4, C_6, 27 D_2, D_3, 16 D_4, D_6, 7 D_8, D_{12}	**Tet**, **Oct**, 7 C_2, C_3, 6 C_4, 4 C_8, 39 D_2, D_3, 18 D_4, 7 D_8
R33.9	9 C_2, 9 C_4, 11 C_8, 54 D_2, 24 D_4, 34 D_8	9 C_2, 9 C_4, 10 C_8, 54 D_2, 24 D_4, 34 D_8	3 C_2, 3 C_4, C_8, 37 D_2, 16 D_4, 25 D_8	9 C_2, 6 C_4, 9 C_8, 54 D_2, 24 D_4, 34 D_8
R33.10	7 C_2, 8 C_4, 7 C_8, 29 D_2, 14 D_4, 10 D_8	7 C_2, 8 C_4, 6 C_8, 29 D_2, 14 D_4, 10 D_8	3 C_2, 3 C_4, C_8, 21 D_2, 11 D_4, 10 D_8	7 C_2, 5 C_4, 5 C_8, 29 D_2, 14 D_4, 10 D_8
R33.11	12 C_2, 9 C_4, 7 C_8, 105 D_2, 16 D_4, 10 D_8	12 C_2, 9 C_4, 6 C_8, 105 D_2, 16 D_4, 10 D_8	3 C_2, 3 C_4, 3 C_8, 52 D_2, 12 D_4, 10 D_8	12 C_2, 6 C_4, 3 C_8, 105 D_2, 16 D_4, 10 D_8
R33.12	12 C_2, 9 C_4, 2 C_8, 123 D_2, 33 D_4	12 C_2, 9 C_4, C_8, 123 D_2, 33 D_4	3 C_2, 2 C_4, C_8, 64 D_2, 22 D_4	12 C_2, 7 C_4, 123 D_2, 33 D_4
R33.13	8 C_2, 8 C_4, 4 C_8, 41 D_2, 16 D_4, 4 D_8	8 C_2, 8 C_4, 3 C_8, 41 D_2, 16 D_4, 4 D_8	3 C_2, 2 C_4, C_8, 27 D_2, 14 D_4, 4 D_8	8 C_2, 6 C_4, 2 C_8, 41 D_2, 16 D_4, 4 D_8
R33.14	5 C_2, 11 C_4, 7 C_8, 16 D_2, 11 D_4, 6 D_8	5 C_2, 11 C_4, 6 C_8, 16 D_2, 11 D_4, 6 D_8	3 C_2, 4 C_4, 3 C_8, 14 D_2, 11 D_4, 6 D_8	5 C_2, 7 C_4, 3 C_8, 16 D_2, 11 D_4, 6 D_8
R33.15	5 C_2, 13 C_4, 7 C_8, 16 D_2, 12 D_4, 6 D_8	5 C_2, 13 C_4, 6 C_8, 16 D_2, 12 D_4, 6 D_8	3 C_2, 4 C_4, 2 C_8, 14 D_2, 12 D_4, 6 D_8	5 C_2, 8 C_4, 3 C_8, 16 D_2, 12 D_4, 6 D_8
R33.16	4 C_2, 5 C_4, 7 C_8, 6 C_{16}, 10 D_2, 7 D_4, 15 D_8, 10 D_{16}	4 C_2, 5 C_4, 6 C_8, 6 C_{16}, 10 D_2, 7 D_4, 15 D_8, 10 D_{16}	3 C_2, 3 C_4, 3 C_8, 6 C_{16}, 10 D_2, 7 D_4, 15 D_8, 10 D_{16}	4 C_2, 2 C_4, 3 C_8, 10 D_2, 4 D_4, 6 D_8
R33.17	2 **Tet**, 3 **Oct**, 5 C_2, C_3, 6 C_4, C_6, C_8, 2 C_{12}, 24 D_2, 2 D_3, 9 D_4, 2 D_6, D_8, 2 D_{12}	2 **Tet**, 3 **Oct**, 5 C_2, C_3, 6 C_4, C_6, C_8, C_{12}, 24 D_2, 2 D_3, 9 D_4, 2 D_6, D_8, D_{12}	**Tet**, 2 **Oct**, 3 C_2, 3 C_4, C_6, C_8, C_{12}, 19 D_2, D_3, 8 D_4, 2 D_6, D_8, D_{12}	2 **Tet**, 5 C_2, C_3, 3 C_4, 24 D_2, D_3, 4 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R33.18	2 **Tet**, **Oct**, 4 C_2, C_3, 7 C_4, C_6, C_8, C_{12}, 14 D_2, D_3, 5 D_4, D_6, D_8	2 **Tet**, **Oct**, 4 C_2, C_3, 7 C_4, C_6, C_8, 14 D_2, D_3, 5 D_4, D_6, D_8	**Tet**, **Oct**, 3 C_2, 4 C_4, C_6, C_8, 13 D_2, D_3, 5 D_4, D_6, D_8	2 **Tet**, 4 C_2, C_3, 3 C_4, 14 D_2, D_3, 2 D_4
R33.19	3 **Tet**, 4 **Oct**, 9 C_2, C_3, 9 C_4, C_6, C_{12}, 75 D_2, 2 D_3, 16 D_4, D_6	3 **Tet**, 4 **Oct**, 9 C_2, C_3, 9 C_4, C_6, 75 D_2, 2 D_3, 16 D_4, D_6	2 **Oct**, 3 C_2, 3 C_4, C_6, 43 D_2, D_3, 10 D_4, D_6	3 **Tet**, 9 C_2, C_3, 6 C_4, 75 D_2, D_3, 16 D_4
R33.20	3 **Tet**, 6 **Oct**, 9 C_2, C_3, 8 C_4, C_6, 2 C_{12}, 84 D_2, 2 D_3, 26 D_4, 2 D_6, 2 D_{12}	3 **Tet**, 6 **Oct**, 9 C_2, C_3, 8 C_4, C_6, C_{12}, 84 D_2, 2 D_3, 26 D_4, 2 D_6, D_{12}	**Tet**, 5 **Oct**, 3 C_2, 3 C_4, C_6, C_{12}, 51 D_2, D_3, 22 D_4, 2 D_6, D_{12}	3 **Tet**, 9 C_2, C_3, 5 C_4, 84 D_2, D_3, 17 D_4
R33.21	**Tet**, **Oct**, 10 C_2, C_3, 7 C_4, 4 C_6, 2 C_{12}, 73 D_2, D_3, 10 D_4, 2 D_6	**Tet**, **Oct**, 10 C_2, C_3, 7 C_4, 4 C_6, C_{12}, 73 D_2, D_3, 10 D_4, 2 D_6	**Oct**, 3 C_2, 3 C_4, C_6, C_{12}, 42 D_2, D_3, 10 D_4, 2 D_6	**Tet**, **Oct**, 10 C_2, C_3, 4 C_4, 73 D_2, D_3, 10 D_4
R33.22	7 C_2, C_3, 8 C_4, 3 C_6, 3 C_8, 4 C_{12}, 30 D_2, 2 D_3, 9 D_4, 4 D_6, 4 D_8, 3 D_{12}	7 C_2, C_3, 8 C_4, 3 C_6, 3 C_8, 3 C_{12}, 30 D_2, 2 D_3, 9 D_4, 4 D_6, 4 D_8, 3 D_{12}	3 C_2, 3 C_4, C_6, C_{12}, 24 D_2, D_3, 6 D_4, 3 D_6, 3 D_8, 2 D_{12}	7 C_2, C_3, 5 C_4, 3 C_8, 30 D_2, 2 D_3, 9 D_4, 4 D_8
R33.23	5 C_2, C_3, 9 C_4, 2 C_6, 3 C_8, 7 C_{12}, 14 D_2, D_3, 7 D_4, D_6, 2 D_8, 2 D_{12}	5 C_2, C_3, 9 C_4, 2 C_6, 3 C_8, 6 C_{12}, 14 D_2, D_3, 7 D_4, D_6, 2 D_8, 2 D_{12}	3 C_2, 3 C_4, C_6, 2 C_{12}, 12 D_2, D_3, 6 D_4, D_6, 2 D_8, 2 D_{12}	5 C_2, C_3, 5 C_4, 3 C_8, 14 D_2, D_3, 7 D_4, 2 D_8
R33.24	5 C_2, C_3, 5 C_4, 4 C_6, 3 C_8, 5 C_{12}, 14 D_2, D_3, 8 D_4, 2 D_6, 6 D_8, 6 D_{12}	5 C_2, C_3, 5 C_4, 4 C_6, 3 C_8, 4 C_{12}, 14 D_2, D_3, 8 D_4, 2 D_6, 6 D_8, 6 D_{12}	3 C_2, 2 C_4, C_6, 12 D_2, D_3, 8 D_4, 2 D_6, 6 D_8, 6 D_{12}	5 C_2, C_3, 3 C_4, 3 C_8, 14 D_2, D_3, 8 D_4, 6 D_8
R33.25	5 C_2, 5 C_4, 2 C_5, 8 C_{10}, 6 C_{20}, 16 D_2, 6 D_4, 2 D_5, 6 D_{10}, 4 D_{20}	5 C_2, 5 C_4, C_5, 4 C_{10}, 2 C_{20}, 16 D_2, 6 D_4, D_5, 3 D_{10}, 2 D_{20}	3 C_2, 2 C_4, C_{10}, 14 D_2, 6 D_4, D_5, 3 D_{10}, 2 D_{20}	5 C_2, 3 C_4, C_5, 16 D_2, 6 D_4, D_5
R33.26	5 C_2, C_3, 4 C_4, 3 C_6, 3 C_9, 4 C_{12}, 3 C_{18}, 6 C_{36}, 18 D_2, 2 D_3, 6 D_4, 6 D_6, 6 D_9, 4 D_{12}, 6 D_{18}, 6 D_{36}	5 C_2, C_3, 4 C_4, 3 C_6, C_9, 3 C_{12}, C_{18}, C_{36}, 18 D_2, 2 D_3, 6 D_4, 6 D_6, 2 D_9, 3 D_{12}, 2 D_{18}, D_{36}	3 C_2, 3 C_4, C_6, 16 D_2, D_3, 6 D_4, 4 D_6, D_9, 3 D_{12}, D_{18}, D_{36}	5 C_2, C_3, C_4, C_6, C_{12}, 18 D_2, 2 D_3, D_4, 2 D_6, D_{12}
R33.27	5 C_2, C_3, 6 C_4, 3 C_6, 3 C_9, 2 C_{12}, 3 C_{18}, 3 C_{36}, 16 D_2, 2 D_3, 4 D_4, 4 D_6, 6 D_9, 3 D_{18}	5 C_2, C_3, 6 C_4, 3 C_6, C_9, C_{12}, C_{18}, 16 D_2, 2 D_3, 4 D_4, 4 D_6, 2 D_9, D_{18}	3 C_2, 3 C_4, C_6, 13 D_2, D_3, 3 D_4, 3 D_6, D_9, D_{18}	5 C_2, C_3, 2 C_4, C_6, 16 D_2, 2 D_3, 4 D_4, D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R33.28	5 C_2, C_3, 3 C_4, 4 C_6, 3 C_9, 2 C_{12}, 12 C_{18}, 6 C_{36}, 13 D_2, D_3, 2 D_4, 2 D_6, 3 D_9, 6 D_{18}	5 C_2, C_3, 3 C_4, 4 C_6, C_9, C_{12}, 4 C_{18}, C_{36}, 13 D_2, D_3, 2 D_4, 2 D_6, D_9, 2 D_{18}	3 C_2, 2 C_4, C_6, C_{18}, 11 D_2, D_3, 2 D_4, 2 D_6, D_9, 2 D_{18}	5 C_2, C_3, C_4, C_9, 13 D_2, D_3, 2 D_4, D_9
R33.29	5 C_2, 2 C_4, 8 C_{17}, 24 C_{34}, 16 C_{68}, 13 D_2, 16 D_{17}, 32 D_{34}	5 C_2, 2 C_4, C_{17}, 3 C_{34}, C_{68}, 13 D_2, 2 D_{17}, 4 D_{34}	3 C_2, 2 C_4, C_{34}, 11 D_2, D_{17}, 3 D_{34}	5 C_2, C_{17}, C_{34}, 13 D_2, 2 D_{17}, D_{34}
R33.30	3 C_2, C_3, 2 C_4, C_6, 5 C_{11}, C_{12}, 5 C_{22}, 10 C_{33}, 5 C_{44}, 10 C_{66}, 10 C_{132}, 3 D_2, 2 D_3, D_6, 10 D_{11}, 5 D_{22}, 20 D_{33}, 10 D_{66}	3 C_2, C_3, 2 C_4, C_6, C_{11}, C_{22}, C_{33}, C_{66}, 3 D_2, 2 D_3, D_6, 2 D_{11}, D_{22}, 2 D_{33}, D_{66}	2 C_2, 2 C_4, C_6, C_{22}, C_{66}, 3 D_2, D_3, D_6, D_{11}, D_{22}, D_{33}, D_{66}	3 C_2, C_3, C_{11}, C_{33}, 3 D_2, D_3, D_{11}, D_{33}
R33.31	5 C_2, 4 C_4, 2 C_5, 6 C_{10}, 13 D_2, 6 D_4	5 C_2, 4 C_4, 13 D_2, 6 D_4	2 C_2, 11 D_2, 4 D_4	5 C_2, 4 C_4, 13 D_2, 6 D_4
R33.32	**Tet**, 7 C_2, C_3, 6 C_4, 3 C_6, C_{12}, 36 D_2, 12 D_4	**Tet**, 7 C_2, C_3, 6 C_4, 3 C_6, C_{12}, 36 D_2, 12 D_4	3 C_2, 2 C_6, 24 D_2, 12 D_4	**Tet**, 7 C_2, C_3, 6 C_4, 36 D_2, 12 D_4
R33.33	2 **Tet**, 6 C_2, C_3, 6 C_4, 3 C_6, C_{12}, 26 D_2, 12 D_4	2 **Tet**, 6 C_2, C_3, 6 C_4, 3 C_6, C_{12}, 26 D_2, 12 D_4	3 C_2, 2 C_6, 18 D_2, 10 D_4	2 **Tet**, 6 C_2, C_3, 6 C_4, 26 D_2, 12 D_4
R33.34	**Tet**, 7 C_2, C_3, 6 C_4, 3 C_6, C_{12}, 36 D_2, 14 D_4	**Tet**, 7 C_2, C_3, 6 C_4, 3 C_6, C_{12}, 36 D_2, 14 D_4	3 C_2, 2 C_6, 24 D_2, 12 D_4	**Tet**, 7 C_2, C_3, 6 C_4, 36 D_2, 14 D_4
R33.35	2 **Tet**, 11 C_2, C_3, 4 C_4, 7 C_6, 80 D_2, 15 D_4	2 **Tet**, 11 C_2, C_3, 4 C_4, 7 C_6, 80 D_2, 15 D_4	3 C_2, 2 C_6, 49 D_2, 10 D_4	2 **Tet**, 11 C_2, C_3, 4 C_4, 80 D_2, 15 D_4
R33.36	4 **Tet**, 3 C_2, C_3, 2 C_4, C_6, 2 C_8, 10 D_2, 4 D_4, 3 D_8	4 **Tet**, 3 C_2, C_3, 2 C_4, C_6, 2 C_8, 10 D_2, 4 D_4, 3 D_8	3 **Tet**, 2 C_2, C_6, 9 D_2, 4 D_4, 3 D_8	4 **Tet**, 3 C_2, C_3, 2 C_4, 2 C_8, 10 D_2, 4 D_4, 3 D_8
R33.37	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, 2 D_8	C_2, C_6, 2 D_2, D_3, D_4, D_6, 2 D_8	**Tet**, 2 C_2, C_3, C_4, 2 C_8, 3 D_2, D_3, 2 D_4, 2 D_8
R33.38	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, C_7, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, 6 D_2, 2 D_3, 3 D_4, D_6	**Oct**, 2 C_2, C_6, 5 D_2, D_3, 2 D_4, D_6	**Tet**, 3 C_2, C_3, 2 C_4, 6 D_2, D_3, 3 D_4
R33.39	5 C_2, 14 C_4, 9 C_8, 13 D_2, 6 D_4	5 C_2, 14 C_4, 7 C_8, 13 D_2, 6 D_4	3 C_2, 4 C_4, 4 C_8, 11 D_2, 6 D_4	5 C_2, 8 C_4, C_8, 13 D_2, 6 D_4
R33.40	5 C_2, 11 C_4, 9 C_8, 13 D_2, 6 D_4	5 C_2, 11 C_4, 7 C_8, 13 D_2, 6 D_4	3 C_2, 4 C_4, 6 C_8, 11 D_2, 6 D_4	5 C_2, 7 C_4, C_8, 13 D_2, 6 D_4
R33.41	15 C_2, 8 C_4, 8 C_8, 161 D_2, 10 D_4	15 C_2, 8 C_4, 6 C_8, 161 D_2, 10 D_4	3 C_2, 4 C_4, 6 C_8, 75 D_2, 4 D_4	15 C_2, 4 C_4, 161 D_2, 10 D_4
R33.42	6 C_2, 7 C_4, 7 C_8, 19 D_2, 5 D_4	6 C_2, 7 C_4, 5 C_8, 19 D_2, 5 D_4	3 C_2, 3 C_4, 4 C_8, 17 D_2, 5 D_4	6 C_2, 4 C_4, C_8, 19 D_2, 5 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R33.43	6 C_2, 9 C_4, 7 C_8, 19 D_2, 5 D_4	6 C_2, 9 C_4, 5 C_8, 19 D_2, 5 D_4	3 C_2, 5 C_4, C_8, 17 D_2, 5 D_4	6 C_2, 4 C_4, C_8, 19 D_2, 4 D_4
R33.44	6 C_2, 8 C_4, 8 C_8, 19 D_2, 5 D_4	6 C_2, 8 C_4, 6 C_8, 19 D_2, 5 D_4	3 C_2, 7 C_4, 6 C_8, 19 D_2, 5 D_4	6 C_2, C_4, 19 D_2, D_4
R33.45	7 C_2, 7 C_4, 6 C_8, 30 D_2, 12 D_4	7 C_2, 7 C_4, 4 C_8, 30 D_2, 12 D_4	3 C_2, 5 C_4, 4 C_8, 25 D_2, 10 D_4	7 C_2, 2 C_4, 30 D_2, 6 D_4
R33.46	7 C_2, 7 C_4, 4 C_8, 33 D_2, 5 D_4	7 C_2, 7 C_4, 2 C_8, 33 D_2, 5 D_4	3 C_2, 4 C_4, 2 C_8, 26 D_2, 5 D_4	7 C_2, 3 C_4, 33 D_2, D_4
R33.47	7 C_2, 6 C_4, 6 C_8, 30 D_2, 12 D_4	7 C_2, 6 C_4, 4 C_8, 30 D_2, 12 D_4	3 C_2, 2 C_4, 2 C_8, 22 D_2, 8 D_4	7 C_2, 4 C_4, 2 C_8, 30 D_2, 12 D_4
R33.48	3 C_2, 5 C_4, 8 C_8, 8 D_2, 5 D_4, 3 D_8	3 C_2, 5 C_4, 6 C_8, 8 D_2, 5 D_4, 3 D_8	2 C_2, 3 C_4, 3 C_8, 8 D_2, 5 D_4, 3 D_8	3 C_2, 2 C_4, 3 C_8, 8 D_2, 4 D_4
R33.49	7 C_2, 8 C_4, 7 C_8, 30 D_2, 12 D_4	7 C_2, 8 C_4, 5 C_8, 30 D_2, 12 D_4	2 C_2, 2 C_4, 2 C_8, 19 D_2, 8 D_4	7 C_2, 6 C_4, 3 C_8, 30 D_2, 12 D_4
R33.50	9 C_2, 7 C_4, 7 C_8, 47 D_2, 14 D_4	9 C_2, 7 C_4, 5 C_8, 47 D_2, 14 D_4	3 C_2, 3 C_4, 4 C_8, 30 D_2, 7 D_4	9 C_2, 4 C_4, C_8, 47 D_2, 14 D_4
R33.51	7 C_2, 9 C_4, 7 C_8, 23 D_2, 10 D_4	7 C_2, 9 C_4, 5 C_8, 23 D_2, 10 D_4	3 C_2, 3 C_4, 4 C_8, 19 D_2, 7 D_4	7 C_2, 6 C_4, C_8, 23 D_2, 10 D_4
R33.52	8 C_2, 7 C_4, 4 C_8, 40 D_2, 11 D_4	8 C_2, 7 C_4, 2 C_8, 40 D_2, 11 D_4	3 C_2, 2 C_4, 2 C_8, 26 D_2, 8 D_4	8 C_2, 5 C_4, 40 D_2, 11 D_4
R33.53	11 C_2, 5 C_4, 4 C_8, 99 D_2, 12 D_4	11 C_2, 5 C_4, 2 C_8, 99 D_2, 12 D_4	3 C_2, 2 C_4, 2 C_8, 48 D_2, 8 D_4	11 C_2, 3 C_4, 99 D_2, 12 D_4
R33.54	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, C_6, 8 C_8, C_{12}, 2 C_{24}, 16 D_2, 2 D_3, 4 D_4, D_6	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, C_6, 6 C_8, 16 D_2, 2 D_3, 4 D_4, D_6	**Oct**, 2 C_2, 3 C_4, C_6, 6 C_8, 11 D_2, D_3, 2 D_4, D_6	**Tet**, 5 C_2, C_3, 3 C_4, 16 D_2, D_3, 4 D_4
R33.55	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 4 C_8, C_{12}, 2 C_{24}, 12 D_2, D_3, 2 D_4, D_6	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 2 C_8, 12 D_2, D_3, 2 D_4, D_6	**Oct**, 2 C_2, 3 C_4, C_6, 2 C_8, 9 D_2, D_3, 2 D_4, D_6	**Tet**, 4 C_2, C_3, 2 C_4, 12 D_2, D_3, 2 D_4
R33.56	3 C_2, C_3, 3 C_4, C_6, 4 C_8, 2 C_{12}, 2 C_{24}, 7 D_2, D_3, 3 D_4, D_6, D_8, 2 D_{12}	3 C_2, C_3, 3 C_4, C_6, 2 C_8, C_{12}, 7 D_2, D_3, 3 D_4, D_6, D_8, D_{12}	2 C_2, 3 C_4, C_6, 2 C_8, C_{12}, 7 D_2, D_3, 3 D_4, D_6, D_8, D_{12}	3 C_2, C_3, 7 D_2, D_3
R33.57	4 C_2, C_3, 2 C_4, C_6, 5 C_8, 2 C_{12}, 4 C_{24}, 12 D_2, 2 D_3, 5 D_4, 2 D_6, 6 D_8, 4 D_{12}, 4 D_{24}	4 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, C_{24}, 12 D_2, 2 D_3, 5 D_4, 2 D_6, 4 D_8, 2 D_{12}, D_{24}	2 C_2, 2 C_4, C_6, 3 C_8, C_{12}, C_{24}, 9 D_2, D_3, 5 D_4, 2 D_6, 4 D_8, 2 D_{12}, D_{24}	4 C_2, C_3, 12 D_2, D_3
R33.58	5 C_2, C_3, 5 C_4, 3 C_6, 4 C_8, 8 C_{12}, 4 C_{24}, 15 D_2, 2 D_3, 6 D_4, 6 D_6, 10 D_{12}	5 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 7 C_{12}, C_{24}, 15 D_2, 2 D_3, 6 D_4, 6 D_6, 9 D_{12}	3 C_2, 2 C_4, C_6, C_{12}, 13 D_2, D_3, 5 D_4, 4 D_6, 7 D_{12}	5 C_2, C_3, 3 C_4, C_6, C_{12}, 15 D_2, 2 D_3, 4 D_4, 2 D_6, D_{12}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R33.59	5 C_2, C_3, 6 C_4, 3 C_6, 6 C_8, 8 C_{12}, 8 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_{12}	5 C_2, C_3, 6 C_4, 3 C_6, 4 C_8, 7 C_{12}, 3 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_{12}	3 C_2, 3 C_4, C_6, 3 C_8, C_{12}, 11 D_2, D_3, 2 D_4, 3 D_6, 4 D_{12}	5 C_2, C_3, 2 C_4, C_6, 13 D_2, 2 D_3, 3 D_4, D_6
R33.60	4 C_2, C_3, 4 C_4, 3 C_6, 4 C_8, 5 C_{12}, 4 C_{24}, 9 D_2, D_3, D_4, 3 D_6, 2 D_{12}	4 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 4 C_{12}, C_{24}, 9 D_2, D_3, D_4, 3 D_6, 2 D_{12}	3 C_2, 2 C_4, C_6, 2 C_8, C_{12}, 9 D_2, D_3, D_4, 3 D_6, 2 D_{12}	4 C_2, C_3, 2 C_4, C_6, 9 D_2, D_3, D_4, D_6
R33.61	7 C_2, C_3, 3 C_4, 5 C_6, 4 C_8, 3 C_{12}, 4 C_{24}, 30 D_2, 2 D_3, 7 D_6	7 C_2, C_3, 3 C_4, 5 C_6, 2 C_8, 2 C_{12}, C_{24}, 30 D_2, 2 D_3, 7 D_6	2 C_2, 2 C_4, C_6, 2 C_8, 2 C_{12}, C_{24}, 19 D_2, D_3, 5 D_6	7 C_2, C_3, C_4, 30 D_2, 2 D_3
R33.62	3 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, 3 C_{12}, 2 C_{24}, 8 D_2, D_3, D_4, 3 D_6, 2 D_{12}	3 C_2, C_3, 4 C_4, 2 C_6, 2 C_{12}, 8 D_2, D_3, D_4, 3 D_6, 2 D_{12}	2 C_2, 3 C_4, C_6, 2 C_{12}, 8 D_2, D_3, D_4, 3 D_6, 2 D_{12}	3 C_2, C_3, C_4, 8 D_2, D_3
R33.63	5 C_2, C_3, 6 C_4, 3 C_6, 6 C_8, 5 C_{12}, 4 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_{12}	5 C_2, C_3, 6 C_4, 3 C_6, 4 C_8, 4 C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_{12}	3 C_2, 3 C_4, C_6, 3 C_8, C_{12}, 11 D_2, D_3, 2 D_4, 3 D_6, 2 D_{12}	5 C_2, C_3, 2 C_4, C_6, 13 D_2, 2 D_3, 3 D_4, D_6
R33.64	3 C_2, 2 C_4, 4 C_8, 5 C_{11}, 5 C_{22}, 5 C_{44}, 10 C_{88}, 3 D_2, 10 D_{11}, 5 D_{22}	3 C_2, 2 C_4, 2 C_8, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	2 C_2, C_4, C_{22}, 3 D_2, D_{11}, D_{22}	3 C_2, C_{11}, 3 D_2, D_{11}
R33.65	2 C_2, 2 C_4, 2 C_8, 5 C_{11}, 5 C_{22}, 5 C_{44}, 10 C_{88}, 2 D_2, 5 D_{11}, 5 D_{22}	2 C_2, 2 C_4, C_{11}, C_{22}, 2 D_2, D_{11}, D_{22}	2 C_2, C_4, C_{22}, 2 D_2, D_{11}, D_{22}	2 C_2, C_{11}, 2 D_2, D_{11}
R33.66	2 **Tet**, 3 C_2, C_3, 3 C_4, C_6, 2 C_{12}, 8 D_2, 2 D_4	2 **Tet**, 3 C_2, C_3, 3 C_4, C_6, 8 D_2, 2 D_4	**Tet**, 2 C_2, 2 C_4, C_6, 7 D_2, 2 D_4	2 **Tet**, 3 C_2, C_3, C_4, 8 D_2
R33.67	2 **Tet**, 3 C_2, C_3, 3 C_4, C_6, 2 C_{12}, 8 D_2, 2 D_4	2 **Tet**, 3 C_2, C_3, 3 C_4, C_6, C_{12}, 8 D_2, 2 D_4	**Tet**, 2 C_2, 2 C_4, C_6, C_{12}, 7 D_2, 2 D_4	2 **Tet**, 3 C_2, C_3, C_4, 8 D_2
R33.68	3 **Tet**, 7 C_2, C_3, 2 C_4, C_6, 2 C_{12}, 58 D_2	3 **Tet**, 7 C_2, C_3, 2 C_4, C_6, 58 D_2	2 C_2, C_4, C_6, 30 D_2	3 **Tet**, 7 C_2, C_3, C_4, 58 D_2
R33.69	3 **Tet**, 7 C_2, C_3, 2 C_4, C_6, 2 C_{12}, 58 D_2	3 **Tet**, 7 C_2, C_3, 2 C_4, C_6, C_{12}, 58 D_2	**Tet**, 2 C_2, C_4, C_6, C_{12}, 32 D_2	3 **Tet**, 7 C_2, C_3, C_4, 58 D_2
R33.70	5 C_2, C_3, 10 C_4, 3 C_6, 12 C_{12}, 13 D_2, 3 D_4	5 C_2, C_3, 10 C_4, 3 C_6, 10 C_{12}, 13 D_2, 3 D_4	3 C_2, 4 C_4, 2 C_6, 4 C_{12}, 11 D_2, 2 D_4	5 C_2, C_3, 4 C_4, 13 D_2, 3 D_4
R33.71	**Tet**, 11 C_2, C_3, 4 C_4, 5 C_6, 4 C_{12}, 89 D_2	**Tet**, 11 C_2, C_3, 4 C_4, 5 C_6, 2 C_{12}, 89 D_2	3 C_2, 4 C_4, 2 C_6, 2 C_{12}, 51 D_2	**Tet**, 11 C_2, C_3, 89 D_2
R33.72	5 C_2, C_3, 8 C_4, 3 C_6, 6 C_{12}, 13 D_2, 3 D_4	5 C_2, C_3, 8 C_4, 3 C_6, 4 C_{12}, 13 D_2, 3 D_4	2 C_2, 2 C_4, C_6, 2 C_{12}, 11 D_2, 2 D_4	5 C_2, C_3, 6 C_4, 13 D_2, 3 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R33.73	5 C_2, C_3, 7 C_4, 3 C_6, 6 C_{12}, 15 D_2, 7 D_4	5 C_2, C_3, 7 C_4, 3 C_6, 4 C_{12}, 15 D_2, 7 D_4	3 C_2, 5 C_4, 2 C_6, 4 C_{12}, 13 D_2, 7 D_4	5 C_2, C_3, 2 C_4, 15 D_2, 2 D_4
R33.74	5 C_2, C_3, 5 C_4, 5 C_6, 7 C_{12}, 16 D_2, 6 D_4	5 C_2, C_3, 5 C_4, 5 C_6, 5 C_{12}, 16 D_2, 6 D_4	3 C_2, 2 C_4, C_6, 14 D_2, 6 D_4	5 C_2, C_3, 3 C_4, 16 D_2, 6 D_4
R33.75	3 C_2, C_3, 2 C_4, C_6, 3 C_7, C_{12}, 3 C_{14}, 3 C_{21}, 3 C_{28}, 3 C_{42}, 3 D_2, 2 D_3, D_6, 6 D_7, 3 D_{14}, 6 D_{21}, 3 D_{42}	3 C_2, C_3, 2 C_4, C_6, C_7, C_{14}, C_{21}, C_{42}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 2 D_{21}, D_{42}	2 C_2, 2 C_4, C_6, C_{14}, 3 D_2, D_3, D_6, D_7, D_{14}, D_{21}, D_{42}	3 C_2, C_3, C_7, 3 D_2, D_3, D_7
R33.76	C_2, 3 C_7, 5 C_{11}, 3 C_{14}, 15 C_{77}, 5 D_{11}	C_2, C_{11}, D_{11}	C_2, D_{11}	C_2, C_{11}, D_{11}
R33.77	5 C_2, 3 C_4, 2 C_5, 10 C_{10}, 10 C_{20}, 13 D_2, 2 D_4	5 C_2, 3 C_4, C_5, 5 C_{10}, 3 C_{20}, 13 D_2, 2 D_4	3 C_2, 2 C_4, C_{10}, 11 D_2, 2 D_4	5 C_2, C_4, C_5, 13 D_2, 2 D_4
R33.78	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_9, 4 C_{12}, 3 C_{18}, 6 C_{36}, 6 D_2	3 C_2, C_3, 2 C_4, 3 C_6, C_9, 2 C_{12}, C_{18}, 6 D_2	2 C_2, C_4, C_6, 5 D_2	3 C_2, C_3, C_6, 6 D_2
R33.79	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_9, 4 C_{12}, 3 C_{18}, 6 C_{36}, 6 D_2	3 C_2, C_3, 2 C_4, 3 C_6, C_9, 3 C_{12}, C_{18}, C_{36}, 6 D_2	2 C_2, C_4, C_6, 6 D_2	3 C_2, C_3, C_4, C_6, C_{12}, 6 D_2
R33.80	5 C_2, C_3, 2 C_4, 5 C_6, 3 C_9, 4 C_{12}, 15 C_{18}, 12 C_{36}, 13 D_2	5 C_2, C_3, 2 C_4, 5 C_6, C_9, 2 C_{12}, 5 C_{18}, 2 C_{36}, 13 D_2	3 C_2, 2 C_4, C_6, C_{18}, 11 D_2	5 C_2, C_3, C_9, 13 D_2
R33.81	C_2, C_3, 11 C_{23}, 11 C_{46}, 11 C_{69}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R33.82	C_2, 33 C_{67}, 33 C_{134}	C_2	C_2	C_2
R33.83	3 C_2, 2 C_4, 8 C_{17}, 24 C_{34}, 32 C_{68}, 3 D_2	3 C_2, 2 C_4, C_{17}, 3 C_{34}, 2 C_{68}, 3 D_2	2 C_2, 2 C_4, C_{34}, 3 D_2	3 C_2, C_{17}, C_{34}, 3 D_2
R33.84	C_2, C_3, C_4, C_6, 5 C_{11}, 2 C_{12}, 5 C_{22}, 10 C_{33}, 10 C_{44}, 10 C_{66}, 20 C_{132}	C_2, C_3, C_4, C_6, C_{11}, C_{22}, C_{33}, C_{66}	C_2, C_4, C_6, C_{22}, C_{66}	C_2, C_3, C_{11}, C_{33}
Genus 34				
R34.1	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_6, C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, **Ico**, 2 C_2, C_6, C_{10}, 3 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, D_{10}, D_{11}, 2 D_{12}	2 C_2, C_3, C_4, C_5, C_{11}, 3 D_2, 2 D_3, D_4, 2 D_5, D_{11}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R34.2	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_6, C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, **Ico**, 2 C_2, C_6, C_{10}, 3 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, D_{10}, D_{11}, 2 D_{12}	2 C_2, C_3, C_4, C_5, C_{11}, 3 D_2, 2 D_3, D_4, 2 D_5, D_{11}
R34.3	2 **Tet**, 2 **Oct**, **Ico**, 2 C_2, 3 C_3, C_4, C_5, 2 C_6, C_{15}, 3 D_2, 4 D_3, D_4, D_5, 2 D_6	2 **Tet**, 2 **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, 3 D_2, 4 D_3, D_4, 2 D_6	2 **Tet**, 2 **Oct**, 2 C_2, C_4, 2 C_6, 3 D_2, 4 D_3, D_4, 2 D_6	2 C_2, 3 C_3, 3 D_2, 4 D_3
R34.4	3 C_2, C_4, 2 C_5, 3 C_7, 4 C_{10}, 6 C_{14}, 12 C_{35}, 24 C_{70}, 4 D_2, D_4, 2 D_5, 3 D_7, 2 D_{10}, 3 D_{14}, 12 D_{35}, 12 D_{70}	3 C_2, C_4, C_5, C_7, 2 C_{10}, 2 C_{14}, C_{35}, 2 C_{70}, 4 D_2, D_4, D_5, D_7, D_{10}, D_{14}, D_{35}, D_{70}	3 C_2, C_4, C_{10}, C_{14}, C_{70}, 4 D_2, D_4, D_5, D_7, D_{10}, D_{14}, D_{35}, D_{70}	3 C_2, C_5, C_7, C_{35}, 4 D_2, D_5, D_7, D_{35}
R34.5	2 C_2, 2 C_4, C_8, 8 C_{17}, 8 C_{34}, 16 C_{68}, 16 C_{136}, 2 D_2, D_4, 8 D_{17}, 8 D_{34}, 16 D_{68}	2 C_2, 2 C_4, C_{17}, C_{34}, C_{68}, 2 D_2, D_4, D_{17}, D_{34}, D_{68}	2 C_2, 2 C_4, C_{34}, C_{68}, 2 D_2, D_4, D_{17}, D_{34}, D_{68}	2 C_2, C_{17}, 2 D_2, D_{17}
R34.6	**Tet**, 2 **Ico**, C_2, C_3, 2 C_5, C_6, C_{11}, D_2, D_3, 2 D_5, D_6	**Tet**, **Ico**, C_2, C_3, C_5, C_6, C_{11}, D_2, D_3, D_5, D_6	**Tet**, **Ico**, C_2, C_6, D_2, D_3, D_5, D_6	C_2, C_3, C_5, C_{11}, D_2, D_3, D_5
R34.7	**Tet**, 4 **Ico**, C_2, C_3, 2 C_5, C_6, C_{11}, D_2, 2 D_3, 2 D_5, D_6	**Tet**, 2 **Ico**, C_2, C_3, C_5, C_6, C_{11}, D_2, 2 D_3, D_5, D_6	**Tet**, 2 **Ico**, C_2, C_6, D_2, 2 D_3, D_5, D_6	C_2, C_3, C_5, C_{11}, D_2, 2 D_3, D_5
R34.8	3 C_2, 3 C_3, C_4, 4 C_6, 6 C_9, 2 C_{12}, 6 C_{18}, 6 C_{36}, 4 D_2, 4 D_3, D_4, 4 D_6, 9 D_9, 2 D_{12}, 9 D_{18}, 6 D_{36}	3 C_2, 3 C_3, C_4, 4 C_6, 4 C_9, C_{12}, 4 C_{18}, C_{36}, 4 D_2, 4 D_3, D_4, 4 D_6, 5 D_9, D_{12}, 5 D_{18}, D_{36}	3 C_2, C_4, 2 C_6, 4 D_2, 4 D_3, D_4, 4 D_6, 5 D_9, D_{12}, 5 D_{18}, D_{36}	3 C_2, 3 C_3, C_6, C_9, C_{18}, 4 D_2, 4 D_3, 2 D_6, 2 D_9, 2 D_{18}
R34.9	3 C_2, 3 C_3, C_4, 5 C_6, 6 C_9, 5 C_{12}, 6 C_{18}, 12 C_{36}, 4 D_2, 2 D_3, D_4, 2 D_6, 6 D_9, 2 D_{12}, 6 D_{18}, 6 D_{36}	3 C_2, 3 C_3, C_4, 5 C_6, 4 C_9, 4 C_{12}, 4 C_{18}, 4 C_{36}, 4 D_2, 2 D_3, D_4, 2 D_6, 6 D_9, D_{12}, 6 D_{18}, 3 D_{36}	3 C_2, 3 C_6, 4 D_2, 2 D_3, D_4, 2 D_6, 6 D_9, D_{12}, 6 D_{18}, 3 D_{36}	3 C_2, 2 C_3, C_4, C_6, C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}
R34.10	3 C_2, C_3, 3 C_6, 8 C_{17}, 8 C_{34}, 8 C_{51}, 8 C_{102}, 3 D_2, 16 D_{17}, 8 D_{34}	3 C_2, C_3, 3 C_6, C_{17}, C_{34}, 3 D_2, 2 D_{17}, D_{34}	3 C_2, C_6, 3 D_2, 2 D_{17}, D_{34}	3 C_2, C_{17}, C_{34}, 3 D_2, 2 D_{17}, D_{34}
R34.11	2 C_2, C_3, C_4, C_5, 2 C_6, C_8, C_{10}, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, C_4, 2 C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, 2 C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, 2 D_2, D_3
R34.12	2 C_2, 3 C_3, C_4, 4 C_6, 6 C_9, C_{12}, 3 D_2, D_3, D_4, D_6, 3 D_9	2 C_2, 3 C_3, C_4, 4 C_6, 4 C_9, 3 D_2, D_3, D_4, D_6, 3 D_9	2 C_2, C_4, 3 C_6, 3 D_2, D_3, D_4, D_6, 3 D_9	2 C_2, 2 C_3, 3 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R34.13	C_2, 2 C_5, 2 C_{10}, 8 C_{17}, 16 C_{85}, 8 D_{17}	C_2, C_5, C_{10}, C_{17}, D_{17}	C_2, C_{10}, D_{17}	C_2, C_{17}, D_{17}
R34.14	3 C_2, C_3, C_4, 3 C_6, 3 C_7, C_{12}, 6 C_{14}, 3 C_{21}, 9 C_{42}, 4 D_2, D_4, 3 D_7, 3 D_{14}	3 C_2, C_3, C_4, 3 C_6, C_7, 2 C_{14}, 4 D_2, D_4, D_7, D_{14}	3 C_2, C_4, C_6, C_{14}, 4 D_2, D_4, D_7, D_{14}	3 C_2, C_7, 4 D_2, D_7
R34.15	2 **Tet**, 2 **Ico**, C_2, 3 C_3, 2 C_5, C_6, 2 C_{15}, D_2, D_3, 2 D_5	2 **Tet**, C_2, 3 C_3, C_6, D_2, D_3	2 **Tet**, C_2, C_6, D_2, D_3	C_2, 3 C_3, D_2, D_3
R34.16	2 C_2, C_3, 2 C_4, 2 C_6, C_8, 3 C_9, 2 C_{12}, 6 C_{18}, 2 C_{24}, 6 C_{36}, 6 C_{72}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, 2 C_6, 2 D_2, D_4	2 C_2, 2 C_4, C_6, 2 D_2, D_4	2 C_2, 2 D_2
R34.17	C_2, C_3, C_6, 11 C_{23}, 11 C_{46}, 22 C_{69}, 22 C_{138}	C_2, C_3, C_6	C_2, C_6	C_2
R34.18	3 C_2, 2 C_5, 3 C_7, 6 C_{10}, 9 C_{14}, 12 C_{35}, 36 C_{70}, 3 D_2	3 C_2, C_5, C_7, 3 C_{10}, 3 C_{14}, C_{35}, 3 C_{70}, 3 D_2	3 C_2, C_{10}, C_{14}, C_{70}, 3 D_2	3 C_2, C_5, C_7, C_{35}, 3 D_2
R34.19	C_2, C_4, 2 C_8, 8 C_{17}, 8 C_{34}, 16 C_{68}, 32 C_{136}	C_2, C_4, C_{17}, C_{34}, C_{68}	C_2, C_4, C_{34}, C_{68}	C_2, C_{17}
Genus 35				
R35.1	5 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, 3 C_9, 4 C_{12}, 9 C_{18}, 4 C_{24}, 12 C_{36}, 12 C_{72}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_9, 6 D_{12}, 12 D_{18}, 18 D_{36}	5 C_2, C_3, 3 C_4, 3 C_6, C_8, C_9, 3 C_{12}, 3 C_{18}, C_{24}, 3 C_{36}, C_{72}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 2 D_9, 5 D_{12}, 4 D_{18}, 5 D_{36}	3 C_2, 2 C_4, C_6, C_{18}, 13 D_2, D_3, 3 D_4, 3 D_6, D_9, 3 D_{12}, 3 D_{18}, 3 D_{36}	5 C_2, C_3, C_4, C_6, C_9, C_{12}, C_{18}, C_{36}, 13 D_2, 2 D_3, D_4, 2 D_6, 2 D_9, D_{12}, 2 D_{18}, D_{36}
R35.2	3 C_2, C_3, 5 C_4, 2 C_6, C_8, 3 C_9, 2 C_{12}, 6 C_{18}, 2 C_{24}, 6 C_{36}, 6 C_{72}, 4 D_2, D_3, 2 D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	3 C_2, C_3, 5 C_4, 2 C_6, C_9, C_{12}, 2 C_{18}, C_{36}, 4 D_2, D_3, 2 D_4, D_6, D_9, D_{12}, D_{18}, D_{36}	3 C_2, 4 C_4, C_6, C_{18}, 4 D_2, D_3, 2 D_4, D_6, D_9, D_{12}, D_{18}, D_{36}	3 C_2, C_3, C_6, C_9, C_{18}, 4 D_2, D_3, D_6, D_9, D_{18}
R35.3	3 C_2, 2 C_4, 2 C_5, 3 C_7, 2 C_{10}, 3 C_{14}, 2 C_{20}, 3 C_{28}, 12 C_{35}, 12 C_{70}, 12 C_{140}, 3 D_2, 4 D_5, 6 D_7, 2 D_{10}, 3 D_{14}, 24 D_{35}, 12 D_{70}	3 C_2, 2 C_4, C_5, C_7, C_{10}, C_{14}, C_{35}, C_{70}, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, 2 D_{35}, D_{70}	2 C_2, 2 C_4, C_{10}, C_{14}, C_{70}, 3 D_2, D_5, D_7, D_{10}, D_{14}, D_{35}, D_{70}	3 C_2, C_5, C_7, C_{35}, 3 D_2, D_5, D_7, D_{35}
R35.4	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 2 C_5, C_6, 4 C_{10}, 2 C_{15}, 2 C_{20}, 16 D_2, 2 D_3, 4 D_4, 6 D_5, D_6, 10 D_{10}, 2 D_{15}, 2 D_{20}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_5, C_6, 2 C_{10}, C_{15}, 16 D_2, 2 D_3, 4 D_4, 3 D_5, D_6, 5 D_{10}, D_{15}	**Tet**, **Oct**, 3 C_2, C_4, C_6, 16 D_2, D_3, 4 D_4, 2 D_5, D_6, 4 D_{10}, D_{15}	**Tet**, 5 C_2, C_3, C_4, C_5, 16 D_2, D_3, 2 D_4, 3 D_5
R35.5	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 2 C_{20}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, 2 C_4, C_6, C_{10}, C_{12}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R35.6	C_2, C_3, 2 C_5, C_6, 3 C_7, 2 C_{15}, 3 C_{21}, 12 C_{35}, 12 C_{105}, 2 D_5, 3 D_7, 12 D_{35}	C_2, C_3, C_5, C_6, C_7, C_{35}, D_5, D_7, D_{35}	C_2, C_6, D_5, D_7, D_{35}	C_2, C_5, C_7, C_{35}, D_5, D_7, D_{35}
R35.7	4 C_2, C_3, 2 C_4, 2 C_6, 4 C_8, 3 C_{12}, 2 C_{16}, 6 C_{24}, 4 C_{48}, 9 D_2, 2 D_3, 3 D_4, 3 D_6, 4 D_8, 5 D_{12}, 8 D_{24}	4 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 2 C_{12}, 2 C_{24}, 9 D_2, 2 D_3, 3 D_4, 3 D_6, 3 D_8, 3 D_{12}, 3 D_{24}	2 C_2, 2 C_4, C_6, 2 C_8, C_{12}, 2 C_{24}, 9 D_2, D_3, 3 D_4, 3 D_6, 3 D_8, 3 D_{12}, 3 D_{24}	4 C_2, C_3, 9 D_2, 2 D_3
R35.8	3 C_2, C_3, 3 C_4, 2 C_6, 4 C_8, 3 C_{12}, 4 C_{16}, 6 C_{24}, 8 C_{48}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, 2 D_{12}, 4 D_{24}	3 C_2, C_3, 3 C_4, 2 C_6, 2 C_8, 2 C_{12}, 2 C_{24}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{24}	2 C_2, 3 C_4, C_6, 2 C_8, C_{12}, 2 C_{24}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{24}	3 C_2, C_3, 4 D_2, D_3
R35.9	5 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 4 C_{12}, 4 C_{16}, 4 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_8, 3 D_{12}, 6 D_{24}	5 C_2, C_3, 3 C_4, 3 C_6, 3 C_8, 3 C_{12}, C_{16}, 3 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 5 D_8, 3 D_{12}, 5 D_{24}	3 C_2, 2 C_4, C_6, C_{12}, 13 D_2, D_3, 2 D_4, 4 D_6, 3 D_8, 2 D_{12}, 3 D_{24}	5 C_2, C_3, C_4, C_6, C_8, 13 D_2, 2 D_3, 2 D_4, D_6, D_8
R35.10	3 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, 4 C_{12}, 2 C_{16}, 3 C_{24}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, 2 D_{24}	3 C_2, C_3, 4 C_4, 2 C_6, C_8, 3 C_{12}, 2 C_{24}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, 2 D_{24}	3 C_2, 3 C_4, C_6, C_{12}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, 2 D_{24}	3 C_2, C_3, C_4, 4 D_2, D_3, D_4
R35.11	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_7, 4 C_{12}, 3 C_{14}, 3 C_{21}, 3 C_{28}, 3 C_{42}, 6 C_{84}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, C_3, 2 C_4, 3 C_6, C_7, 2 C_{12}, C_{14}, 3 D_2, 2 D_7, D_{14}	2 C_2, 2 C_4, C_6, C_{14}, 3 D_2, D_7, D_{14}	3 C_2, C_7, 3 D_2, D_7
R35.12	2 C_2, 2 C_4, 2 C_5, 3 C_8, 2 C_{10}, 4 C_{16}, 2 C_{20}, 4 C_{40}, 8 C_{80}, 2 D_2, 2 D_5, 2 D_{10}	2 C_2, 2 C_4, C_5, 2 C_8, C_{10}, 2 D_2, D_5, D_{10}	2 C_2, C_4, C_{10}, 2 D_2, D_5, D_{10}	2 C_2, C_5, 2 D_2, D_5
R35.13	3 C_2, 2 C_4, 2 C_5, 4 C_8, 2 C_{10}, 8 C_{16}, 2 C_{20}, 4 C_{40}, 8 C_{80}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, 2 C_4, C_5, 2 C_8, C_{10}, 3 D_2, 2 D_5, D_{10}	2 C_2, C_4, C_{10}, 3 D_2, D_5, D_{10}	3 C_2, C_5, 3 D_2, D_5
R35.14	5 C_2, 3 C_4, 2 C_5, 2 C_8, 10 C_{10}, 8 C_{20}, 8 C_{40}, 13 D_2, 3 D_4	5 C_2, 3 C_4, C_8, 13 D_2, 3 D_4	3 C_2, 2 C_4, 13 D_2, 3 D_4	5 C_2, C_4, 13 D_2, D_4
R35.15	3 C_2, 5 C_4, 2 C_5, C_8, 6 C_{10}, 16 C_{20}, 4 C_{40}, 4 D_2, 2 D_4	3 C_2, 5 C_4, 4 D_2, 2 D_4	3 C_2, 3 C_4, 4 D_2, 2 D_4	3 C_2, 4 D_2
R35.16	C_2, 3 C_7, 5 C_{11}, 5 C_{22}, 15 C_{77}, 3 D_7	C_2, C_7, D_7	C_2, D_7	C_2, C_7, D_7
R35.17	C_2, 35 C_{71}, 35 C_{142}	C_2	C_2	C_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R35.18	2 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 3 C_9, 3 C_{12}, 6 C_{18}, 4 C_{24}, 9 C_{36}, 12 C_{72}, 2 D_2	2 C_2, C_3, 2 C_4, 2 C_6, C_9, C_{12}, 2 C_{18}, C_{36}, 2 D_2	2 C_2, C_4, C_6, C_{18}, 2 D_2	2 C_2, C_3, C_6, C_9, C_{18}, 2 D_2
R35.19	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_8, 3 C_9, 4 C_{12}, 9 C_{18}, 8 C_{24}, 12 C_{36}, 24 C_{72}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_8, C_9, 3 C_{12}, 3 C_{18}, 2 C_{24}, 3 C_{36}, 2 C_{72}, 3 D_2	2 C_2, C_4, C_6, C_{18}, 3 D_2	3 C_2, C_3, C_4, C_6, C_9, C_{12}, C_{18}, C_{36}, 3 D_2
R35.20	C_2, C_4, 2 C_5, 3 C_7, 2 C_{10}, 3 C_{14}, 4 C_{20}, 6 C_{28}, 12 C_{35}, 12 C_{70}, 24 C_{140}	C_2, C_4, C_5, C_7, C_{10}, C_{14}, C_{35}, C_{70}	C_2, C_4, C_{10}, C_{14}, C_{70}	C_2, C_5, C_7, C_{35}
Genus 36				
R36.1	2 C_2, C_3, C_4, 2 C_6, C_7, 2 C_8, C_{14}, 2 C_{16}, 2 D_2, D_3, D_4, D_6, D_7, 2 D_8, D_{14}	2 C_2, C_3, C_4, 2 C_6, C_7, C_8, C_{14}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{14}	2 C_2, C_4, 2 C_6, C_8, C_{14}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{14}	2 C_2, C_3, C_7, 2 D_2, D_3, D_7
R36.2	2 C_2, C_3, C_4, 2 C_6, C_7, 2 C_8, C_{14}, 2 C_{16}, 2 D_2, D_3, D_4, D_6, D_7, 2 D_8, D_{14}	2 C_2, C_3, C_4, 2 C_6, C_7, C_8, C_{14}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{14}	2 C_2, C_4, 2 C_6, C_8, C_{14}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{14}	2 C_2, C_3, C_7, 2 D_2, D_3, D_7
R36.3	**Tet**, **Oct**, 2 C_2, C_3, C_4, 4 C_5, 10 C_{10}, 2 C_{20}, 3 D_2, D_3, D_4, 2 D_5, 2 D_{10}	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 C_5, 7 C_{10}, 3 D_2, D_3, D_4, 2 D_5, 2 D_{10}	**Tet**, **Oct**, 2 C_2, C_4, 6 C_{10}, 3 D_2, D_3, D_4, 2 D_5, 2 D_{10}	**Tet**, 2 C_2, C_3, 2 C_5, 3 D_2, D_3, 2 D_5
R36.4	3 C_2, C_4, 9 C_7, 6 C_{14}, 4 D_2, D_4, 15 D_7, 6 D_{14}	3 C_2, C_4, 7 C_7, 4 C_{14}, 4 D_2, D_4, 11 D_7, 4 D_{14}	3 C_2, 3 C_{14}, 4 D_2, D_4, 11 D_7, 4 D_{14}	3 C_2, C_4, 7 C_7, 4 D_2, D_4, 11 D_7
R36.5	**Tet**, **Oct**, 2 C_2, C_3, C_4, 6 C_{13}, 6 C_{26}, 12 C_{39}, 3 D_2, D_3, D_4, 6 D_{13}, 6 D_{26}, 12 D_{39}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_{13}, C_{26}, C_{39}, 3 D_2, D_3, D_4, D_{13}, D_{26}, D_{39}	**Tet**, **Oct**, 2 C_2, C_4, C_{26}, 3 D_2, D_3, D_4, D_{13}, D_{26}, D_{39}	**Tet**, 2 C_2, C_3, C_{13}, 3 D_2, D_3, D_{13}
R36.6	3 C_2, C_4, 18 C_{37}, 36 C_{74}, 4 D_2, D_4, 18 D_{37}, 18 D_{74}	3 C_2, C_4, C_{37}, 2 C_{74}, 4 D_2, D_4, D_{37}, D_{74}	3 C_2, C_4, C_{74}, 4 D_2, D_4, D_{37}, D_{74}	3 C_2, C_{37}, 4 D_2, D_{37}
R36.7	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 3 C_9, 2 C_{12}, 2 C_{16}, 3 C_{18}, 4 C_{24}, 6 C_{36}, 4 C_{48}, 12 C_{72}, 12 C_{144}, 2 D_2, D_3, D_4, D_6, 2 D_8, 3 D_9, 2 D_{12}, 3 D_{18}, 4 D_{24}, 6 D_{36}, 12 D_{72}	2 C_2, C_3, 2 C_4, C_6, C_8, C_9, C_{12}, C_{18}, C_{24}, C_{36}, C_{72}, 2 D_2, D_3, D_4, D_6, D_8, D_9, D_{12}, D_{18}, D_{24}, D_{36}, D_{72}	2 C_2, 2 C_4, C_6, C_8, C_{12}, C_{18}, C_{24}, C_{36}, C_{72}, 2 D_2, D_3, D_4, D_6, D_8, D_9, D_{12}, D_{18}, D_{24}, D_{36}, D_{72}	2 C_2, C_3, C_9, 2 D_2, D_3, D_9
R36.8	**Tet**, 2 **Ico**, C_2, C_3, 8 C_5, 2 C_{10}, 2 C_{15}, D_2, D_3, 2 D_5	**Tet**, 2 **Ico**, C_2, C_3, 6 C_5, C_{10}, D_2, D_3, 2 D_5	**Tet**, 2 **Ico**, C_2, C_{10}, D_2, D_3, 2 D_5	**Tet**, C_2, C_3, 4 C_5, D_2, D_3, 2 D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R36.9	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	**Tet**, **Oct**, 2 C_2, C_4, C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	**Tet**, 2 C_2, C_3, C_6, C_7, 3 D_2, 2 D_3, D_6, D_7
R36.10	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	**Tet**, **Oct**, 2 C_2, C_4, C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	**Tet**, 2 C_2, C_3, C_6, C_7, 3 D_2, 2 D_3, D_6, D_7
R36.11	3 C_2, C_3, 4 C_5, C_6, 8 C_{10}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	3 C_2, C_3, 3 C_5, C_6, 5 C_{10}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	3 C_2, C_6, 4 C_{10}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	3 C_2, C_3, 2 C_5, 3 D_2, 2 D_3, 4 D_5
R36.12	3 C_2, C_3, 4 C_5, C_6, 4 C_{10}, 3 D_2, 2 D_3, 8 D_5, D_6, 4 D_{10}	3 C_2, C_3, 3 C_5, C_6, 3 C_{10}, 3 D_2, 2 D_3, 6 D_5, D_6, 3 D_{10}	3 C_2, 2 C_{10}, 3 D_2, 2 D_3, 6 D_5, D_6, 3 D_{10}	3 C_2, C_3, 3 C_5, C_6, 3 D_2, 2 D_3, 6 D_5, D_6
R36.13	3 C_2, C_3, C_6, 9 C_{19}, 9 C_{38}, 9 C_{57}, 3 D_2, 2 D_3, D_6, 18 D_{19}, 9 D_{38}, 9 D_{57}	3 C_2, C_3, C_6, C_{19}, C_{38}, C_{57}, 3 D_2, 2 D_3, D_6, 2 D_{19}, D_{38}, D_{57}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_{19}, D_{38}, D_{57}	3 C_2, C_3, C_{19}, 3 D_2, 2 D_3, 2 D_{19}
R36.14	3 C_2, C_4, 2 C_8, 6 C_{13}, 12 C_{26}, 6 C_{52}, 4 D_2, 2 D_4, 2 D_8, 6 D_{13}, 6 D_{26}, 6 D_{52}	3 C_2, C_4, C_8, C_{13}, 2 C_{26}, C_{52}, 4 D_2, 2 D_4, D_8, D_{13}, D_{26}, D_{52}	3 C_2, C_{26}, 4 D_2, 2 D_4, D_8, D_{13}, D_{26}, D_{52}	3 C_2, C_4, C_{13}, 4 D_2, 2 D_4, D_{13}
R36.15	3 C_2, C_4, 8 C_5, 12 C_{10}, 14 C_{20}, 4 D_2, D_4, 4 D_5, 4 D_{10}, 4 D_{20}	3 C_2, C_4, 6 C_5, 8 C_{10}, 10 C_{20}, 4 D_2, D_4, 4 D_5, 4 D_{10}, 4 D_{20}	3 C_2, 7 C_{10}, 4 D_2, D_4, 4 D_5, 4 D_{10}, 4 D_{20}	3 C_2, C_4, 4 C_5, 4 D_2, D_4, 4 D_5
R36.16	3 C_2, C_4, 8 C_5, 10 C_{10}, 4 C_{20}, 4 D_2, D_4, 10 D_5, 10 D_{10}, 4 D_{20}	3 C_2, C_4, 6 C_5, 7 C_{10}, C_{20}, 4 D_2, D_4, 7 D_5, 7 D_{10}, D_{20}	3 C_2, C_4, 5 C_{10}, 4 D_2, D_4, 7 D_5, 7 D_{10}, D_{20}	3 C_2, 6 C_5, C_{10}, 4 D_2, 7 D_5, 2 D_{10}
R36.17	3 C_2, C_4, 8 C_5, 22 C_{10}, 2 C_{20}, 4 D_2, D_4, 2 D_5, 2 D_{10}	3 C_2, C_4, 6 C_5, 16 C_{10}, 4 D_2, D_4, 2 D_5, 2 D_{10}	3 C_2, C_4, 14 C_{10}, 4 D_2, D_4, 2 D_5, 2 D_{10}	3 C_2, 4 C_5, 4 D_2, 2 D_5
R36.18	3 C_2, C_3, 2 C_5, C_6, 3 C_9, 6 C_{10}, 2 C_{15}, 3 C_{18}, 2 C_{30}, 6 C_{45}, 6 C_{90}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, C_3, C_5, C_6, C_9, 3 C_{10}, C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, C_{10}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, C_3, C_6, C_9, C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}
R36.19	3 C_2, 15 C_7, 6 C_{14}, 3 D_2, 21 D_7, 6 D_{14}	3 C_2, 11 C_7, 2 C_{14}, 3 D_2, 13 D_7, 2 D_{14}	3 C_2, 3 D_2, 13 D_7, 2 D_{14}	3 C_2, 11 C_7, 3 D_2, 13 D_7
R36.20	3 C_2, 15 C_7, 21 C_{14}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, 11 C_7, 13 C_{14}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, 12 C_{14}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, 9 C_7, 3 D_2, 6 D_7
R36.21	3 C_2, C_3, C_4, C_6, 3 C_7, 2 C_{12}, 9 C_{14}, 3 C_{21}, 3 C_{28}, 3 C_{42}, 6 C_{84}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, C_3, C_4, C_6, C_7, C_{12}, 3 C_{14}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}	3 C_2, C_{14}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}	3 C_2, C_3, C_4, C_6, C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R36.22	2 C_2, 2 C_4, 2 C_5, 2 C_8, 4 C_{10}, 2 C_{16}, 4 C_{20}, 4 C_{40}, 8 C_{80}, 2 D_2, D_4, 2 D_8	2 C_2, 2 C_4, C_5, C_8, 2 C_{10}, 2 D_2, D_4, D_8	2 C_2, 2 C_4, C_8, C_{10}, 2 D_2, D_4, D_8	2 C_2, 2 D_2
R36.23	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 C_7, 6 C_{14}, 3 C_{21}, 3 C_{28}, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_7, 2 C_{14}, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, C_{14}, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 D_2, D_3, D_4
R36.24	3 C_2, C_3, C_6, 6 C_{13}, 18 C_{26}, 6 C_{39}, 6 C_{78}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6	3 C_2, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6
R36.25	3 C_2, C_4, 9 C_{19}, 27 C_{38}, 9 C_{76}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R36.26	**Tet**, C_2, C_3, 6 C_{13}, 6 C_{26}, 12 C_{39}, D_2	**Tet**, C_2, C_3, C_{13}, C_{26}, C_{39}, D_2	**Tet**, C_2, C_{26}, D_2	**Tet**, C_2, C_3, C_{13}, D_2
R36.27	C_2, C_3, 2 C_5, 2 C_{10}, 2 C_{15}, 10 C_{25}, 10 C_{50}, 10 C_{75}, D_3	C_2, C_3, C_5, C_{10}, D_3	C_2, C_{10}, D_3	C_2, C_3, D_3
R36.28	C_2, 36 C_{73}, 36 C_{146}	C_2	C_2	C_2
R36.29	3 C_2, 18 C_{37}, 54 C_{74}, 3 D_2	3 C_2, C_{37}, 3 C_{74}, 3 D_2	3 C_2, C_{74}, 3 D_2	3 C_2, C_{37}, 3 D_2
R36.30	C_2, C_3, C_4, C_6, 2 C_8, 3 C_9, 2 C_{12}, 4 C_{16}, 3 C_{18}, 4 C_{24}, 6 C_{36}, 8 C_{48}, 12 C_{72}, 24 C_{144}	C_2, C_3, C_4, C_6, C_8, C_9, C_{12}, C_{18}, C_{24}, C_{36}, C_{72}	C_2, C_4, C_6, C_8, C_{12}, C_{18}, C_{24}, C_{36}, C_{72}	C_2, C_3, C_9
Genus 37				
R37.1	6 **Tet**, 3 **Oct**, 5 C_2, 4 C_3, 2 C_4, 8 C_6, C_{12}, 24 D_2, 5 D_3, 5 D_4, 10 D_6	6 **Tet**, 3 **Oct**, 5 C_2, 4 C_3, 2 C_4, 8 C_6, 24 D_2, 5 D_3, 5 D_4, 10 D_6	2 **Tet**, 3 **Oct**, 2 C_2, 2 C_4, 3 C_6, 20 D_2, 3 D_3, 5 D_4, 10 D_6	**Tet**, 5 C_2, 2 C_3, 4 C_6, 24 D_2, 5 D_3, 8 D_6
R37.2	5 **Tet**, 2 **Ico**, 3 C_2, 3 C_3, 2 C_5, 2 C_6, 2 C_{10}, 2 C_{15}, 11 D_2, 2 D_3, 4 D_5, 2 D_6, 4 D_{10}	5 **Tet**, **Ico**, 3 C_2, 3 C_3, C_5, 2 C_6, C_{10}, 11 D_2, 2 D_3, 2 D_5, 2 D_6, 2 D_{10}	**Tet**, C_2, 9 D_2, D_3, D_5, 2 D_6, 2 D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_5, C_6, 11 D_2, 2 D_3, 2 D_5, 2 D_6
R37.3	**Tet**, 3 C_2, 4 C_3, 6 C_6, 2 C_9, 2 C_{18}, 6 D_2, 4 D_3, 5 D_6	**Tet**, 3 C_2, 4 C_3, 6 C_6, C_9, C_{18}, 6 D_2, 4 D_3, 5 D_6	2 C_2, 5 C_6, C_{18}, 5 D_2, 2 D_3, 4 D_6	3 C_2, 2 C_3, C_6, 6 D_2, 4 D_3, 2 D_6
R37.4	**Tet**, 3 C_2, 4 C_3, 6 C_6, 3 C_9, 3 C_{18}, 6 D_2, 5 D_3, 6 D_6	**Tet**, 3 C_2, 4 C_3, 6 C_6, C_9, C_{18}, 6 D_2, 5 D_3, 6 D_6	2 C_2, C_6, 5 D_2, 5 D_3, 6 D_6	3 C_2, 2 C_3, 3 C_6, 6 D_2, 5 D_3, 6 D_6
R37.5	2 **Tet**, 5 C_2, 3 C_3, 2 C_4, 6 C_6, 2 C_8, C_{12}, 2 C_{24}, 20 D_2, 2 D_3, 4 D_4, 7 D_6	2 **Tet**, 5 C_2, 3 C_3, 2 C_4, 6 C_6, C_8, 20 D_2, 2 D_3, 4 D_4, 7 D_6	2 C_2, 2 C_4, 3 C_6, C_8, 17 D_2, D_3, 4 D_4, 7 D_6	5 C_2, C_3, 2 C_6, 20 D_2, 2 D_3, 5 D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R37.6	**Tet**, 3 C_2, 3 C_3, 3 C_4, 3 C_6, 3 C_8, 3 C_{12}, 2 C_{24}, 7 D_2, D_3, 5 D_4, D_6, 3 D_8, D_{12}	**Tet**, 3 C_2, 3 C_3, 3 C_4, 3 C_6, 2 C_8, 2 C_{12}, 7 D_2, D_3, 5 D_4, D_6, 2 D_8, D_{12}	2 C_2, 3 C_4, 3 C_6, 2 C_8, 2 C_{12}, 6 D_2, D_3, 5 D_4, D_6, 2 D_8, D_{12}	3 C_2, C_3, 7 D_2, D_3
R37.7	2 **Tet**, **Oct**, 4 C_2, 3 C_3, 3 C_4, 6 C_6, 2 C_8, 4 C_{12}, 4 C_{24}, 12 D_2, D_3, 3 D_4, D_6	2 **Tet**, **Oct**, 4 C_2, 3 C_3, 3 C_4, 6 C_6, C_8, 3 C_{12}, C_{24}, 12 D_2, D_3, 3 D_4, D_6	**Oct**, 2 C_2, 2 C_4, C_6, C_8, 11 D_2, D_3, 3 D_4, D_6	**Tet**, **Oct**, 4 C_2, C_3, C_4, C_6, 12 D_2, D_3, 2 D_4, D_6
R37.8	3 **Tet**, 2 **Oct**, 6 C_2, 5 C_3, 3 C_4, 8 C_6, C_{12}, 26 D_2, 9 D_3, 5 D_4, 15 D_6, D_{12}	3 **Tet**, 2 **Oct**, 6 C_2, 5 C_3, 3 C_4, 8 C_6, C_{12}, 26 D_2, 9 D_3, 5 D_4, 15 D_6, D_{12}	2 **Oct**, 3 C_2, C_4, 4 C_6, 21 D_2, 6 D_3, 5 D_4, 13 D_6, D_{12}	2 **Tet**, 2 **Oct**, 6 C_2, 4 C_3, 2 C_4, 4 C_6, C_{12}, 26 D_2, 9 D_3, 4 D_4, 11 D_6, D_{12}
R37.9	3 **Tet**, 3 **Oct**, 3 C_2, 2 C_3, 3 C_4, C_6, C_8, 10 D_2, 2 D_3, 3 D_4, D_6	3 **Tet**, 3 **Oct**, 3 C_2, 2 C_3, 3 C_4, C_6, 10 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 3 **Oct**, 2 C_2, 2 C_4, 9 D_2, 2 D_3, 3 D_4, D_6	3 **Tet**, 2 **Oct**, 3 C_2, 2 C_3, C_4, C_6, 10 D_2, 2 D_3, 2 D_4, D_6
R37.10	3 **Tet**, 3 **Oct**, 3 C_2, 2 C_3, 3 C_4, C_6, C_8, 10 D_2, 2 D_3, 3 D_4, D_6	3 **Tet**, 3 **Oct**, 3 C_2, 2 C_3, 3 C_4, C_6, 10 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 3 **Oct**, 2 C_2, 2 C_4, 9 D_2, 2 D_3, 3 D_4, D_6	3 **Tet**, 2 **Oct**, 3 C_2, 2 C_3, C_4, C_6, 10 D_2, 2 D_3, 2 D_4, D_6
R37.11	6 C_2, 2 C_3, 3 C_4, 8 C_6, C_8, 5 C_{12}, 27 D_2, 8 D_3, 3 D_4, 27 D_6, 10 D_{12}	6 C_2, 2 C_3, 3 C_4, 8 C_6, 5 C_{12}, 27 D_2, 8 D_3, 3 D_4, 27 D_6, 10 D_{12}	3 C_2, 2 C_4, 2 C_6, 21 D_2, 5 D_3, 3 D_4, 21 D_6, 10 D_{12}	6 C_2, 2 C_3, C_4, 6 C_6, 5 C_{12}, 27 D_2, 8 D_3, 2 D_4, 22 D_6, 10 D_{12}
R37.12	6 C_2, 2 C_3, 5 C_4, 6 C_6, 2 C_8, 8 C_{12}, 19 D_2, 7 D_3, 3 D_4, 17 D_6, 15 D_{12}	6 C_2, 2 C_3, 5 C_4, 6 C_6, C_8, 8 C_{12}, 19 D_2, 7 D_3, 3 D_4, 17 D_6, 15 D_{12}	3 C_2, 4 C_4, 2 C_6, C_8, 3 C_{12}, 17 D_2, 5 D_3, 3 D_4, 15 D_6, 15 D_{12}	6 C_2, 2 C_3, C_4, 4 C_6, 5 C_{12}, 19 D_2, 7 D_3, 2 D_4, 12 D_6, 10 D_{12}
R37.13	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 3 C_4, C_5, 3 C_6, 3 C_{10}, C_{12}, 29 D_2, 4 D_3, 6 D_4, 4 D_5, 7 D_6, 6 D_{10}, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 3 C_6, C_{12}, 29 D_2, 4 D_3, 6 D_4, 7 D_6, D_{12}	**Oct**, 3 C_2, C_4, 2 C_6, 23 D_2, 2 D_3, 6 D_4, 6 D_6, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 2 C_4, C_6, C_{12}, 29 D_2, 4 D_3, 4 D_4, 3 D_6, D_{12}
R37.14	5 C_2, 5 C_3, 2 C_4, 10 C_6, 2 C_{12}, 13 D_2, 12 D_3, 16 D_6	5 C_2, 5 C_3, 2 C_4, 10 C_6, C_{12}, 13 D_2, 12 D_3, 16 D_6	3 C_2, 2 C_4, C_6, 11 D_2, 11 D_3, 15 D_6	5 C_2, 5 C_3, 7 C_6, 13 D_2, 12 D_3, 12 D_6
R37.15	5 C_2, 3 C_3, 2 C_4, 10 C_6, 4 C_{12}, 13 D_2, 7 D_3, 10 D_6	5 C_2, 3 C_3, 2 C_4, 10 C_6, 3 C_{12}, 13 D_2, 7 D_3, 10 D_6	3 C_2, 2 C_4, 2 C_6, 2 C_{12}, 11 D_2, 7 D_3, 10 D_6	5 C_2, 2 C_3, 5 C_6, 13 D_2, 7 D_3, 10 D_6
R37.16	5 C_2, 5 C_3, 2 C_4, 9 C_6, 5 C_{12}, 13 D_2, 10 D_3, 12 D_6	5 C_2, 5 C_3, 2 C_4, 9 C_6, 4 C_{12}, 13 D_2, 10 D_3, 12 D_6	3 C_2, 2 C_4, 7 C_6, 4 C_{12}, 11 D_2, 5 D_3, 10 D_6	5 C_2, 4 C_3, 2 C_6, 13 D_2, 10 D_3, 4 D_6
R37.17	5 C_2, 3 C_3, 2 C_4, 7 C_6, 3 C_{12}, 13 D_2, 8 D_3, 11 D_6	5 C_2, 3 C_3, 2 C_4, 7 C_6, 2 C_{12}, 13 D_2, 8 D_3, 11 D_6	3 C_2, 2 C_4, 5 C_6, 2 C_{12}, 11 D_2, 4 D_3, 9 D_6	5 C_2, 3 C_3, 2 C_6, 13 D_2, 7 D_3, 4 D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R37.18	3 C_2, 2 C_3, 2 C_4, 2 C_5, 2 C_6, 2 C_{10}, 4 C_{15}, 2 C_{20}, 3 D_2, 4 D_3, 4 D_5, 2 D_6, 2 D_{10}, 4 D_{15}	3 C_2, 2 C_3, 2 C_4, C_5, 2 C_6, C_{10}, 2 C_{15}, 3 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 2 D_{15}	2 C_2, 2 C_4, C_{10}, 3 D_2, 4 D_3, D_5, 2 D_6, D_{10}, 2 D_{15}	3 C_2, 2 C_3, C_5, 2 C_6, 3 D_2, 4 D_3, D_5, 2 D_6
R37.19	6 C_2, 5 C_4, 2 C_5, 2 C_8, 10 C_{10}, 8 C_{20}, 8 C_{40}, 19 D_2, 3 D_4, 2 D_5, 6 D_{10}, 4 D_{20}	6 C_2, 5 C_4, C_5, C_8, 5 C_{10}, 3 C_{20}, C_{40}, 19 D_2, 3 D_4, D_5, 3 D_{10}, 2 D_{20}	3 C_2, 4 C_4, C_8, C_{10}, 17 D_2, 3 D_4, D_5, 3 D_{10}, 2 D_{20}	6 C_2, C_4, C_5, C_{10}, 19 D_2, 2 D_4, D_5, D_{10}
R37.20	6 C_2, 3 C_4, 2 C_5, C_8, 8 C_{10}, 2 C_{20}, 4 C_{40}, 27 D_2, 3 D_4, 4 D_5, 14 D_{10}	6 C_2, 3 C_4, C_5, 4 C_{10}, 27 D_2, 3 D_4, 2 D_5, 7 D_{10}	3 C_2, 2 C_4, C_{10}, 21 D_2, 3 D_4, D_5, 5 D_{10}	6 C_2, C_4, C_5, C_{10}, 27 D_2, 2 D_4, 2 D_5, D_{10}
R37.21	5 C_2, 2 C_4, 9 C_{19}, 27 C_{38}, 18 C_{76}, 13 D_2, 18 D_{19}, 36 D_{38}	5 C_2, 2 C_4, C_{19}, 3 C_{38}, C_{76}, 13 D_2, 2 D_{19}, 4 D_{38}	3 C_2, 2 C_4, C_{38}, 11 D_2, D_{19}, 3 D_{38}	5 C_2, C_{19}, C_{38}, 13 D_2, 2 D_{19}, D_{38}
R37.22	3 C_2, 2 C_4, 18 C_{37}, 18 C_{74}, 18 C_{148}, 3 D_2, 36 D_{37}, 18 D_{74}	3 C_2, 2 C_4, C_{37}, C_{74}, 3 D_2, 2 D_{37}, D_{74}	2 C_2, 2 C_4, C_{74}, 3 D_2, D_{37}, D_{74}	3 C_2, C_{37}, 3 D_2, D_{37}
R37.23	4 **Tet**, 7 C_2, 7 C_3, 12 C_6, 31 D_2, 10 D_3, 20 D_6	4 **Tet**, 7 C_2, 7 C_3, 12 C_6, 31 D_2, 10 D_3, 20 D_6	3 C_2, 6 C_6, 23 D_2, 5 D_3, 16 D_6	2 **Tet**, 7 C_2, 5 C_3, 6 C_6, 31 D_2, 10 D_3, 16 D_6
R37.24	2 **Tet**, 7 C_2, 4 C_3, 12 C_6, 31 D_2, 10 D_3, 27 D_6	2 **Tet**, 7 C_2, 4 C_3, 12 C_6, 31 D_2, 10 D_3, 27 D_6	3 C_2, 5 C_6, 23 D_2, 5 D_3, 21 D_6	7 C_2, 2 C_3, 6 C_6, 31 D_2, 10 D_3, 22 D_6
R37.25	5 C_2, 3 C_3, 4 C_4, 9 C_6, 6 C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_{12}	5 C_2, 3 C_3, 4 C_4, 9 C_6, 5 C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_{12}	3 C_2, 4 C_4, 6 C_6, 5 C_{12}, 13 D_2, D_3, 3 D_4, 4 D_6, 3 D_{12}	5 C_2, C_3, C_6, 13 D_2, 2 D_3, D_6
R37.26	2 **Tet**, 7 C_2, 3 C_3, 2 C_4, 11 C_6, C_{12}, 34 D_2, 2 D_3, 5 D_4, 6 D_6	2 **Tet**, 7 C_2, 3 C_3, 2 C_4, 11 C_6, 34 D_2, 2 D_3, 5 D_4, 6 D_6	3 C_2, 2 C_4, 7 C_6, 27 D_2, D_3, 5 D_4, 6 D_6	7 C_2, C_3, 3 C_6, 34 D_2, 2 D_3, 4 D_6
R37.27	2 **Tet**, **Oct**, 6 C_2, 3 C_3, 3 C_4, 11 C_6, 3 C_{12}, 26 D_2, D_3, 5 D_4, D_6	2 **Tet**, **Oct**, 6 C_2, 3 C_3, 3 C_4, 11 C_6, 2 C_{12}, 26 D_2, D_3, 5 D_4, D_6	**Oct**, 3 C_2, C_4, 5 C_6, 21 D_2, D_3, 5 D_4, D_6	**Tet**, **Oct**, 6 C_2, C_3, 2 C_4, C_6, 26 D_2, D_3, 4 D_4, D_6
R37.28	5 C_2, 3 C_3, 4 C_4, 6 C_6, 8 C_{12}, 13 D_2, 3 D_3, 3 D_4, 4 D_6, D_{12}	5 C_2, 3 C_3, 4 C_4, 6 C_6, 7 C_{12}, 13 D_2, 3 D_3, 3 D_4, 4 D_6, D_{12}	3 C_2, 3 C_4, 4 C_6, 3 C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, D_{12}	5 C_2, C_3, C_6, 13 D_2, 3 D_3, 2 D_6
R37.29	2 **Tet**, 7 C_2, 3 C_3, 2 C_4, 7 C_6, 7 C_{12}, 34 D_2, 4 D_3, 5 D_4, 12 D_6, 10 D_{12}	2 **Tet**, 7 C_2, 3 C_3, 2 C_4, 7 C_6, 6 C_{12}, 34 D_2, 4 D_3, 5 D_4, 12 D_6, 10 D_{12}	3 C_2, C_4, 4 C_6, 2 C_{12}, 27 D_2, 2 D_3, 5 D_4, 10 D_6, 10 D_{12}	7 C_2, C_3, C_4, 2 C_6, 34 D_2, 4 D_3, 2 D_4, 8 D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R37.30	2 **Tet**, 2 **Oct**, 6 C_2, 3 C_3, 3 C_4, 6 C_6, 4 C_{12}, 26 D_2, 5 D_3, 5 D_4, 11 D_6, 6 D_{12}	2 **Tet**, 2 **Oct**, 6 C_2, 3 C_3, 3 C_4, 6 C_6, 3 C_{12}, 26 D_2, 5 D_3, 5 D_4, 11 D_6, 5 D_{12}	2 **Oct**, 3 C_2, C_4, C_6, 21 D_2, 4 D_3, 5 D_4, 8 D_6, 5 D_{12}	2 **Tet**, 2 **Oct**, 6 C_2, 3 C_3, 2 C_4, C_6, 26 D_2, 5 D_3, 4 D_4, D_6
R37.31	C_2, 4 C_3, 2 C_5, C_6, 12 C_{15}, 2 D_3, 2 D_5, 6 D_{15}	C_2, 4 C_3, C_5, C_6, 5 C_{15}, 2 D_3, D_5, 3 D_{15}	C_2, C_6, 2 D_3, D_5, 3 D_{15}	C_2, 2 C_3, C_5, 2 D_3, D_5
R37.32	**Tet**, 7 C_2, C_3, 2 C_5, 3 C_6, 6 C_{10}, 2 C_{15}, 2 C_{30}, 31 D_2, 8 D_5, 18 D_{10}	**Tet**, 7 C_2, C_3, C_5, 3 C_6, 3 C_{10}, 31 D_2, 4 D_5, 9 D_{10}	3 C_2, 2 C_6, 23 D_2, 2 D_5, 7 D_{10}	7 C_2, C_5, C_{10}, 31 D_2, 4 D_5, 2 D_{10}
R37.33	C_2, 3 C_3, C_6, 6 C_{13}, 30 C_{39}, D_3, 6 D_{13}, 12 D_{39}	C_2, 3 C_3, C_6, C_{13}, 4 C_{39}, D_3, D_{13}, 2 D_{39}	C_2, C_6, D_3, D_{13}, 2 D_{39}	C_2, C_3, C_{13}, D_3, D_{13}
R37.34	C_2, C_3, C_6, 18 C_{37}, 18 C_{111}, 18 D_{37}	C_2, C_3, C_6, C_{37}, D_{37}	C_2, C_6, D_{37}	C_2, C_{37}, D_{37}
R37.35	5 C_2, 2 C_3, 3 C_4, 6 C_6, 4 C_8, 3 C_{12}, 13 D_2, 6 D_3, 10 D_6	5 C_2, 2 C_3, 3 C_4, 6 C_6, 2 C_8, 3 C_{12}, 13 D_2, 6 D_3, 10 D_6	2 C_2, 3 C_4, 2 C_6, 2 C_8, 3 C_{12}, 11 D_2, 3 D_3, 8 D_6	5 C_2, 2 C_3, 4 C_6, 13 D_2, 6 D_3, 7 D_6
R37.36	4 C_2, 2 C_3, 2 C_4, 8 C_6, 2 C_8, 10 D_2, 3 D_3, 2 D_4, 6 D_6	4 C_2, 2 C_3, 2 C_4, 8 C_6, 10 D_2, 3 D_3, 2 D_4, 6 D_6	2 C_2, 2 C_4, 2 C_6, 8 D_2, 3 D_3, 2 D_4, 6 D_6	4 C_2, 2 C_3, 6 C_6, 10 D_2, 3 D_3, 3 D_6
R37.37	3 C_2, 3 C_3, 5 C_6, 6 C_9, 3 C_{18}, 6 D_2, 2 D_3, 2 D_6	3 C_2, 3 C_3, 5 C_6, 2 C_9, C_{18}, 6 D_2, 2 D_3, 2 D_6	2 C_2, C_6, 5 D_2, 2 D_3, 2 D_6	3 C_2, 2 C_3, 2 C_6, 6 D_2, 2 D_3, 2 D_6
R37.38	**Tet**, 2 **Ico**, 7 C_2, C_3, 2 C_5, 3 C_6, 6 C_{10}, 37 D_2, 4 D_3, 8 D_5, 6 D_6, 12 D_{10}	**Tet**, 7 C_2, C_3, 3 C_6, 37 D_2, 4 D_3, 6 D_6	3 C_2, 2 C_6, 27 D_2, D_3, 5 D_6	**Tet**, 7 C_2, C_3, C_6, 37 D_2, 4 D_3, 2 D_6
R37.39	3 C_2, 5 C_3, 2 C_4, 7 C_6, 4 C_{12}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 5 C_3, 2 C_4, 7 C_6, 2 C_{12}, 3 D_2, 4 D_3, 2 D_6	2 C_2, 2 C_4, C_6, 3 D_2, 4 D_3, 2 D_6	3 C_2, 5 C_3, 4 C_6, 3 D_2, 4 D_3, 2 D_6
R37.40	3 C_2, 3 C_3, 2 C_4, 5 C_6, 4 C_{12}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 3 C_3, 2 C_4, 5 C_6, 2 C_{12}, 3 D_2, 4 D_3, 2 D_6	2 C_2, 2 C_4, C_6, 3 D_2, 4 D_3, 2 D_6	3 C_2, 2 C_3, 2 C_6, 3 D_2, 4 D_3, 2 D_6
R37.41	3 C_2, 4 C_3, 2 C_4, 6 C_6, 8 C_{12}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 4 C_3, 2 C_4, 6 C_6, 6 C_{12}, 3 D_2, 4 D_3, 2 D_6	2 C_2, 2 C_4, 5 C_6, 6 C_{12}, 3 D_2, 2 D_3, 2 D_6	3 C_2, 2 C_3, 3 D_2, 4 D_3
R37.42	3 C_2, 7 C_3, 2 C_4, 9 C_6, 10 C_{12}, 3 D_2, 6 D_3, 3 D_6	3 C_2, 7 C_3, 2 C_4, 9 C_6, 8 C_{12}, 3 D_2, 6 D_3, 3 D_6	2 C_2, 2 C_4, 8 C_6, 8 C_{12}, 3 D_2, 3 D_3, 3 D_6	3 C_2, 5 C_3, C_6, 3 D_2, 6 D_3
R37.43	3 C_2, 4 C_3, 2 C_4, 6 C_6, 2 C_{12}, 3 D_2, 6 D_3, 3 D_6	3 C_2, 4 C_3, 2 C_4, 6 C_6, 3 D_2, 6 D_3, 3 D_6	2 C_2, 2 C_4, 5 C_6, 3 D_2, 3 D_3, 3 D_6	3 C_2, 4 C_3, C_6, 3 D_2, 4 D_3
R37.44	**Tet**, 5 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, 2 C_{12}, 2 C_{24}, 20 D_2, 4 D_4	**Tet**, 5 C_2, C_3, 4 C_4, 2 C_6, C_8, 20 D_2, 4 D_4	2 C_2, 4 C_4, C_6, C_8, 17 D_2, 4 D_4	5 C_2, 20 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R37.45	4 C_2, C_3, 4 C_4, C_6, 3 C_8, 3 C_{12}, 2 C_{24}, 10 D_2, 7 D_4, 3 D_8	4 C_2, C_3, 4 C_4, C_6, 2 C_8, C_{12}, 10 D_2, 7 D_4, 2 D_8	2 C_2, 4 C_4, C_6, 2 C_8, C_{12}, 8 D_2, 7 D_4, 2 D_8	4 C_2, 10 D_2
R37.46	6 C_2, C_3, 5 C_4, 6 C_6, 2 C_8, 8 C_{12}, 4 C_{24}, 19 D_2, 3 D_4	6 C_2, C_3, 5 C_4, 6 C_6, C_8, 6 C_{12}, C_{24}, 19 D_2, 3 D_4	3 C_2, 4 C_4, C_6, C_8, 17 D_2, 3 D_4	6 C_2, C_4, 19 D_2, 2 D_4
R37.47	6 C_2, C_3, 3 C_4, 6 C_6, C_8, 4 C_{12}, 2 C_{24}, 27 D_2, 3 D_4	6 C_2, C_3, 3 C_4, 6 C_6, 2 C_{12}, 27 D_2, 3 D_4	3 C_2, 2 C_4, C_6, 21 D_2, 3 D_4	6 C_2, C_4, 27 D_2, 2 D_4
R37.48	C_2, 2 C_3, C_4, 2 C_5, 2 C_{10}, 4 C_{15}, 4 C_{20}, 2 D_3	C_2, 2 C_3, C_4, C_5, C_{10}, 2 C_{15}, 2 D_3	C_2, C_4, C_{10}, 2 D_3	C_2, 2 C_3, C_5, 2 D_3
R37.49	**Tet**, 3 C_2, C_3, C_6, 3 C_7, 9 C_{14}, 6 C_{21}, 6 C_{42}, 6 D_2	**Tet**, 3 C_2, C_3, C_6, 6 D_2	2 C_2, C_6, 5 D_2	3 C_2, 6 D_2
R37.50	C_2, 3 C_3, C_6, 6 C_9, 3 C_{18}, 18 C_{27}, 9 C_{54}, D_3	C_2, 3 C_3, C_6, 3 C_9, D_3	C_2, C_6, D_3	C_2, 2 C_3, D_3
R37.51	5 C_2, 3 C_4, 2 C_5, 4 C_8, 10 C_{10}, 12 C_{20}, 16 C_{40}, 13 D_2	5 C_2, 3 C_4, C_5, 2 C_8, 5 C_{10}, 4 C_{20}, 2 C_{40}, 13 D_2	2 C_2, 3 C_4, 2 C_8, C_{10}, 11 D_2	5 C_2, C_5, C_{10}, 13 D_2
R37.52	4 C_2, 2 C_4, 2 C_5, 2 C_8, 8 C_{10}, 4 C_{20}, 8 C_{40}, 10 D_2, 2 D_4	4 C_2, 2 C_4, C_5, 4 C_{10}, 10 D_2, 2 D_4	2 C_2, 2 C_4, C_{10}, 8 D_2, 2 D_4	4 C_2, C_5, C_{10}, 10 D_2
R37.53	C_2, C_3, 2 C_5, C_6, 2 C_{10}, 4 C_{15}, 10 C_{25}, 4 C_{30}, 10 C_{50}, 20 C_{75}, 20 C_{150}	C_2, C_3, C_6	C_2, C_6	C_2
R37.54	3 C_2, 2 C_4, 9 C_{19}, 27 C_{38}, 36 C_{76}, 3 D_2	3 C_2, 2 C_4, C_{19}, 3 C_{38}, 2 C_{76}, 3 D_2	2 C_2, 2 C_4, C_{38}, 3 D_2	3 C_2, C_{19}, C_{38}, 3 D_2
R37.55	C_2, C_4, 18 C_{37}, 18 C_{74}, 36 C_{148}	C_2, C_4, C_{37}, C_{74}	C_2, C_4, C_{74}	C_2, C_{37}
Genus 38				
R38.1	3 C_2, C_3, C_4, 2 C_6, 6 C_{13}, 12 C_{26}, 12 C_{39}, 24 C_{78}, 4 D_2, D_3, D_4, D_6, 6 D_{13}, 6 D_{26}, 12 D_{39}, 12 D_{78}	3 C_2, C_3, C_4, 2 C_6, C_{13}, 2 C_{26}, C_{39}, 2 C_{78}, 4 D_2, D_3, D_4, D_6, D_{13}, D_{26}, D_{39}, D_{78}	3 C_2, C_4, C_6, C_{26}, C_{78}, 4 D_2, D_3, D_4, D_6, D_{13}, D_{26}, D_{39}, D_{78}	3 C_2, C_3, C_{13}, C_{39}, 4 D_2, D_3, D_{13}, D_{39}
R38.2	2 C_2, 2 C_4, C_8, 9 C_{19}, 9 C_{38}, 18 C_{76}, 18 C_{152}, 2 D_2, D_4, 9 D_{19}, 9 D_{38}, 18 D_{76}	2 C_2, 2 C_4, C_{19}, C_{38}, C_{76}, 2 D_2, D_4, D_{19}, D_{38}, D_{76}	2 C_2, 2 C_4, C_{38}, C_{76}, 2 D_2, D_4, D_{19}, D_{38}, D_{76}	2 C_2, C_{19}, 2 D_2, D_{19}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R38.3	3 C_2, C_3, C_4, 2 C_5, 2 C_6, 2 C_8, 2 C_{10}, C_{12}, 2 C_{15}, 4 C_{20}, 2 C_{30}, 8 C_{40}, 4 C_{60}, 4 D_2, D_3, 2 D_4, 4 D_5, D_6, 2 D_8, 4 D_{10}, D_{12}, 2 D_{15}, 8 D_{20}, 2 D_{30}, 8 D_{40}, 4 D_{60}	3 C_2, C_3, C_4, C_5, 2 C_6, C_8, C_{10}, C_{12}, C_{15}, C_{20}, C_{30}, C_{40}, C_{60}, 4 D_2, D_3, 2 D_4, 2 D_5, D_6, D_8, 2 D_{10}, D_{12}, D_{15}, 2 D_{20}, D_{30}, D_{40}, D_{60}	3 C_2, C_6, 4 D_2, D_3, 2 D_4, 2 D_5, D_6, D_8, 2 D_{10}, D_{12}, D_{15}, 2 D_{20}, D_{30}, D_{40}, D_{60}	3 C_2, C_3, C_4, C_5, C_{10}, C_{20}, 4 D_2, D_3, 2 D_4, 2 D_5, 2 D_{10}, 2 D_{20}
R38.4	3 C_2, C_3, 3 C_6, 9 C_{19}, 9 C_{38}, 9 C_{57}, 9 C_{114}, 3 D_2, 18 D_{19}, 9 D_{38}	3 C_2, C_3, 3 C_6, C_{19}, C_{38}, 3 D_2, 2 D_{19}, D_{38}	3 C_2, C_6, 3 D_2, 2 D_{19}, D_{38}	3 C_2, C_{19}, C_{38}, 3 D_2, 2 D_{19}, D_{38}
R38.5	2 C_2, C_3, C_4, 2 C_5, C_6, C_8, 2 C_{10}, 4 C_{15}, 2 C_{20}, 4 C_{30}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 4 D_{15}, 2 D_{20}, 4 D_{30}	2 C_2, C_3, C_4, C_5, C_6, C_{10}, C_{15}, C_{20}, C_{30}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{15}, D_{20}, D_{30}	2 C_2, C_4, C_6, C_{10}, C_{20}, C_{30}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{15}, D_{20}, D_{30}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5
R38.6	2 C_2, 2 C_4, C_8, 6 C_{13}, 6 C_{26}, 12 C_{52}, 2 D_2, D_4, 6 D_{13}, 6 D_{26}, 6 D_{52}	2 C_2, 2 C_4, C_{13}, C_{26}, C_{52}, 2 D_2, D_4, D_{13}, D_{26}, D_{52}	2 C_2, 2 C_4, C_{26}, 2 D_2, D_4, D_{13}, D_{26}, D_{52}	2 C_2, C_{13}, 2 D_2, D_{13}
R38.7	C_2, 2 C_5, 2 C_{10}, 9 C_{19}, 18 C_{95}, 9 D_{19}	C_2, C_{19}, D_{19}	C_2, D_{19}	C_2, C_{19}, D_{19}
R38.8	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 2 C_{12}, 4 C_{16}, 2 C_{24}, 4 C_{32}, 4 C_{48}, 2 D_2, D_3, D_4, D_6, 2 D_8, D_{12}, 4 D_{16}, 2 D_{24}, 4 D_{48}	2 C_2, C_3, 2 C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{48}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{48}	2 C_2, 2 C_4, C_6, C_8, C_{16}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{48}	2 C_2, C_3, 2 D_2, D_3
R38.9	3 C_2, C_3, C_4, 2 C_6, 3 C_7, 9 C_{14}, 3 C_{21}, 3 C_{28}, 9 C_{42}, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, C_4, 2 C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_4, C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, 4 D_2, D_3
R38.10	C_2, 3 C_7, 5 C_{11}, 3 C_{14}, 5 C_{22}, 30 C_{77}, 30 C_{154}	C_2	C_2	C_2
R38.11	3 C_2, C_3, 3 C_6, 6 C_{13}, 18 C_{26}, 12 C_{39}, 36 C_{78}, 3 D_2	3 C_2, C_3, 3 C_6, C_{13}, 3 C_{26}, C_{39}, 3 C_{78}, 3 D_2	3 C_2, C_6, C_{26}, C_{78}, 3 D_2	3 C_2, C_3, C_{13}, C_{39}, 3 D_2
R38.12	C_2, C_4, 2 C_8, 9 C_{19}, 9 C_{38}, 18 C_{76}, 36 C_{152}	C_2, C_4, C_{19}, C_{38}, C_{76}	C_2, C_4, C_{38}, C_{76}	C_2, C_{19}
Genus 39				
R39.1	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, 3 C_7, 9 C_{14}, 6 C_{21}, 6 C_{42}, 16 D_2, 2 D_3, 4 D_4, D_6, 6 D_7, 12 D_{14}, 12 D_{21}, 6 D_{42}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, C_7, 3 C_{14}, C_{21}, C_{42}, 16 D_2, 2 D_3, 4 D_4, D_6, 2 D_7, 4 D_{14}, 2 D_{21}, D_{42}	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, C_6, C_{14}, 16 D_2, D_3, 4 D_4, D_6, D_7, 4 D_{14}, D_{21}, D_{42}	**Tet**, 5 C_2, C_3, C_7, C_{14}, 16 D_2, D_3, 2 D_7, D_{14}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R39.2	5 C_2, 3 C_4, 2 C_5, 4 C_8, 6 C_{10}, 4 C_{16}, 8 C_{20}, 16 C_{40}, 16 C_{80}, 13 D_2, 3 D_4, 4 D_5, 6 D_8, 8 D_{10}, 12 D_{20}, 24 D_{40}	5 C_2, 3 C_4, C_5, 3 C_8, 3 C_{10}, C_{16}, 3 C_{20}, 3 C_{40}, C_{80}, 13 D_2, 3 D_4, 2 D_5, 5 D_8, 4 D_{10}, 4 D_{20}, 5 D_{40}	3 C_2, 2 C_4, C_{10}, 13 D_2, 2 D_4, D_5, 3 D_8, 3 D_{10}, 3 D_{20}, 3 D_{40}	5 C_2, C_4, C_5, C_8, C_{10}, C_{20}, C_{40}, 13 D_2, 2 D_4, 2 D_5, D_8, 2 D_{10}, 2 D_{20}, D_{40}
R39.3	3 C_2, 4 C_4, 2 C_5, 2 C_8, 4 C_{10}, 2 C_{16}, 6 C_{20}, 8 C_{40}, 8 C_{80}, 4 D_2, 2 D_4, 2 D_5, D_8, 2 D_{10}, 4 D_{20}, 4 D_{40}	3 C_2, 4 C_4, C_5, C_8, 2 C_{10}, 2 C_{20}, C_{40}, 4 D_2, 2 D_4, D_5, D_8, D_{10}, D_{20}, D_{40}	3 C_2, 3 C_4, C_{10}, 4 D_2, 2 D_4, D_5, D_8, D_{10}, D_{20}, D_{40}	3 C_2, C_4, C_5, C_{10}, C_{20}, 4 D_2, D_4, D_5, D_{10}, D_{20}
R39.4	3 C_2, C_3, 2 C_4, C_6, C_{12}, 6 C_{13}, 6 C_{26}, 12 C_{39}, 6 C_{52}, 12 C_{78}, 12 C_{156}, 3 D_2, 2 D_3, D_6, 12 D_{13}, 6 D_{26}, 24 D_{39}, 12 D_{78}	3 C_2, C_3, 2 C_4, C_6, C_{13}, C_{26}, C_{39}, C_{78}, 3 D_2, 2 D_3, D_6, 2 D_{13}, D_{26}, 2 D_{39}, D_{78}	2 C_2, 2 C_4, C_6, C_{26}, C_{78}, 3 D_2, D_3, D_6, D_{13}, D_{26}, D_{39}, D_{78}	3 C_2, C_3, C_{13}, C_{39}, 3 D_2, D_3, D_{13}, D_{39}
R39.5	2 C_2, C_3, 3 C_4, C_6, C_8, 3 C_9, 2 C_{12}, 3 D_2, D_3, 2 D_4, D_6, 3 D_9, D_{12}	2 C_2, C_3, 3 C_4, C_6, C_9, 2 C_{12}, 3 D_2, D_3, 2 D_4, D_6, D_9, D_{12}	2 C_2, 2 C_4, C_6, C_{12}, 3 D_2, D_3, 2 D_4, D_6, D_9, D_{12}	2 C_2, C_3, 3 D_2, D_3
R39.6	5 C_2, 3 C_4, 3 C_7, 2 C_8, 9 C_{14}, 12 C_{28}, 13 D_2, 3 D_4, 6 D_7, 12 D_{14}, 9 D_{28}	5 C_2, 3 C_4, C_7, C_8, 3 C_{14}, 3 C_{28}, 13 D_2, 3 D_4, 2 D_7, 4 D_{14}, 3 D_{28}	3 C_2, 2 C_4, C_{14}, C_{28}, 13 D_2, 3 D_4, D_7, 4 D_{14}, 3 D_{28}	5 C_2, C_4, C_7, C_{14}, 13 D_2, D_4, 2 D_7, D_{14}
R39.7	3 C_2, 5 C_4, 3 C_7, C_8, 6 C_{14}, 21 C_{28}, 4 D_2, 2 D_4, 3 D_7, 3 D_{14}, 6 D_{28}	3 C_2, 5 C_4, C_7, 2 C_{14}, 6 C_{28}, 4 D_2, 2 D_4, D_7, D_{14}, 2 D_{28}	3 C_2, 3 C_4, C_{14}, 2 C_{28}, 4 D_2, 2 D_4, D_7, D_{14}, 2 D_{28}	3 C_2, C_7, 4 D_2, D_7
R39.8	3 C_2, 2 C_4, 4 C_8, 6 C_{13}, 6 C_{26}, 6 C_{52}, 12 C_{104}, 3 D_2, 12 D_{13}, 6 D_{26}	3 C_2, 2 C_4, 2 C_8, C_{13}, C_{26}, 3 D_2, 2 D_{13}, D_{26}	2 C_2, C_4, C_{26}, 3 D_2, D_{13}, D_{26}	3 C_2, C_{13}, 3 D_2, D_{13}
R39.9	2 C_2, 2 C_4, 2 C_8, 6 C_{13}, 6 C_{26}, 6 C_{52}, 12 C_{104}, 2 D_2, 6 D_{13}, 6 D_{26}	2 C_2, 2 C_4, C_{13}, C_{26}, 2 D_2, D_{13}, D_{26}	2 C_2, C_4, C_{26}, 2 D_2, D_{13}, D_{26}	2 C_2, C_{13}, 2 D_2, D_{13}
R39.10	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 2 C_{20}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{20}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, 2 C_4, C_6, C_{10}, C_{20}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5
R39.11	5 C_2, C_3, 3 C_4, 5 C_6, 4 C_8, 4 C_{12}, 4 C_{16}, 4 C_{24}, 8 C_{48}, 13 D_2, 3 D_4, 6 D_8	5 C_2, C_3, 3 C_4, 5 C_6, 3 C_8, 2 C_{12}, C_{16}, 13 D_2, 3 D_4, 5 D_8	3 C_2, 2 C_4, C_6, 13 D_2, 2 D_4, 3 D_8	5 C_2, C_4, C_8, 13 D_2, 2 D_4, D_8
R39.12	3 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 5 C_{12}, 2 C_{16}, 3 C_{24}, 4 C_{48}, 4 D_2, 2 D_4, D_8	3 C_2, C_3, 4 C_4, 3 C_6, C_8, 3 C_{12}, 4 D_2, 2 D_4, D_8	3 C_2, 3 C_4, C_6, 4 D_2, 2 D_4, D_8	3 C_2, C_4, 4 D_2, D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R39.13	C_2, 3 C_7, 6 C_{13}, 3 C_{14}, 18 C_{91}, 6 D_{13}	C_2, C_{13}, D_{13}	C_2, D_{13}	C_2, C_{13}, D_{13}
R39.14	3 C_2, C_3, 3 C_4, 2 C_6, 4 C_8, 2 C_{12}, 4 C_{16}, 5 C_{24}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{24}	3 C_2, C_3, 3 C_4, 2 C_6, 2 C_8, C_{12}, 2 C_{24}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{24}	2 C_2, 3 C_4, C_6, 2 C_8, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{24}	3 C_2, C_3, 4 D_2, D_3
R39.15	4 C_2, C_3, 2 C_4, 2 C_6, 4 C_8, 3 C_{12}, 2 C_{16}, 6 C_{24}, 9 D_2, 2 D_3, 3 D_4, 3 D_6, 4 D_8, 4 D_{12}, 6 D_{24}	4 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 2 C_{12}, 3 C_{24}, 9 D_2, 2 D_3, 3 D_4, 3 D_6, 3 D_8, 3 D_{12}, 5 D_{24}	2 C_2, 2 C_4, C_6, 2 C_8, C_{12}, 9 D_2, D_3, 3 D_4, 3 D_6, 3 D_8, 2 D_{12}, 3 D_{24}	4 C_2, C_3, 9 D_2, 2 D_3
R39.16	3 C_2, C_3, 2 C_4, C_6, 3 C_7, C_{12}, 9 C_{14}, 3 C_{21}, 12 C_{28}, 3 C_{42}, 6 C_{84}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 3 D_2, 2 D_3, D_6	2 C_2, 2 C_4, C_6, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, D_3
R39.17	**Tet**, 3 C_2, C_3, C_6, 3 C_7, 9 C_{14}, 6 C_{21}, 6 C_{42}, 6 D_2	**Tet**, 3 C_2, C_3, C_6, C_7, 3 C_{14}, C_{21}, C_{42}, 6 D_2	**Tet**, 2 C_2, C_6, C_{14}, 6 D_2	**Tet**, 3 C_2, C_3, C_7, C_{14}, 6 D_2
R39.18	C_2, 39 C_{79}, 39 C_{158}	C_2	C_2	C_2
R39.19	2 C_2, 2 C_4, 2 C_5, 3 C_8, 4 C_{10}, 4 C_{16}, 6 C_{20}, 12 C_{40}, 16 C_{80}, 2 D_2	2 C_2, 2 C_4, C_5, C_8, 2 C_{10}, 2 C_{20}, C_{40}, 2 D_2	2 C_2, C_4, C_{10}, 2 D_2	2 C_2, C_4, C_5, C_{10}, C_{20}, 2 D_2
R39.20	3 C_2, 2 C_4, 2 C_5, 4 C_8, 6 C_{10}, 8 C_{16}, 8 C_{20}, 16 C_{40}, 32 C_{80}, 3 D_2	3 C_2, 2 C_4, C_5, 3 C_8, 3 C_{10}, 2 C_{16}, 3 C_{20}, 3 C_{40}, 2 C_{80}, 3 D_2	2 C_2, C_4, C_{10}, 3 D_2	3 C_2, C_4, C_5, C_8, C_{10}, C_{20}, C_{40}, 3 D_2
R39.21	C_2, C_3, C_4, C_6, 2 C_{12}, 6 C_{13}, 6 C_{26}, 12 C_{39}, 12 C_{52}, 12 C_{78}, 24 C_{156}	C_2, C_3, C_4, C_6, C_{13}, C_{26}, C_{39}, C_{78}	C_2, C_4, C_6, C_{26}, C_{78}	C_2, C_3, C_{13}, C_{39}
Genus 40				
R40.1	3 C_2, 2 C_3, C_4, 2 C_5, 2 C_6, 4 C_{10}, 4 C_{15}, 2 C_{30}, 4 D_2, 4 D_3, D_4, 2 D_5, 2 D_6, 2 D_{10}, 2 D_{15}	3 C_2, 2 C_3, C_4, C_5, 2 C_6, 2 C_{10}, C_{15}, 4 D_2, 4 D_3, D_4, D_5, 2 D_6, D_{10}, D_{15}	3 C_2, C_4, C_6, C_{10}, 4 D_2, 4 D_3, D_4, D_5, 2 D_6, D_{10}, D_{15}	3 C_2, 2 C_3, C_5, 4 D_2, 4 D_3, D_5
R40.2	3 C_2, C_4, 20 C_{41}, 40 C_{82}, 4 D_2, D_4, 20 D_{41}, 20 D_{82}	3 C_2, C_4, C_{41}, 2 C_{82}, 4 D_2, D_4, D_{41}, D_{82}	3 C_2, C_4, C_{82}, 4 D_2, D_4, D_{41}, D_{82}	3 C_2, C_{41}, 4 D_2, D_{41}
R40.3	2 C_2, 2 C_4, 2 C_5, 2 C_8, 2 C_{10}, 4 C_{16}, 4 C_{20}, 4 C_{32}, 8 C_{40}, 16 C_{80}, 16 C_{160}, 2 D_2, D_4, 2 D_5, 2 D_8, 2 D_{10}, 4 D_{16}, 4 D_{20}, 8 D_{40}, 16 D_{80}	2 C_2, 2 C_4, C_5, C_8, C_{10}, C_{16}, C_{20}, C_{40}, C_{80}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{16}, D_{20}, D_{40}, D_{80}	2 C_2, 2 C_4, C_8, C_{10}, C_{16}, C_{20}, C_{40}, C_{80}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{16}, D_{20}, D_{40}, D_{80}	2 C_2, C_5, 2 D_2, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R40.4	3 C_2, 2 C_3, C_4, 4 C_6, 2 C_8, 2 C_{12}, 4 C_{16}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 4 D_8, 2 D_{12}, 4 D_{16}	3 C_2, 2 C_3, C_4, 4 C_6, C_8, 2 C_{12}, C_{16}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 2 D_{12}, D_{16}	3 C_2, 3 C_6, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 2 D_{12}, D_{16}	3 C_2, 2 C_3, C_4, 4 D_2, 2 D_3, 2 D_4
R40.5	3 C_2, 3 C_3, 5 C_6, 3 C_7, 3 C_{14}, 9 C_{21}, 3 C_{42}, 3 D_2, 2 D_3, D_6, 6 D_7, 3 D_{14}, 3 D_{21}	3 C_2, 3 C_3, 5 C_6, C_7, C_{14}, 2 C_{21}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, D_{21}	3 C_2, 4 C_6, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, D_{21}	3 C_2, C_3, C_7, 3 D_2, 2 D_3, 2 D_7
R40.6	3 C_2, 3 C_3, 2 C_6, 3 C_7, 3 C_{14}, 15 C_{21}, 6 C_{42}, 3 D_2, 5 D_3, 2 D_6, 6 D_7, 3 D_{14}, 21 D_{21}, 6 D_{42}	3 C_2, 3 C_3, 2 C_6, C_7, C_{14}, 4 C_{21}, C_{42}, 3 D_2, 5 D_3, 2 D_6, 2 D_7, D_{14}, 5 D_{21}, D_{42}	3 C_2, 3 D_2, 5 D_3, 2 D_6, 2 D_7, D_{14}, 5 D_{21}, D_{42}	3 C_2, 3 C_3, C_7, C_{21}, 3 D_2, 5 D_3, 2 D_7, 2 D_{21}
R40.7	3 C_2, 3 C_3, 5 C_6, 3 C_7, 3 C_{14}, 15 C_{21}, 15 C_{42}, 3 D_2, 2 D_3, D_6, 6 D_7, 3 D_{14}, 12 D_{21}, 6 D_{42}	3 C_2, 3 C_3, 5 C_6, C_7, C_{14}, 4 C_{21}, 4 C_{42}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 4 D_{21}, 2 D_{42}	3 C_2, 4 C_6, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 4 D_{21}, 2 D_{42}	3 C_2, C_3, C_7, C_{14}, 3 D_2, 2 D_3, 2 D_7, D_{14}
R40.8	3 C_2, C_3, C_4, 2 C_5, 3 C_6, 2 C_8, 2 C_{10}, C_{12}, 2 C_{15}, 4 C_{20}, 2 C_{24}, 2 C_{30}, 8 C_{40}, 4 C_{60}, 8 C_{120}, 4 D_2, 2 D_4, 4 D_5, 2 D_8, 4 D_{10}, 8 D_{20}, 8 D_{40}	3 C_2, C_3, C_4, C_5, 3 C_6, C_8, C_{10}, C_{20}, C_{40}, 4 D_2, 2 D_4, 2 D_5, D_8, 2 D_{10}, 2 D_{20}, D_{40}	3 C_2, C_6, 4 D_2, 2 D_4, 2 D_5, D_8, 2 D_{10}, 2 D_{20}, D_{40}	3 C_2, C_4, C_5, C_8, C_{10}, C_{20}, C_{40}, 4 D_2, 2 D_4, 2 D_5, D_8, 2 D_{10}, 2 D_{20}, D_{40}
R40.9	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_8	**Tet**, **Oct**, 2 C_2, C_6, 3 D_2, 2 D_3, 2 D_4, D_6, D_8	2 C_2, C_3, C_4, C_8, 3 D_2, 2 D_3, 2 D_4, D_8
R40.10	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_8	**Tet**, **Oct**, 2 C_2, C_6, 3 D_2, 2 D_3, 2 D_4, D_6, D_8	2 C_2, C_3, C_4, C_8, 3 D_2, 2 D_3, 2 D_4, D_8
R40.11	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, 6 C_9, C_{12}, 6 C_{18}, 3 C_{36}, 3 D_2, D_3, D_4	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, 2 C_9, 2 C_{18}, 3 D_2, D_3, D_4	2 **Tet**, **Oct**, 2 C_2, C_6, C_{18}, 3 D_2, D_3, D_4	2 C_2, 2 C_3, C_4, 3 D_2, D_3, D_4
R40.12	3 C_2, 2 C_5, 2 C_{10}, 5 C_{11}, 5 C_{22}, 10 C_{55}, 3 D_2, 4 D_5, 2 D_{10}, 10 D_{11}, 5 D_{22}, 10 D_{55}	3 C_2, C_5, C_{10}, C_{11}, C_{22}, C_{55}, 3 D_2, 2 D_5, D_{10}, 2 D_{11}, D_{22}, D_{55}	3 C_2, 3 D_2, 2 D_5, D_{10}, 2 D_{11}, D_{22}, D_{55}	3 C_2, C_5, C_{11}, 3 D_2, 2 D_5, 2 D_{11}
R40.13	3 C_2, 3 C_3, C_4, 8 C_6, 6 C_9, C_{12}, 15 C_{18}, 4 D_2, D_3, D_4, D_6, 3 D_9, 3 D_{18}	3 C_2, 3 C_3, C_4, 8 C_6, 4 C_9, 9 C_{18}, 4 D_2, D_3, D_4, D_6, 3 D_9, 3 D_{18}	3 C_2, C_4, 6 C_6, 4 C_{18}, 4 D_2, D_3, D_4, D_6, 3 D_9, 3 D_{18}	3 C_2, 2 C_3, 4 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R40.14	3 C_2, 3 C_3, C_4, 4 C_6, 6 C_9, 2 C_{12}, 9 C_{18}, 4 D_2, 4 D_3, D_4, 4 D_6, 6 D_9, 2 D_{12}, 6 D_{18}	3 C_2, 3 C_3, C_4, 4 C_6, 4 C_9, C_{12}, 5 C_{18}, 4 D_2, 4 D_3, D_4, 4 D_6, 4 D_9, D_{12}, 4 D_{18}	3 C_2, C_4, 2 C_6, 4 C_{18}, 4 D_2, 4 D_3, D_4, 4 D_6, 4 D_9, D_{12}, 4 D_{18}	3 C_2, 3 C_3, C_6, C_9, 4 D_2, 4 D_3, 2 D_6, D_9
R40.15	2 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 2 C_{12}, 4 C_{16}, 2 C_{24}, 4 C_{32}, 4 C_{48}, 8 C_{96}, 2 D_2, D_4, 2 D_8, 4 D_{16}	2 C_2, C_3, 2 C_4, 2 C_6, C_8, C_{16}, 2 D_2, D_4, D_8, D_{16}	2 C_2, 2 C_4, C_6, C_8, C_{16}, 2 D_2, D_4, D_8, D_{16}	2 C_2, 2 D_2
R40.16	3 C_2, C_3, 2 C_5, 3 C_6, 3 C_9, 2 C_{10}, 2 C_{15}, 9 C_{18}, 2 C_{30}, 6 C_{45}, 6 C_{90}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_3, C_5, 3 C_6, C_{10}, 3 D_2, 2 D_5, D_{10}	3 C_2, C_6, 3 D_2, 2 D_5, D_{10}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}
R40.17	3 C_2, C_4, 2 C_8, 5 C_{11}, 15 C_{22}, 5 C_{44}, 10 C_{88}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8	3 C_2, 4 D_2, 2 D_4, D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8
R40.18	3 C_2, 3 C_3, 2 C_5, 2 C_6, 6 C_{10}, 6 C_{15}, 4 C_{30}, 3 D_2, 5 D_3, 2 D_6	3 C_2, 3 C_3, C_5, 2 C_6, 3 C_{10}, C_{15}, 3 D_2, 5 D_3, 2 D_6	3 C_2, C_{10}, 3 D_2, 5 D_3, 2 D_6	3 C_2, 3 C_3, C_5, 3 D_2, 5 D_3
R40.19	3 C_2, 3 C_3, 2 C_5, 5 C_6, 6 C_{10}, 10 C_{15}, 18 C_{30}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, C_5, 5 C_6, 3 C_{10}, 3 C_{15}, 5 C_{30}, 3 D_2, 2 D_3, D_6	3 C_2, 4 C_6, C_{10}, C_{30}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_5, 3 D_2, 2 D_3
R40.20	C_2, 2 C_5, 8 C_{17}, 8 C_{34}, 16 C_{85}, 2 D_5	C_2, C_5, D_5	C_2, D_5	C_2, C_5, D_5
R40.21	3 C_2, C_3, C_4, 3 C_6, 3 C_7, C_{12}, 9 C_{14}, 6 C_{21}, 3 C_{28}, 18 C_{42}, 6 C_{84}, 4 D_2, D_4	3 C_2, C_3, C_4, 3 C_6, 4 D_2, D_4	3 C_2, C_6, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R40.22	C_2, C_3, C_6, 3 C_9, 3 C_{18}, 9 C_{27}, 9 C_{54}, 27 C_{81}, 27 C_{162}	C_2, C_3, C_6	C_2, C_6	C_2
R40.23	3 C_2, 20 C_{41}, 60 C_{82}, 3 D_2	3 C_2, C_{41}, 3 C_{82}, 3 D_2	3 C_2, C_{82}, 3 D_2	3 C_2, C_{41}, 3 D_2
R40.24	C_2, C_4, 2 C_5, 2 C_8, 2 C_{10}, 4 C_{16}, 4 C_{20}, 8 C_{32}, 8 C_{40}, 16 C_{80}, 32 C_{160}	C_2, C_4, C_5, C_8, C_{10}, C_{16}, C_{20}, C_{40}, C_{80}	C_2, C_4, C_8, C_{10}, C_{16}, C_{20}, C_{40}, C_{80}	C_2, C_5
Genus 41				
R41.1	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 7 C_8, 4 C_{16}, 12 D_2, D_3, 4 D_4, D_6, 2 D_8	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 6 C_8, C_{16}, 12 D_2, D_3, 4 D_4, D_6, 2 D_8	**Tet**, **Oct**, 2 C_2, 4 C_4, 4 C_8, 12 D_2, D_3, 4 D_4, D_6, 2 D_8	**Tet**, 4 C_2, C_3, 12 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R41.2	**Tet**, **Oct**, 3 C_2, C_3, 4 C_4, C_6, 3 C_8, 2 C_{16}, 7 D_2, D_3, 4 D_4, D_6, D_8	**Tet**, **Oct**, 3 C_2, C_3, 4 C_4, C_6, 2 C_8, 7 D_2, D_3, 4 D_4, D_6, D_8	**Tet**, **Oct**, 2 C_2, 3 C_4, C_8, 7 D_2, D_3, 4 D_4, D_6, D_8	**Tet**, 3 C_2, C_3, C_4, 7 D_2, D_3, D_4
R41.3	4 C_2, C_3, 5 C_4, C_5, 2 C_6, 2 C_8, C_{10}, 2 C_{12}, 2 C_{20}, 2 C_{24}, 10 D_2, 3 D_3, 8 D_4, 2 D_5, 4 D_6, 2 D_8, 2 D_{10}, 3 D_{12}, 2 D_{20}, 2 D_{24}	4 C_2, C_3, 5 C_4, C_5, 2 C_6, 2 C_8, C_{10}, 2 C_{12}, 2 C_{20}, 2 C_{24}, 10 D_2, 3 D_3, 8 D_4, 2 D_5, 4 D_6, 2 D_8, 2 D_{10}, 3 D_{12}, 2 D_{20}, 2 D_{24}	3 C_2, C_4, 10 D_2, 3 D_3, 8 D_4, 2 D_5, 4 D_6, 2 D_8, 2 D_{10}, 3 D_{12}, 2 D_{20}, 2 D_{24}	4 C_2, C_3, 4 C_4, C_5, 2 C_8, C_{10}, 2 C_{20}, 10 D_2, 3 D_3, 7 D_4, 2 D_5, 2 D_8, 2 D_{10}, 2 D_{20}
R41.4	**Tet**, **Ico**, 7 C_2, C_3, 4 C_4, C_5, 3 C_6, 3 C_{10}, 2 C_{12}, 31 D_2, 4 D_3, 4 D_5, 6 D_6, 6 D_{10}	**Tet**, **Ico**, 7 C_2, C_3, 4 C_4, C_5, 3 C_6, 3 C_{10}, C_{12}, 31 D_2, 4 D_3, 4 D_5, 6 D_6, 6 D_{10}	3 C_2, 4 C_4, C_6, C_{10}, C_{12}, 25 D_2, 2 D_3, 2 D_5, 5 D_6, 5 D_{10}	**Tet**, **Ico**, 7 C_2, C_3, C_5, 2 C_{10}, 31 D_2, 4 D_3, 4 D_5, 4 D_{10}
R41.5	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 3 C_4, C_5, 3 C_6, 2 C_{10}, C_{12}, 26 D_2, 4 D_3, 5 D_4, 3 D_5, 7 D_6, 4 D_{10}, D_{12}	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 3 C_4, C_5, 3 C_6, 2 C_{10}, 26 D_2, 4 D_3, 5 D_4, 3 D_5, 7 D_6, 4 D_{10}	**Tet**, **Oct**, **Ico**, 3 C_2, 2 C_4, C_6, C_{10}, 24 D_2, 2 D_3, 5 D_4, 2 D_5, 6 D_6, 4 D_{10}	**Tet**, **Ico**, 6 C_2, C_3, C_4, C_5, C_{10}, 26 D_2, 4 D_3, D_4, 3 D_5, 2 D_{10}
R41.6	5 C_2, 2 C_4, 5 C_5, 9 C_{10}, 2 C_{20}, 13 D_2, 14 D_5, 15 D_{10}	5 C_2, 2 C_4, 4 C_5, 8 C_{10}, 13 D_2, 12 D_5, 14 D_{10}	3 C_2, 2 C_4, 6 C_{10}, 11 D_2, 6 D_5, 12 D_{10}	5 C_2, 4 C_5, 2 C_{10}, 13 D_2, 11 D_5, 4 D_{10}
R41.7	**Tet**, 2 **Oct**, 9 C_2, C_3, 8 C_4, 3 C_6, 4 C_8, 4 C_{12}, 4 C_{24}, 55 D_2, 2 D_3, 14 D_4, 4 D_6, 6 D_{12}	**Tet**, 2 **Oct**, 9 C_2, C_3, 8 C_4, 3 C_6, 3 C_8, 3 C_{12}, C_{24}, 55 D_2, 2 D_3, 14 D_4, 4 D_6, 5 D_{12}	**Oct**, 3 C_2, 4 C_4, C_6, 2 C_{12}, 40 D_2, D_3, 11 D_4, 4 D_6, 5 D_{12}	**Tet**, 2 **Oct**, 9 C_2, C_3, 4 C_4, 55 D_2, 2 D_3, 9 D_4
R41.8	**Tet**, **Oct**, 6 C_2, C_3, 11 C_4, 2 C_6, 2 C_8, 2 C_{12}, 2 C_{24}, 26 D_2, D_3, 8 D_4, D_6, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 11 C_4, 2 C_6, C_8, C_{12}, 26 D_2, D_3, 8 D_4, D_6, D_{12}	**Oct**, 3 C_2, 6 C_4, C_6, C_{12}, 23 D_2, D_3, 8 D_4, D_6, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 4 C_4, 26 D_2, D_3, 4 D_4
R41.9	6 C_2, C_3, 7 C_4, 3 C_6, 7 C_8, 2 C_{12}, 4 C_{24}, 19 D_2, D_3, 7 D_4, 3 D_6, 4 D_8	6 C_2, C_3, 7 C_4, 3 C_6, 6 C_8, C_{12}, 19 D_2, D_3, 7 D_4, 3 D_6, 4 D_8	3 C_2, 6 C_4, C_6, 4 C_8, C_{12}, 19 D_2, D_3, 7 D_4, 3 D_6, 4 D_8	6 C_2, C_3, 19 D_2, D_3
R41.10	6 C_2, C_3, 5 C_4, 2 C_6, 5 C_8, 3 C_{12}, 2 C_{24}, 26 D_2, 2 D_3, 9 D_4, 4 D_6, 4 D_8, 3 D_{12}	6 C_2, C_3, 5 C_4, 2 C_6, 4 C_8, 2 C_{12}, 26 D_2, 2 D_3, 9 D_4, 4 D_6, 4 D_8, 2 D_{12}	3 C_2, 4 C_4, C_6, 3 C_8, C_{12}, 24 D_2, D_3, 9 D_4, 3 D_6, 4 D_8, 2 D_{12}	6 C_2, C_3, C_4, 26 D_2, 2 D_3, D_4
R41.11	9 C_2, C_3, 6 C_4, 7 C_6, 2 C_8, 4 C_{12}, 4 C_{24}, 54 D_2, 2 D_3, 11 D_4, 10 D_6, 6 D_{12}	9 C_2, C_3, 6 C_4, 7 C_6, C_8, 3 C_{12}, C_{24}, 54 D_2, 2 D_3, 11 D_4, 10 D_6, 6 D_{12}	3 C_2, 3 C_4, C_6, C_8, 37 D_2, D_3, 8 D_4, 7 D_6, 4 D_{12}	9 C_2, C_3, 3 C_4, C_6, 54 D_2, 2 D_3, 11 D_4, D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R41.12	4 C_2, C_3, 5 C_4, 3 C_6, 3 C_8, 4 C_{12}, 4 C_{24}, 8 D_2, D_3, 4 D_4, D_6, D_8, 2 D_{12}	4 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 3 C_{12}, C_{24}, 8 D_2, D_3, 4 D_4, D_6, D_8, 2 D_{12}	3 C_2, 2 C_4, C_6, C_8, 8 D_2, D_3, 4 D_4, D_6, D_8, 2 D_{12}	4 C_2, C_3, 3 C_4, C_8, 8 D_2, D_3, 4 D_4, D_8
R41.13	5 C_2, C_3, 5 C_4, 4 C_6, 3 C_8, 3 C_{12}, 4 C_{24}, 14 D_2, D_3, 7 D_4, 2 D_6, D_8, D_{12}	5 C_2, C_3, 5 C_4, 4 C_6, 2 C_8, 2 C_{12}, 14 D_2, D_3, 7 D_4, 2 D_6, D_8, D_{12}	3 C_2, 2 C_4, C_6, 12 D_2, D_3, 6 D_4, 2 D_6, D_8, D_{12}	5 C_2, C_3, 3 C_4, C_8, 14 D_2, D_3, 6 D_4, D_8
R41.14	4 C_2, C_3, 4 C_4, 3 C_6, 3 C_8, 4 C_{12}, 2 C_{24}, 10 D_2, D_3, 5 D_4, 2 D_6, 3 D_8, 6 D_{12}	4 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 3 C_{12}, 10 D_2, D_3, 5 D_4, 2 D_6, 3 D_8, 6 D_{12}	3 C_2, 3 C_4, C_6, 2 C_8, 10 D_2, D_3, 5 D_4, 2 D_6, 3 D_8, 6 D_{12}	4 C_2, C_3, C_4, C_6, 10 D_2, D_3, 2 D_4, D_6
R41.15	5 C_2, 3 C_4, 5 C_{11}, 20 C_{22}, 10 C_{44}, 13 D_2, 2 D_4, 5 D_{11}, 10 D_{22}	5 C_2, 3 C_4, C_{11}, 4 C_{22}, C_{44}, 13 D_2, 2 D_4, D_{11}, 2 D_{22}	3 C_2, 2 C_4, C_{22}, 11 D_2, 2 D_4, D_{11}, 2 D_{22}	5 C_2, C_4, C_{11}, 13 D_2, 2 D_4, D_{11}
R41.16	5 C_2, C_3, 2 C_4, 3 C_6, 3 C_7, 2 C_{12}, 9 C_{14}, 6 C_{21}, 6 C_{28}, 18 C_{42}, 12 C_{84}, 13 D_2, 2 D_3, 4 D_6, 6 D_7, 12 D_{14}, 12 D_{21}, 24 D_{42}	5 C_2, C_3, 2 C_4, 3 C_6, C_7, C_{12}, 3 C_{14}, C_{21}, C_{28}, 3 C_{42}, C_{84}, 13 D_2, 2 D_3, 4 D_6, 2 D_7, 4 D_{14}, 2 D_{21}, 4 D_{42}	3 C_2, 2 C_4, C_6, C_{14}, C_{42}, 11 D_2, D_3, 3 D_6, D_7, 3 D_{14}, D_{21}, 3 D_{42}	5 C_2, C_3, C_6, C_7, C_{14}, C_{21}, C_{42}, 13 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 2 D_{21}, D_{42}
R41.17	3 C_2, 2 C_4, 20 C_{41}, 20 C_{82}, 20 C_{164}, 3 D_2, 40 D_{41}, 20 D_{82}	3 C_2, 2 C_4, C_{41}, C_{82}, 3 D_2, 2 D_{41}, D_{82}	2 C_2, 2 C_4, C_{82}, 3 D_2, D_{41}, D_{82}	3 C_2, C_{41}, 3 D_2, D_{41}
R41.18	**Tet**, 2 **Ico**, 3 C_2, C_3, 8 C_5, C_6, 4 C_{10}, 2 C_{15}, 7 D_2, 2 D_3, 12 D_5, D_6, 6 D_{10}, 2 D_{15}	**Tet**, 2 **Ico**, 3 C_2, C_3, 7 C_5, C_6, 4 C_{10}, 2 C_{15}, 7 D_2, 2 D_3, 11 D_5, D_6, 6 D_{10}, 2 D_{15}	2 C_2, C_6, 2 C_{10}, 6 D_2, D_3, 9 D_5, D_6, 6 D_{10}, 2 D_{15}	**Tet**, 3 C_2, C_3, 7 C_5, 2 C_{10}, 7 D_2, D_3, 11 D_5, 4 D_{10}
R41.19	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, 5 C_5, C_6, 2 C_{10}, 2 C_{15}, 3 D_2, 2 D_3, D_4, 3 D_5, D_6, 2 D_{10}, 2 D_{15}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, 4 C_5, C_6, 2 C_{10}, 2 C_{15}, 3 D_2, 2 D_3, D_4, 3 D_5, D_6, 2 D_{10}, 2 D_{15}	**Oct**, C_2, C_6, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 2 D_{15}	**Tet**, 2 C_2, C_3, C_4, 3 C_5, 2 C_{10}, 3 D_2, D_3, D_4, 3 D_5, 2 D_{10}
R41.20	4 C_2, 4 C_4, 2 C_5, 2 C_{10}, 4 C_{20}, 13 D_2, 8 D_4	4 C_2, 4 C_4, C_5, C_{10}, C_{20}, 13 D_2, 8 D_4	2 C_2, 3 C_4, C_{10}, 11 D_2, 8 D_4	4 C_2, 13 D_2
R41.21	4 C_2, 4 C_4, 2 C_5, 2 C_{10}, 4 C_{20}, 13 D_2, 8 D_4	4 C_2, 4 C_4, C_5, C_{10}, C_{20}, 13 D_2, 8 D_4	2 C_2, 3 C_4, C_{10}, 11 D_2, 8 D_4	4 C_2, 13 D_2
R41.22	4 C_2, C_3, 2 C_4, C_5, 3 C_6, 2 C_8, C_{10}, C_{12}, C_{20}, 9 D_2, 3 D_3, 4 D_4, D_5, 5 D_6, 2 D_8, D_{10}, D_{12}	4 C_2, C_3, 2 C_4, C_5, 3 C_6, 2 C_8, C_{10}, C_{12}, C_{20}, 9 D_2, 3 D_3, 4 D_4, D_5, 5 D_6, 2 D_8, D_{10}, D_{12}	3 C_2, 9 D_2, 3 D_3, 4 D_4, D_5, 5 D_6, 2 D_8, D_{10}, D_{12}	4 C_2, C_3, 2 C_4, C_5, 2 C_8, C_{10}, C_{20}, 9 D_2, 3 D_3, 4 D_4, D_5, 2 D_8, D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R41.23	**Tet**, **Oct**, 5 C_2, C_3, 6 C_4, 2 C_6, 3 C_8, 18 D_2, D_3, 5 D_4, D_6	**Tet**, **Oct**, 5 C_2, C_3, 6 C_4, 2 C_6, 2 C_8, 18 D_2, D_3, 5 D_4, D_6	**Oct**, 3 C_2, 3 C_4, C_6, 2 C_8, 17 D_2, D_3, 5 D_4, D_6	**Tet**, **Oct**, 5 C_2, C_3, 3 C_4, 18 D_2, D_3, 3 D_4
R41.24	**Tet**, 2 **Oct**, 7 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 34 D_2, 2 D_3, 11 D_4, 4 D_6	**Tet**, 2 **Oct**, 7 C_2, C_3, 5 C_4, 3 C_6, C_8, 34 D_2, 2 D_3, 11 D_4, 4 D_6	**Oct**, 3 C_2, 2 C_4, C_6, C_8, 27 D_2, D_3, 9 D_4, 3 D_6	**Tet**, 2 **Oct**, 7 C_2, C_3, 3 C_4, 34 D_2, 2 D_3, 9 D_4
R41.25	**Tet**, **Oct**, 6 C_2, C_3, 7 C_4, 2 C_6, 3 C_8, 28 D_2, D_3, 16 D_4, D_6, 2 D_8	**Tet**, **Oct**, 6 C_2, C_3, 7 C_4, 2 C_6, 2 C_8, 28 D_2, D_3, 16 D_4, D_6, D_8	**Tet**, **Oct**, 3 C_2, 4 C_4, C_6, C_8, 22 D_2, D_3, 15 D_4, D_6, D_8	**Tet**, 6 C_2, C_3, 3 C_4, 28 D_2, D_3, 7 D_4
R41.26	**Tet**, 2 **Oct**, 9 C_2, C_3, 6 C_4, 3 C_6, 4 C_8, 55 D_2, 2 D_3, 11 D_4, 4 D_6	**Tet**, 2 **Oct**, 9 C_2, C_3, 6 C_4, 3 C_6, 3 C_8, 55 D_2, 2 D_3, 11 D_4, 4 D_6	**Oct**, 3 C_2, 4 C_4, C_6, 3 C_8, 40 D_2, D_3, 8 D_4, 3 D_6	**Tet**, 2 **Oct**, 9 C_2, C_3, 2 C_4, 55 D_2, 2 D_3, 8 D_4
R41.27	**Tet**, **Oct**, 6 C_2, C_3, 9 C_4, 2 C_6, 2 C_8, 26 D_2, D_3, 7 D_4, D_6	**Tet**, **Oct**, 6 C_2, C_3, 9 C_4, 2 C_6, C_8, 26 D_2, D_3, 7 D_4, D_6	**Tet**, **Oct**, 3 C_2, 6 C_4, C_6, C_8, 22 D_2, D_3, 7 D_4, D_6	**Tet**, 6 C_2, C_3, 2 C_4, 26 D_2, D_3, 3 D_4
R41.28	**Tet**, **Oct**, 6 C_2, C_3, 7 C_4, 2 C_6, 2 C_8, 26 D_2, D_3, 6 D_4, D_6	**Tet**, **Oct**, 6 C_2, C_3, 7 C_4, 2 C_6, C_8, 26 D_2, D_3, 6 D_4, D_6	**Oct**, 3 C_2, 5 C_4, C_6, C_8, 21 D_2, D_3, 6 D_4, D_6	**Tet**, **Oct**, 6 C_2, C_3, 2 C_4, 26 D_2, D_3, 4 D_4
R41.29	**Tet**, **Oct**, 5 C_2, C_3, 6 C_4, 2 C_6, 3 C_8, 18 D_2, D_3, 5 D_4, D_6	**Tet**, **Oct**, 5 C_2, C_3, 6 C_4, 2 C_6, 2 C_8, 18 D_2, D_3, 5 D_4, D_6	**Oct**, 3 C_2, 3 C_4, 2 C_6, 2 C_8, 15 D_2, D_3, 5 D_4, D_6	**Tet**, **Oct**, 5 C_2, C_3, 3 C_4, 18 D_2, D_3, 3 D_4
R41.30	2 **Tet**, 3 **Oct**, 5 C_2, C_3, 6 C_4, 2 C_6, C_8, 27 D_2, D_3, 8 D_4, D_6	2 **Tet**, 3 **Oct**, 5 C_2, C_3, 6 C_4, 2 C_6, 27 D_2, D_3, 8 D_4, D_6	3 **Oct**, 3 C_2, 2 C_4, 2 C_6, 23 D_2, D_3, 8 D_4, D_6	2 **Tet**, 3 **Oct**, 5 C_2, C_3, 4 C_4, 27 D_2, D_3, 5 D_4
R41.31	**Tet**, 2 **Oct**, 7 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 34 D_2, 2 D_3, 11 D_4, 4 D_6	**Tet**, 2 **Oct**, 7 C_2, C_3, 5 C_4, 3 C_6, C_8, 34 D_2, 2 D_3, 11 D_4, 4 D_6	**Oct**, 3 C_2, 2 C_4, 2 C_6, C_8, 25 D_2, D_3, 8 D_4, 4 D_6	**Tet**, 2 **Oct**, 7 C_2, C_3, 3 C_4, 34 D_2, 2 D_3, 9 D_4
R41.32	2 **Tet**, 6 **Oct**, 8 C_2, C_3, 6 C_4, 3 C_6, C_8, 53 D_2, 4 D_3, 21 D_4, 6 D_6, D_8	2 **Tet**, 6 **Oct**, 8 C_2, C_3, 6 C_4, 3 C_6, 53 D_2, 4 D_3, 21 D_4, 6 D_6	2 **Oct**, 3 C_2, C_4, 2 C_6, 36 D_2, D_3, 11 D_4, 5 D_6	2 **Tet**, 6 **Oct**, 8 C_2, C_3, 5 C_4, 53 D_2, 4 D_3, 18 D_4
R41.33	6 C_2, C_3, 6 C_4, 5 C_6, 5 C_8, 2 C_{12}, 19 D_2, D_3, 8 D_4, 3 D_6, 4 D_8, 3 D_{12}	6 C_2, C_3, 6 C_4, 5 C_6, 4 C_8, 2 C_{12}, 19 D_2, D_3, 8 D_4, 3 D_6, 4 D_8, 3 D_{12}	3 C_2, C_4, 2 C_6, C_8, 17 D_2, D_3, 7 D_4, 3 D_6, 4 D_8, 3 D_{12}	6 C_2, C_3, 5 C_4, 3 C_8, 19 D_2, D_3, 7 D_4, 4 D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R41.34	**Tet**, 3 C_2, C_3, C_6, 5 C_{11}, 5 C_{22}, 5 C_{33}, 6 D_2, 10 D_{11}, 10 D_{22}	**Tet**, 3 C_2, C_3, C_6, C_{11}, C_{22}, 6 D_2, 2 D_{11}, 2 D_{22}	2 C_2, C_6, 5 D_2, 2 D_{11}, 2 D_{22}	3 C_2, C_{11}, 6 D_2, 2 D_{11}
R41.35	C_2, C_3, C_6, 20 C_{41}, 20 C_{123}, 20 D_{41}	C_2, C_3, C_6, C_{41}, D_{41}	C_2, C_6, D_{41}	C_2, C_{41}, D_{41}
R41.36	9 C_2, 8 C_4, 12 C_8, 8 C_{16}, 45 D_2, 6 D_4, 6 D_8	9 C_2, 8 C_4, 10 C_8, 3 C_{16}, 45 D_2, 6 D_4, 6 D_8	3 C_2, 5 C_4, 7 C_8, 35 D_2, 6 D_4, 6 D_8	9 C_2, 3 C_4, 45 D_2, D_4
R41.37	7 C_2, 7 C_4, 6 C_8, 4 C_{16}, 37 D_2, 6 D_4, 6 D_8	7 C_2, 7 C_4, 4 C_8, C_{16}, 37 D_2, 6 D_4, 6 D_8	3 C_2, 4 C_4, C_8, 30 D_2, 5 D_4, 4 D_8	7 C_2, 3 C_4, 37 D_2, 2 D_4
R41.38	7 C_2, 6 C_4, 6 C_8, 4 C_{16}, 37 D_2, 6 D_4, 6 D_8	7 C_2, 6 C_4, 4 C_8, C_{16}, 37 D_2, 6 D_4, 6 D_8	3 C_2, 3 C_4, C_8, 29 D_2, 5 D_4, 4 D_8	7 C_2, 3 C_4, 37 D_2, 2 D_4
R41.39	7 C_2, 7 C_4, 8 C_8, 4 C_{16}, 37 D_2, 6 D_4, 6 D_8	7 C_2, 7 C_4, 6 C_8, 37 D_2, 6 D_4, 6 D_8	3 C_2, 4 C_4, 5 C_8, 30 D_2, 6 D_4, 6 D_8	7 C_2, 3 C_4, 37 D_2, D_4
R41.40	8 C_2, 6 C_4, 6 C_8, 4 C_{16}, 47 D_2, 10 D_4, 6 D_8	8 C_2, 6 C_4, 4 C_8, C_{16}, 47 D_2, 10 D_4, 6 D_8	2 C_2, 4 C_4, 4 C_8, C_{16}, 28 D_2, 8 D_4, 6 D_8	8 C_2, 2 C_4, 47 D_2, 4 D_4
R41.41	4 C_2, 7 C_4, 5 C_8, 2 C_{16}, 10 D_2, 4 D_4, D_8	4 C_2, 7 C_4, 3 C_8, 10 D_2, 4 D_4, D_8	3 C_2, 5 C_4, C_8, 10 D_2, 4 D_4, D_8	4 C_2, 2 C_4, 10 D_2, D_4
R41.42	4 C_2, 6 C_4, 5 C_8, 2 C_{16}, 10 D_2, 4 D_4, D_8	4 C_2, 6 C_4, 3 C_8, 10 D_2, 4 D_4, D_8	3 C_2, 5 C_4, 2 C_8, 10 D_2, 4 D_4, D_8	4 C_2, C_4, 10 D_2, D_4
R41.43	6 C_2, 4 C_4, 7 C_8, 2 C_{16}, 27 D_2, 8 D_4, 10 D_8	6 C_2, 4 C_4, 5 C_8, 27 D_2, 8 D_4, 10 D_8	2 C_2, 4 C_4, 5 C_8, 21 D_2, 8 D_4, 10 D_8	6 C_2, 27 D_2
R41.44	6 C_2, 7 C_4, 6 C_8, 2 C_{16}, 29 D_2, 8 D_4, D_8	6 C_2, 7 C_4, 4 C_8, 29 D_2, 8 D_4, D_8	2 C_2, 5 C_4, 4 C_8, 13 D_2, 8 D_4, D_8	6 C_2, 2 C_4, 29 D_2, 4 D_4
R41.45	5 C_2, 5 C_4, 7 C_8, 4 C_{16}, 16 D_2, 6 D_4, 3 D_8	5 C_2, 5 C_4, 5 C_8, C_{16}, 16 D_2, 6 D_4, 3 D_8	2 C_2, 5 C_4, 5 C_8, C_{16}, 12 D_2, 6 D_4, 3 D_8	5 C_2, 16 D_2
R41.46	5 C_2, 7 C_4, 9 C_8, 4 C_{16}, 15 D_2, 4 D_4, 2 D_8	5 C_2, 7 C_4, 7 C_8, 15 D_2, 4 D_4, 2 D_8	3 C_2, 6 C_4, 6 C_8, 15 D_2, 4 D_4, 2 D_8	5 C_2, 15 D_2
R41.47	6 C_2, 9 C_4, 15 C_8, 4 C_{16}, 19 D_2, 4 D_4, 2 D_8	6 C_2, 9 C_4, 13 C_8, C_{16}, 19 D_2, 4 D_4, 2 D_8	3 C_2, 7 C_4, 8 C_8, 19 D_2, 4 D_4, 2 D_8	6 C_2, 19 D_2
R41.48	5 C_2, 5 C_4, 4 C_8, 2 C_{16}, 23 D_2, 8 D_4	5 C_2, 5 C_4, 2 C_8, 23 D_2, 8 D_4	2 C_2, 2 C_4, C_8, 17 D_2, 4 D_4	5 C_2, 3 C_4, C_8, 23 D_2, 7 D_4
R41.49	3 C_2, 6 C_4, 5 C_8, 2 C_{16}, 8 D_2, 3 D_4	3 C_2, 6 C_4, 3 C_8, 8 D_2, 3 D_4	2 C_2, 3 C_4, 2 C_8, 8 D_2, 3 D_4	3 C_2, 3 C_4, C_8, 8 D_2, 2 D_4
R41.50	4 C_2, 2 C_4, 3 C_7, 2 C_8, 6 C_{14}, 9 C_{28}, 6 C_{56}, 10 D_2, 2 D_4, 6 D_7, 12 D_{14}, 9 D_{28}	4 C_2, 2 C_4, C_7, 2 C_{14}, 2 C_{28}, 10 D_2, 2 D_4, 2 D_7, 4 D_{14}, 2 D_{28}	2 C_2, 2 C_4, C_{14}, C_{28}, 8 D_2, 2 D_4, D_7, 3 D_{14}, 2 D_{28}	4 C_2, C_7, 10 D_2, 2 D_7

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R41.51	5 C_2, 3 C_4, 3 C_7, 4 C_8, 9 C_{14}, 6 C_{28}, 12 C_{56}, 13 D_2, 6 D_7, 12 D_{14}	5 C_2, 3 C_4, C_7, 2 C_8, 3 C_{14}, C_{28}, 13 D_2, 2 D_7, 4 D_{14}	2 C_2, 3 C_4, 2 C_8, C_{14}, 11 D_2, D_7, 3 D_{14}	5 C_2, C_7, 13 D_2, 2 D_7
R41.52	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	2 C_2, 2 C_4, C_6, C_{10}, 5 D_2, D_3, D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_5, 6 D_2, 2 D_3, 2 D_5
R41.53	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 2 C_2, C_4, C_6, C_{10}, 6 D_2, D_3, D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_4, C_5, 6 D_2, 2 D_3, 2 D_5
R41.54	3 C_2, C_3, 3 C_4, 2 C_6, 3 C_8, 2 C_{12}, 4 C_{16}, 3 C_{24}, 4 C_{48}, 6 D_2, D_3, 2 D_6	3 C_2, C_3, 3 C_4, 2 C_6, C_8, C_{12}, 6 D_2, D_3, 2 D_6	2 C_2, 2 C_4, C_6, C_{12}, 6 D_2, D_3, 2 D_6	3 C_2, C_3, 6 D_2, D_3
R41.55	3 C_2, C_3, 3 C_4, 2 C_6, 4 C_8, 3 C_{12}, 6 C_{16}, 4 C_{24}, 8 C_{48}, 4 D_2, D_3, 2 D_4, D_6, 2 D_{12}	3 C_2, C_3, 3 C_4, 2 C_6, 2 C_8, 2 C_{12}, 4 D_2, D_3, 2 D_4, D_6, 2 D_{12}	2 C_2, 2 C_4, C_6, 2 C_{12}, 4 D_2, D_3, 2 D_4, D_6, 2 D_{12}	3 C_2, C_3, 4 D_2, D_3
R41.56	3 C_2, C_3, 3 C_4, 2 C_6, 4 C_8, 2 C_{12}, 6 C_{16}, 3 C_{24}, 4 C_{48}, 4 D_2, D_3, 2 D_4, D_6, D_{12}	3 C_2, C_3, 3 C_4, 2 C_6, 2 C_8, C_{12}, 4 D_2, D_3, 2 D_4, D_6, D_{12}	2 C_2, 2 C_4, C_6, C_{12}, 4 D_2, D_3, 2 D_4, D_6, D_{12}	3 C_2, C_3, 4 D_2, D_3
R41.57	5 C_2, C_3, 3 C_4, 3 C_6, 6 C_8, 2 C_{12}, 8 C_{16}, 4 C_{24}, 8 C_{48}, 13 D_2, 2 D_3, 4 D_6	5 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, C_{12}, 2 C_{16}, 13 D_2, 2 D_3, 4 D_6	2 C_2, 2 C_4, C_6, C_{12}, 11 D_2, D_3, 3 D_6	5 C_2, C_3, 13 D_2, 2 D_3
R41.58	3 C_2, 2 C_4, 8 C_5, 12 C_{10}, 18 C_{20}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, 2 C_4, 6 C_5, 8 C_{10}, 10 C_{20}, 3 D_2, 4 D_5, 2 D_{10}	2 C_2, 2 C_4, 7 C_{10}, 8 C_{20}, 3 D_2, 2 D_5, 2 D_{10}	3 C_2, 4 C_5, 3 D_2, 4 D_5
R41.59	3 C_2, 2 C_4, 8 C_5, 8 C_{10}, 4 C_{20}, 3 D_2, 16 D_5, 8 D_{10}	3 C_2, 2 C_4, 6 C_5, 6 C_{10}, 3 D_2, 12 D_5, 6 D_{10}	2 C_2, 2 C_4, 6 C_{10}, 3 D_2, 6 D_5, 6 D_{10}	3 C_2, 6 C_5, 3 D_2, 10 D_5
R41.60	**Tet**, 7 C_2, C_3, 4 C_4, 3 C_6, 8 C_8, 4 C_{12}, 8 C_{24}, 31 D_2	**Tet**, 7 C_2, C_3, 4 C_4, 3 C_6, 6 C_8, 3 C_{12}, 2 C_{24}, 31 D_2	2 C_2, 3 C_4, C_6, 2 C_{12}, 20 D_2	**Tet**, 7 C_2, C_3, C_4, 31 D_2
R41.61	**Tet**, 5 C_2, C_3, 4 C_4, 2 C_6, 4 C_8, 3 C_{12}, 4 C_{24}, 20 D_2	**Tet**, 5 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, C_{12}, 20 D_2	2 C_2, 3 C_4, C_6, C_{12}, 17 D_2	**Tet**, 5 C_2, C_3, 20 D_2
R41.62	5 C_2, C_3, 4 C_4, 3 C_6, 6 C_8, 4 C_{12}, 8 C_{24}, 13 D_2, 3 D_4	5 C_2, C_3, 4 C_4, 3 C_6, 4 C_8, 2 C_{12}, 13 D_2, 3 D_4	2 C_2, 3 C_4, C_6, 2 C_{12}, 13 D_2, 3 D_4	5 C_2, C_3, 13 D_2
R41.63	4 C_2, C_3, 4 C_4, 2 C_6, 4 C_8, 3 C_{12}, 4 C_{24}, 9 D_2, 3 D_4	4 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, 2 C_{12}, 9 D_2, 3 D_4	2 C_2, 3 C_4, C_6, C_{12}, 9 D_2, 3 D_4	4 C_2, C_3, C_4, 9 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R41.64	5 C_2, C_3, 5 C_4, 5 C_6, 4 C_8, 5 C_{12}, 8 C_{24}, 15 D_2, 6 D_4	5 C_2, C_3, 5 C_4, 5 C_6, 2 C_8, 3 C_{12}, 15 D_2, 6 D_4	3 C_2, 2 C_4, C_6, 13 D_2, 5 D_4	5 C_2, C_3, 3 C_4, 15 D_2, 4 D_4
R41.65	5 C_2, C_3, 6 C_4, 5 C_6, 6 C_8, 10 C_{12}, 12 C_{24}, 13 D_2, 3 D_4	5 C_2, C_3, 6 C_4, 5 C_6, 4 C_8, 8 C_{12}, 4 C_{24}, 13 D_2, 3 D_4	3 C_2, 3 C_4, C_6, 3 C_8, 11 D_2, 2 D_4	5 C_2, C_3, 2 C_4, 13 D_2, 3 D_4
R41.66	7 C_2, C_3, 3 C_4, 7 C_6, 4 C_8, 6 C_{12}, 8 C_{24}, 30 D_2	7 C_2, C_3, 3 C_4, 7 C_6, 2 C_8, 4 C_{12}, 2 C_{24}, 30 D_2	2 C_2, 2 C_4, C_6, 2 C_8, 19 D_2	7 C_2, C_3, C_4, C_6, 30 D_2
R41.67	3 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 5 C_{12}, 4 C_{24}, 8 D_2, D_4	3 C_2, C_3, 4 C_4, 3 C_6, 3 C_{12}, 8 D_2, D_4	2 C_2, 3 C_4, C_6, 8 D_2, D_4	3 C_2, C_3, C_4, C_6, 8 D_2
R41.68	4 C_2, C_3, 4 C_4, 4 C_6, 4 C_8, 6 C_{12}, 8 C_{24}, 9 D_2, D_4	4 C_2, C_3, 4 C_4, 4 C_6, 2 C_8, 4 C_{12}, 2 C_{24}, 9 D_2, D_4	3 C_2, 2 C_4, C_6, 2 C_8, 9 D_2, D_4	4 C_2, C_3, 2 C_4, 9 D_2, D_4
R41.69	5 C_2, 2 C_4, 5 C_{11}, 25 C_{22}, 20 C_{44}, 13 D_2	5 C_2, 2 C_4, C_{11}, 5 C_{22}, 2 C_{44}, 13 D_2	3 C_2, 2 C_4, C_{22}, 11 D_2	5 C_2, C_{11}, 13 D_2
R41.70	C_2, 41 C_{83}, 41 C_{166}	C_2	C_2	C_2
R41.71	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_7, 4 C_{12}, 9 C_{14}, 6 C_{21}, 12 C_{28}, 18 C_{42}, 24 C_{84}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, C_7, 2 C_{12}, 3 C_{14}, C_{21}, 2 C_{28}, 3 C_{42}, 2 C_{84}, 3 D_2	2 C_2, 2 C_4, C_6, C_{14}, C_{42}, 3 D_2	3 C_2, C_3, C_6, C_7, C_{14}, C_{21}, C_{42}, 3 D_2
R41.72	C_2, C_4, 20 C_{41}, 20 C_{82}, 40 C_{164}	C_2, C_4, C_{41}, C_{82}	C_2, C_4, C_{82}	C_2, C_{41}
Genus 42				
R42.1	2 C_2, C_3, C_4, 2 C_5, C_6, 3 C_9, 2 C_{10}, 4 C_{15}, 4 C_{30}, 12 C_{45}, 3 D_2, D_3, D_4, 2 D_5, D_6, 3 D_9, 2 D_{10}, 4 D_{15}, 4 D_{30}, 12 D_{45}	2 C_2, C_3, C_4, C_5, C_6, C_9, C_{10}, C_{15}, C_{30}, C_{45}, 3 D_2, D_3, D_4, D_5, D_6, D_9, D_{10}, D_{15}, D_{30}, D_{45}	2 C_2, C_4, C_6, C_{10}, C_{30}, 3 D_2, D_3, D_4, D_5, D_6, D_9, D_{10}, D_{15}, D_{30}, D_{45}	2 C_2, C_3, C_5, C_{15}, 3 D_2, D_3, D_5, D_{15}
R42.2	3 C_2, C_4, 21 C_{43}, 42 C_{86}, 4 D_2, D_4, 21 D_{43}, 21 D_{86}	3 C_2, C_4, C_{43}, 2 C_{86}, 4 D_2, D_4, D_{43}, D_{86}	3 C_2, C_4, C_{86}, 4 D_2, D_4, D_{43}, D_{86}	3 C_2, C_{43}, 4 D_2, D_{43}
R42.3	2 C_2, C_3, 2 C_4, C_6, 3 C_7, C_8, 2 C_{12}, 3 C_{14}, 6 C_{21}, 2 C_{24}, 6 C_{28}, 6 C_{42}, 6 C_{56}, 12 C_{84}, 12 C_{168}, 2 D_2, D_3, D_4, D_6, 3 D_7, 2 D_{12}, 3 D_{14}, 6 D_{21}, 6 D_{28}, 6 D_{42}, 12 D_{84}	2 C_2, C_3, 2 C_4, C_6, C_7, C_{12}, C_{14}, C_{21}, C_{28}, C_{42}, C_{84}, 2 D_2, D_3, D_4, D_6, D_7, D_{12}, D_{14}, D_{21}, D_{28}, D_{42}, D_{84}	2 C_2, 2 C_4, C_6, C_{12}, C_{14}, C_{28}, C_{42}, C_{84}, 2 D_2, D_3, D_4, D_6, D_7, D_{12}, D_{14}, D_{21}, D_{28}, D_{42}, D_{84}	2 C_2, C_3, C_7, C_{21}, 2 D_2, D_3, D_7, D_{21}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R42.4	3 C_2, C_3, C_4, 2 C_6, 5 C_{11}, 5 C_{22}, 5 C_{33}, 10 C_{44}, 5 C_{66}, 4 D_2, D_3, D_4, D_6, 10 D_{11}, 10 D_{22}, 5 D_{33}, 10 D_{44}, 5 D_{66}	3 C_2, C_3, C_4, 2 C_6, C_{11}, C_{22}, C_{33}, C_{44}, C_{66}, 4 D_2, D_3, D_4, D_6, 2 D_{11}, 2 D_{22}, D_{33}, D_{44}, D_{66}	3 C_2, C_4, C_6, 4 D_2, D_3, D_4, D_6, 2 D_{11}, 2 D_{22}, D_{33}, D_{44}, D_{66}	3 C_2, C_3, C_{11}, C_{22}, 4 D_2, D_3, 2 D_{11}, 2 D_{22}
R42.5	2 C_2, C_3, C_4, 2 C_5, C_6, C_8, 2 C_{10}, 4 C_{15}, 2 C_{20}, 4 C_{30}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 4 D_{15}, 2 D_{20}, 4 D_{30}	2 C_2, C_3, C_4, C_5, C_6, C_{10}, C_{15}, C_{20}, C_{30}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{15}, D_{20}, D_{30}	2 C_2, C_4, C_6, C_{10}, C_{20}, C_{30}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{15}, D_{20}, D_{30}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5
R42.6	3 C_2, C_3, C_4, 2 C_5, 2 C_6, 2 C_8, 4 C_{10}, C_{12}, 4 C_{15}, 2 C_{20}, 8 C_{30}, 4 C_{60}, 4 D_2, D_3, 2 D_4, 2 D_5, D_6, 2 D_8, 2 D_{10}, D_{12}, 4 D_{15}, 2 D_{20}, 4 D_{30}, 4 D_{60}	3 C_2, C_3, C_4, C_5, 2 C_6, C_8, 2 C_{10}, C_{12}, C_{15}, C_{20}, 2 C_{30}, C_{60}, 4 D_2, D_3, 2 D_4, D_5, D_6, D_8, D_{10}, D_{12}, D_{15}, D_{20}, D_{30}, D_{60}	3 C_2, C_6, C_{10}, C_{30}, 4 D_2, D_3, 2 D_4, D_5, D_6, D_8, D_{10}, D_{12}, D_{15}, D_{20}, D_{30}, D_{60}	3 C_2, C_3, C_4, C_5, C_{15}, 4 D_2, D_3, 2 D_4, D_5, D_{15}
R42.7	C_2, C_3, 2 C_5, 3 C_7, 2 C_{10}, 2 C_{15}, 6 C_{21}, 6 C_{35}, 12 C_{105}, D_3, 3 D_7, 6 D_{21}	C_2, C_3, C_7, C_{21}, D_3, D_7, D_{21}	C_2, D_3, D_7, D_{21}	C_2, C_3, C_7, C_{21}, D_3, D_7, D_{21}
R42.8	3 C_2, C_4, 3 C_7, 2 C_8, 6 C_{14}, 4 C_{16}, 3 C_{28}, 6 C_{56}, 4 D_2, 2 D_4, 3 D_7, 4 D_8, 3 D_{14}, 4 D_{16}, 3 D_{28}, 6 D_{56}	3 C_2, C_4, C_7, C_8, 2 C_{14}, C_{16}, C_{28}, C_{56}, 4 D_2, 2 D_4, D_7, 2 D_8, D_{14}, D_{16}, D_{28}, D_{56}	3 C_2, C_{14}, 4 D_2, 2 D_4, D_7, 2 D_8, D_{14}, D_{16}, D_{28}, D_{56}	3 C_2, C_4, C_7, C_8, 4 D_2, 2 D_4, D_7, 2 D_8
R42.9	C_2, 3 C_7, 6 C_{13}, 6 C_{26}, 18 C_{91}, 3 D_7	C_2, C_7, D_7	C_2, D_7	C_2, C_7, D_7
R42.10	2 C_2, 2 C_4, C_8, 5 C_{11}, 10 C_{22}, 10 C_{44}, 10 C_{88}, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 D_2
R42.11	C_2, C_3, 2 C_5, C_6, 3 C_9, 2 C_{10}, 4 C_{15}, 4 C_{30}, 12 C_{45}, D_2	C_2, C_3, C_5, C_6, C_9, C_{10}, C_{15}, C_{30}, C_{45}, D_2	C_2, C_6, C_{10}, C_{30}, D_2	C_2, C_3, C_5, C_{15}, D_2
R42.12	C_2, C_3, 14 C_{29}, 14 C_{58}, 14 C_{87}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R42.13	C_2, 2 C_5, 2 C_{10}, 8 C_{17}, 8 C_{34}, 32 C_{85}, 32 C_{170}	C_2	C_2	C_2
R42.14	3 C_2, 21 C_{43}, 63 C_{86}, 3 D_2	3 C_2, C_{43}, 3 C_{86}, 3 D_2	3 C_2, C_{86}, 3 D_2	3 C_2, C_{43}, 3 D_2
R42.15	C_2, C_3, C_4, C_6, 3 C_7, 2 C_8, 2 C_{12}, 3 C_{14}, 6 C_{21}, 4 C_{24}, 6 C_{28}, 6 C_{42}, 12 C_{56}, 12 C_{84}, 24 C_{168}	C_2, C_3, C_4, C_6, C_7, C_{12}, C_{14}, C_{21}, C_{28}, C_{42}, C_{84}	C_2, C_4, C_6, C_{12}, C_{14}, C_{28}, C_{42}, C_{84}	C_2, C_3, C_7, C_{21}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 43				
R43.1	C_2, 3 C_3, C_6, 3 C_7, 6 C_9, 3 C_{21}, 3 D_2, D_3, 3 D_7, 3 D_9	C_2, 3 C_3, C_6, 3 C_7, 4 C_9, 3 C_{21}, 3 D_2, D_3, 3 D_7, 3 D_9	C_2, C_6, 3 D_2, D_3, 3 D_7, 3 D_9	C_2, 2 C_3, 3 C_7, 3 C_{21}, 3 D_2, D_3, 3 D_7
R43.2	2 C_2, 3 C_3, 2 C_4, 2 C_5, 3 C_6, 2 C_{10}, 2 C_{12}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 2 D_2, 3 D_3, D_4, 2 D_5, 3 D_6, 2 D_{10}, D_{12}, 2 D_{15}, 2 D_{30}	2 C_2, 3 C_3, 2 C_4, C_5, 3 C_6, C_{10}, 2 C_{12}, C_{15}, C_{30}, 2 D_2, 3 D_3, D_4, D_5, 3 D_6, D_{10}, D_{12}, D_{15}, D_{30}	2 C_2, 2 C_4, 3 C_6, C_{10}, 2 C_{12}, C_{30}, 2 D_2, 3 D_3, D_4, D_5, 3 D_6, D_{10}, D_{12}, D_{15}, D_{30}	2 C_2, 3 C_3, C_5, 2 D_2, 3 D_3, D_5
R43.3	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 3 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 6 D_8, D_{14}	**Tet**, 2 **Oct**, 2 C_2, 2 C_4, C_6, 3 C_8, 16 D_2, 2 D_3, 6 D_4, 6 D_6, D_7, 6 D_8, D_{14}	**Tet**, 5 C_2, C_3, 2 C_6, C_7, C_{14}, 16 D_2, 4 D_3, 4 D_6, 2 D_7, D_{14}
R43.4	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 3 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 6 D_8, D_{14}	**Tet**, 2 **Oct**, 2 C_2, 2 C_4, C_6, 3 C_8, 16 D_2, 2 D_3, 6 D_4, 6 D_6, D_7, 6 D_8, D_{14}	**Tet**, 5 C_2, C_3, 2 C_6, C_7, C_{14}, 16 D_2, 4 D_3, 4 D_6, 2 D_7, D_{14}
R43.5	5 C_2, 3 C_4, 2 C_8, 5 C_{11}, 15 C_{22}, 20 C_{44}, 20 C_{88}, 13 D_2, 3 D_4, 10 D_{11}, 20 D_{22}, 30 D_{44}	5 C_2, 3 C_4, C_8, C_{11}, 3 C_{22}, 3 C_{44}, C_{88}, 13 D_2, 3 D_4, 2 D_{11}, 4 D_{22}, 5 D_{44}	3 C_2, 2 C_4, C_{22}, 13 D_2, 3 D_4, D_{11}, 3 D_{22}, 3 D_{44}	5 C_2, C_4, C_{11}, C_{22}, C_{44}, 13 D_2, D_4, 2 D_{11}, 2 D_{22}, D_{44}
R43.6	3 C_2, 5 C_4, C_8, 5 C_{11}, 10 C_{22}, 10 C_{44}, 10 C_{88}, 4 D_2, 2 D_4, 5 D_{11}, 5 D_{22}, 5 D_{44}	3 C_2, 5 C_4, C_{11}, 2 C_{22}, C_{44}, 4 D_2, 2 D_4, D_{11}, D_{22}, D_{44}	3 C_2, 4 C_4, C_{22}, 4 D_2, 2 D_4, D_{11}, D_{22}, D_{44}	3 C_2, C_{11}, C_{22}, 4 D_2, D_{11}, D_{22}
R43.7	3 C_2, 2 C_4, 21 C_{43}, 21 C_{86}, 21 C_{172}, 3 D_2, 42 D_{43}, 21 D_{86}	3 C_2, 2 C_4, C_{43}, C_{86}, 3 D_2, 2 D_{43}, D_{86}	2 C_2, 2 C_4, C_{86}, 3 D_2, D_{43}, D_{86}	3 C_2, C_{43}, 3 D_2, D_{43}
R43.8	5 C_2, 3 C_3, 2 C_4, 11 C_6, 2 C_8, 2 C_{12}, 4 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	5 C_2, 3 C_3, 2 C_4, 11 C_6, C_8, C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	3 C_2, 2 C_4, 6 C_6, C_8, 13 D_2, D_3, 3 D_4, 4 D_6	5 C_2, C_3, C_6, 13 D_2, 2 D_3, D_6
R43.9	3 C_2, 3 C_3, 3 C_4, 8 C_6, 2 C_8, 3 C_{12}, 2 C_{24}, 4 D_2, D_3, 2 D_4, D_6	3 C_2, 3 C_3, 3 C_4, 8 C_6, C_8, 2 C_{12}, 4 D_2, D_3, 2 D_4, D_6	3 C_2, 3 C_4, 7 C_6, C_8, 4 D_2, D_3, 2 D_4, D_6	3 C_2, C_3, 4 D_2, D_3
R43.10	5 C_2, 3 C_3, 2 C_4, 6 C_6, 2 C_8, C_{12}, C_{24}, 13 D_2, 6 D_3, 3 D_4, 9 D_6, D_{12}	5 C_2, 3 C_3, 2 C_4, 6 C_6, C_8, 13 D_2, 6 D_3, 3 D_4, 9 D_6	3 C_2, 2 C_4, 3 C_6, C_8, 13 D_2, 4 D_3, 3 D_4, 9 D_6	5 C_2, 3 C_3, C_6, 13 D_2, 6 D_3, 2 D_6
R43.11	3 C_2, 3 C_3, 3 C_4, 4 C_6, 2 C_8, 2 C_{12}, C_{24}, 4 D_2, 5 D_3, 2 D_4, 4 D_6, 2 D_{12}	3 C_2, 3 C_3, 3 C_4, 4 C_6, C_8, C_{12}, 4 D_2, 5 D_3, 2 D_4, 4 D_6, D_{12}	3 C_2, 3 C_4, 3 C_6, C_8, 4 D_2, 5 D_3, 2 D_4, 4 D_6, D_{12}	3 C_2, 3 C_3, C_6, 4 D_2, 5 D_3, 2 D_6

	Mapping	Immersion		Embedding
	necessary and sufficient	necessary	sufficient	necessary
R43.12	C_2, 3 C_3, 2 C_5, C_6, 6 C_9, 10 C_{15}, 24 C_{45}, D_3, 2 D_5, 3 D_9, 4 D_{15}, 12 D_{45}	C_2, 3 C_3, C_5, C_6, 4 C_9, 4 C_{15}, 4 C_{45}, D_3, D_5, 3 D_9, D_{15}, 3 D_{45}	C_2, C_6, D_3, D_5, 3 D_9, D_{15}, 3 D_{45}	C_2, 2 C_3, C_5, C_{15}, D_3, D_5, D_{15}
R43.13	C_2, C_3, C_6, 21 C_{43}, 21 C_{129}, 21 D_{43}	C_2, C_3, C_6, C_{43}, D_{43}	C_2, C_6, D_{43}	C_2, C_{43}, D_{43}
R43.14	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	**Tet**, **Oct**, C_2, C_4, C_8, 3 D_2, D_3, 2 D_4, D_6, D_8	**Tet**, 2 C_2, C_3, C_6, C_7, 3 D_2, 2 D_3, D_6, D_7
R43.15	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, 2 C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, C_8, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	**Tet**, **Oct**, C_2, C_4, C_8, 3 D_2, D_3, 2 D_4, D_6, D_8	**Tet**, 2 C_2, C_3, C_6, C_7, 3 D_2, 2 D_3, D_6, D_7
R43.16	5 C_2, 2 C_3, 3 C_4, 8 C_6, 2 C_8, 2 C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	5 C_2, 2 C_3, 3 C_4, 8 C_6, C_8, C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	3 C_2, 3 C_4, 5 C_6, C_8, C_{12}, 13 D_2, D_3, 3 D_4, 4 D_6	5 C_2, 2 C_3, 2 C_6, 13 D_2, 2 D_3, D_6
R43.17	3 C_2, 2 C_3, 5 C_4, 6 C_6, C_8, 3 C_{12}, 4 D_2, D_3, 2 D_4, D_6	3 C_2, 2 C_3, 5 C_4, 6 C_6, 2 C_{12}, 4 D_2, D_3, 2 D_4, D_6	3 C_2, 5 C_4, 5 C_6, C_{12}, 4 D_2, D_3, 2 D_4, D_6	3 C_2, 2 C_3, C_6, 4 D_2, D_3
R43.18	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 2 C_{20}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, 2 C_4, C_6, C_{10}, C_{12}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5
R43.19	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, 2 C_{12}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 2 D_{20}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, C_{20}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, 2 C_4, C_6, C_{10}, C_{12}, C_{20}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, C_5, 2 D_2, D_5
R43.20	3 C_2, 3 C_3, 2 C_4, 3 C_6, 6 C_9, 2 C_{12}, 6 C_{18}, 3 C_{36}, 3 D_2, 6 D_3, 3 D_6, 12 D_9, 6 D_{18}	3 C_2, 3 C_3, 2 C_4, 3 C_6, 4 C_9, 4 C_{18}, 3 D_2, 6 D_3, 3 D_6, 8 D_9, 4 D_{18}	2 C_2, 2 C_4, 3 C_6, 4 C_{18}, 3 D_2, 3 D_3, 3 D_6, 4 D_9, 4 D_{18}	3 C_2, 3 C_3, C_9, 3 D_2, 4 D_3, D_9
R43.21	3 C_2, 3 C_3, 2 C_4, 5 C_6, 6 C_9, 7 C_{12}, 6 C_{18}, 9 C_{36}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, 3 C_3, 2 C_4, 5 C_6, 4 C_9, 5 C_{12}, 4 C_{18}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	2 C_2, 2 C_4, 4 C_6, 3 C_{12}, 4 C_{18}, 3 D_2, D_3, D_6, 3 D_9, 3 D_{18}	3 C_2, 2 C_3, 3 D_2, D_3
R43.22	4 C_2, C_3, 2 C_4, 4 C_6, 4 C_8, 2 C_{12}, 2 C_{16}, 5 C_{24}, 4 C_{48}, 9 D_2, 3 D_4, 4 D_8	4 C_2, C_3, 2 C_4, 4 C_6, 2 C_8, 9 D_2, 3 D_4, 3 D_8	2 C_2, 2 C_4, C_6, 2 C_8, 9 D_2, 3 D_4, 3 D_8	4 C_2, 9 D_2
R43.23	3 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 4 C_{12}, 4 C_{16}, 6 C_{24}, 8 C_{48}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, 2 C_{12}, 4 D_2, 2 D_4, 2 D_8	2 C_2, 3 C_4, C_6, 2 C_8, 4 D_2, 2 D_4, 2 D_8	3 C_2, 4 D_2
R43.24	C_2, C_3, C_6, 14 C_{29}, 14 C_{58}, 28 C_{87}, 28 C_{174}	C_2, C_3, C_6	C_2, C_6	C_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R43.25	2 C_2, 2 C_4, 2 C_8, 5 C_{11}, 10 C_{22}, 15 C_{44}, 20 C_{88}, 2 D_2	2 C_2, 2 C_4, C_{11}, 2 C_{22}, C_{44}, 2 D_2	2 C_2, C_4, C_{22}, 2 D_2	2 C_2, C_{11}, C_{22}, 2 D_2
R43.26	3 C_2, 2 C_4, 4 C_8, 5 C_{11}, 15 C_{22}, 20 C_{44}, 40 C_{88}, 3 D_2	3 C_2, 2 C_4, 2 C_8, C_{11}, 3 C_{22}, 3 C_{44}, 2 C_{88}, 3 D_2	2 C_2, C_4, C_{22}, 3 D_2	3 C_2, C_4, C_{11}, C_{22}, C_{44}, 3 D_2
R43.27	C_2, C_4, 21 C_{43}, 21 C_{86}, 42 C_{172}	C_2, C_4, C_{43}, C_{86}	C_2, C_4, C_{86}	C_2, C_{43}
Genus 44				
R44.1	3 C_2, C_3, C_4, 2 C_5, 2 C_6, 3 C_9, 4 C_{10}, 4 C_{15}, 6 C_{18}, 8 C_{30}, 12 C_{45}, 24 C_{90}, 4 D_2, D_3, D_4, 2 D_5, D_6, 3 D_9, 2 D_{10}, 4 D_{15}, 3 D_{18}, 4 D_{30}, 12 D_{45}, 12 D_{90}	3 C_2, C_3, C_4, C_5, 2 C_6, C_9, 2 C_{10}, C_{15}, 2 C_{18}, 2 C_{30}, C_{45}, 2 C_{90}, 4 D_2, D_3, D_4, D_5, D_6, D_9, D_{10}, D_{15}, D_{18}, D_{30}, D_{45}, D_{90}	3 C_2, C_4, C_6, C_{10}, C_{18}, C_{30}, C_{90}, 4 D_2, D_3, D_4, D_5, D_6, D_9, D_{10}, D_{15}, D_{18}, D_{30}, D_{45}, D_{90}	3 C_2, C_3, C_5, C_9, C_{15}, C_{45}, 4 D_2, D_3, D_5, D_9, D_{15}, D_{45}
R44.2	2 C_2, 2 C_4, 2 C_8, 5 C_{11}, 2 C_{16}, 5 C_{22}, 10 C_{44}, 20 C_{88}, 20 C_{176}, 2 D_2, D_4, 2 D_8, 5 D_{11}, 5 D_{22}, 10 D_{44}, 20 D_{88}	2 C_2, 2 C_4, C_8, C_{11}, C_{22}, C_{44}, C_{88}, 2 D_2, D_4, D_8, D_{11}, D_{22}, D_{44}, D_{88}	2 C_2, 2 C_4, C_8, C_{22}, C_{44}, C_{88}, 2 D_2, D_4, D_8, D_{11}, D_{22}, D_{44}, D_{88}	2 C_2, C_{11}, 2 D_2, D_{11}
R44.3	3 C_2, C_3, C_6, 11 C_{23}, 11 C_{46}, 11 C_{69}, 3 D_2, 2 D_3, D_6, 22 D_{23}, 11 D_{46}, 11 D_{69}	3 C_2, C_3, C_6, C_{23}, C_{46}, C_{69}, 3 D_2, 2 D_3, D_6, 2 D_{23}, D_{46}, D_{69}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_{23}, D_{46}, D_{69}	3 C_2, C_3, C_{23}, 3 D_2, 2 D_3, 2 D_{23}
R44.4	3 C_2, C_3, C_4, 3 C_6, 5 C_{11}, C_{12}, 5 C_{22}, 5 C_{33}, 10 C_{44}, 5 C_{66}, 10 C_{132}, 4 D_2, D_4, 10 D_{11}, 10 D_{22}, 10 D_{44}	3 C_2, C_3, C_4, 3 C_6, C_{11}, C_{22}, C_{44}, 4 D_2, D_4, 2 D_{11}, 2 D_{22}, D_{44}	3 C_2, C_6, 4 D_2, D_4, 2 D_{11}, 2 D_{22}, D_{44}	3 C_2, C_4, C_{11}, C_{22}, C_{44}, 4 D_2, D_4, 2 D_{11}, 2 D_{22}, D_{44}
R44.5	2 C_2, C_3, 2 C_4, 2 C_5, C_6, C_8, 2 C_{10}, 2 C_{12}, 4 C_{15}, 4 C_{20}, 4 C_{30}, 8 C_{60}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, D_{12}, 4 D_{15}, 2 D_{20}, 4 D_{30}, 4 D_{60}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, C_{15}, C_{20}, C_{30}, C_{60}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{12}, D_{15}, D_{20}, D_{30}, D_{60}	2 C_2, 2 C_4, C_6, C_{10}, C_{30}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{12}, D_{15}, D_{20}, D_{30}, D_{60}	2 C_2, C_3, C_5, C_{15}, 2 D_2, D_3, D_5, D_{15}
R44.6	3 C_2, C_3, C_4, 2 C_5, C_6, 2 C_8, 4 C_{10}, 2 C_{12}, 2 C_{15}, 2 C_{20}, 4 C_{24}, 2 C_{30}, 4 C_{60}, 4 D_2, 2 D_3, 2 D_4, 2 D_5, 2 D_6, 2 D_8, 2 D_{10}, 4 D_{12}, 2 D_{15}, 2 D_{20}, 4 D_{24}, 2 D_{30}, 4 D_{60}	3 C_2, C_3, C_4, C_5, C_6, C_8, 2 C_{10}, C_{12}, C_{15}, C_{20}, C_{24}, C_{30}, C_{60}, 4 D_2, 2 D_3, 2 D_4, D_5, 2 D_6, D_8, D_{10}, 2 D_{12}, D_{15}, D_{20}, D_{24}, D_{30}, D_{60}	3 C_2, C_{10}, 4 D_2, 2 D_3, 2 D_4, D_5, 2 D_6, D_8, D_{10}, 2 D_{12}, D_{15}, D_{20}, D_{24}, D_{30}, D_{60}	3 C_2, C_3, C_4, C_5, C_6, C_{12}, 4 D_2, 2 D_3, 2 D_4, D_5, 2 D_6, 2 D_{12}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R44.7	3 C_2, 2 C_5, 6 C_{10}, 5 C_{11}, 5 C_{22}, 10 C_{55}, 10 C_{110}, 3 D_2, 10 D_{11}, 5 D_{22}	3 C_2, C_5, 3 C_{10}, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	3 C_2, C_{10}, 3 D_2, 2 D_{11}, D_{22}	3 C_2, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}
R44.8	C_2, C_3, C_6, 3 C_9, 5 C_{11}, 3 C_{18}, 5 C_{33}, 15 C_{99}, 5 D_{11}	C_2, C_3, C_6, C_9, C_{11}, C_{18}, D_{11}	C_2, C_6, C_{18}, D_{11}	C_2, C_{11}, D_{11}
R44.9	3 C_2, C_4, 11 C_{23}, 33 C_{46}, 11 C_{92}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R44.10	C_2, 44 C_{89}, 44 C_{178}	C_2	C_2	C_2
R44.11	3 C_2, C_3, 2 C_5, 3 C_6, 3 C_9, 6 C_{10}, 4 C_{15}, 9 C_{18}, 12 C_{30}, 12 C_{45}, 36 C_{90}, 3 D_2	3 C_2, C_3, C_5, 3 C_6, C_9, 3 C_{10}, C_{15}, 3 C_{18}, 3 C_{30}, C_{45}, 3 C_{90}, 3 D_2	3 C_2, C_6, C_{10}, C_{18}, C_{30}, C_{90}, 3 D_2	3 C_2, C_3, C_5, C_9, C_{15}, C_{45}, 3 D_2
R44.12	C_2, C_4, 2 C_8, 5 C_{11}, 4 C_{16}, 5 C_{22}, 10 C_{44}, 20 C_{88}, 40 C_{176}	C_2, C_4, C_8, C_{11}, C_{22}, C_{44}, C_{88}	C_2, C_4, C_8, C_{22}, C_{44}, C_{88}	C_2, C_{11}
Genus 45				
R45.1	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_6, C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, D_{10}, D_{11}, 2 D_{12}	**Oct**, C_2, C_{10}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_5, C_{11}, 3 D_2, 2 D_3, D_4, D_5, D_{11}
R45.2	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_6, C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, D_{10}, D_{11}, 2 D_{12}	**Oct**, C_2, C_{10}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_5, C_{11}, 3 D_2, 2 D_3, D_4, D_5, D_{11}
R45.3	C_2, C_3, 15 C_{11}, 5 C_{22}, D_3, 5 D_{11}	C_2, C_3, 11 C_{11}, C_{22}, D_3, 5 D_{11}	C_2, C_{22}, D_3, 5 D_{11}	C_2, C_3, 10 C_{11}, D_3, 5 D_{11}
R45.4	2 C_2, C_3, 2 C_4, C_6, C_7, 3 C_8, C_{12}, C_{14}, 2 C_{28}, 2 D_2, 2 D_3, D_4, D_6, 2 D_8	2 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, 2 D_2, 2 D_3, D_4, D_6, 2 D_8	2 C_2, C_4, C_6, 3 C_8, 2 D_2, 2 D_3, D_4, D_6, 2 D_8	2 C_2, C_3, 2 D_2, 2 D_3
R45.5	4 C_2, C_3, 3 C_4, 2 C_5, 3 C_6, 4 C_{15}, 21 D_2, D_3, 6 D_4, 2 D_5, 3 D_6, 4 D_{15}	4 C_2, C_3, 3 C_4, C_5, 3 C_6, C_{15}, 21 D_2, D_3, 6 D_4, D_5, 3 D_6, D_{15}	2 C_2, C_4, C_6, 17 D_2, D_3, 6 D_4, D_5, 3 D_6, D_{15}	4 C_2, C_3, 2 C_4, C_5, 21 D_2, D_3, 4 D_4, D_5
R45.6	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{16}, 4 C_{24}, 4 C_{48}, 12 D_2, D_3, 4 D_4, D_6, 4 D_8, 2 D_{12}, 4 D_{24}	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 3 C_8, C_{12}, C_{16}, C_{24}, 12 D_2, D_3, 4 D_4, D_6, 3 D_8, D_{12}, D_{24}	**Oct**, 3 C_2, 3 C_4, C_6, 11 D_2, D_3, 4 D_4, D_6, 3 D_8, D_{12}, D_{24}	**Tet**, 4 C_2, C_3, 2 C_4, C_8, 12 D_2, D_3, 3 D_4, D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R45.7	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_6, 4 C_8, 2 C_{12}, 8 C_{16}, 4 C_{24}, 8 C_{48}, 18 D_2, 2 D_3, 8 D_4, 2 D_6, 8 D_8, 4 D_{12}, 8 D_{16}, 8 D_{24}, 8 D_{48}	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_6, 3 C_8, C_{12}, 3 C_{16}, C_{24}, C_{48}, 18 D_2, 2 D_3, 8 D_4, 2 D_6, 6 D_8, 2 D_{12}, 3 D_{16}, 2 D_{24}, D_{48}	**Tet**, 2 **Oct**, 3 C_2, 3 C_4, C_6, 16 D_2, D_3, 7 D_4, 2 D_6, 3 D_8, D_{12}, 3 D_{16}, D_{24}, D_{48}	**Tet**, 5 C_2, C_3, C_4, C_8, C_{16}, 18 D_2, D_3, 2 D_4, 2 D_8, D_{16}
R45.8	6 C_2, C_3, 6 C_4, 5 C_6, 4 C_8, 6 C_{12}, 4 C_{16}, 8 C_{24}, 8 C_{48}, 19 D_2, D_3, 4 D_4, 3 D_6, 2 D_8, 4 D_{12}, 4 D_{24}	6 C_2, C_3, 6 C_4, 5 C_6, 3 C_8, 5 C_{12}, C_{16}, 3 C_{24}, C_{48}, 19 D_2, D_3, 4 D_4, 3 D_6, 2 D_8, 3 D_{12}, 2 D_{24}	3 C_2, 4 C_4, C_6, 17 D_2, D_3, 4 D_4, 3 D_6, 2 D_8, 3 D_{12}, 2 D_{24}	6 C_2, C_3, 2 C_4, C_6, C_{12}, 19 D_2, D_3, 3 D_4, D_6, D_{12}
R45.9	4 C_2, C_3, 6 C_4, 3 C_6, 2 C_8, 4 C_{12}, 2 C_{16}, 4 C_{24}, 4 C_{48}, 12 D_2, D_3, 4 D_4, 3 D_6, 2 D_8, 4 D_{12}, 4 D_{24}	4 C_2, C_3, 6 C_4, 3 C_6, C_8, 3 C_{12}, C_{24}, 12 D_2, D_3, 4 D_4, 3 D_6, 2 D_8, 3 D_{12}, 2 D_{24}	3 C_2, 4 C_4, C_6, 12 D_2, D_3, 4 D_4, 3 D_6, 2 D_8, 3 D_{12}, 2 D_{24}	4 C_2, C_3, 2 C_4, C_6, C_{12}, 12 D_2, D_3, 3 D_4, D_6, D_{12}
R45.10	5 C_2, 2 C_4, 11 C_{23}, 33 C_{46}, 22 C_{92}, 13 D_2, 22 D_{23}, 44 D_{46}	5 C_2, 2 C_4, C_{23}, 3 C_{46}, C_{92}, 13 D_2, 2 D_{23}, 4 D_{46}	3 C_2, 2 C_4, C_{46}, 11 D_2, D_{23}, 3 D_{46}	5 C_2, C_{23}, C_{46}, 13 D_2, 2 D_{23}, D_{46}
R45.11	3 C_2, C_3, 2 C_4, 2 C_5, C_6, 3 C_9, 2 C_{10}, C_{12}, 4 C_{15}, 3 C_{18}, 2 C_{20}, 4 C_{30}, 3 C_{36}, 12 C_{45}, 4 C_{60}, 12 C_{90}, 12 C_{180}, 3 D_2, 2 D_3, 4 D_5, D_6, 6 D_9, 2 D_{10}, 8 D_{15}, 3 D_{18}, 4 D_{30}, 24 D_{45}, 12 D_{90}	3 C_2, C_3, 2 C_4, C_5, C_6, C_9, C_{10}, C_{15}, C_{18}, C_{30}, C_{45}, C_{90}, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_9, D_{10}, 2 D_{15}, D_{18}, D_{30}, 2 D_{45}, D_{90}	2 C_2, 2 C_4, C_6, C_{10}, C_{18}, C_{30}, C_{90}, 3 D_2, D_3, D_5, D_6, D_9, D_{10}, D_{15}, D_{18}, D_{30}, D_{45}, D_{90}	3 C_2, C_3, C_5, C_9, C_{15}, C_{45}, 3 D_2, D_3, D_5, D_9, D_{15}, D_{45}
R45.12	**Tet**, 2 **Ico**, C_2, C_3, 2 C_5, C_6, C_{11}, D_2, D_3, 2 D_5, D_6	**Tet**, **Ico**, C_2, C_3, C_5, C_6, C_{11}, D_2, D_3, D_5, D_6	**Tet**, **Ico**, C_2, C_6, D_2, D_3, D_5, D_6	**Tet**, C_2, C_3, C_5, C_{11}, D_2, D_3, D_5
R45.13	**Tet**, 4 **Ico**, C_2, C_3, 2 C_5, C_6, C_{11}, D_2, 2 D_3, 2 D_5, D_6	**Tet**, 2 **Ico**, C_2, C_3, C_5, C_6, C_{11}, D_2, 2 D_3, D_5, D_6	**Tet**, 2 **Ico**, C_2, C_6, D_2, 2 D_3, D_5, D_6	**Tet**, C_2, C_3, C_5, C_{11}, D_2, 2 D_3, D_5
R45.14	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, C_7, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 2 C_2, 2 C_4, C_6, 6 D_2, D_3, 3 D_4, D_6	**Tet**, 3 C_2, C_3, 6 D_2, D_3
R45.15	3 C_2, 3 C_4, 2 C_5, 2 C_8, 2 C_{10}, 8 D_2, 4 D_4, 4 D_5, 2 D_8, 2 D_{10}	3 C_2, 3 C_4, C_5, C_8, C_{10}, 8 D_2, 4 D_4, 2 D_5, D_8, D_{10}	2 C_2, 2 C_4, C_8, C_{10}, 8 D_2, 4 D_4, 2 D_5, D_8, D_{10}	3 C_2, C_4, C_5, 8 D_2, 2 D_5
R45.16	3 C_2, 3 C_4, 2 C_5, 2 C_8, 2 C_{10}, 8 D_2, 4 D_4, 2 D_5, 2 D_8, 2 D_{10}	3 C_2, 3 C_4, C_5, C_8, C_{10}, 8 D_2, 4 D_4, D_5, D_8, D_{10}	2 C_2, 2 C_4, C_8, C_{10}, 8 D_2, 4 D_4, D_5, D_8, D_{10}	3 C_2, C_4, C_5, 8 D_2, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R45.17	5 C_2, 5 C_4, 8 C_8, 12 C_{16}, 8 C_{32}, 15 D_2, 7 D_4, 10 D_8, 16 D_{16}	5 C_2, 5 C_4, 6 C_8, 7 C_{16}, C_{32}, 15 D_2, 7 D_4, 8 D_8, 11 D_{16}	3 C_2, 2 C_4, 2 C_8, 13 D_2, 6 D_4, 5 D_8, 7 D_{16}	5 C_2, 3 C_4, C_8, C_{16}, 15 D_2, 4 D_4, 2 D_8, D_{16}
R45.18	5 C_2, 6 C_4, 8 C_8, 12 C_{16}, 16 C_{32}, 13 D_2, 3 D_4, 6 D_8, 12 D_{16}	5 C_2, 6 C_4, 6 C_8, 9 C_{16}, 3 C_{32}, 13 D_2, 3 D_4, 5 D_8, 12 D_{16}	3 C_2, 3 C_4, 2 C_8, 13 D_2, 2 D_4, 3 D_8, 8 D_{16}	5 C_2, 2 C_4, C_8, 13 D_2, 2 D_4, D_8
R45.19	4 C_2, 4 C_4, 6 C_8, 4 C_{16}, 4 C_{32}, 12 D_2, 3 D_4, 4 D_8, 4 D_{16}	4 C_2, 4 C_4, 4 C_8, C_{16}, 12 D_2, 3 D_4, 3 D_8, 2 D_{16}	2 C_2, 3 C_4, 4 C_8, C_{16}, 10 D_2, 3 D_4, 3 D_8, 2 D_{16}	4 C_2, C_4, 12 D_2, D_4
R45.20	5 C_2, 4 C_4, 7 C_8, 8 C_{16}, 8 C_{32}, 15 D_2, 3 D_4, 4 D_8, 4 D_{16}	5 C_2, 4 C_4, 5 C_8, 3 C_{16}, C_{32}, 15 D_2, 3 D_4, 3 D_8, 2 D_{16}	2 C_2, 3 C_4, 5 C_8, 3 C_{16}, C_{32}, 11 D_2, 3 D_4, 3 D_8, 2 D_{16}	5 C_2, C_4, 15 D_2, D_4
R45.21	5 C_2, 5 C_4, 7 C_8, 8 C_{16}, 8 C_{32}, 13 D_2, 3 D_4, 6 D_8, 6 D_{16}	5 C_2, 5 C_4, 5 C_8, 5 C_{16}, C_{32}, 13 D_2, 3 D_4, 5 D_8, 6 D_{16}	3 C_2, 2 C_4, 2 C_8, 13 D_2, 2 D_4, 3 D_8, 4 D_{16}	5 C_2, 3 C_4, C_8, 13 D_2, 2 D_4, D_8
R45.22	4 C_2, 5 C_4, 7 C_8, 8 C_{16}, 8 C_{32}, 9 D_2, 2 D_4, 4 D_8, 4 D_{16}	4 C_2, 5 C_4, 5 C_8, 5 C_{16}, 9 D_2, 2 D_4, 3 D_8, 4 D_{16}	3 C_2, 3 C_4, 2 C_8, 9 D_2, 2 D_4, 3 D_8, 4 D_{16}	4 C_2, 2 C_4, C_8, 9 D_2, D_4, D_8
R45.23	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_8, 2 C_{10}, C_{12}, 4 C_{15}, 2 C_{20}, 2 C_{24}, 4 C_{30}, 4 C_{40}, 4 C_{60}, 8 C_{120}, 2 D_2, D_3, 2 D_5, D_6, 2 D_{10}, 4 D_{15}, 4 D_{30}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{15}, C_{30}, 2 D_2, D_3, D_5, D_6, D_{10}, D_{15}, D_{30}	2 C_2, C_4, C_6, C_{10}, C_{30}, 2 D_2, D_3, D_5, D_6, D_{10}, D_{15}, D_{30}	2 C_2, C_3, C_5, C_{15}, 2 D_2, D_3, D_5, D_{15}
R45.24	3 C_2, C_3, 2 C_4, 2 C_5, C_6, 4 C_8, 2 C_{10}, C_{12}, 4 C_{15}, 2 C_{20}, 2 C_{24}, 4 C_{30}, 4 C_{40}, 4 C_{60}, 8 C_{120}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 8 D_{15}, 4 D_{30}	3 C_2, C_3, 2 C_4, C_5, C_6, 2 C_8, C_{10}, C_{15}, C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	2 C_2, C_4, C_6, C_{10}, C_{30}, 3 D_2, D_3, D_5, D_6, D_{10}, D_{15}, D_{30}	3 C_2, C_3, C_5, C_{15}, 3 D_2, D_3, D_5, D_{15}
R45.25	C_2, 35 C_{11}, 5 C_{22}, 5 D_{11}	C_2, 27 C_{11}, C_{22}, 5 D_{11}	C_2, C_{22}, 5 D_{11}	C_2, 25 C_{11}, 5 D_{11}
R45.26	**Tet**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 2 C_{20}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, 7 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 2 C_2, C_4, C_6, C_{10}, 7 D_2, D_3, D_5, D_6, D_{10}	**Tet**, 3 C_2, C_3, C_5, 7 D_2, D_3, D_5
R45.27	**Tet**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 2 C_{20}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, 7 D_2, 2 D_3, 2 D_5, D_6, D_{10}	2 C_2, C_4, C_6, C_{10}, 6 D_2, D_3, D_5, D_6, D_{10}	**Tet**, 3 C_2, C_3, C_5, 7 D_2, D_3, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R45.28	5 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 6 C_{10}, 2 C_{12}, 2 C_{15}, 4 C_{20}, 6 C_{30}, 13 D_2, 2 D_3, 4 D_5, 4 D_6, 8 D_{10}, 4 D_{15}, 8 D_{30}	5 C_2, C_3, 2 C_4, C_5, 3 C_6, 3 C_{10}, C_{12}, C_{15}, C_{20}, 3 C_{30}, 13 D_2, 2 D_3, 2 D_5, 4 D_6, 4 D_{10}, 2 D_{15}, 4 D_{30}	3 C_2, 2 C_4, C_6, C_{10}, 11 D_2, D_3, D_5, 3 D_6, 3 D_{10}, D_{15}, 3 D_{30}	5 C_2, C_3, C_5, C_6, C_{10}, 13 D_2, 2 D_3, 2 D_5, D_6, D_{10}
R45.29	C_2, C_3, 2 C_5, 3 C_7, 3 C_{14}, 4 C_{15}, 3 C_{21}, 6 C_{35}, 12 C_{105}, D_3, 2 D_5, 4 D_{15}	C_2, C_3, C_5, C_{15}, D_3, D_5, D_{15}	C_2, D_3, D_5, D_{15}	C_2, C_3, C_5, C_{15}, D_3, D_5, D_{15}
R45.30	3 C_2, C_3, 2 C_5, 3 C_6, 4 C_{15}, 15 D_2	3 C_2, C_3, C_5, 3 C_6, C_{15}, 15 D_2	C_2, C_6, 11 D_2	3 C_2, C_3, C_5, 15 D_2
R45.31	C_2, C_3, 3 C_9, 5 C_{11}, 5 C_{22}, 5 C_{33}, 15 C_{99}, D_3, 3 D_9	C_2, C_3, C_9, C_{11}, C_{22}, D_3, D_9	C_2, C_{22}, D_3, D_9	C_2, C_3, C_9, D_3, D_9
R45.32	2 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, 6 C_{16}, 2 C_{24}, 8 C_{32}, 4 C_{48}, 8 C_{96}, 2 D_2, D_3, D_6	2 C_2, C_3, 2 C_4, C_6, C_8, 2 D_2, D_3, D_6	2 C_2, C_4, C_6, 2 D_2, D_3, D_6	2 C_2, C_3, 2 D_2, D_3
R45.33	3 C_2, C_3, 2 C_4, C_6, 4 C_8, C_{12}, 8 C_{16}, 2 C_{24}, 16 C_{32}, 4 C_{48}, 8 C_{96}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 2 C_8, 3 D_2, 2 D_3, D_6	2 C_2, C_4, C_6, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, D_3
R45.34	C_2, 2 C_5, 9 C_{19}, 9 C_{38}, 18 C_{95}, 2 D_5	C_2, C_5, D_5	C_2, D_5	C_2, C_5, D_5
R45.35	2 C_2, C_3, 2 C_4, C_6, 3 C_8, 2 C_{12}, 6 C_{16}, 4 C_{24}, 8 C_{48}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, C_6, C_8, C_{12}, 2 D_2, D_4	2 C_2, C_4, C_6, 2 D_2, D_4	2 C_2, C_3, C_4, 2 D_2
R45.36	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 4 C_8, 2 C_{12}, 8 C_{16}, 4 C_{24}, 8 C_{48}, 6 D_2	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, 2 C_{16}, C_{24}, 6 D_2	2 C_2, C_4, C_6, 5 D_2	**Tet**, 3 C_2, C_3, C_4, C_8, 6 D_2
R45.37	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 4 C_8, 2 C_{12}, 8 C_{16}, 4 C_{24}, 8 C_{48}, 6 D_2	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, 3 C_{16}, C_{24}, C_{48}, 6 D_2	**Tet**, 2 C_2, C_4, C_6, 6 D_2	**Tet**, 3 C_2, C_3, C_4, C_8, C_{16}, 6 D_2
R45.38	5 C_2, C_3, 3 C_4, 5 C_6, 6 C_8, 6 C_{12}, 8 C_{16}, 12 C_{24}, 16 C_{48}, 13 D_2	5 C_2, C_3, 3 C_4, 5 C_6, 4 C_8, 5 C_{12}, 2 C_{16}, 4 C_{24}, 2 C_{48}, 13 D_2	2 C_2, 2 C_4, C_6, 11 D_2	5 C_2, C_3, C_4, C_6, C_{12}, 13 D_2
R45.39	3 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 4 C_{12}, 6 C_{16}, 8 C_{24}, 12 C_{48}, 4 D_2, 2 D_4	3 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, 2 C_{12}, 4 D_2, 2 D_4	2 C_2, 2 C_4, C_6, 4 D_2, 2 D_4	3 C_2, C_3, C_6, 4 D_2
R45.40	3 C_2, C_3, 3 C_4, 3 C_6, 3 C_8, 4 C_{12}, 4 C_{16}, 6 C_{24}, 8 C_{48}, 6 D_2	3 C_2, C_3, 3 C_4, 3 C_6, C_8, 3 C_{12}, C_{24}, 6 D_2	2 C_2, 2 C_4, C_6, 6 D_2	3 C_2, C_3, C_4, C_6, C_{12}, 6 D_2
R45.41	C_2, C_3, 15 C_{31}, 15 C_{62}, 15 C_{93}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R45.42	C_2, 3 C_7, 6 C_{13}, 3 C_{14}, 6 C_{26}, 36 C_{91}, 36 C_{182}	C_2	C_2	C_2
R45.43	3 C_2, 2 C_4, 11 C_{23}, 33 C_{46}, 44 C_{92}, 3 D_2	3 C_2, 2 C_4, C_{23}, 3 C_{46}, 2 C_{92}, 3 D_2	2 C_2, 2 C_4, C_{46}, 3 D_2	3 C_2, C_{23}, C_{46}, 3 D_2
R45.44	C_2, C_3, C_4, 2 C_5, C_6, 3 C_9, 2 C_{10}, 2 C_{12}, 4 C_{15}, 3 C_{18}, 4 C_{20}, 4 C_{30}, 6 C_{36}, 12 C_{45}, 8 C_{60}, 12 C_{90}, 24 C_{180}	C_2, C_3, C_4, C_5, C_6, C_9, C_{10}, C_{15}, C_{18}, C_{30}, C_{45}, C_{90}	C_2, C_4, C_6, C_{10}, C_{18}, C_{30}, C_{90}	C_2, C_3, C_5, C_9, C_{15}, C_{45}
Genus 46				
R46.1	2 **Tet**, **Oct**, 2 **Ico**, 2 C_2, 3 C_3, C_4, 2 C_5, C_6, 2 C_8, 2 C_{10}, C_{12}, 2 C_{15}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, D_6, 2 D_8, 2 D_{10}, D_{12}, 2 D_{15}	2 **Tet**, **Oct**, 2 **Ico**, 2 C_2, 3 C_3, C_4, 2 C_5, C_6, C_8, 2 C_{10}, C_{12}, 2 C_{15}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, D_6, D_8, 2 D_{10}, D_{12}, 2 D_{15}	2 **Tet**, **Oct**, 2 **Ico**, 2 C_2, C_6, 2 C_{10}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, D_6, D_8, 2 D_{10}, D_{12}, 2 D_{15}	2 C_2, 2 C_3, C_4, 2 C_5, 2 C_{15}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, 2 D_{15}
R46.2	2 **Tet**, **Oct**, 2 **Ico**, 2 C_2, 2 C_3, C_4, 2 C_5, C_6, 2 C_8, 2 C_{10}, C_{12}, 2 C_{15}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, D_6, 2 D_8, 2 D_{10}, D_{12}, 2 D_{15}	2 **Tet**, **Oct**, 2 **Ico**, 2 C_2, 2 C_3, C_4, 2 C_5, C_6, C_8, 2 C_{10}, C_{12}, 2 C_{15}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, D_6, D_8, 2 D_{10}, D_{12}, 2 D_{15}	2 **Tet**, **Oct**, 2 **Ico**, 2 C_2, C_6, 2 C_{10}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, D_6, D_8, 2 D_{10}, D_{12}, 2 D_{15}	2 **Tet**, **Oct**, 2 C_2, 2 C_3, C_4, 2 C_5, 2 C_{15}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, 2 D_{15}
R46.3	2 **Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 4 C_6, 3 C_9, C_{12}, 9 C_{18}, 3 C_{36}, 3 D_2, 2 D_3, D_4, D_6	2 **Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 4 C_6, C_9, 3 C_{18}, 3 D_2, 2 D_3, D_4, D_6	2 **Tet**, **Oct**, 2 C_2, C_4, 3 C_6, C_{18}, 3 D_2, 2 D_3, D_4, D_6	2 C_2, 2 C_3, 3 D_2, 2 D_3
R46.4	**Tet**, **Oct**, **Ico**, C_2, C_3, 2 C_4, C_5, C_8, D_2, D_3, D_4, D_5	**Tet**, **Oct**, **Ico**, C_2, C_3, 2 C_4, C_5, D_2, D_3, D_4, D_5	**Tet**, **Oct**, **Ico**, C_2, 2 C_4, D_2, D_3, D_4, D_5	C_2, C_3, C_5, D_2, D_3, D_5
R46.5	**Tet**, **Oct**, **Ico**, C_2, C_3, 2 C_4, C_5, C_8, D_2, D_3, D_4, D_5	**Tet**, **Oct**, **Ico**, C_2, C_3, 2 C_4, C_5, D_2, D_3, D_4, D_5	**Tet**, **Oct**, **Ico**, C_2, 2 C_4, D_2, D_3, D_4, D_5	C_2, C_3, C_5, D_2, D_3, D_5
R46.6	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, 2 C_8, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, 2 D_8, 2 D_{10}	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_8, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, D_8, 2 D_{10}	**Tet**, **Oct**, 2 **Ico**, 2 C_2, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, D_8, 2 D_{10}	2 C_2, C_3, C_4, 2 C_5, 3 D_2, D_3, 2 D_4, 4 D_5
R46.7	**Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 4 C_6, C_9, 3 D_2, 4 D_3, D_4, 2 D_6	**Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 4 C_6, 3 D_2, 4 D_3, D_4, 2 D_6	**Tet**, **Oct**, 2 C_2, C_4, 4 C_6, 3 D_2, 4 D_3, D_4, 2 D_6	2 C_2, 3 C_3, 3 D_2, 4 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R46.8	**Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 2 C_6, 2 C_9, 2 C_{12}, 3 D_2, 6 D_3, D_4, 3 D_6, 2 D_9, 2 D_{12}	**Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 2 C_6, C_9, 2 C_{12}, 3 D_2, 6 D_3, D_4, 3 D_6, D_9, 2 D_{12}	**Tet**, **Oct**, 2 C_2, 2 C_6, 3 D_2, 6 D_3, D_4, 3 D_6, D_9, 2 D_{12}	2 C_2, 4 C_3, C_4, 3 D_2, 6 D_3, D_4
R46.9	3 C_2, C_4, 23 C_{47}, 46 C_{94}, 4 D_2, D_4, 23 D_{47}, 23 D_{94}	3 C_2, C_4, C_{47}, 2 C_{94}, 4 D_2, D_4, D_{47}, D_{94}	3 C_2, C_4, C_{94}, 4 D_2, D_4, D_{47}, D_{94}	3 C_2, C_{47}, 4 D_2, D_{47}
R46.10	2 C_2, 2 C_4, C_8, 11 C_{23}, 11 C_{46}, 22 C_{92}, 22 C_{184}, 2 D_2, D_4, 11 D_{23}, 11 D_{46}, 22 D_{92}	2 C_2, 2 C_4, C_{23}, C_{46}, C_{92}, 2 D_2, D_4, D_{23}, D_{46}, D_{92}	2 C_2, 2 C_4, C_{46}, C_{92}, 2 D_2, D_4, D_{23}, D_{46}, D_{92}	2 C_2, C_{23}, 2 D_2, D_{23}
R46.11	3 C_2, 3 C_3, C_4, 5 C_6, 2 C_8, 2 C_{12}, 4 C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_8, 4 D_{12}, 4 D_{24}	3 C_2, 3 C_3, C_4, 5 C_6, C_8, 2 C_{12}, 2 C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 4 D_{12}, 2 D_{24}	3 C_2, C_4, 4 C_6, C_8, 2 C_{12}, 2 C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 4 D_{12}, 2 D_{24}	3 C_2, 3 C_3, 4 D_2, 4 D_3
R46.12	3 C_2, 5 C_3, C_4, 10 C_6, 2 C_8, C_{12}, 4 D_2, 5 D_3, 2 D_4, 4 D_6, 2 D_8, D_{12}	3 C_2, 5 C_3, C_4, 10 C_6, C_8, C_{12}, 4 D_2, 5 D_3, 2 D_4, 4 D_6, D_8, D_{12}	3 C_2, C_4, 9 C_6, C_8, C_{12}, 4 D_2, 5 D_3, 2 D_4, 4 D_6, D_8, D_{12}	3 C_2, 4 C_3, 4 D_2, 5 D_3
R46.13	2 **Tet**, **Oct**, **Ico**, 2 C_2, 3 C_3, C_4, C_5, 4 C_6, C_{12}, C_{15}, 3 D_2, 2 D_3, D_4, D_5, D_6	2 **Tet**, **Oct**, **Ico**, 2 C_2, 3 C_3, C_4, C_5, 4 C_6, C_{15}, 3 D_2, 2 D_3, D_4, D_5, D_6	2 **Tet**, **Oct**, **Ico**, 2 C_2, C_4, 4 C_6, 3 D_2, 2 D_3, D_4, D_5, D_6	2 C_2, C_3, C_5, 3 D_2, 2 D_3, D_5
R46.14	3 C_2, 5 C_3, 3 C_6, 6 C_9, 3 C_{18}, 3 D_2, 8 D_3, 3 D_6, 9 D_9, 3 D_{18}	3 C_2, 5 C_3, 3 C_6, 4 C_9, C_{18}, 3 D_2, 8 D_3, 3 D_6, 5 D_9, D_{18}	3 C_2, C_6, 3 D_2, 8 D_3, 3 D_6, 5 D_9, D_{18}	3 C_2, 5 C_3, 3 D_2, 8 D_3
R46.15	3 C_2, 7 C_3, 7 C_6, 12 C_9, 6 C_{18}, 3 D_2, 5 D_3, 2 D_6, 9 D_9, 3 D_{18}	3 C_2, 7 C_3, 7 C_6, 10 C_9, 4 C_{18}, 3 D_2, 5 D_3, 2 D_6, 9 D_9, 3 D_{18}	3 C_2, 6 C_6, 3 D_2, 5 D_3, 2 D_6, 9 D_9, 3 D_{18}	3 C_2, 6 C_3, 3 D_2, 5 D_3
R46.16	3 C_2, 3 C_3, 3 C_6, 4 C_9, 3 C_{18}, 3 D_2, 6 D_3, 3 D_6, 7 D_9, 3 D_{18}	3 C_2, 3 C_3, 3 C_6, 2 C_9, C_{18}, 3 D_2, 6 D_3, 3 D_6, 3 D_9, D_{18}	3 C_2, C_6, 3 D_2, 6 D_3, 3 D_6, 3 D_9, D_{18}	3 C_2, 3 C_3, 3 D_2, 6 D_3
R46.17	3 C_2, 4 C_3, 3 C_6, 3 C_9, 3 C_{18}, 3 D_2, 7 D_3, 3 D_6, 6 D_9, 3 D_{18}	3 C_2, 4 C_3, 3 C_6, C_9, C_{18}, 3 D_2, 7 D_3, 3 D_6, 2 D_9, D_{18}	3 C_2, C_6, 3 D_2, 7 D_3, 3 D_6, 2 D_9, D_{18}	3 C_2, 4 C_3, 3 D_2, 7 D_3
R46.18	3 C_2, 4 C_3, 6 C_6, 3 C_9, 9 C_{18}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 4 C_3, 6 C_6, C_9, 3 C_{18}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 5 C_6, 2 C_{18}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 2 C_3, 3 D_2, 4 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R46.19	3 C_2, 5 C_3, 7 C_6, 6 C_9, 6 C_{18}, 3 D_2, 6 D_3, 3 D_6, 6 D_9, 3 D_{18}	3 C_2, 5 C_3, 7 C_6, 4 C_9, 4 C_{18}, 3 D_2, 6 D_3, 3 D_6, 6 D_9, 3 D_{18}	3 C_2, 5 C_6, 3 D_2, 6 D_3, 3 D_6, 6 D_9, 3 D_{18}	3 C_2, 4 C_3, C_6, 3 D_2, 6 D_3, D_6
R46.20	3 C_2, 6 C_3, 8 C_6, C_9, C_{18}, 3 D_2, 10 D_3, 5 D_6	3 C_2, 6 C_3, 8 C_6, 3 D_2, 10 D_3, 5 D_6	3 C_2, 6 C_6, 3 D_2, 10 D_3, 5 D_6	3 C_2, 5 C_3, C_6, 3 D_2, 10 D_3, D_6
R46.21	3 C_2, 3 C_3, 5 C_6, 4 C_9, 4 C_{18}, 3 D_2, 4 D_3, 2 D_6, 6 D_9, 3 D_{18}	3 C_2, 3 C_3, 5 C_6, 3 C_9, 3 C_{18}, 3 D_2, 4 D_3, 2 D_6, 6 D_9, 3 D_{18}	3 C_2, 3 C_6, 3 D_2, 4 D_3, 2 D_6, 6 D_9, 3 D_{18}	3 C_2, 2 C_3, C_6, 3 D_2, 4 D_3, D_6
R46.22	3 C_2, 6 C_3, 14 C_6, C_9, C_{18}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 6 C_3, 14 C_6, 3 D_2, 4 D_3, 2 D_6	3 C_2, 12 C_6, 3 D_2, 4 D_3, 2 D_6	3 C_2, 4 C_3, 3 D_2, 4 D_3
R46.23	3 C_2, 3 C_3, C_4, 8 C_6, 2 C_8, 3 C_{12}, 4 C_{16}, 6 C_{24}, 4 C_{48}, 4 D_2, D_3, 2 D_4, D_6, 4 D_8, D_{12}, 4 D_{16}, 2 D_{24}	3 C_2, 3 C_3, C_4, 8 C_6, C_8, 2 C_{12}, C_{16}, 2 C_{24}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, D_{16}, D_{24}	3 C_2, 6 C_6, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, D_{16}, D_{24}	3 C_2, C_3, C_4, C_8, 4 D_2, D_3, 2 D_4, 2 D_8
R46.24	3 C_2, 3 C_3, C_4, 5 C_6, 2 C_8, 5 C_{12}, 4 C_{16}, 10 C_{24}, 20 C_{48}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 4 D_8, 4 D_{12}, 4 D_{16}, 8 D_{24}, 8 D_{48}	3 C_2, 3 C_3, C_4, 5 C_6, C_8, 4 C_{12}, C_{16}, 4 C_{24}, 4 C_{48}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 4 D_{12}, D_{16}, 4 D_{24}, 2 D_{48}	3 C_2, 4 C_6, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 4 D_{12}, D_{16}, 4 D_{24}, 2 D_{48}	3 C_2, C_3, C_4, C_8, C_{16}, 4 D_2, 2 D_3, 2 D_4, 2 D_8, D_{16}
R46.25	3 C_2, 3 C_3, C_4, 4 C_6, 2 C_8, 5 C_{12}, 4 C_{16}, 10 C_{24}, 8 C_{48}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 4 D_8, 7 D_{12}, 4 D_{16}, 14 D_{24}, 8 D_{48}	3 C_2, 3 C_3, C_4, 4 C_6, C_8, 4 C_{12}, C_{16}, 4 C_{24}, C_{48}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_8, 5 D_{12}, D_{16}, 5 D_{24}, D_{48}	3 C_2, 2 C_6, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_8, 5 D_{12}, D_{16}, 5 D_{24}, D_{48}	3 C_2, 3 C_3, C_4, C_6, C_8, C_{12}, C_{24}, 4 D_2, 4 D_3, 2 D_4, 2 D_6, 2 D_8, 2 D_{12}, 2 D_{24}
R46.26	3 C_2, C_3, 3 C_6, 11 C_{23}, 11 C_{46}, 11 C_{69}, 11 C_{138}, 3 D_2, 22 D_{23}, 11 D_{46}	3 C_2, C_3, 3 C_6, C_{23}, C_{46}, 3 D_2, 2 D_{23}, D_{46}	3 C_2, C_6, 3 D_2, 2 D_{23}, D_{46}	3 C_2, C_{23}, C_{46}, 3 D_2, 2 D_{23}, D_{46}
R46.27	**Tet**, C_2, 4 C_3, C_6, 2 C_9, D_2, 2 D_3, D_6	**Tet**, C_2, 4 C_3, C_6, D_2, 2 D_3, D_6	**Tet**, C_2, C_6, D_2, 2 D_3, D_6	C_2, 3 C_3, D_2, 2 D_3
R46.28	**Tet**, C_2, 4 C_3, C_6, 2 C_9, D_2, 2 D_3, D_6	**Tet**, C_2, 4 C_3, C_6, C_9, D_2, 2 D_3, D_6	**Tet**, C_2, C_6, D_2, 2 D_3, D_6	C_2, 4 C_3, D_2, 2 D_3
R46.29	C_2, 8 C_5, 2 C_{10}, 30 C_{25}, 2 D_5, 10 D_{25}	C_2, 6 C_5, C_{10}, 11 C_{25}, D_5, 5 D_{25}	C_2, C_{10}, D_5, 5 D_{25}	C_2, 5 C_5, D_5
R46.30	C_2, 2 C_5, 2 C_{10}, 11 C_{23}, 22 C_{115}, 11 D_{23}	C_2, C_5, C_{10}, C_{23}, D_{23}	C_2, C_{10}, D_{23}	C_2, C_{23}, D_{23}
R46.31	2 C_2, 2 C_4, 3 C_7, 2 C_8, 3 C_{14}, 2 C_{16}, 6 C_{28}, 6 C_{56}, 2 D_2, D_4, 3 D_7, 2 D_8, 3 D_{14}, 3 D_{28}, 6 D_{56}	2 C_2, 2 C_4, C_7, C_8, C_{14}, C_{28}, C_{56}, 2 D_2, D_4, D_7, D_8, D_{14}, D_{28}, D_{56}	2 C_2, 2 C_4, C_8, C_{14}, 2 D_2, D_4, D_7, D_8, D_{14}, D_{28}, D_{56}	2 C_2, C_7, 2 D_2, D_7

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R46.32	3 C_2, 3 C_3, C_4, 5 C_6, 6 C_9, 5 C_{12}, 12 C_{18}, 9 C_{36}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, 3 C_3, C_4, 5 C_6, 2 C_9, 4 C_{12}, 4 C_{18}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, 3 C_6, C_{18}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, 2 C_3, C_4, 4 D_2, 2 D_3, D_4
R46.33	3 C_2, 3 C_3, C_4, 8 C_6, 6 C_9, C_{12}, 18 C_{18}, 3 C_{36}, 4 D_2, D_3, D_4, D_6	3 C_2, 3 C_3, C_4, 8 C_6, 2 C_9, 6 C_{18}, 4 D_2, D_3, D_4, D_6	3 C_2, C_4, 6 C_6, C_{18}, 4 D_2, D_3, D_4, D_6	3 C_2, 2 C_3, 4 D_2, D_3
R46.34	C_2, 3 C_3, C_6, 5 C_{11}, 5 C_{22}, 25 C_{33}, 10 C_{66}, D_3	C_2, 3 C_3, C_6, D_3	C_2, C_6, D_3	C_2, C_3, D_3
R46.35	C_2, C_3, C_6, 15 C_{31}, 15 C_{62}, 30 C_{93}, 30 C_{186}	C_2, C_3, C_6	C_2, C_6	C_2
R46.36	3 C_2, 23 C_{47}, 69 C_{94}, 3 D_2	3 C_2, C_{47}, 3 C_{94}, 3 D_2	3 C_2, C_{94}, 3 D_2	3 C_2, C_{47}, 3 D_2
R46.37	C_2, C_4, 2 C_8, 11 C_{23}, 11 C_{46}, 22 C_{92}, 44 C_{184}	C_2, C_4, C_{23}, C_{46}, C_{92}	C_2, C_4, C_{46}, C_{92}	C_2, C_{23}
Genus 47				
R47.1	5 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 4 C_{12}, 8 C_{16}, 8 C_{24}, 8 C_{32}, 16 C_{48}, 16 C_{96}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_8, 6 D_{12}, 12 D_{16}, 12 D_{24}, 24 D_{48}	5 C_2, C_3, 3 C_4, 3 C_6, 3 C_8, 3 C_{12}, 3 C_{16}, 3 C_{24}, C_{32}, 3 C_{48}, C_{96}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 4 D_8, 4 D_{12}, 5 D_{16}, 4 D_{24}, 5 D_{48}	3 C_2, 2 C_4, C_6, 13 D_2, D_3, 2 D_4, 3 D_6, 3 D_8, 3 D_{12}, 3 D_{16}, 3 D_{24}, 3 D_{48}	5 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{48}, 13 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 2 D_{12}, D_{16}, 2 D_{24}, D_{48}
R47.2	3 C_2, C_3, 4 C_4, 2 C_6, 3 C_8, 3 C_{12}, 4 C_{16}, 6 C_{24}, 4 C_{32}, 8 C_{48}, 8 C_{96}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, 2 D_{12}, 2 D_{16}, 4 D_{24}, 4 D_{48}	3 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, 2 C_{12}, C_{16}, 2 C_{24}, C_{48}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{48}	3 C_2, 3 C_4, C_6, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{48}	3 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}, 4 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{24}
R47.3	3 C_2, 2 C_4, 23 C_{47}, 23 C_{94}, 23 C_{188}, 3 D_2, 46 D_{47}, 23 D_{94}	3 C_2, 2 C_4, C_{47}, C_{94}, 3 D_2, 2 D_{47}, D_{94}	2 C_2, 2 C_4, C_{94}, 3 D_2, D_{47}, D_{94}	3 C_2, C_{47}, 3 D_2, D_{47}
R47.4	C_2, C_3, C_6, 23 C_{47}, 23 C_{141}, 23 D_{47}	C_2, C_3, C_6, C_{47}, D_{47}	C_2, C_6, D_{47}	C_2, C_{47}, D_{47}
R47.5	3 C_2, C_3, 3 C_4, 2 C_6, 2 C_8, 3 C_9, 2 C_{12}, 6 C_{18}, 4 D_2, D_3, 2 D_4, D_6, 3 D_9, D_{12}, 3 D_{18}	3 C_2, C_3, 3 C_4, 2 C_6, C_8, C_9, 2 C_{12}, 2 C_{18}, 4 D_2, D_3, 2 D_4, D_6, D_9, D_{12}, D_{18}	3 C_2, 3 C_4, C_6, C_8, 2 C_{12}, C_{18}, 4 D_2, D_3, 2 D_4, D_6, D_9, D_{12}, D_{18}	3 C_2, C_3, 4 D_2, D_3
R47.6	5 C_2, C_3, 2 C_4, 3 C_6, 2 C_8, 3 C_9, 2 C_{12}, 9 C_{18}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_9, 4 D_{12}, 12 D_{18}	5 C_2, C_3, 2 C_4, 3 C_6, C_8, C_9, 2 C_{12}, 3 C_{18}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 2 D_9, 4 D_{12}, 4 D_{18}	3 C_2, 2 C_4, C_6, C_8, 2 C_{12}, C_{18}, 13 D_2, D_3, 3 D_4, 4 D_6, D_9, 4 D_{12}, 4 D_{18}	5 C_2, C_3, C_6, 13 D_2, 2 D_3, D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R47.7	4 C_2, 2 C_4, 4 C_8, 6 C_{16}, 12 C_{32}, 8 C_{64}, 9 D_2, 3 D_4, 5 D_8, 10 D_{16}, 16 D_{32}	4 C_2, 2 C_4, 2 C_8, 2 C_{16}, 2 C_{32}, 9 D_2, 3 D_4, 3 D_8, 3 D_{16}, 3 D_{32}	2 C_2, 2 C_4, 2 C_8, 2 C_{16}, 2 C_{32}, 9 D_2, 3 D_4, 3 D_8, 3 D_{16}, 3 D_{32}	4 C_2, 9 D_2
R47.8	3 C_2, 3 C_4, 4 C_8, 6 C_{16}, 12 C_{32}, 16 C_{64}, 4 D_2, 2 D_4, 2 D_8, 4 D_{16}, 8 D_{32}	3 C_2, 3 C_4, 2 C_8, 2 C_{16}, 2 C_{32}, 4 D_2, 2 D_4, D_8, D_{16}, 2 D_{32}	2 C_2, 3 C_4, 2 C_8, 2 C_{16}, 2 C_{32}, 4 D_2, 2 D_4, D_8, D_{16}, 2 D_{32}	3 C_2, 4 D_2
R47.9	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, 2 C_{12}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 2 D_{20}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, C_{20}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, 2 C_4, C_6, C_{10}, C_{12}, C_{20}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, C_5, 2 D_2, D_5
R47.10	C_2, 2 C_5, 2 C_{10}, 9 C_{19}, 9 C_{38}, 36 C_{95}, 36 C_{190}	C_2	C_2	C_2
R47.11	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_8, 3 C_{12}, 6 C_{16}, 6 C_{24}, 8 C_{32}, 12 C_{48}, 16 C_{96}, 2 D_2	2 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 2 C_{12}, C_{16}, 2 C_{24}, C_{48}, 2 D_2	2 C_2, C_4, C_6, 2 D_2	2 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}, 2 D_2
R47.12	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_8, 4 C_{12}, 8 C_{16}, 8 C_{24}, 16 C_{32}, 16 C_{48}, 32 C_{96}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_8, 3 C_{12}, 3 C_{16}, 3 C_{24}, 2 C_{32}, 3 C_{48}, 2 C_{96}, 3 D_2	2 C_2, C_4, C_6, 3 D_2	3 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{48}, 3 D_2
R47.13	C_2, C_4, 23 C_{47}, 23 C_{94}, 46 C_{188}	C_2, C_4, C_{47}, C_{94}	C_2, C_4, C_{94}	C_2, C_{47}
Genus 48				
R48.1	**Tet**, **Oct**, 2 C_2, C_3, C_4, 8 C_{17}, 8 C_{34}, 16 C_{51}, 3 D_2, D_3, D_4, 8 D_{17}, 8 D_{34}, 16 D_{51}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_{17}, C_{34}, C_{51}, 3 D_2, D_3, D_4, D_{17}, D_{34}, D_{51}	**Tet**, **Oct**, 2 C_2, C_4, C_{34}, 3 D_2, D_3, D_4, D_{17}, D_{34}, D_{51}	**Tet**, 2 C_2, C_3, C_{17}, 3 D_2, D_3, D_{17}
R48.2	3 C_2, C_4, 3 C_7, 6 C_{14}, 21 C_{49}, 42 C_{98}, 4 D_2, D_4, 3 D_7, 3 D_{14}, 21 D_{49}, 21 D_{98}	3 C_2, C_4, C_7, 2 C_{14}, C_{49}, 2 C_{98}, 4 D_2, D_4, D_7, D_{14}, D_{49}, D_{98}	3 C_2, C_4, C_{14}, C_{98}, 4 D_2, D_4, D_7, D_{14}, D_{49}, D_{98}	3 C_2, C_7, C_{49}, 4 D_2, D_7, D_{49}
R48.3	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 2 C_{12}, 4 C_{16}, 4 C_{24}, 8 C_{32}, 8 C_{48}, 8 C_{64}, 16 C_{96}, 16 C_{192}, 2 D_2, D_3, D_4, D_6, 2 D_8, 2 D_{12}, 4 D_{16}, 4 D_{24}, 8 D_{32}, 8 D_{48}, 16 D_{96}	2 C_2, C_3, 2 C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{32}, C_{48}, C_{96}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{32}, D_{48}, D_{96}	2 C_2, 2 C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{32}, C_{48}, C_{96}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{32}, D_{48}, D_{96}	2 C_2, C_3, 2 D_2, D_3
R48.4	3 C_2, C_3, 2 C_5, C_6, 2 C_{10}, 2 C_{15}, 10 C_{25}, 10 C_{50}, 10 C_{75}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 2 D_{15}, 20 D_{25}, 10 D_{50}, 10 D_{75}	3 C_2, C_3, C_5, C_6, C_{10}, C_{15}, C_{25}, C_{50}, C_{75}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}, 2 D_{25}, D_{50}, D_{75}	3 C_2, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}, 2 D_{25}, D_{50}, D_{75}	3 C_2, C_3, C_5, C_{25}, 3 D_2, 2 D_3, 2 D_5, 2 D_{25}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R48.5	3 C_2, C_4, 2 C_8, 8 C_{17}, 16 C_{34}, 8 C_{68}, 4 D_2, 2 D_4, 2 D_8, 8 D_{17}, 8 D_{34}, 8 D_{68}	3 C_2, C_4, C_8, C_{17}, 2 C_{34}, C_{68}, 4 D_2, 2 D_4, D_8, D_{17}, D_{34}, D_{68}	3 C_2, C_{34}, 4 D_2, 2 D_4, D_8, D_{17}, D_{34}, D_{68}	3 C_2, C_4, C_{17}, 4 D_2, 2 D_4, D_{17}
R48.6	3 C_2, 2 C_5, 2 C_{10}, 6 C_{13}, 6 C_{26}, 12 C_{65}, 3 D_2, 4 D_5, 2 D_{10}, 12 D_{13}, 6 D_{26}, 12 D_{65}	3 C_2, C_5, C_{10}, C_{13}, C_{26}, C_{65}, 3 D_2, 2 D_5, D_{10}, 2 D_{13}, D_{26}, D_{65}	3 C_2, 3 D_2, 2 D_5, D_{10}, 2 D_{13}, D_{26}, D_{65}	3 C_2, C_5, C_{13}, 3 D_2, 2 D_5, 2 D_{13}
R48.7	3 C_2, C_3, C_4, 2 C_5, C_6, 2 C_8, 6 C_{10}, 2 C_{12}, 2 C_{15}, 2 C_{20}, 4 C_{24}, 2 C_{30}, 4 C_{40}, 4 C_{60}, 8 C_{120}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 4 D_{12}, 4 D_{24}	3 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}, D_{24}	3 C_2, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}, D_{24}	3 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}, D_{24}
R48.8	2 C_2, C_3, 2 C_4, 2 C_5, C_6, C_8, 2 C_{10}, 2 C_{12}, 2 C_{15}, 4 C_{20}, 2 C_{30}, 4 C_{40}, 4 C_{60}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, D_{12}, 2 D_{15}, 4 D_{20}, 2 D_{30}, 4 D_{60}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, C_{15}, C_{20}, C_{30}, C_{60}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{12}, D_{15}, D_{20}, D_{30}, D_{60}	2 C_2, 2 C_4, C_6, C_{10}, C_{20}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{12}, D_{15}, D_{20}, D_{30}, D_{60}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5
R48.9	3 C_2, C_3, C_6, 3 C_7, 3 C_9, 3 C_{14}, 3 C_{18}, 3 C_{21}, 9 C_{63}, 3 D_2, 2 D_3, D_6, 6 D_7, 6 D_9, 3 D_{14}, 3 D_{18}, 3 D_{21}, 9 D_{63}	3 C_2, C_3, C_6, C_7, C_9, C_{14}, C_{18}, C_{21}, C_{63}, 3 D_2, 2 D_3, D_6, 2 D_7, 2 D_9, D_{14}, D_{18}, D_{21}, D_{63}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_7, 2 D_9, D_{14}, D_{18}, D_{21}, D_{63}	3 C_2, C_3, C_7, C_9, 3 D_2, 2 D_3, 2 D_7, 2 D_9
R48.10	3 C_2, C_4, 3 C_7, 2 C_8, 9 C_{14}, 4 C_{16}, 3 C_{28}, 6 C_{56}, 12 C_{112}, 4 D_2, 2 D_4, 4 D_8, 4 D_{16}	3 C_2, C_4, C_7, C_8, 3 C_{14}, C_{16}, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, C_{14}, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, C_4, C_8, C_{16}, 4 D_2, 2 D_4, 2 D_8, D_{16}
R48.11	3 C_2, C_4, 2 C_8, 6 C_{13}, 18 C_{26}, 6 C_{52}, 12 C_{104}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8	3 C_2, 4 D_2, 2 D_4, D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8
R48.12	3 C_2, C_3, C_6, 8 C_{17}, 24 C_{34}, 8 C_{51}, 8 C_{102}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6	3 C_2, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6
R48.13	3 C_2, C_4, 2 C_5, 6 C_{10}, 2 C_{20}, 10 C_{25}, 30 C_{50}, 10 C_{100}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R48.14	**Tet**, C_2, C_3, 8 C_{17}, 8 C_{34}, 16 C_{51}, D_2	**Tet**, C_2, C_3, C_{17}, C_{34}, C_{51}, D_2	**Tet**, C_2, C_{34}, D_2	**Tet**, C_2, C_3, C_{17}, D_2
R48.15	C_2, 48 C_{97}, 48 C_{194}	C_2	C_2	C_2
R48.16	3 C_2, 3 C_7, 9 C_{14}, 21 C_{49}, 63 C_{98}, 3 D_2	3 C_2, C_7, 3 C_{14}, C_{49}, 3 C_{98}, 3 D_2	3 C_2, C_{14}, C_{98}, 3 D_2	3 C_2, C_7, C_{49}, 3 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R48.17	C_2, C_3, C_4, C_6, 2 C_8, 2 C_{12}, 4 C_{16}, 4 C_{24}, 8 C_{32}, 8 C_{48}, 16 C_{64}, 16 C_{96}, 32 C_{192}	C_2, C_3, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{32}, C_{48}, C_{96}	C_2, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{32}, C_{48}, C_{96}	C_2, C_3
Genus 49				
R49.1	2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_8, 4 C_{10}, 2 C_{16}, 2 D_2, D_4, 2 D_5, 2 D_8, 2 D_{10}	2 C_2, C_3, C_4, C_5, C_6, 2 C_8, 2 C_{10}, 2 C_{16}, 2 D_2, D_4, D_5, 2 D_8, D_{10}	C_2, C_{10}, 2 D_2, D_4, D_5, 2 D_8, D_{10}	2 C_2, C_3, C_4, C_5, 2 C_8, 2 C_{16}, 2 D_2, D_4, D_5, 2 D_8
R49.2	5 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 6 C_4, 3 C_6, 4 C_{12}, 26 D_2, 2 D_3, 13 D_4, 3 D_6, 6 D_{12}	5 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 6 C_4, 3 C_6, 3 C_{12}, 26 D_2, 2 D_3, 13 D_4, 3 D_6, 6 D_{12}	2 **Tet**, 2 **Oct**, 2 C_2, 2 C_4, C_6, 18 D_2, D_3, 13 D_4, 2 D_6, 6 D_{12}	**Tet**, 5 C_2, C_3, 4 C_4, C_6, 3 C_{12}, 26 D_2, 2 D_3, 8 D_4, 3 D_6, 6 D_{12}
R49.3	2 **Tet**, 3 **Oct**, 3 C_2, 3 C_3, 2 C_4, 2 C_6, C_7, C_{12}, C_{14}, C_{21}, 6 D_2, 5 D_3, 3 D_4, 3 D_6, D_{12}	2 **Tet**, 3 **Oct**, 3 C_2, 3 C_3, 2 C_4, 2 C_6, C_{12}, 6 D_2, 5 D_3, 3 D_4, 3 D_6, D_{12}	2 **Oct**, 2 C_2, C_6, 5 D_2, 4 D_3, 2 D_4, 3 D_6, D_{12}	2 **Tet**, 2 **Oct**, 3 C_2, 3 C_3, 2 C_4, C_6, C_{12}, 6 D_2, 5 D_3, 3 D_4, 2 D_6, D_{12}
R49.4	3 C_2, C_3, C_6, 3 C_7, 3 C_9, 3 C_{14}, 3 C_{18}, 15 D_2, 2 D_3, D_6, 6 D_7, 6 D_9, 3 D_{14}, 3 D_{18}	3 C_2, C_3, C_6, C_7, 3 C_9, C_{14}, 3 C_{18}, 15 D_2, 2 D_3, D_6, 2 D_7, 6 D_9, D_{14}, 3 D_{18}	2 C_2, C_6, C_{14}, 3 C_{18}, 12 D_2, D_3, D_6, D_7, 3 D_9, D_{14}, 3 D_{18}	3 C_2, C_3, C_7, 15 D_2, 2 D_3, D_7
R49.5	2 **Tet**, 6 **Oct**, **Ico**, 5 C_2, C_3, 5 C_4, C_5, 3 C_6, C_8, C_{12}, 31 D_2, 4 D_3, 16 D_4, D_5, 7 D_6, D_8, D_{12}	2 **Tet**, 6 **Oct**, 5 C_2, C_3, 5 C_4, 3 C_6, C_8, C_{12}, 31 D_2, 4 D_3, 16 D_4, 7 D_6, D_8, D_{12}	**Tet**, 5 **Oct**, 2 C_2, C_4, 24 D_2, 3 D_3, 14 D_4, 7 D_6, D_8, D_{12}	2 **Tet**, 4 **Oct**, 5 C_2, C_3, 4 C_4, 3 C_6, C_8, C_{12}, 31 D_2, 4 D_3, 14 D_4, 7 D_6, D_8, D_{12}
R49.6	3 **Tet**, 6 **Oct**, 6 C_2, 2 C_3, 6 C_4, 3 C_6, C_8, C_{12}, 35 D_2, 5 D_3, 19 D_4, 6 D_6, D_8, D_{12}	3 **Tet**, 6 **Oct**, 6 C_2, 2 C_3, 6 C_4, 3 C_6, C_8, C_{12}, 35 D_2, 5 D_3, 19 D_4, 6 D_6, D_8, D_{12}	5 **Oct**, 3 C_2, C_4, C_6, 27 D_2, 4 D_3, 17 D_4, 6 D_6, D_8, D_{12}	3 **Tet**, 3 **Oct**, 6 C_2, 2 C_3, 5 C_4, 2 C_6, C_8, C_{12}, 35 D_2, 5 D_3, 17 D_4, 5 D_6, D_8, D_{12}
R49.7	9 C_2, 7 C_4, 3 C_7, 178 D_2, 28 D_4, 3 D_7	9 C_2, 7 C_4, C_7, 178 D_2, 28 D_4, D_7	2 C_2, C_4, 64 D_2, 28 D_4, D_7	9 C_2, 6 C_4, C_7, 178 D_2, 24 D_4, D_7
R49.8	7 C_2, 6 C_4, 2 C_5, 4 C_8, 6 C_{10}, 37 D_2, 12 D_4, 4 D_5, 8 D_8, 8 D_{10}	7 C_2, 6 C_4, C_5, 4 C_8, 3 C_{10}, 37 D_2, 12 D_4, 2 D_5, 8 D_8, 4 D_{10}	3 C_2, 2 C_4, C_{10}, 33 D_2, 8 D_4, D_5, 6 D_8, 3 D_{10}	7 C_2, 4 C_4, C_5, 4 C_8, 37 D_2, 12 D_4, 2 D_5, 8 D_8
R49.9	5 C_2, 7 C_4, 2 C_5, 4 C_8, 4 C_{10}, 15 D_2, 10 D_4, 2 D_5, 4 D_8, 2 D_{10}	5 C_2, 7 C_4, C_5, 4 C_8, 2 C_{10}, 15 D_2, 10 D_4, D_5, 4 D_8, D_{10}	3 C_2, 2 C_4, C_{10}, 13 D_2, 8 D_4, D_5, 4 D_8, D_{10}	5 C_2, 5 C_4, C_5, 4 C_8, 15 D_2, 10 D_4, D_5, 4 D_8

	Mapping	Immersion		Embedding
	necessary and sufficient	necessary	sufficient	necessary
R49.10	12 C_2, 7 C_4, 2 C_5, 4 C_{10}, 181 D_2, 22 D_4, 2 D_5, 2 D_{10}	12 C_2, 7 C_4, C_5, 2 C_{10}, 181 D_2, 22 D_4, D_5, D_{10}	3 C_2, C_4, C_{10}, 72 D_2, 22 D_4, D_5, D_{10}	12 C_2, 6 C_4, C_5, 181 D_2, 20 D_4, D_5
R49.11	5 C_2, 2 C_3, 5 C_4, 9 C_6, 4 C_{12}, 16 D_2, 3 D_3, 6 D_4, 8 D_6, 4 D_{12}	5 C_2, 2 C_3, 5 C_4, 9 C_6, 3 C_{12}, 16 D_2, 3 D_3, 6 D_4, 8 D_6, 4 D_{12}	3 C_2, 2 C_4, 3 C_6, 14 D_2, 3 D_3, 6 D_4, 8 D_6, 4 D_{12}	5 C_2, 2 C_3, 3 C_4, 3 C_6, 2 C_{12}, 16 D_2, 3 D_3, 6 D_4, 6 D_6, 4 D_{12}
R49.12	9 C_2, 9 C_4, 9 C_8, 4 C_{16}, 48 D_2, 17 D_4, 24 D_8	9 C_2, 9 C_4, 8 C_8, C_{16}, 48 D_2, 17 D_4, 24 D_8	3 C_2, 5 C_4, 4 C_8, 33 D_2, 13 D_4, 21 D_8	9 C_2, 4 C_4, 3 C_8, 48 D_2, 14 D_4, 12 D_8
R49.13	8 C_2, 10 C_4, 8 C_8, 8 C_{16}, 36 D_2, 11 D_4, 6 D_8	8 C_2, 10 C_4, 7 C_8, 3 C_{16}, 36 D_2, 11 D_4, 6 D_8	3 C_2, 6 C_4, 5 C_8, 3 C_{16}, 25 D_2, 10 D_4, 6 D_8	8 C_2, 4 C_4, 2 C_8, 36 D_2, 9 D_4, 4 D_8
R49.14	12 C_2, 11 C_4, 4 C_8, 4 C_{16}, 114 D_2, 14 D_4, 2 D_8	12 C_2, 11 C_4, 3 C_8, C_{16}, 114 D_2, 14 D_4, 2 D_8	3 C_2, 6 C_4, 3 C_8, C_{16}, 57 D_2, 14 D_4, 2 D_8	12 C_2, 5 C_4, 114 D_2, 12 D_4
R49.15	7 C_2, 11 C_4, 7 C_8, 4 C_{16}, 32 D_2, 9 D_4, 9 D_8	7 C_2, 11 C_4, 6 C_8, C_{16}, 32 D_2, 9 D_4, 9 D_8	3 C_2, 6 C_4, 2 C_8, 24 D_2, 8 D_4, 9 D_8	7 C_2, 4 C_4, 3 C_8, 32 D_2, 7 D_4, 6 D_8
R49.16	7 C_2, 11 C_4, 6 C_8, 4 C_{16}, 32 D_2, 9 D_4, 6 D_8	7 C_2, 11 C_4, 5 C_8, 32 D_2, 9 D_4, 6 D_8	3 C_2, 6 C_4, 3 C_8, 24 D_2, 8 D_4, 6 D_8	7 C_2, 5 C_4, 2 C_8, 32 D_2, 7 D_4, 4 D_8
R49.17	9 C_2, 10 C_4, 2 C_8, 2 C_{16}, 85 D_2, 24 D_4, 2 D_8	9 C_2, 10 C_4, C_8, 85 D_2, 24 D_4, 2 D_8	3 C_2, 4 C_4, C_8, 48 D_2, 24 D_4, 2 D_8	9 C_2, 6 C_4, 85 D_2, 16 D_4
R49.18	9 C_2, 6 C_4, 5 C_8, 2 C_{16}, 69 D_2, 15 D_4, 12 D_8	9 C_2, 6 C_4, 4 C_8, 69 D_2, 15 D_4, 12 D_8	3 C_2, 4 C_4, 4 C_8, 37 D_2, 15 D_4, 12 D_8	9 C_2, 2 C_4, 69 D_2, 3 D_4
R49.19	8 C_2, 7 C_4, 6 C_8, 4 C_{16}, 44 D_2, 11 D_4, 6 D_8	8 C_2, 7 C_4, 5 C_8, C_{16}, 44 D_2, 11 D_4, 6 D_8	3 C_2, 5 C_4, 5 C_8, C_{16}, 32 D_2, 11 D_4, 6 D_8	8 C_2, 2 C_4, 44 D_2, 3 D_4
R49.20	9 C_2, 10 C_4, 7 C_8, 4 C_{16}, 54 D_2, 18 D_4, 16 D_8	9 C_2, 10 C_4, 6 C_8, C_{16}, 54 D_2, 18 D_4, 16 D_8	3 C_2, 4 C_4, 2 C_8, C_{16}, 40 D_2, 13 D_4, 12 D_8	9 C_2, 6 C_4, 4 C_8, 54 D_2, 15 D_4, 16 D_8
R49.21	7 C_2, 8 C_4, 5 C_8, 4 C_{16}, 33 D_2, 14 D_4, 10 D_8	7 C_2, 8 C_4, 4 C_8, 33 D_2, 14 D_4, 10 D_8	3 C_2, 4 C_4, C_8, 28 D_2, 12 D_4, 10 D_8	7 C_2, 4 C_4, 3 C_8, 33 D_2, 11 D_4, 10 D_8
R49.22	6 C_2, 12 C_4, 4 C_8, 2 C_{16}, 30 D_2, 27 D_4, 6 D_8	6 C_2, 12 C_4, 3 C_8, 30 D_2, 27 D_4, 6 D_8	3 C_2, 5 C_4, 20 D_2, 21 D_4, 6 D_8	6 C_2, 7 C_4, 3 C_8, 30 D_2, 23 D_4, 6 D_8
R49.23	6 C_2, 11 C_4, 4 C_8, 2 C_{16}, 27 D_2, 16 D_4, 6 D_8	6 C_2, 11 C_4, 3 C_8, 27 D_2, 16 D_4, 6 D_8	3 C_2, 6 C_4, 21 D_2, 12 D_4, 6 D_8	6 C_2, 4 C_4, 3 C_8, 27 D_2, 14 D_4, 6 D_8
R49.24	5 C_2, 5 C_4, 10 C_8, 6 C_{16}, 14 D_2, 9 D_4, 15 D_8, 2 D_{16}	5 C_2, 5 C_4, 9 C_8, 3 C_{16}, 14 D_2, 9 D_4, 14 D_8, 2 D_{16}	3 C_2, 2 C_4, 2 C_8, 12 D_2, 7 D_4, 11 D_8, 2 D_{16}	5 C_2, 3 C_4, 5 C_8, 2 C_{16}, 14 D_2, 7 D_4, 10 D_8, 2 D_{16}
R49.25	4 C_2, 6 C_4, 7 C_8, 6 C_{16}, 8 D_2, 6 D_4, 5 D_8, 2 D_{16}	4 C_2, 6 C_4, 6 C_8, 3 C_{16}, 8 D_2, 6 D_4, 5 D_8, 2 D_{16}	3 C_2, 2 C_4, C_8, 8 D_2, 6 D_4, 5 D_8, 2 D_{16}	4 C_2, 4 C_4, 4 C_8, 2 C_{16}, 8 D_2, 5 D_4, 5 D_8, 2 D_{16}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R49.26	**Tet**, 2 **Oct**, **Ico**, 5 C_2, C_3, 4 C_4, C_5, 3 C_6, C_{10}, C_{12}, C_{20}, 18 D_2, 4 D_3, 6 D_4, 2 D_5, 7 D_6, D_{10}, D_{12}	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, 3 C_6, C_{12}, 18 D_2, 4 D_3, 6 D_4, 7 D_6, D_{12}	**Tet**, 2 **Oct**, 3 C_2, 3 C_4, 2 C_6, 16 D_2, 2 D_3, 6 D_4, 6 D_6, D_{12}	**Tet**, 5 C_2, C_3, C_4, C_6, 18 D_2, 4 D_3, D_4, 2 D_6
R49.27	**Tet**, 2 **Oct**, **Ico**, 5 C_2, C_3, 6 C_4, C_5, 3 C_6, C_{10}, 2 C_{12}, C_{20}, 16 D_2, 4 D_3, 4 D_4, 2 D_5, 6 D_6, D_{10}	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, 3 C_6, 2 C_{12}, 16 D_2, 4 D_3, 4 D_4, 6 D_6	**Oct**, 3 C_2, 3 C_4, 2 C_6, C_{12}, 13 D_2, 2 D_3, 3 D_4, 5 D_6	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, 16 D_2, 4 D_3, 4 D_4, 2 D_6
R49.28	5 C_2, 5 C_4, 3 C_7, 12 C_{14}, 9 C_{28}, 16 D_2, 6 D_4, 3 D_7, 9 D_{14}, 6 D_{28}	5 C_2, 5 C_4, C_7, 4 C_{14}, 2 C_{28}, 16 D_2, 6 D_4, D_7, 3 D_{14}, 2 D_{28}	3 C_2, 2 C_4, C_{14}, 14 D_2, 6 D_4, D_7, 3 D_{14}, 2 D_{28}	5 C_2, 3 C_4, C_7, 16 D_2, 6 D_4, D_7
R49.29	5 C_2, 3 C_4, 6 C_{13}, 24 C_{26}, 12 C_{52}, 13 D_2, 2 D_4, 6 D_{13}, 12 D_{26}	5 C_2, 3 C_4, C_{13}, 4 C_{26}, C_{52}, 13 D_2, 2 D_4, D_{13}, 2 D_{26}	3 C_2, 2 C_4, C_{26}, 11 D_2, 2 D_4, D_{13}, 2 D_{26}	5 C_2, C_4, C_{13}, 13 D_2, 2 D_4, D_{13}
R49.30	5 C_2, 2 C_4, 2 C_5, 6 C_{10}, 4 C_{20}, 10 C_{25}, 30 C_{50}, 20 C_{100}, 13 D_2, 4 D_5, 8 D_{10}, 20 D_{25}, 40 D_{50}	5 C_2, 2 C_4, C_5, 3 C_{10}, C_{20}, C_{25}, 3 C_{50}, C_{100}, 13 D_2, 2 D_5, 4 D_{10}, 2 D_{25}, 4 D_{50}	3 C_2, 2 C_4, C_{10}, C_{50}, 11 D_2, D_5, 3 D_{10}, D_{25}, 3 D_{50}	5 C_2, C_5, C_{10}, C_{25}, C_{50}, 13 D_2, 2 D_5, D_{10}, 2 D_{25}, D_{50}
R49.31	3 C_2, 2 C_4, 3 C_7, 3 C_{14}, 3 C_{28}, 21 C_{49}, 21 C_{98}, 21 C_{196}, 3 D_2, 6 D_7, 3 D_{14}, 42 D_{49}, 21 D_{98}	3 C_2, 2 C_4, C_7, C_{14}, C_{49}, C_{98}, 3 D_2, 2 D_7, D_{14}, 2 D_{49}, D_{98}	2 C_2, 2 C_4, C_{14}, C_{98}, 3 D_2, D_7, D_{14}, D_{49}, D_{98}	3 C_2, C_7, C_{49}, 3 D_2, D_7, D_{49}
R49.32	2 **Tet**, **Oct**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 2 C_5, 2 C_6, 10 D_2, D_3, 5 D_4, 2 D_5, D_6	2 **Tet**, **Oct**, 3 C_2, C_3, 2 C_4, 2 C_6, 10 D_2, D_3, 5 D_4, D_6	**Tet**, **Oct**, C_2, 5 D_2, D_3, 5 D_4, D_6	2 **Tet**, **Oct**, 3 C_2, C_3, 2 C_4, 2 C_6, 10 D_2, D_3, 5 D_4, D_6
R49.33	2 **Tet**, 4 **Oct**, 2 **Ico**, 3 C_2, 2 C_3, 2 C_4, C_5, 2 C_6, 9 D_2, 4 D_3, 4 D_4, D_5, 2 D_6	2 **Tet**, 4 **Oct**, 3 C_2, 2 C_3, 2 C_4, 2 C_6, 9 D_2, 4 D_3, 4 D_4, 2 D_6	2 **Oct**, 2 C_2, 2 C_6, 7 D_2, 2 D_3, 3 D_4, 2 D_6	2 **Tet**, 2 **Oct**, 3 C_2, 2 C_3, 2 C_4, 9 D_2, 3 D_3, 4 D_4
R49.34	5 **Tet**, 2 **Oct**, 7 C_2, 3 C_3, 2 C_4, 7 C_6, 39 D_2, 2 D_3, 8 D_4, D_6	5 **Tet**, 2 **Oct**, 7 C_2, 3 C_3, 2 C_4, 7 C_6, 39 D_2, 2 D_3, 8 D_4, D_6	2 **Oct**, 3 C_2, 3 C_6, 23 D_2, 2 D_3, 8 D_4, D_6	2 **Tet**, 2 **Oct**, 7 C_2, C_3, 2 C_4, C_6, 39 D_2, 2 D_3, 8 D_4, D_6
R49.35	2 **Tet**, 7 C_2, 3 C_3, 4 C_4, 7 C_6, 6 C_{12}, 33 D_2, 4 D_3, 14 D_4, 11 D_6, 22 D_{12}	2 **Tet**, 7 C_2, 3 C_3, 4 C_4, 7 C_6, 6 C_{12}, 33 D_2, 4 D_3, 14 D_4, 11 D_6, 22 D_{12}	3 C_2, 4 C_6, 24 D_2, 2 D_3, 10 D_4, 8 D_6, 16 D_{12}	7 C_2, C_3, 4 C_4, 2 C_6, 6 C_{12}, 33 D_2, 4 D_3, 14 D_4, 9 D_6, 22 D_{12}
R49.36	2 **Tet**, 7 C_2, 3 C_3, 4 C_4, 7 C_6, 2 C_{12}, 33 D_2, 4 D_3, 14 D_4, 10 D_6, 4 D_{12}	2 **Tet**, 7 C_2, 3 C_3, 4 C_4, 7 C_6, 2 C_{12}, 33 D_2, 4 D_3, 14 D_4, 10 D_6, 4 D_{12}	3 C_2, 4 C_6, 24 D_2, 2 D_3, 10 D_4, 8 D_6, 4 D_{12}	7 C_2, C_3, 4 C_4, 2 C_6, 2 C_{12}, 33 D_2, 4 D_3, 14 D_4, 8 D_6, 4 D_{12}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R49.37	6 **Tet**, 9 C_2, 3 C_3, 2 C_4, 8 C_6, C_{12}, 68 D_2, 5 D_3, 8 D_4, 20 D_6, 2 D_{12}	6 **Tet**, 9 C_2, 3 C_3, 2 C_4, 8 C_6, C_{12}, 68 D_2, 5 D_3, 8 D_4, 20 D_6, 2 D_{12}	3 C_2, 4 C_6, 34 D_2, 2 D_3, 8 D_4, 12 D_6, 2 D_{12}	9 C_2, C_3, 2 C_4, 3 C_6, C_{12}, 68 D_2, 5 D_3, 8 D_4, 18 D_6, 2 D_{12}
R49.38	5 **Tet**, 7 **Oct**, 5 C_2, 3 C_3, 4 C_4, 3 C_6, 18 D_2, 5 D_3, 11 D_4, 3 D_6	5 **Tet**, 7 **Oct**, 5 C_2, 3 C_3, 4 C_4, 3 C_6, 18 D_2, 5 D_3, 11 D_4, 3 D_6	7 **Oct**, 3 C_2, 2 C_6, 11 D_2, 5 D_3, 11 D_4, 3 D_6	5 **Tet**, **Oct**, 5 C_2, 3 C_3, 4 C_4, C_6, 18 D_2, 5 D_3, 11 D_4, D_6
R49.39	3 **Tet**, 13 C_2, C_3, 3 C_4, 3 C_6, C_{12}, 218 D_2, 9 D_4	3 **Tet**, 13 C_2, C_3, 3 C_4, 3 C_6, 218 D_2, 9 D_4	3 C_2, C_4, 2 C_6, 75 D_2, 9 D_4	13 C_2, 2 C_4, 218 D_2, 7 D_4
R49.40	**Tet**, 7 C_2, C_3, 8 C_4, 3 C_6, 4 C_{12}, 34 D_2, 14 D_4	**Tet**, 7 C_2, C_3, 8 C_4, 3 C_6, 3 C_{12}, 34 D_2, 14 D_4	3 C_2, 5 C_4, 2 C_6, 3 C_{12}, 25 D_2, 12 D_4	7 C_2, 3 C_4, 34 D_2, 8 D_4
R49.41	2 **Tet**, 6 C_2, C_3, 7 C_4, 3 C_6, 4 C_{12}, 24 D_2, 10 D_4	2 **Tet**, 6 C_2, C_3, 7 C_4, 3 C_6, 3 C_{12}, 24 D_2, 10 D_4	3 C_2, 5 C_4, 2 C_6, 3 C_{12}, 18 D_2, 9 D_4	6 C_2, 2 C_4, 24 D_2, 4 D_4
R49.42	2 **Tet**, 7 C_2, C_3, 5 C_4, 3 C_6, C_{12}, 38 D_2, 11 D_4	2 **Tet**, 7 C_2, C_3, 5 C_4, 3 C_6, 38 D_2, 11 D_4	3 C_2, 3 C_4, 2 C_6, 29 D_2, 11 D_4	7 C_2, 2 C_4, 38 D_2, 2 D_4
R49.43	**Tet**, 4 C_2, C_3, 3 C_4, 3 C_6, C_8, C_{12}, 11 D_2, 4 D_4, D_8	**Tet**, 4 C_2, C_3, 3 C_4, 3 C_6, C_8, 11 D_2, 4 D_4, D_8	**Tet**, 3 C_2, 2 C_4, 2 C_6, C_8, 11 D_2, 4 D_4, D_8	4 C_2, C_4, 11 D_2, D_4
R49.44	**Tet**, 4 C_2, C_3, 3 C_4, 3 C_6, C_8, C_{12}, 11 D_2, 4 D_4, D_8	**Tet**, 4 C_2, C_3, 3 C_4, 3 C_6, C_8, 11 D_2, 4 D_4, D_8	**Tet**, 3 C_2, 2 C_4, 2 C_6, C_8, 11 D_2, 4 D_4, D_8	4 C_2, C_4, 11 D_2, D_4
R49.45	**Tet**, 11 C_2, C_3, 6 C_4, 3 C_6, 4 C_{12}, 101 D_2, 20 D_4	**Tet**, 11 C_2, C_3, 6 C_4, 3 C_6, 3 C_{12}, 101 D_2, 20 D_4	3 C_2, 2 C_4, 2 C_6, 3 C_{12}, 52 D_2, 8 D_4	11 C_2, 4 C_4, 101 D_2, 20 D_4
R49.46	**Tet**, 7 C_2, C_3, 8 C_4, 3 C_6, C_{12}, 36 D_2, 13 D_4	**Tet**, 7 C_2, C_3, 8 C_4, 3 C_6, 36 D_2, 13 D_4	3 C_2, 2 C_4, 2 C_6, 25 D_2, 13 D_4	7 C_2, 6 C_4, 36 D_2, 8 D_4
R49.47	**Tet**, 7 C_2, C_3, 9 C_4, 3 C_6, C_{12}, 38 D_2, 31 D_4	**Tet**, 7 C_2, C_3, 9 C_4, 3 C_6, 38 D_2, 31 D_4	3 C_2, C_4, 2 C_6, 23 D_2, 24 D_4	7 C_2, 8 C_4, 38 D_2, 28 D_4
R49.48	**Tet**, 7 C_2, C_3, 8 C_4, 3 C_6, 4 C_{12}, 33 D_2, 14 D_4	**Tet**, 7 C_2, C_3, 8 C_4, 3 C_6, 3 C_{12}, 33 D_2, 14 D_4	3 C_2, 3 C_4, 2 C_6, 2 C_{12}, 24 D_2, 10 D_4	7 C_2, 4 C_4, 33 D_2, 14 D_4
R49.49	2 **Tet**, 2 **Ico**, 3 C_2, 3 C_3, 2 C_5, 2 C_6, 2 C_{10}, 2 C_{15}, 7 D_2, 5 D_3, 4 D_5, 3 D_6, 2 D_{10}, 2 D_{15}	2 **Tet**, **Ico**, 3 C_2, 3 C_3, C_5, 2 C_6, C_{10}, 7 D_2, 5 D_3, 2 D_5, 3 D_6, D_{10}	2 C_2, C_6, C_{10}, 6 D_2, 4 D_3, D_5, 3 D_6, D_{10}	2 **Tet**, 3 C_2, 3 C_3, C_5, 7 D_2, 4 D_3, 2 D_5
R49.50	2 **Tet**, 2 **Ico**, 3 C_2, 3 C_3, 2 C_5, 5 C_6, 2 C_{10}, 2 C_{15}, 2 C_{30}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	2 **Tet**, **Ico**, 3 C_2, 3 C_3, C_5, 5 C_6, C_{10}, 7 D_2, 2 D_3, 2 D_5, D_6, D_{10}	2 C_2, 4 C_6, C_{10}, 6 D_2, D_3, D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_5, 7 D_2, 2 D_3, 2 D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R49.51	2 **Tet**, 3 C_2, 3 C_3, 2 C_5, 2 C_6, 2 C_{10}, 10 C_{15}, 4 C_{30}, 6 D_2, 2 D_3, 4 D_5, 2 D_6, 4 D_{10}, 8 D_{15}, 8 D_{30}	2 **Tet**, 3 C_2, 3 C_3, C_5, 2 C_6, C_{10}, 4 C_{15}, 2 C_{30}, 6 D_2, 2 D_3, 2 D_5, 2 D_6, 2 D_{10}, 4 D_{15}, 4 D_{30}	2 C_2, C_6, 5 D_2, 2 D_3, 2 D_5, 2 D_6, 2 D_{10}, 4 D_{15}, 4 D_{30}	3 C_2, C_3, C_5, C_6, 6 D_2, 2 D_3, 2 D_5, 2 D_6
R49.52	2 **Tet**, 2 **Oct**, **Ico**, 2 C_2, 3 C_3, C_4, C_5, 2 C_6, C_{15}, 3 D_2, 4 D_3, D_4, D_5, 2 D_6	2 **Tet**, 2 **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, 3 D_2, 4 D_3, D_4, 2 D_6	2 **Oct**, C_2, C_6, 2 D_2, 3 D_3, D_4, 2 D_6	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 3 D_2, 3 D_3, D_4
R49.53	2 **Tet**, **Oct**, **Ico**, 2 C_2, 3 C_3, C_4, C_5, 4 C_6, C_{12}, C_{15}, 3 D_2, 2 D_3, D_4, D_5, D_6	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 4 C_6, C_{12}, 3 D_2, 2 D_3, D_4, D_6	**Oct**, C_2, 3 C_6, 2 D_2, D_3, D_4, D_6	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 D_2, 2 D_3, D_4
R49.54	**Tet**, 3 C_2, C_3, C_6, 6 C_{13}, 6 C_{26}, 6 C_{39}, 6 D_2, 12 D_{13}, 12 D_{26}	**Tet**, 3 C_2, C_3, C_6, C_{13}, C_{26}, 6 D_2, 2 D_{13}, 2 D_{26}	2 C_2, C_6, 5 D_2, 2 D_{13}, 2 D_{26}	3 C_2, C_{13}, 6 D_2, 2 D_{13}
R49.55	C_2, 3 C_3, C_6, 8 C_{17}, 40 C_{51}, D_3, 8 D_{17}, 16 D_{51}	C_2, 3 C_3, C_6, C_{17}, 4 C_{51}, D_3, D_{17}, 2 D_{51}	C_2, C_6, D_3, D_{17}, 2 D_{51}	C_2, C_3, C_{17}, D_3, D_{17}
R49.56	C_2, C_3, C_6, 3 C_7, 3 C_{21}, 21 C_{49}, 21 C_{147}, 3 D_7, 21 D_{49}	C_2, C_3, C_6, C_7, C_{49}, D_7, D_{49}	C_2, C_6, D_7, D_{49}	C_2, C_7, C_{49}, D_7, D_{49}
R49.57	8 C_2, 3 C_7, 164 D_2	8 C_2, C_7, 164 D_2	C_2, 50 D_2	8 C_2, C_7, 164 D_2
R49.58	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, C_7, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, 6 D_2, 2 D_3, 3 D_4, D_6	**Oct**, 2 C_2, C_6, 5 D_2, D_3, 2 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, 6 D_2, 2 D_3, 3 D_4
R49.59	4 C_2, 2 C_3, 2 C_4, 4 C_6, 2 C_8, 2 C_{12}, 2 C_{24}, 10 D_2, 4 D_3, 2 D_4, 6 D_6, D_{12}	4 C_2, 2 C_3, 2 C_4, 4 C_6, C_{12}, 10 D_2, 4 D_3, 2 D_4, 6 D_6, D_{12}	2 C_2, 2 C_4, 3 C_6, C_{12}, 8 D_2, D_3, 2 D_4, 5 D_6, D_{12}	4 C_2, 2 C_3, C_6, 10 D_2, 3 D_3, D_6
R49.60	5 C_2, 2 C_3, 3 C_4, 4 C_6, 4 C_8, 3 C_{12}, 2 C_{24}, 13 D_2, 6 D_3, 7 D_6	5 C_2, 2 C_3, 3 C_4, 4 C_6, 2 C_8, 2 C_{12}, 13 D_2, 6 D_3, 7 D_6	2 C_2, 3 C_4, 3 C_6, 2 C_8, 2 C_{12}, 11 D_2, D_3, 6 D_6	5 C_2, 2 C_3, C_6, 13 D_2, 4 D_3, 2 D_6
R49.61	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_9, 2 C_{12}, 3 C_{18}, 7 D_2, 4 D_4	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, 7 D_2, 4 D_4	2 C_2, C_6, 6 D_2, 4 D_4	3 C_2, 2 C_4, 7 D_2, 4 D_4
R49.62	5 C_2, 4 C_4, 2 C_5, 6 C_{10}, 13 D_2, 6 D_4	5 C_2, 4 C_4, C_5, 3 C_{10}, 13 D_2, 6 D_4	2 C_2, C_{10}, 11 D_2, 4 D_4	5 C_2, 4 C_4, C_5, 13 D_2, 6 D_4
R49.63	5 C_2, 4 C_4, 2 C_5, 6 C_{10}, 13 D_2, 6 D_4	5 C_2, 4 C_4, C_5, 3 C_{10}, 13 D_2, 6 D_4	3 C_2, 2 C_{10}, 11 D_2, 4 D_4	5 C_2, 4 C_4, C_5, 13 D_2, 6 D_4
R49.64	15 C_2, 2 C_5, 6 C_{10}, 261 D_2	15 C_2, C_5, 3 C_{10}, 261 D_2	3 C_2, 2 C_{10}, 88 D_2	15 C_2, C_5, 261 D_2
R49.65	5 C_2, 4 C_4, 2 C_5, 6 C_{10}, 13 D_2, 6 D_4	5 C_2, 4 C_4, C_5, 3 C_{10}, 13 D_2, 6 D_4	3 C_2, 4 C_4, 2 C_{10}, 13 D_2, 6 D_4	5 C_2, C_5, 13 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R49.66	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 6 C_4, 7 C_6, 13 C_{12}, 16 D_2, 2 D_3, 4 D_4, D_6	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 6 C_4, 7 C_6, 11 C_{12}, 16 D_2, 2 D_3, 4 D_4, D_6	**Oct**, 3 C_2, 3 C_4, 4 C_6, 4 C_{12}, 13 D_2, D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 16 D_2, 2 D_3, 4 D_4
R49.67	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 4 C_4, 7 C_6, 8 C_{12}, 18 D_2, 2 D_3, 6 D_4, 2 D_6, 2 D_{12}	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 4 C_4, 7 C_6, 6 C_{12}, 18 D_2, 2 D_3, 6 D_4, 2 D_6, 2 D_{12}	2 **Tet**, 2 **Oct**, 3 C_2, 3 C_4, 4 C_6, C_{12}, 16 D_2, D_3, 6 D_4, 2 D_6, 2 D_{12}	**Tet**, 5 C_2, C_3, C_4, 18 D_2, 2 D_3, D_4
R49.68	4 C_2, 3 C_3, 4 C_4, 4 C_6, 8 C_{12}, 9 D_2, 2 D_3, 6 D_4, 3 D_6, 4 D_{12}	4 C_2, 3 C_3, 4 C_4, 4 C_6, 6 C_{12}, 9 D_2, 2 D_3, 6 D_4, 3 D_6, 4 D_{12}	2 C_2, 4 C_4, 3 C_6, 6 C_{12}, 9 D_2, D_3, 6 D_4, 3 D_6, 4 D_{12}	4 C_2, C_3, C_6, 9 D_2, 2 D_3, D_6
R49.69	2 **Tet**, 7 C_2, 3 C_3, 4 C_4, 7 C_6, 8 C_{12}, 31 D_2, 4 D_3, 9 D_6	2 **Tet**, 7 C_2, 3 C_3, 4 C_4, 7 C_6, 6 C_{12}, 31 D_2, 4 D_3, 9 D_6	2 C_2, 4 C_4, 3 C_6, 6 C_{12}, 20 D_2, D_3, 6 D_6	7 C_2, C_3, 2 C_6, 31 D_2, 4 D_3, 7 D_6
R49.70	5 C_2, 3 C_3, 3 C_4, 14 C_6, 11 C_{12}, 13 D_2, D_3, 2 D_4, 2 D_6	5 C_2, 3 C_3, 3 C_4, 14 C_6, 9 C_{12}, 13 D_2, D_3, 2 D_4, 2 D_6	3 C_2, 2 C_4, 6 C_6, 6 C_{12}, 11 D_2, D_3, 2 D_4, 2 D_6	5 C_2, C_3, C_4, 2 C_6, 13 D_2, D_3, 2 D_4, 2 D_6
R49.71	2 **Tet**, 4 **Oct**, 5 C_2, 3 C_3, 6 C_4, 5 C_6, 3 C_{12}, 16 D_2, 6 D_3, 4 D_4, 6 D_6	2 **Tet**, 4 **Oct**, 5 C_2, 3 C_3, 6 C_4, 5 C_6, C_{12}, 16 D_2, 6 D_3, 4 D_4, 6 D_6	2 **Oct**, 3 C_2, 4 C_4, 3 C_6, C_{12}, 13 D_2, 3 D_3, 3 D_4, 5 D_6	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 2 C_4, 16 D_2, 5 D_3, 4 D_4
R49.72	2 **Tet**, 3 **Oct**, 5 C_2, 3 C_3, 4 C_4, 6 C_6, 3 C_{12}, 18 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_{12}	2 **Tet**, 3 **Oct**, 5 C_2, 3 C_3, 4 C_4, 6 C_6, C_{12}, 18 D_2, 4 D_3, 6 D_4, 6 D_6, D_{12}	2 **Tet**, 3 **Oct**, 3 C_2, 4 C_4, 3 C_6, C_{12}, 16 D_2, 3 D_3, 6 D_4, 6 D_6, D_{12}	2 **Tet**, 5 C_2, 3 C_3, 18 D_2, 3 D_3
R49.73	5 C_2, 3 C_3, 3 C_4, 13 C_6, 4 C_{12}, 13 D_2, 3 D_3, 2 D_4, 7 D_6	5 C_2, 3 C_3, 3 C_4, 13 C_6, 2 C_{12}, 13 D_2, 3 D_3, 2 D_4, 7 D_6	3 C_2, 2 C_4, 4 C_6, 11 D_2, 3 D_3, 2 D_4, 7 D_6	5 C_2, 3 C_3, C_4, 3 C_6, 13 D_2, 3 D_3, 2 D_4, 3 D_6
R49.74	5 C_2, C_3, 2 C_4, 2 C_5, 5 C_6, 6 C_{10}, 4 C_{12}, 2 C_{15}, 4 C_{20}, 6 C_{30}, 8 C_{60}, 13 D_2, 4 D_5, 8 D_{10}	5 C_2, C_3, 2 C_4, C_5, 5 C_6, 3 C_{10}, 2 C_{12}, C_{20}, 13 D_2, 2 D_5, 4 D_{10}	3 C_2, 2 C_4, C_6, C_{10}, 11 D_2, D_5, 3 D_{10}	5 C_2, C_5, C_{10}, 13 D_2, 2 D_5, D_{10}
R49.75	5 C_2, 5 C_4, 16 C_8, 8 C_{16}, 15 D_2, 10 D_4, 20 D_8	5 C_2, 5 C_4, 14 C_8, 2 C_{16}, 15 D_2, 10 D_4, 18 D_8	3 C_2, 2 C_4, 4 C_8, 13 D_2, 7 D_4, 14 D_8	5 C_2, 3 C_4, 6 C_8, 15 D_2, 6 D_4, 10 D_8
R49.76	4 C_2, 6 C_4, 11 C_8, 8 C_{16}, 9 D_2, 5 D_4, 4 D_8	4 C_2, 6 C_4, 9 C_8, C_{16}, 9 D_2, 5 D_4, 4 D_8	3 C_2, 3 C_4, 3 C_8, 9 D_2, 5 D_4, 4 D_8	4 C_2, 3 C_4, 4 C_8, 9 D_2, 3 D_4, 4 D_8
R49.77	5 C_2, 6 C_4, 18 C_8, 20 C_{16}, 13 D_2, 3 D_4, 6 D_8	5 C_2, 6 C_4, 16 C_8, 12 C_{16}, 13 D_2, 3 D_4, 6 D_8	3 C_2, 3 C_4, 5 C_8, 11 C_{16}, 11 D_2, 2 D_4, 4 D_8	5 C_2, 2 C_4, 6 C_8, 13 D_2, 3 D_4, 6 D_8
R49.78	4 C_2, 6 C_4, 12 C_8, 12 C_{16}, 9 D_2, 2 D_4, 2 D_8	4 C_2, 6 C_4, 10 C_8, 5 C_{16}, 9 D_2, 2 D_4, 2 D_8	3 C_2, 3 C_4, 4 C_8, 5 C_{16}, 9 D_2, 2 D_4, 2 D_8	4 C_2, 2 C_4, 4 C_8, 9 D_2, 2 D_4, 2 D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R49.79	4 C_2, 6 C_4, 11 C_8, 12 C_{16}, 9 D_2, 2 D_4, 2 D_8	4 C_2, 6 C_4, 9 C_8, 6 C_{16}, 9 D_2, 2 D_4, 2 D_8	3 C_2, 3 C_4, 5 C_8, 5 C_{16}, 9 D_2, 2 D_4, 2 D_8	4 C_2, 2 C_4, 3 C_8, 9 D_2, 2 D_4, 2 D_8
R49.80	5 C_2, 6 C_4, 13 C_8, 12 C_{16}, 13 D_2, 3 D_4, 3 D_8	5 C_2, 6 C_4, 11 C_8, 6 C_{16}, 13 D_2, 3 D_4, 3 D_8	3 C_2, 3 C_4, 7 C_8, 5 C_{16}, 11 D_2, 2 D_4, 2 D_8	5 C_2, 2 C_4, 3 C_8, 13 D_2, 3 D_4, 3 D_8
R49.81	6 C_2, 7 C_4, 4 C_8, 8 C_{16}, 26 D_2, 12 D_4	6 C_2, 7 C_4, 2 C_8, 26 D_2, 12 D_4	2 C_2, 4 C_4, 2 C_8, 21 D_2, 10 D_4	6 C_2, 3 C_4, 26 D_2, 6 D_4
R49.82	7 C_2, 9 C_4, 6 C_8, 8 C_{16}, 30 D_2, 12 D_4	7 C_2, 9 C_4, 4 C_8, 2 C_{16}, 30 D_2, 12 D_4	2 C_2, 4 C_4, 4 C_8, 2 C_{16}, 22 D_2, 10 D_4	7 C_2, 5 C_4, 30 D_2, 6 D_4
R49.83	7 C_2, 7 C_4, 6 C_8, 8 C_{16}, 37 D_2, 3 D_4	7 C_2, 7 C_4, 4 C_8, 37 D_2, 3 D_4	2 C_2, 5 C_4, 4 C_8, 25 D_2, 2 D_4	7 C_2, 2 C_4, 37 D_2, 3 D_4
R49.84	9 C_2, 8 C_4, 10 C_8, 16 C_{16}, 45 D_2, 3 D_4	9 C_2, 8 C_4, 8 C_8, 6 C_{16}, 45 D_2, 3 D_4	2 C_2, 5 C_4, 8 C_8, 6 C_{16}, 27 D_2, 2 D_4	9 C_2, 3 C_4, 45 D_2, 3 D_4
R49.85	4 C_2, 6 C_4, 10 C_8, 8 C_{16}, 9 D_2, 5 D_4, 4 D_8	4 C_2, 6 C_4, 8 C_8, 2 C_{16}, 9 D_2, 5 D_4, 4 D_8	3 C_2, 2 C_4, 2 C_8, 9 D_2, 5 D_4, 4 D_8	4 C_2, 4 C_4, 4 C_8, 9 D_2, 3 D_4, 4 D_8
R49.86	6 C_2, 7 C_4, 3 C_8, 6 C_{16}, 20 D_2, 13 D_4	6 C_2, 7 C_4, C_8, C_{16}, 20 D_2, 13 D_4	2 C_2, 6 C_4, C_8, C_{16}, 16 D_2, 13 D_4	6 C_2, C_4, 20 D_2
R49.87	6 C_2, 7 C_4, 3 C_8, 6 C_{16}, 21 D_2, 12 D_4	6 C_2, 7 C_4, C_8, C_{16}, 21 D_2, 12 D_4	2 C_2, 6 C_4, C_8, C_{16}, 15 D_2, 12 D_4	6 C_2, C_4, 21 D_2
R49.88	9 C_2, 4 C_4, 3 C_8, 4 C_{16}, 85 D_2, 12 D_4	9 C_2, 4 C_4, C_8, 85 D_2, 12 D_4	2 C_2, 4 C_4, C_8, 36 D_2, 12 D_4	9 C_2, 85 D_2
R49.89	9 C_2, 4 C_4, 3 C_8, 4 C_{16}, 81 D_2, 14 D_4	9 C_2, 4 C_4, C_8, 81 D_2, 14 D_4	2 C_2, 4 C_4, C_8, 38 D_2, 14 D_4	9 C_2, 81 D_2
R49.90	11 C_2, 6 C_4, 6 C_8, 8 C_{16}, 100 D_2	11 C_2, 6 C_4, 4 C_8, 2 C_{16}, 100 D_2	2 C_2, 6 C_4, 4 C_8, 2 C_{16}, 43 D_2	11 C_2, 100 D_2
R49.91	8 C_2, 6 C_4, 6 C_8, 8 C_{16}, 47 D_2, 7 D_4	8 C_2, 6 C_4, 4 C_8, 2 C_{16}, 47 D_2, 7 D_4	2 C_2, 6 C_4, 4 C_8, 2 C_{16}, 28 D_2, 7 D_4	8 C_2, 47 D_2
R49.92	7 C_2, 6 C_4, 6 C_8, 8 C_{16}, 37 D_2, 3 D_4	7 C_2, 6 C_4, 4 C_8, 2 C_{16}, 37 D_2, 3 D_4	2 C_2, 3 C_4, 2 C_8, 24 D_2, 2 D_4	7 C_2, 2 C_4, 37 D_2, 3 D_4
R49.93	4 C_2, 8 C_4, 2 C_8, 4 C_{16}, 10 D_2, 6 D_4	4 C_2, 8 C_4, 10 D_2, 6 D_4	2 C_2, 3 C_4, 8 D_2, 6 D_4	4 C_2, 4 C_4, 10 D_2, 2 D_4
R49.94	4 C_2, 10 C_4, 2 C_8, 4 C_{16}, 10 D_2, 6 D_4	4 C_2, 10 C_4, 10 D_2, 6 D_4	2 C_2, 3 C_4, 8 D_2, 6 D_4	4 C_2, 7 C_4, 10 D_2, 2 D_4
R49.95	7 C_2, 7 C_4, 8 C_8, 8 C_{16}, 37 D_2, 3 D_4	7 C_2, 7 C_4, 6 C_8, 2 C_{16}, 37 D_2, 3 D_4	2 C_2, 3 C_4, 4 C_8, 24 D_2, 2 D_4	7 C_2, 4 C_4, 37 D_2, 3 D_4
R49.96	3 C_2, 2 C_4, 3 C_7, 4 C_8, 3 C_{14}, 8 C_{16}, 3 C_{28}, 6 C_{56}, 12 C_{112}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, 2 C_4, C_7, 3 C_8, C_{14}, 2 C_{16}, 3 D_2, 2 D_7, D_{14}	2 C_2, C_4, C_{14}, 3 D_2, D_7, D_{14}	3 C_2, C_7, 3 D_2, D_7
R49.97	2 C_2, 2 C_4, 3 C_7, 3 C_8, 3 C_{14}, 4 C_{16}, 3 C_{28}, 6 C_{56}, 12 C_{112}, 2 D_2, 3 D_7, 3 D_{14}	2 C_2, 2 C_4, C_7, C_8, C_{14}, 2 D_2, D_7, D_{14}	2 C_2, C_4, C_{14}, 2 D_2, D_7, D_{14}	2 C_2, C_7, 2 D_2, D_7

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R49.98	**Tet**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 2 C_{20}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, 3 C_2, C_3, 2 C_4, C_6, C_{12}, 7 D_2, 2 D_3, D_6	2 C_2, C_4, C_6, 6 D_2, D_3, D_6	**Tet**, 3 C_2, C_3, 7 D_2, 2 D_3
R49.99	**Tet**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 2 C_{20}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, 3 C_2, C_3, 2 C_4, C_6, C_{12}, 7 D_2, 2 D_3, D_6	**Tet**, 2 C_2, C_4, C_6, 7 D_2, D_3, D_6	**Tet**, 3 C_2, C_3, C_4, 7 D_2, 2 D_3
R49.100	3 C_2, C_3, 3 C_6, 3 C_9, 9 C_{18}, 9 C_{27}, 9 C_{54}, 6 D_2	3 C_2, C_3, 3 C_6, 6 D_2	2 C_2, C_6, 5 D_2	3 C_2, 6 D_2
R49.101	5 C_2, 3 C_4, 3 C_7, 15 C_{14}, 15 C_{28}, 13 D_2, 2 D_4	5 C_2, 3 C_4, C_7, 5 C_{14}, 3 C_{28}, 13 D_2, 2 D_4	3 C_2, 2 C_4, C_{14}, 11 D_2, 2 D_4	5 C_2, C_4, C_7, 13 D_2, 2 D_4
R49.102	C_2, C_3, 2 C_5, C_6, 3 C_7, 2 C_{10}, 4 C_{15}, 3 C_{21}, 4 C_{30}, 6 C_{35}, 12 C_{105}, 3 D_7	C_2, C_3, C_5, C_6, C_7, C_{10}, D_7	C_2, C_6, C_{10}, D_7	C_2, C_7, D_7
R49.103	3 C_2, 3 C_3, 2 C_4, 5 C_6, 6 C_9, 7 C_{12}, 12 C_{18}, 18 C_{36}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, 2 C_4, 5 C_6, 2 C_9, 5 C_{12}, 4 C_{18}, 3 C_{36}, 3 D_2, 2 D_3, D_6	2 C_2, 2 C_4, 3 C_6, 3 C_{12}, C_{18}, 3 D_2, D_3, D_6	3 C_2, 3 C_3, C_6, 3 D_2, 2 D_3
R49.104	5 C_2, 2 C_4, 6 C_{13}, 30 C_{26}, 24 C_{52}, 13 D_2	5 C_2, 2 C_4, C_{13}, 5 C_{26}, 2 C_{52}, 13 D_2	3 C_2, 2 C_4, C_{26}, 11 D_2	5 C_2, C_{13}, 13 D_2
R49.105	C_2, C_3, C_6, 3 C_9, 5 C_{11}, 3 C_{18}, 5 C_{22}, 10 C_{33}, 10 C_{66}, 30 C_{99}, 30 C_{198}	C_2, C_3, C_6	C_2, C_6	C_2
R49.106	3 C_2, 2 C_4, 2 C_5, 6 C_{10}, 8 C_{20}, 10 C_{25}, 30 C_{50}, 40 C_{100}, 3 D_2	3 C_2, 2 C_4, C_5, 3 C_{10}, 2 C_{20}, C_{25}, 3 C_{50}, 2 C_{100}, 3 D_2	2 C_2, 2 C_4, C_{10}, C_{50}, 3 D_2	3 C_2, C_5, C_{10}, C_{25}, C_{50}, 3 D_2
R49.107	C_2, C_4, 3 C_7, 3 C_{14}, 6 C_{28}, 21 C_{49}, 21 C_{98}, 42 C_{196}	C_2, C_4, C_7, C_{14}, C_{49}, C_{98}	C_2, C_4, C_{14}, C_{98}	C_2, C_7, C_{49}
Genus 50				
R50.1	**Tet**, C_2, C_3, C_6, 3 C_7, 2 C_{13}, D_2, 2 D_3, D_6, 3 D_7, 2 D_{13}	**Tet**, C_2, C_3, C_6, 3 C_7, D_2, 2 D_3, D_6, 3 D_7	**Tet**, C_2, C_6, D_2, 2 D_3, D_6, 3 D_7	**Tet**, C_2, C_3, 3 C_7, D_2, 2 D_3, 3 D_7
R50.2	3 C_2, C_3, C_4, 2 C_6, 8 C_{17}, 16 C_{34}, 16 C_{51}, 32 C_{102}, 4 D_2, D_3, D_4, D_6, 8 D_{17}, 8 D_{34}, 16 D_{51}, 16 D_{102}	3 C_2, C_3, C_4, 2 C_6, C_{17}, 2 C_{34}, C_{51}, 2 C_{102}, 4 D_2, D_3, D_4, D_6, D_{17}, D_{34}, D_{51}, D_{102}	3 C_2, C_4, C_6, C_{34}, C_{102}, 4 D_2, D_3, D_4, D_6, D_{17}, D_{34}, D_{51}, D_{102}	3 C_2, C_3, C_{17}, C_{51}, 4 D_2, D_3, D_{17}, D_{51}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R50.3	2 C_2, 2 C_4, 2 C_5, C_8, 2 C_{10}, 4 C_{20}, 10 C_{25}, 4 C_{40}, 10 C_{50}, 20 C_{100}, 20 C_{200}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 4 D_{20}, 10 D_{25}, 10 D_{50}, 20 D_{100}	2 C_2, 2 C_4, C_5, C_{10}, C_{20}, C_{25}, C_{50}, C_{100}, 2 D_2, D_4, D_5, D_{10}, D_{20}, D_{25}, D_{50}, D_{100}	2 C_2, 2 C_4, C_{10}, C_{20}, C_{50}, C_{100}, 2 D_2, D_4, D_5, D_{10}, D_{20}, D_{25}, D_{50}, D_{100}	2 C_2, C_5, C_{25}, 2 D_2, D_5, D_{25}
R50.4	3 C_2, C_3, 3 C_6, 7 C_7, 7 C_{14}, 3 D_2, 14 D_7, 7 D_{14}	3 C_2, C_3, 3 C_6, 7 C_7, 7 C_{14}, 3 D_2, 14 D_7, 7 D_{14}	3 C_2, 2 C_6, 7 C_{14}, 3 D_2, 14 D_7, 7 D_{14}	3 C_2, C_3, 7 C_7, 3 D_2, 14 D_7
R50.5	3 C_2, C_3, C_4, 2 C_6, 6 C_{13}, 6 C_{26}, 6 C_{39}, 12 C_{52}, 6 C_{78}, 4 D_2, D_3, D_4, D_6, 12 D_{13}, 12 D_{26}, 6 D_{39}, 12 D_{52}, 6 D_{78}	3 C_2, C_3, C_4, 2 C_6, C_{13}, C_{26}, C_{39}, C_{52}, C_{78}, 4 D_2, D_3, D_4, D_6, 2 D_{13}, 2 D_{26}, D_{39}, D_{52}, D_{78}	3 C_2, C_4, C_6, 4 D_2, D_3, D_4, D_6, 2 D_{13}, 2 D_{26}, D_{39}, D_{52}, D_{78}	3 C_2, C_3, C_{13}, C_{26}, 4 D_2, D_3, 2 D_{13}, 2 D_{26}
R50.6	3 C_2, C_3, 2 C_5, 3 C_6, 2 C_{10}, 2 C_{15}, 10 C_{25}, 2 C_{30}, 10 C_{50}, 10 C_{75}, 10 C_{150}, 3 D_2, 4 D_5, 2 D_{10}, 20 D_{25}, 10 D_{50}	3 C_2, C_3, C_5, 3 C_6, C_{10}, C_{25}, C_{50}, 3 D_2, 2 D_5, D_{10}, 2 D_{25}, D_{50}	3 C_2, C_6, 3 D_2, 2 D_5, D_{10}, 2 D_{25}, D_{50}	3 C_2, C_5, C_{10}, C_{25}, C_{50}, 3 D_2, 2 D_5, D_{10}, 2 D_{25}, D_{50}
R50.7	C_2, C_4, 6 C_7, 2 C_8, 6 D_7	C_2, C_4, 6 C_7, 6 D_7	C_2, C_4, 6 D_7	C_2, 6 C_7, 6 D_7
R50.8	2 C_2, 2 C_4, C_8, 8 C_{17}, 8 C_{34}, 16 C_{68}, 2 D_2, D_4, 8 D_{17}, 8 D_{34}, 8 D_{68}	2 C_2, 2 C_4, C_{17}, C_{34}, C_{68}, 2 D_2, D_4, D_{17}, D_{34}, D_{68}	2 C_2, 2 C_4, C_{34}, 2 D_2, D_4, D_{17}, D_{34}, D_{68}	2 C_2, C_{17}, 2 D_2, D_{17}
R50.9	3 C_2, C_3, C_4, C_6, 5 C_{11}, 2 C_{12}, 10 C_{22}, 5 C_{33}, 5 C_{66}, 4 D_2, 2 D_3, D_4, 2 D_6, 5 D_{11}, 2 D_{12}, 5 D_{22}, 5 D_{33}, 5 D_{66}	3 C_2, C_3, C_4, C_6, C_{11}, C_{12}, 2 C_{22}, C_{33}, C_{66}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{11}, D_{12}, D_{22}, D_{33}, D_{66}	3 C_2, C_4, C_{22}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{11}, D_{12}, D_{22}, D_{33}, D_{66}	3 C_2, C_3, C_6, C_{11}, 4 D_2, 2 D_3, 2 D_6, D_{11}
R50.10	2 C_2, C_3, 2 C_4, 2 C_5, 2 C_6, C_8, 2 C_{10}, 2 C_{12}, 2 C_{15}, 4 C_{20}, 2 C_{24}, 2 C_{30}, 4 C_{40}, 4 C_{60}, 8 C_{120}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 4 D_{20}	2 C_2, C_3, 2 C_4, C_5, 2 C_6, C_{10}, C_{20}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, 2 C_4, C_6, C_{10}, C_{20}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, C_5, 2 D_2, D_5
R50.11	2 C_2, C_3, C_4, 2 C_5, C_6, C_8, 4 C_{10}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 4 C_{40}, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, C_4, C_5, C_6, 2 C_{10}, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, C_6, C_{10}, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, 2 D_2, D_3
R50.12	2 C_2, C_3, 2 C_4, 2 C_5, C_6, C_8, 2 C_{10}, 2 C_{12}, 2 C_{15}, 4 C_{20}, 2 C_{24}, 2 C_{30}, 4 C_{60}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 2 D_{12}, 2 D_{15}, 2 D_{20}, 2 D_{30}, 4 D_{60}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, C_{15}, C_{20}, C_{30}, C_{60}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{12}, D_{15}, D_{20}, D_{30}, D_{60}	2 C_2, 2 C_4, C_6, C_{10}, C_{12}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{12}, D_{15}, D_{20}, D_{30}, D_{60}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R50.13	3 C_2, 2 C_5, 2 C_{10}, 5 C_{11}, 15 C_{22}, 10 C_{55}, 10 C_{110}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}	3 C_2, 3 D_2, 2 D_5, D_{10}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}
R50.14	C_2, C_3, 2 C_5, C_6, 3 C_7, 3 C_{14}, 2 C_{15}, 6 C_{21}, 6 C_{35}, 6 C_{42}, 12 C_{105}, 2 D_5	C_2, C_3, C_5, C_6, C_7, C_{14}, D_5	C_2, C_6, C_{14}, D_5	C_2, C_5, D_5
R50.15	2 C_2, 2 C_4, C_8, 6 C_{13}, 12 C_{26}, 12 C_{52}, 12 C_{104}, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 D_2
R50.16	C_2, 50 C_{101}, 50 C_{202}	C_2	C_2	C_2
R50.17	3 C_2, C_3, 3 C_6, 8 C_{17}, 24 C_{34}, 16 C_{51}, 48 C_{102}, 3 D_2	3 C_2, C_3, 3 C_6, C_{17}, 3 C_{34}, C_{51}, 3 C_{102}, 3 D_2	3 C_2, C_6, C_{34}, C_{102}, 3 D_2	3 C_2, C_3, C_{17}, C_{51}, 3 D_2
R50.18	C_2, C_4, 2 C_5, 2 C_8, 2 C_{10}, 4 C_{20}, 10 C_{25}, 8 C_{40}, 10 C_{50}, 20 C_{100}, 40 C_{200}	C_2, C_4, C_5, C_{10}, C_{20}, C_{25}, C_{50}, C_{100}	C_2, C_4, C_{10}, C_{20}, C_{50}, C_{100}	C_2, C_5, C_{25}
Genus 51				
R51.1	2 C_2, C_3, 2 C_4, 4 C_5, C_6, 4 C_{10}, 2 C_{12}, 8 C_{20}, 2 D_2, D_4, 8 D_5, 8 D_{10}, 8 D_{20}	2 C_2, C_3, 2 C_4, 4 C_5, C_6, 4 C_{10}, C_{12}, 8 C_{20}, 2 D_2, D_4, 8 D_5, 8 D_{10}, 8 D_{20}	2 C_2, 2 C_4, C_6, 4 C_{10}, C_{12}, 8 C_{20}, 2 D_2, D_4, 8 D_5, 8 D_{10}, 8 D_{20}	2 C_2, 4 C_5, 2 D_2, 8 D_5
R51.2	C_2, C_3, 6 C_5, C_6, 2 C_{10}, 4 C_{15}, 4 C_{30}, 4 D_5	C_2, C_3, 5 C_5, C_6, C_{10}, C_{15}, C_{30}, 4 D_5	C_2, C_6, C_{10}, C_{30}, 4 D_5	C_2, 4 C_5, 4 D_5
R51.3	5 C_2, 3 C_4, 5 C_5, 2 C_8, 13 C_{10}, 5 C_{20}, 13 D_2, 3 D_4, 18 D_5, 29 D_{10}, 5 D_{20}	5 C_2, 3 C_4, 5 C_5, C_8, 13 C_{10}, 5 C_{20}, 13 D_2, 3 D_4, 18 D_5, 29 D_{10}, 5 D_{20}	3 C_2, 3 C_4, C_8, 5 C_{10}, 5 C_{20}, 13 D_2, 3 D_4, 13 D_5, 29 D_{10}, 5 D_{20}	5 C_2, 5 C_5, 8 C_{10}, 13 D_2, 18 D_5, 16 D_{10}
R51.4	3 C_2, 5 C_4, 5 C_5, C_8, 5 C_{10}, 13 C_{20}, 4 D_2, 2 D_4, 13 D_5, 13 D_{10}, 13 D_{20}	3 C_2, 5 C_4, 5 C_5, 5 C_{10}, 13 C_{20}, 4 D_2, 2 D_4, 13 D_5, 13 D_{10}, 13 D_{20}	3 C_2, 4 C_4, 5 C_{10}, 13 C_{20}, 4 D_2, 2 D_4, 13 D_5, 13 D_{10}, 13 D_{20}	3 C_2, 5 C_5, 4 D_2, 13 D_5
R51.5	3 C_2, C_3, 2 C_4, 5 C_5, C_6, 5 C_{10}, C_{12}, 5 C_{15}, 3 D_2, 2 D_3, 10 D_5, D_6, 5 D_{10}, 5 D_{15}	3 C_2, C_3, 2 C_4, 5 C_5, C_6, 5 C_{10}, 5 C_{15}, 3 D_2, 2 D_3, 10 D_5, D_6, 5 D_{10}, 5 D_{15}	2 C_2, 2 C_4, C_6, 3 D_2, D_3, 10 D_5, D_6, 5 D_{10}, 5 D_{15}	3 C_2, C_3, 5 C_5, 5 C_{10}, 3 D_2, D_3, 10 D_5, 5 D_{10}
R51.6	C_2, C_4, 7 C_5, 2 C_{10}, 4 C_{20}, 5 D_5	C_2, C_4, 6 C_5, C_{10}, C_{20}, 5 D_5	C_2, C_4, C_{10}, C_{20}, 5 D_5	C_2, 5 C_5, 5 D_5
R51.7	2 C_2, C_3, 4 C_4, C_5, C_6, C_8, C_{10}, C_{12}, C_{20}, 2 C_{24}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, 4 C_4, C_5, C_6, C_{10}, C_{20}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, 3 C_4, C_6, C_{10}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R51.8	2 C_2, C_3, 4 C_4, C_5, C_6, C_8, C_{10}, C_{12}, C_{20}, 2 C_{24}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, 4 C_4, C_5, C_6, C_{10}, C_{20}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, 3 C_4, C_6, C_{10}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5
R51.9	5 C_2, C_3, 2 C_4, 3 C_6, 3 C_9, 9 C_{18}, 9 C_{27}, 9 C_{54}, 16 D_2, 2 D_3, 4 D_4, 4 D_6, 6 D_9, 12 D_{18}, 18 D_{27}, 9 D_{54}	5 C_2, C_3, 2 C_4, 3 C_6, C_9, 3 C_{18}, C_{27}, C_{54}, 16 D_2, 2 D_3, 4 D_4, 4 D_6, 2 D_9, 4 D_{18}, 2 D_{27}, D_{54}	3 C_2, 2 C_4, C_6, C_{18}, 16 D_2, D_3, 4 D_4, 4 D_6, D_9, 4 D_{18}, D_{27}, D_{54}	5 C_2, C_3, C_6, C_9, C_{18}, 16 D_2, 2 D_3, D_6, 2 D_9, D_{18}
R51.10	5 C_2, 3 C_4, 2 C_8, 6 C_{13}, 18 C_{26}, 24 C_{52}, 24 C_{104}, 13 D_2, 3 D_4, 12 D_{13}, 24 D_{26}, 36 D_{52}	5 C_2, 3 C_4, C_8, C_{13}, 3 C_{26}, 3 C_{52}, C_{104}, 13 D_2, 3 D_4, 2 D_{13}, 4 D_{26}, 5 D_{52}	3 C_2, 2 C_4, C_{26}, 13 D_2, 3 D_4, D_{13}, 3 D_{26}, 3 D_{52}	5 C_2, C_4, C_{13}, C_{26}, C_{52}, 13 D_2, D_4, 2 D_{13}, 2 D_{26}, D_{52}
R51.11	3 C_2, 5 C_4, C_8, 6 C_{13}, 12 C_{26}, 12 C_{52}, 12 C_{104}, 4 D_2, 2 D_4, 6 D_{13}, 6 D_{26}, 6 D_{52}	3 C_2, 5 C_4, C_{13}, 2 C_{26}, C_{52}, 4 D_2, 2 D_4, D_{13}, D_{26}, D_{52}	3 C_2, 4 C_4, C_{26}, 4 D_2, 2 D_4, D_{13}, D_{26}, D_{52}	3 C_2, C_{13}, C_{26}, 4 D_2, D_{13}, D_{26}
R51.12	3 C_2, C_3, 2 C_4, C_6, C_{12}, 8 C_{17}, 8 C_{34}, 16 C_{51}, 8 C_{68}, 16 C_{102}, 16 C_{204}, 3 D_2, 2 D_3, D_6, 16 D_{17}, 8 D_{34}, 32 D_{51}, 16 D_{102}	3 C_2, C_3, 2 C_4, C_6, C_{17}, C_{34}, C_{51}, C_{102}, 3 D_2, 2 D_3, D_6, 2 D_{17}, D_{34}, 2 D_{51}, D_{102}	2 C_2, 2 C_4, C_6, C_{34}, C_{102}, 3 D_2, D_3, D_6, D_{17}, D_{34}, D_{51}, D_{102}	3 C_2, C_3, C_{17}, C_{51}, 3 D_2, D_3, D_{17}, D_{51}
R51.13	3 C_2, C_3, 3 C_4, C_5, 2 C_6, 3 C_8, C_{10}, 3 C_{12}, C_{20}, 4 D_2, 2 D_3, 3 D_4, D_5, 2 D_6, 2 D_8, D_{10}, 2 D_{12}	3 C_2, C_3, 3 C_4, C_5, 2 C_6, 2 C_8, C_{10}, 3 C_{12}, C_{20}, 4 D_2, 2 D_3, 3 D_4, D_5, 2 D_6, D_8, D_{10}, 2 D_{12}	3 C_2, 3 C_4, C_6, 2 C_8, C_{10}, 3 C_{12}, C_{20}, 4 D_2, 2 D_3, 3 D_4, D_5, 2 D_6, D_8, D_{10}, 2 D_{12}	3 C_2, C_3, C_5, 4 D_2, 2 D_3, D_5
R51.14	4 C_2, C_3, 2 C_4, C_5, 3 C_6, 2 C_8, C_{10}, C_{12}, C_{20}, 12 D_2, 4 D_3, 4 D_4, 2 D_5, 7 D_6, 2 D_8, D_{10}, D_{12}	4 C_2, C_3, 2 C_4, C_5, 3 C_6, C_8, C_{10}, C_{12}, C_{20}, 12 D_2, 4 D_3, 4 D_4, 2 D_5, 7 D_6, D_8, D_{10}, D_{12}	3 C_2, 2 C_4, C_6, C_8, C_{10}, C_{12}, C_{20}, 12 D_2, 3 D_3, 4 D_4, 2 D_5, 7 D_6, D_8, D_{10}, D_{12}	4 C_2, C_3, C_5, 12 D_2, 4 D_3, 2 D_5
R51.15	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, 3 C_7, 6 C_{14}, 3 C_{21}, 3 C_{28}, 16 D_2, 2 D_3, 4 D_4, D_6, 9 D_7, 15 D_{14}, 3 D_{21}, 3 D_{28}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, C_7, 2 C_{14}, C_{21}, 16 D_2, 2 D_3, 4 D_4, D_6, 3 D_7, 5 D_{14}, D_{21}	**Tet**, **Oct**, 3 C_2, C_4, C_6, 16 D_2, D_3, 4 D_4, D_6, 2 D_7, 4 D_{14}, D_{21}	**Tet**, 5 C_2, C_3, C_4, C_7, 16 D_2, D_3, 2 D_4, 3 D_7
R51.16	2 C_2, 2 C_4, 5 C_5, 2 C_8, 5 C_{10}, 5 C_{20}, 2 D_2, 8 D_5, 5 D_{10}	2 C_2, 2 C_4, 5 C_5, 5 C_{10}, 5 C_{20}, 2 D_2, 8 D_5, 5 D_{10}	2 C_2, 2 C_4, 5 C_{10}, 5 C_{20}, 2 D_2, 8 D_5, 5 D_{10}	2 C_2, 5 C_5, 2 D_2, 8 D_5
R51.17	3 C_2, 2 C_4, 5 C_5, 4 C_8, 5 C_{10}, 5 C_{20}, 3 D_2, 10 D_5, 5 D_{10}	3 C_2, 2 C_4, 5 C_5, 2 C_8, 5 C_{10}, 5 C_{20}, 3 D_2, 10 D_5, 5 D_{10}	2 C_2, 2 C_4, 2 C_8, 5 C_{10}, 5 C_{20}, 3 D_2, 5 D_5, 5 D_{10}	3 C_2, 5 C_5, 3 D_2, 10 D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R51.18	4 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 3 C_9, 3 C_{12}, 3 C_{18}, 6 C_{36}, 12 D_2, 2 D_3, 4 D_4, 4 D_6, 2 D_8, 6 D_9, 4 D_{12}, 6 D_{18}, 6 D_{36}	4 C_2, C_3, 2 C_4, 2 C_6, C_8, C_9, 2 C_{12}, C_{18}, C_{36}, 12 D_2, 2 D_3, 4 D_4, 4 D_6, D_8, 2 D_9, 3 D_{12}, 2 D_{18}, D_{36}	2 C_2, 2 C_4, C_6, C_8, 2 C_{12}, C_{18}, C_{36}, 12 D_2, D_3, 4 D_4, 4 D_6, D_8, D_9, 3 D_{12}, 2 D_{18}, D_{36}	4 C_2, C_3, 12 D_2, 2 D_3
R51.19	3 C_2, C_3, 3 C_4, 2 C_6, 3 C_8, 3 C_9, 2 C_{12}, 3 C_{18}, 3 C_{36}, 4 D_2, D_3, 3 D_4, D_6, 2 D_8, 3 D_9, D_{12}, 3 D_{18}	3 C_2, C_3, 3 C_4, 2 C_6, 2 C_8, C_9, C_{12}, C_{18}, 4 D_2, D_3, 3 D_4, D_6, D_8, D_9, D_{12}, D_{18}	2 C_2, 3 C_4, C_6, 2 C_8, C_{12}, C_{18}, 4 D_2, D_3, 3 D_4, D_6, D_8, D_9, D_{12}, D_{18}	3 C_2, C_3, 4 D_2, D_3
R51.20	5 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, 3 C_9, 4 C_{12}, 9 C_{18}, 12 C_{36}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_9, 3 D_{12}, 12 D_{18}, 9 D_{36}	5 C_2, C_3, 3 C_4, 3 C_6, C_8, C_9, 3 C_{12}, 3 C_{18}, 3 C_{36}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 2 D_9, 3 D_{12}, 4 D_{18}, 3 D_{36}	3 C_2, 2 C_4, C_6, C_{12}, C_{18}, C_{36}, 13 D_2, D_3, 3 D_4, 4 D_6, D_9, 3 D_{12}, 4 D_{18}, 3 D_{36}	5 C_2, C_3, C_4, C_6, C_9, C_{18}, 13 D_2, 2 D_3, D_4, D_6, 2 D_9, D_{18}
R51.21	3 C_2, C_3, 5 C_4, 2 C_6, C_8, 3 C_9, 7 C_{12}, 6 C_{18}, 21 C_{36}, 4 D_2, D_3, 2 D_4, D_6, 3 D_9, 2 D_{12}, 3 D_{18}, 6 D_{36}	3 C_2, C_3, 5 C_4, 2 C_6, C_9, 6 C_{12}, 2 C_{18}, 6 C_{36}, 4 D_2, D_3, 2 D_4, D_6, D_9, 2 D_{12}, D_{18}, 2 D_{36}	3 C_2, 3 C_4, C_6, 2 C_{12}, C_{18}, 2 C_{36}, 4 D_2, D_3, 2 D_4, D_6, D_9, 2 D_{12}, D_{18}, 2 D_{36}	3 C_2, C_3, C_9, 4 D_2, D_3, D_9
R51.22	3 C_2, 2 C_4, 4 C_8, 8 C_{17}, 8 C_{34}, 8 C_{68}, 16 C_{136}, 3 D_2, 16 D_{17}, 8 D_{34}	3 C_2, 2 C_4, 2 C_8, C_{17}, C_{34}, 3 D_2, 2 D_{17}, D_{34}	2 C_2, C_4, C_{34}, 3 D_2, D_{17}, D_{34}	3 C_2, C_{17}, 3 D_2, D_{17}
R51.23	2 C_2, 2 C_4, 2 C_8, 8 C_{17}, 8 C_{34}, 8 C_{68}, 16 C_{136}, 2 D_2, 8 D_{17}, 8 D_{34}	2 C_2, 2 C_4, C_{17}, C_{34}, 2 D_2, D_{17}, D_{34}	2 C_2, C_4, C_{34}, 2 D_2, D_{17}, D_{34}	2 C_2, C_{17}, 2 D_2, D_{17}
R51.24	C_2, C_3, C_4, 5 C_5, C_6, 2 C_{12}, 5 C_{15}, 5 D_5	C_2, C_3, C_4, 5 C_5, C_6, 5 C_{15}, 5 D_5	C_2, C_4, C_6, 5 D_5	C_2, C_3, 5 C_5, 5 D_5
R51.25	C_2, 3 C_7, 3 C_{14}, 8 C_{17}, 24 C_{119}, 8 D_{17}	C_2, C_{17}, D_{17}	C_2, D_{17}	C_2, C_{17}, D_{17}
R51.26	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 4 C_{10}, 2 C_{12}, 4 C_{15}, 6 C_{20}, 4 C_{30}, 8 C_{60}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, C_5, C_6, 2 C_{10}, C_{12}, 2 C_{20}, 2 D_2, D_4	2 C_2, C_4, C_6, C_{10}, 2 D_2, D_4	2 C_2, 2 D_2
R51.27	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 2 C_5, C_6, 10 C_{10}, 2 C_{15}, 4 C_{20}, 2 C_{30}, 16 D_2, 2 D_3, 4 D_4, D_6	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_5, C_6, 5 C_{10}, C_{20}, 16 D_2, 2 D_3, 4 D_4, D_6	**Tet**, **Oct**, 3 C_2, C_4, C_6, C_{10}, 16 D_2, D_3, 4 D_4, D_6	**Tet**, 5 C_2, C_3, C_4, 16 D_2, D_3, 2 D_4
R51.28	5 C_2, 3 C_4, 3 C_7, 2 C_8, 15 C_{14}, 12 C_{28}, 12 C_{56}, 13 D_2, 3 D_4	5 C_2, 3 C_4, C_8, 13 D_2, 3 D_4	3 C_2, 2 C_4, 13 D_2, 3 D_4	5 C_2, C_4, 13 D_2, D_4
R51.29	3 C_2, 5 C_4, 3 C_7, C_8, 9 C_{14}, 24 C_{28}, 6 C_{56}, 4 D_2, 2 D_4	3 C_2, 5 C_4, 4 D_2, 2 D_4	3 C_2, 3 C_4, 4 D_2, 2 D_4	3 C_2, 4 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R51.30	3 C_2, C_3, 3 C_6, 3 C_9, 9 C_{18}, 9 C_{27}, 9 C_{54}, 6 D_2	3 C_2, C_3, 3 C_6, C_9, 3 C_{18}, C_{27}, C_{54}, 6 D_2	2 C_2, C_6, C_{18}, 6 D_2	3 C_2, C_3, C_6, C_9, C_{18}, 6 D_2
R51.31	C_2, C_3, 2 C_5, 3 C_7, 2 C_{10}, 3 C_{14}, 2 C_{15}, 3 C_{21}, 12 C_{35}, 12 C_{70}, 12 C_{105}, D_3	C_2, C_3, C_5, C_{10}, D_3	C_2, C_{10}, D_3	C_2, C_3, D_3
R51.32	C_2, 51 C_{103}, 51 C_{206}	C_2	C_2	C_2
R51.33	2 C_2, 2 C_4, 2 C_8, 6 C_{13}, 12 C_{26}, 18 C_{52}, 24 C_{104}, 2 D_2	2 C_2, 2 C_4, C_{13}, 2 C_{26}, C_{52}, 2 D_2	2 C_2, C_4, C_{26}, 2 D_2	2 C_2, C_{13}, C_{26}, 2 D_2
R51.34	3 C_2, 2 C_4, 4 C_8, 6 C_{13}, 18 C_{26}, 24 C_{52}, 48 C_{104}, 3 D_2	3 C_2, 2 C_4, 2 C_8, C_{13}, 3 C_{26}, 3 C_{52}, 2 C_{104}, 3 D_2	2 C_2, C_4, C_{26}, 3 D_2	3 C_2, C_4, C_{13}, C_{26}, C_{52}, 3 D_2
R51.35	C_2, C_3, C_4, C_6, 2 C_{12}, 8 C_{17}, 8 C_{34}, 16 C_{51}, 16 C_{68}, 16 C_{102}, 32 C_{204}	C_2, C_3, C_4, C_6, C_{17}, C_{34}, C_{51}, C_{102}	C_2, C_4, C_6, C_{34}, C_{102}	C_2, C_3, C_{17}, C_{51}
Genus 52				
R52.1	**Tet**, **Oct**, C_2, C_3, C_4, 2 C_8, 3 C_9, C_{17}, D_2, D_3, D_4, 2 D_8, 3 D_9, D_{17}	**Tet**, **Oct**, C_2, C_3, C_4, C_8, 3 C_9, C_{17}, D_2, D_3, D_4, D_8, 3 D_9, D_{17}	**Tet**, **Oct**, C_2, C_4, C_8, D_2, D_3, D_4, D_8, 3 D_9, D_{17}	**Tet**, C_2, C_3, C_{17}, D_2, D_3, D_{17}
R52.2	**Tet**, **Oct**, C_2, C_3, C_4, 2 C_8, 3 C_9, C_{17}, D_2, D_3, D_4, 2 D_8, 3 D_9, D_{17}	**Tet**, **Oct**, C_2, C_3, C_4, C_8, 3 C_9, C_{17}, D_2, D_3, D_4, D_8, 3 D_9, D_{17}	**Tet**, **Oct**, C_2, C_4, C_8, D_2, D_3, D_4, D_8, 3 D_9, D_{17}	**Tet**, C_2, C_3, C_{17}, D_2, D_3, D_{17}
R52.3	3 C_2, C_4, 26 C_{53}, 52 C_{106}, 4 D_2, D_4, 26 D_{53}, 26 D_{106}	3 C_2, C_4, C_{53}, 2 C_{106}, 4 D_2, D_4, D_{53}, D_{106}	3 C_2, C_4, C_{106}, 4 D_2, D_4, D_{53}, D_{106}	3 C_2, C_{53}, 4 D_2, D_{53}
R52.4	2 C_2, 2 C_4, 2 C_8, 6 C_{13}, 2 C_{16}, 6 C_{26}, 12 C_{52}, 24 C_{104}, 24 C_{208}, 2 D_2, D_4, 2 D_8, 6 D_{13}, 6 D_{26}, 12 D_{52}, 24 D_{104}	2 C_2, 2 C_4, C_8, C_{13}, C_{26}, C_{52}, C_{104}, 2 D_2, D_4, D_8, D_{13}, D_{26}, D_{52}, D_{104}	2 C_2, 2 C_4, C_8, C_{26}, C_{52}, C_{104}, 2 D_2, D_4, D_8, D_{13}, D_{26}, D_{52}, D_{104}	2 C_2, C_{13}, 2 D_2, D_{13}
R52.5	3 C_2, 2 C_3, C_4, 2 C_5, 2 C_6, 2 C_{10}, 4 C_{15}, 4 C_{20}, 4 D_2, 4 D_3, D_4, 4 D_5, 2 D_6, 4 D_{10}, 4 D_{15}, 4 D_{20}	3 C_2, 2 C_3, C_4, C_5, 2 C_6, C_{10}, 2 C_{15}, C_{20}, 4 D_2, 4 D_3, D_4, 2 D_5, 2 D_6, 2 D_{10}, 2 D_{15}, D_{20}	3 C_2, C_6, 4 D_2, 4 D_3, D_4, 2 D_5, 2 D_6, 2 D_{10}, 2 D_{15}, D_{20}	3 C_2, 2 C_3, C_4, C_5, 4 D_2, 4 D_3, D_4, 2 D_5
R52.6	3 C_2, 3 C_3, 2 C_6, 6 C_9, 3 C_{18}, 18 C_{27}, 9 C_{54}, 3 D_2, 5 D_3, 2 D_6, 9 D_9, 3 D_{18}, 27 D_{27}, 9 D_{54}	3 C_2, 3 C_3, 2 C_6, 4 C_9, C_{18}, 4 C_{27}, C_{54}, 3 D_2, 5 D_3, 2 D_6, 5 D_9, D_{18}, 5 D_{27}, D_{54}	3 C_2, 3 D_2, 5 D_3, 2 D_6, 5 D_9, D_{18}, 5 D_{27}, D_{54}	3 C_2, 3 C_3, C_9, C_{27}, 3 D_2, 5 D_3, 2 D_9, 2 D_{27}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R52.7	3 C_2, 3 C_3, 5 C_6, 6 C_9, 6 C_{18}, 18 C_{27}, 18 C_{54}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}, 18 D_{27}, 9 D_{54}	3 C_2, 3 C_3, 5 C_6, 4 C_9, 4 C_{18}, 4 C_{27}, 4 C_{54}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}, 6 D_{27}, 3 D_{54}	3 C_2, 3 C_6, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}, 6 D_{27}, 3 D_{54}	3 C_2, 2 C_3, C_6, C_9, C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}
R52.8	3 C_2, C_3, C_4, 3 C_6, C_{12}, 6 C_{13}, 6 C_{26}, 6 C_{39}, 12 C_{52}, 6 C_{78}, 12 C_{156}, 4 D_2, D_4, 12 D_{13}, 12 D_{26}, 12 D_{52}	3 C_2, C_3, C_4, 3 C_6, C_{13}, C_{26}, C_{52}, 4 D_2, D_4, 2 D_{13}, 2 D_{26}, D_{52}	3 C_2, C_6, 4 D_2, D_4, 2 D_{13}, 2 D_{26}, D_{52}	3 C_2, C_4, C_{13}, C_{26}, C_{52}, 4 D_2, D_4, 2 D_{13}, 2 D_{26}, D_{52}
R52.9	3 C_2, C_4, 2 C_5, 3 C_7, 4 C_{10}, 3 C_{14}, 6 C_{28}, 6 C_{35}, 6 C_{70}, 4 D_2, D_4, 2 D_5, 6 D_7, 2 D_{10}, 6 D_{14}, 6 D_{28}, 6 D_{35}, 6 D_{70}	3 C_2, C_4, C_5, C_7, 2 C_{10}, C_{14}, C_{28}, C_{35}, C_{70}, 4 D_2, D_4, D_5, 2 D_7, D_{10}, 2 D_{14}, D_{28}, D_{35}, D_{70}	3 C_2, C_4, C_{10}, 4 D_2, D_4, D_5, 2 D_7, D_{10}, 2 D_{14}, D_{28}, D_{35}, D_{70}	3 C_2, C_5, C_7, C_{14}, 4 D_2, D_5, 2 D_7, 2 D_{14}
R52.10	3 C_2, 2 C_5, 6 C_{10}, 6 C_{13}, 6 C_{26}, 12 C_{65}, 12 C_{130}, 3 D_2, 12 D_{13}, 6 D_{26}	3 C_2, C_{13}, C_{26}, 3 D_2, 2 D_{13}, D_{26}	3 C_2, 3 D_2, 2 D_{13}, D_{26}	3 C_2, C_{13}, C_{26}, 3 D_2, 2 D_{13}, D_{26}
R52.11	2 C_2, 2 C_3, 2 C_4, 3 C_6, 2 C_8, 3 C_{12}, 2 C_{16}, 2 D_2, D_3, D_4, D_6, 2 D_8, D_{12}	2 C_2, 2 C_3, 2 C_4, 3 C_6, C_8, 2 C_{12}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}	2 C_2, 2 C_4, 3 C_6, C_8, 2 C_{12}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}	2 C_2, 2 C_3, 2 D_2, D_3
R52.12	C_2, C_3, C_6, 3 C_9, 6 C_{13}, 3 C_{18}, 6 C_{39}, 18 C_{117}, 6 D_{13}	C_2, C_3, C_6, C_{13}, D_{13}	C_2, C_6, D_{13}	C_2, C_{13}, D_{13}
R52.13	3 C_2, C_3, C_4, 2 C_5, 3 C_6, 2 C_8, 4 C_{10}, C_{12}, 2 C_{15}, 2 C_{20}, 2 C_{24}, 6 C_{30}, 2 C_{60}, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, 2 D_{20}	3 C_2, C_3, C_4, C_5, 3 C_6, C_8, 2 C_{10}, C_{20}, 4 D_2, 2 D_4, D_5, D_8, D_{10}, D_{20}	3 C_2, C_6, C_{10}, 4 D_2, 2 D_4, D_5, D_8, D_{10}, D_{20}	3 C_2, C_4, C_5, 4 D_2, 2 D_4, D_5
R52.14	2 C_2, 2 C_4, 3 C_7, 2 C_8, 6 C_{14}, 2 C_{16}, 6 C_{28}, 6 C_{56}, 12 C_{112}, 2 D_2, D_4, 2 D_8	2 C_2, 2 C_4, C_8, 2 D_2, D_4, D_8	2 C_2, 2 C_4, C_8, 2 D_2, D_4, D_8	2 C_2, 2 D_2
R52.15	3 C_2, C_3, C_4, 3 C_6, 3 C_9, C_{12}, 9 C_{18}, 9 C_{27}, 3 C_{36}, 27 C_{54}, 9 C_{108}, 4 D_2, D_4	3 C_2, C_3, C_4, 3 C_6, 4 D_2, D_4	3 C_2, C_6, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R52.16	C_2, C_3, 2 C_5, C_6, 3 C_7, 2 C_{10}, 3 C_{14}, 4 C_{15}, 6 C_{21}, 4 C_{30}, 12 C_{35}, 6 C_{42}, 12 C_{70}, 24 C_{105}, 24 C_{210}	C_2, C_3, C_6	C_2, C_6	C_2
R52.17	3 C_2, 26 C_{53}, 78 C_{106}, 3 D_2	3 C_2, C_{53}, 3 C_{106}, 3 D_2	3 C_2, C_{106}, 3 D_2	3 C_2, C_{53}, 3 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R52.18	C_2, C_4, 2 C_8, 6 C_{13}, 4 C_{16}, 6 C_{26}, 12 C_{52}, 24 C_{104}, 48 C_{208}	C_2, C_4, C_8, C_{13}, C_{26}, C_{52}, C_{104}	C_2, C_4, C_8, C_{26}, C_{52}, C_{104}	C_2, C_{13}
Genus 53				
R53.1	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_5, 2 C_6, 10 C_{10}, 4 C_{15}, 8 C_{30}, 26 D_2, D_3, 5 D_4, 2 D_5, D_6, 6 D_{10}, 4 D_{15}, 4 D_{30}	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, C_5, 2 C_6, 5 C_{10}, C_{15}, 2 C_{30}, 26 D_2, D_3, 5 D_4, D_5, D_6, 3 D_{10}, D_{15}, D_{30}	**Oct**, 3 C_2, C_4, C_6, C_{10}, 21 D_2, D_3, 5 D_4, D_5, D_6, 3 D_{10}, D_{15}, D_{30}	**Tet**, **Oct**, 6 C_2, C_3, 2 C_4, C_5, 26 D_2, D_3, 4 D_4, D_5
R53.2	6 C_2, 5 C_4, 3 C_7, 2 C_8, 15 C_{14}, 12 C_{28}, 12 C_{56}, 19 D_2, 3 D_4, 3 D_7, 9 D_{14}, 6 D_{28}	6 C_2, 5 C_4, C_7, C_8, 5 C_{14}, 3 C_{28}, C_{56}, 19 D_2, 3 D_4, D_7, 3 D_{14}, 2 D_{28}	3 C_2, 4 C_4, C_8, C_{14}, 17 D_2, 3 D_4, D_7, 3 D_{14}, 2 D_{28}	6 C_2, C_4, C_7, C_{14}, 19 D_2, 2 D_4, D_7, D_{14}
R53.3	6 C_2, 3 C_4, 3 C_7, C_8, 12 C_{14}, 3 C_{28}, 6 C_{56}, 27 D_2, 3 D_4, 6 D_7, 21 D_{14}	6 C_2, 3 C_4, C_7, 4 C_{14}, 27 D_2, 3 D_4, 2 D_7, 7 D_{14}	3 C_2, 2 C_4, C_{14}, 21 D_2, 3 D_4, D_7, 5 D_{14}	6 C_2, C_4, C_7, C_{14}, 27 D_2, 2 D_4, 2 D_7, D_{14}
R53.4	5 C_2, C_3, 2 C_4, 3 C_6, 3 C_9, 2 C_{12}, 9 C_{18}, 9 C_{27}, 6 C_{36}, 27 C_{54}, 18 C_{108}, 13 D_2, 2 D_3, 4 D_6, 6 D_9, 12 D_{18}, 18 D_{27}, 36 D_{54}	5 C_2, C_3, 2 C_4, 3 C_6, C_9, C_{12}, 3 C_{18}, C_{27}, C_{36}, 3 C_{54}, C_{108}, 13 D_2, 2 D_3, 4 D_6, 2 D_9, 4 D_{18}, 2 D_{27}, 4 D_{54}	3 C_2, 2 C_4, C_6, C_{18}, C_{54}, 11 D_2, D_3, 3 D_6, D_9, 3 D_{18}, D_{27}, 3 D_{54}	5 C_2, C_3, C_6, C_9, C_{18}, C_{27}, C_{54}, 13 D_2, 2 D_3, D_6, 2 D_9, D_{18}, 2 D_{27}, D_{54}
R53.5	3 C_2, 2 C_4, 26 C_{53}, 26 C_{106}, 26 C_{212}, 3 D_2, 52 D_{53}, 26 D_{106}	3 C_2, 2 C_4, C_{53}, C_{106}, 3 D_2, 2 D_{53}, D_{106}	2 C_2, 2 C_4, C_{106}, 3 D_2, D_{53}, D_{106}	3 C_2, C_{53}, 3 D_2, D_{53}
R53.6	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_6, 4 C_8, C_{12}, 8 C_{16}, 2 C_{24}, 26 D_2, D_3, 8 D_4, D_6, 12 D_8, D_{12}, 12 D_{16}, 2 D_{24}	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_6, 3 C_8, C_{12}, 5 C_{16}, 2 C_{24}, 26 D_2, D_3, 8 D_4, D_6, 9 D_8, D_{12}, 9 D_{16}, 2 D_{24}	**Oct**, 3 C_2, C_4, 2 C_6, 19 D_2, D_3, 7 D_4, D_6, 6 D_8, D_{12}, 9 D_{16}, 2 D_{24}	**Tet**, **Oct**, 6 C_2, C_3, 2 C_4, 26 D_2, D_3, 5 D_4
R53.7	4 C_2, C_3, 3 C_4, 2 C_6, 4 C_8, C_{12}, 4 C_{16}, 2 C_{24}, 8 D_2, D_3, 5 D_4, D_6, 6 D_8, D_{12}, 2 D_{16}, 2 D_{24}	4 C_2, C_3, 3 C_4, 2 C_6, 3 C_8, C_{12}, 2 C_{16}, 2 C_{24}, 8 D_2, D_3, 5 D_4, D_6, 5 D_8, D_{12}, 2 D_{16}, 2 D_{24}	3 C_2, 2 C_4, 2 C_6, C_8, 8 D_2, D_3, 5 D_4, D_6, 5 D_8, D_{12}, 2 D_{16}, 2 D_{24}	4 C_2, C_3, C_4, 8 D_2, D_3, 2 D_4
R53.8	**Tet**, **Oct**, 3 C_2, C_3, 3 C_4, C_6, 2 C_8, 2 C_{12}, 2 C_{16}, 9 D_2, D_3, 3 D_4, D_6, 2 D_8, 2 D_{12}	**Tet**, **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_8, 2 C_{12}, 9 D_2, D_3, 3 D_4, D_6, 2 D_8, 2 D_{12}	**Oct**, 2 C_2, 2 C_4, C_6, C_8, 2 C_{12}, 8 D_2, D_3, 3 D_4, D_6, 2 D_8, 2 D_{12}	**Tet**, **Oct**, 3 C_2, C_3, C_4, 9 D_2, D_3, D_4
R53.9	**Tet**, 7 C_2, C_3, 3 C_6, 3 C_7, 9 C_{14}, 3 C_{21}, 3 C_{42}, 31 D_2, 12 D_7, 27 D_{14}	**Tet**, 7 C_2, C_3, 3 C_6, C_7, 3 C_{14}, 31 D_2, 4 D_7, 9 D_{14}	3 C_2, 2 C_6, 23 D_2, 2 D_7, 7 D_{14}	7 C_2, C_7, C_{14}, 31 D_2, 4 D_7, 2 D_{14}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R53.10	C_2, C_3, C_6, 26 C_{53}, 26 C_{159}, 26 D_{53}	C_2, C_3, C_6, C_{53}, D_{53}	C_2, C_6, D_{53}	C_2, C_{53}, D_{53}
R53.11	6 C_2, 5 C_4, 2 C_5, 2 C_8, 10 C_{10}, 14 C_{20}, 19 D_2, 3 D_4, 2 D_5, 6 D_{10}, 4 D_{20}	6 C_2, 5 C_4, C_5, C_8, 5 C_{10}, 6 C_{20}, 19 D_2, 3 D_4, D_5, 3 D_{10}, 2 D_{20}	3 C_2, 4 C_4, C_8, C_{10}, 3 C_{20}, 17 D_2, 3 D_4, D_5, 3 D_{10}, 2 D_{20}	6 C_2, C_4, C_5, 19 D_2, 2 D_4, D_5
R53.12	6 C_2, 3 C_4, 2 C_5, C_8, 8 C_{10}, 6 C_{20}, 27 D_2, 3 D_4, 4 D_5, 14 D_{10}	6 C_2, 3 C_4, C_5, 4 C_{10}, 2 C_{20}, 27 D_2, 3 D_4, 2 D_5, 7 D_{10}	3 C_2, 2 C_4, C_{10}, C_{20}, 21 D_2, 3 D_4, D_5, 5 D_{10}	6 C_2, C_4, C_5, 27 D_2, 2 D_4, 2 D_5
R53.13	4 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 3 C_9, 3 C_{12}, 6 C_{18}, 2 C_{24}, 9 C_{36}, 6 C_{72}, 10 D_2, 2 D_3, 2 D_4, 4 D_6, 6 D_9, 3 D_{12}, 12 D_{18}, 9 D_{36}	4 C_2, C_3, 2 C_4, 2 C_6, C_9, 2 C_{12}, 2 C_{18}, 2 C_{36}, 10 D_2, 2 D_3, 2 D_4, 4 D_6, 2 D_9, 2 D_{12}, 4 D_{18}, 2 D_{36}	2 C_2, 2 C_4, C_6, C_{12}, C_{18}, C_{36}, 8 D_2, D_3, 2 D_4, 3 D_6, D_9, 2 D_{12}, 3 D_{18}, 2 D_{36}	4 C_2, C_3, C_9, 10 D_2, 2 D_3, 2 D_9
R53.14	5 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 3 C_9, 2 C_{12}, 9 C_{18}, 4 C_{24}, 6 C_{36}, 12 C_{72}, 13 D_2, 2 D_3, 4 D_6, 6 D_9, 12 D_{18}	5 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, C_9, C_{12}, 3 C_{18}, C_{36}, 13 D_2, 2 D_3, 4 D_6, 2 D_9, 4 D_{18}	2 C_2, 3 C_4, C_6, 2 C_8, C_{18}, 11 D_2, D_3, 3 D_6, D_9, 3 D_{18}	5 C_2, C_3, C_9, 13 D_2, 2 D_3, 2 D_9
R53.15	3 C_2, C_3, 2 C_4, C_6, 5 C_{11}, C_{12}, 5 C_{22}, 5 C_{33}, 5 C_{44}, 5 C_{66}, 3 D_2, 2 D_3, D_6, 10 D_{11}, 5 D_{22}, 10 D_{33}, 5 D_{66}	3 C_2, C_3, 2 C_4, C_6, C_{11}, C_{22}, C_{33}, C_{66}, 3 D_2, 2 D_3, D_6, 2 D_{11}, D_{22}, 2 D_{33}, D_{66}	2 C_2, 2 C_4, C_6, C_{22}, 3 D_2, D_3, D_6, D_{11}, D_{22}, D_{33}, D_{66}	3 C_2, C_3, C_{11}, 3 D_2, D_3, D_{11}
R53.16	3 C_2, 4 C_4, 6 C_8, 10 C_{16}, 8 C_{32}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}	3 C_2, 4 C_4, 4 C_8, 4 C_{16}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}	2 C_2, 3 C_4, 4 C_8, 4 C_{16}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}	3 C_2, C_4, 4 D_2
R53.17	3 C_2, 5 C_4, 7 C_8, 12 C_{16}, 16 C_{32}, 4 D_2, 2 D_4, 2 D_8, 4 D_{16}	3 C_2, 5 C_4, 5 C_8, 6 C_{16}, 4 D_2, 2 D_4, 2 D_8, 4 D_{16}	2 C_2, 3 C_4, 5 C_8, 6 C_{16}, 4 D_2, 2 D_4, 2 D_8, 4 D_{16}	3 C_2, 2 C_4, 4 D_2
R53.18	4 C_2, 4 C_4, 6 C_8, 12 C_{16}, 4 C_{32}, 10 D_2, 6 D_4, 9 D_8, 14 D_{16}	4 C_2, 4 C_4, 4 C_8, 6 C_{16}, 10 D_2, 6 D_4, 6 D_8, 10 D_{16}	2 C_2, 2 C_4, 4 C_8, 6 C_{16}, 8 D_2, 6 D_4, 6 D_8, 10 D_{16}	4 C_2, 2 C_4, 10 D_2, 2 D_4
R53.19	3 C_2, 4 C_4, 5 C_8, 10 C_{16}, 4 C_{32}, 6 D_2, 2 D_4, 3 D_8, 4 D_{16}	3 C_2, 4 C_4, 3 C_8, 5 C_{16}, 6 D_2, 2 D_4, 2 D_8, 4 D_{16}	2 C_2, 3 C_4, 3 C_8, 5 C_{16}, 6 D_2, 2 D_4, 2 D_8, 4 D_{16}	3 C_2, C_4, 6 D_2
R53.20	5 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 10 C_{10}, 2 C_{12}, 2 C_{15}, 8 C_{20}, 6 C_{30}, 8 C_{60}, 13 D_2, 2 D_3, 4 D_6	5 C_2, C_3, 2 C_4, 3 C_6, C_{12}, 13 D_2, 2 D_3, 4 D_6	3 C_2, 2 C_4, C_6, 11 D_2, D_3, 3 D_6	5 C_2, C_3, C_6, 13 D_2, 2 D_3, D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R53.21	3 C_2, C_3, 2 C_4, 2 C_5, C_6, 4 C_8, 2 C_{10}, C_{12}, 2 C_{15}, 2 C_{20}, 2 C_{24}, 2 C_{30}, 4 C_{40}, 2 C_{60}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 4 D_{15}, 2 D_{30}	3 C_2, C_3, 2 C_4, C_5, C_6, 2 C_8, C_{10}, C_{15}, C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	2 C_2, C_4, C_6, C_{10}, 3 D_2, D_3, D_5, D_6, D_{10}, D_{15}, D_{30}	3 C_2, C_3, C_5, 3 D_2, D_3, D_5
R53.22	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_8, 2 C_{10}, C_{12}, 2 C_{15}, 2 C_{20}, 2 C_{24}, 2 C_{30}, 4 C_{40}, 2 C_{60}, 2 D_2, D_3, 2 D_5, D_6, 2 D_{10}, 2 D_{15}, 2 D_{30}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{15}, C_{30}, 2 D_2, D_3, D_5, D_6, D_{10}, D_{15}, D_{30}	2 C_2, C_4, C_6, C_{10}, 2 D_2, D_3, D_5, D_6, D_{10}, D_{15}, D_{30}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5
R53.23	**Tet**, 7 C_2, C_3, 2 C_5, 3 C_6, 14 C_{10}, 4 C_{15}, 12 C_{30}, 31 D_2	**Tet**, 7 C_2, C_3, C_5, 3 C_6, 7 C_{10}, C_{15}, 3 C_{30}, 31 D_2	3 C_2, 2 C_6, C_{10}, 23 D_2	**Tet**, 7 C_2, C_3, C_5, 31 D_2
R53.24	5 C_2, 3 C_4, 3 C_7, 4 C_8, 15 C_{14}, 18 C_{28}, 24 C_{56}, 13 D_2	5 C_2, 3 C_4, C_7, 2 C_8, 5 C_{14}, 4 C_{28}, 2 C_{56}, 13 D_2	2 C_2, 3 C_4, 2 C_8, C_{14}, 11 D_2	5 C_2, C_7, C_{14}, 13 D_2
R53.25	4 C_2, 2 C_4, 3 C_7, 2 C_8, 12 C_{14}, 6 C_{28}, 12 C_{56}, 10 D_2, 2 D_4	4 C_2, 2 C_4, C_7, 4 C_{14}, 10 D_2, 2 D_4	2 C_2, 2 C_4, C_{14}, 8 D_2, 2 D_4	4 C_2, C_7, C_{14}, 10 D_2
R53.26	C_2, 53 C_{107}, 53 C_{214}	C_2	C_2	C_2
R53.27	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_9, 4 C_{12}, 9 C_{18}, 9 C_{27}, 12 C_{36}, 27 C_{54}, 36 C_{108}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, C_9, 2 C_{12}, 3 C_{18}, C_{27}, 2 C_{36}, 3 C_{54}, 2 C_{108}, 3 D_2	2 C_2, 2 C_4, C_6, C_{18}, C_{54}, 3 D_2	3 C_2, C_3, C_6, C_9, C_{18}, C_{27}, C_{54}, 3 D_2
R53.28	C_2, C_4, 26 C_{53}, 26 C_{106}, 52 C_{212}	C_2, C_4, C_{53}, C_{106}	C_2, C_4, C_{106}	C_2, C_{53}
Genus 54				
R54.1	**Tet**, **Oct**, 2 C_2, C_3, C_4, 9 C_{19}, 9 C_{38}, 18 C_{57}, 3 D_2, D_3, D_4, 9 D_{19}, 9 D_{38}, 18 D_{57}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_{19}, C_{38}, C_{57}, 3 D_2, D_3, D_4, D_{19}, D_{38}, D_{57}	**Tet**, **Oct**, 2 C_2, C_4, C_{38}, 3 D_2, D_3, D_4, D_{19}, D_{38}, D_{57}	**Tet**, 2 C_2, C_3, C_{19}, 3 D_2, D_3, D_{19}
R54.2	3 C_2, C_4, 2 C_5, 4 C_{10}, 5 C_{11}, 10 C_{22}, 20 C_{55}, 40 C_{110}, 4 D_2, D_4, 2 D_5, 2 D_{10}, 5 D_{11}, 5 D_{22}, 20 D_{55}, 20 D_{110}	3 C_2, C_4, C_5, 2 C_{10}, C_{11}, 2 C_{22}, C_{55}, 2 C_{110}, 4 D_2, D_4, D_5, D_{10}, D_{11}, D_{22}, D_{55}, D_{110}	3 C_2, C_4, C_{10}, C_{22}, C_{110}, 4 D_2, D_4, D_5, D_{10}, D_{11}, D_{22}, D_{55}, D_{110}	3 C_2, C_5, C_{11}, C_{55}, 4 D_2, D_5, D_{11}, D_{55}
R54.3	2 C_2, C_3, 2 C_4, C_6, C_8, 3 C_9, 2 C_{12}, 3 C_{18}, 2 C_{24}, 9 C_{27}, 6 C_{36}, 9 C_{54}, 6 C_{72}, 18 C_{108}, 18 C_{216}, 2 D_2, D_3, D_4, D_6, 3 D_9, 2 D_{12}, 3 D_{18}, 9 D_{27}, 6 D_{36}, 9 D_{54}, 18 D_{108}	2 C_2, C_3, 2 C_4, C_6, C_9, C_{12}, C_{18}, C_{27}, C_{36}, C_{54}, C_{108}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{27}, D_{36}, D_{54}, D_{108}	2 C_2, C_4, C_6, C_{12}, C_{18}, C_{36}, C_{54}, C_{108}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{27}, D_{36}, D_{54}, D_{108}	2 C_2, C_3, C_9, C_{27}, 2 D_2, D_3, D_9, D_{27}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R54.4	3 C_2, C_3, C_4, 2 C_6, 3 C_7, 2 C_8, C_{12}, 3 C_{14}, 3 C_{21}, 6 C_{28}, 3 C_{42}, 12 C_{56}, 6 C_{84}, 4 D_2, D_3, 2 D_4, D_6, 6 D_7, 2 D_8, D_{12}, 6 D_{14}, 3 D_{21}, 12 D_{28}, 3 D_{42}, 12 D_{56}, 6 D_{84}	3 C_2, C_3, C_4, 2 C_6, C_7, C_8, C_{12}, C_{14}, C_{21}, C_{28}, C_{42}, C_{56}, C_{84}, 4 D_2, D_3, 2 D_4, D_6, 2 D_7, D_8, D_{12}, 2 D_{14}, D_{21}, 2 D_{28}, D_{42}, D_{56}, D_{84}	3 C_2, C_6, 4 D_2, D_3, 2 D_4, D_6, 2 D_7, D_8, D_{12}, 2 D_{14}, D_{21}, 2 D_{28}, D_{42}, D_{56}, D_{84}	3 C_2, C_3, C_4, C_7, C_{14}, C_{28}, 4 D_2, D_3, 2 D_4, 2 D_7, 2 D_{14}, 2 D_{28}
R54.5	3 C_2, C_4, 2 C_8, 9 C_{19}, 18 C_{38}, 9 C_{76}, 4 D_2, 2 D_4, 2 D_8, 9 D_{19}, 9 D_{38}, 9 D_{76}	3 C_2, C_4, C_8, C_{19}, 2 C_{38}, C_{76}, 4 D_2, 2 D_4, D_8, D_{19}, D_{38}, D_{76}	3 C_2, C_{38}, 4 D_2, 2 D_4, D_8, D_{19}, D_{38}, D_{76}	3 C_2, C_4, C_{19}, 4 D_2, 2 D_4, D_{19}
R54.6	C_2, C_3, 2 C_5, 3 C_9, 2 C_{10}, 2 C_{15}, 9 C_{27}, 6 C_{45}, 18 C_{135}, D_3, 3 D_9, 9 D_{27}	C_2, C_3, C_5, C_9, C_{10}, C_{27}, D_3, D_9, D_{27}	C_2, C_{10}, D_3, D_9, D_{27}	C_2, C_3, C_9, C_{27}, D_3, D_9, D_{27}
R54.7	3 C_2, C_3, C_4, 3 C_6, 5 C_{11}, C_{12}, 10 C_{22}, 5 C_{33}, 15 C_{66}, 4 D_2, D_4, 5 D_{11}, 5 D_{22}	3 C_2, C_3, C_4, 3 C_6, C_{11}, 2 C_{22}, 4 D_2, D_4, D_{11}, D_{22}	3 C_2, C_4, C_6, C_{22}, 4 D_2, D_4, D_{11}, D_{22}	3 C_2, C_{11}, 4 D_2, D_{11}
R54.8	3 C_2, C_4, 2 C_5, 3 C_7, 2 C_{10}, 6 C_{14}, 4 C_{20}, 6 C_{35}, 6 C_{70}, 4 D_2, D_4, 4 D_5, 3 D_7, 4 D_{10}, 3 D_{14}, 4 D_{20}, 6 D_{35}, 6 D_{70}	3 C_2, C_4, C_5, C_7, C_{10}, 2 C_{14}, C_{20}, C_{35}, C_{70}, 4 D_2, D_4, 2 D_5, D_7, 2 D_{10}, D_{14}, D_{20}, D_{35}, D_{70}	3 C_2, C_4, C_{14}, 4 D_2, D_4, 2 D_5, D_7, 2 D_{10}, D_{14}, D_{20}, D_{35}, D_{70}	3 C_2, C_5, C_7, C_{10}, 4 D_2, 2 D_5, D_7, 2 D_{10}
R54.9	3 C_2, C_3, C_6, 3 C_7, 3 C_9, 9 C_{14}, 3 C_{18}, 3 C_{21}, 3 C_{42}, 9 C_{63}, 9 C_{126}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, C_3, C_6, C_9, C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, C_3, C_6, C_9, C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}
R54.10	2 C_2, C_3, 2 C_4, 2 C_5, C_6, C_8, 4 C_{10}, 2 C_{12}, 2 C_{15}, 4 C_{20}, 2 C_{24}, 2 C_{30}, 4 C_{40}, 4 C_{60}, 8 C_{120}, 2 D_2, D_3, D_4, D_6, 2 D_{12}	2 C_2, C_3, 2 C_4, C_5, C_6, 2 C_{10}, C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_4, C_6, C_{10}, C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, C_3, 2 D_2, D_3
R54.11	2 C_2, C_3, 2 C_4, 2 C_5, 2 C_6, C_8, 2 C_{10}, 2 C_{12}, 2 C_{15}, 4 C_{20}, 2 C_{24}, 2 C_{30}, 6 C_{60}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 2 D_{20}	2 C_2, C_3, 2 C_4, C_5, 2 C_6, C_{10}, C_{20}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, 2 C_4, C_6, C_{10}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, C_5, 2 D_2, D_5
R54.12	C_2, C_3, 3 C_9, 6 C_{13}, 6 C_{26}, 6 C_{39}, 18 C_{117}, D_3, 3 D_9	C_2, C_3, C_9, D_3, D_9	C_2, D_3, D_9	C_2, C_3, C_9, D_3, D_9
R54.13	2 C_2, C_3, C_4, 2 C_5, C_6, C_8, 4 C_{10}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 4 C_{40}, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, C_4, C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, 2 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R54.14	3 C_2, C_3, C_4, 2 C_5, 2 C_6, 2 C_8, 6 C_{10}, C_{12}, 2 C_{15}, 2 C_{20}, 6 C_{30}, 4 C_{40}, 2 C_{60}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}	3 C_2, C_3, C_4, 2 C_6, C_8, C_{12}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}	3 C_2, C_6, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}	3 C_2, C_3, C_4, 4 D_2, D_3, 2 D_4
R54.15	3 C_2, C_3, C_6, 9 C_{19}, 27 C_{38}, 9 C_{57}, 9 C_{114}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6	3 C_2, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6
R54.16	**Tet**, C_2, C_3, 9 C_{19}, 9 C_{38}, 18 C_{57}, D_2	**Tet**, C_2, C_3, C_{19}, C_{38}, C_{57}, D_2	**Tet**, C_2, C_{38}, D_2	**Tet**, C_2, C_3, C_{19}, D_2
R54.17	C_2, C_3, 18 C_{37}, 18 C_{74}, 18 C_{111}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R54.18	C_2, 54 C_{109}, 54 C_{218}	C_2	C_2	C_2
R54.19	3 C_2, 2 C_5, 6 C_{10}, 5 C_{11}, 15 C_{22}, 20 C_{55}, 60 C_{110}, 3 D_2	3 C_2, C_5, 3 C_{10}, C_{11}, 3 C_{22}, C_{55}, 3 C_{110}, 3 D_2	3 C_2, C_{10}, C_{22}, C_{110}, 3 D_2	3 C_2, C_5, C_{11}, C_{55}, 3 D_2
R54.20	C_2, C_3, C_4, C_6, 2 C_8, 3 C_9, 2 C_{12}, 3 C_{18}, 4 C_{24}, 9 C_{27}, 6 C_{36}, 9 C_{54}, 12 C_{72}, 18 C_{108}, 36 C_{216}	C_2, C_3, C_4, C_6, C_9, C_{12}, C_{18}, C_{27}, C_{36}, C_{54}, C_{108}	C_2, C_4, C_6, C_{12}, C_{18}, C_{36}, C_{54}, C_{108}	C_2, C_3, C_9, C_{27}
Genus 55				
R55.1	2 C_2, 4 C_3, 2 C_4, 4 C_6, 3 C_9, 5 C_{12}, 3 C_{18}, 6 C_{36}, 2 D_2, 3 D_3, D_4, 3 D_6, 6 D_9, 3 D_{12}, 6 D_{18}, 6 D_{36}	2 C_2, 4 C_3, 2 C_4, 4 C_6, 3 C_9, 4 C_{12}, 3 C_{18}, 6 C_{36}, 2 D_2, 3 D_3, D_4, 3 D_6, 6 D_9, 3 D_{12}, 6 D_{18}, 6 D_{36}	2 C_2, 2 C_4, 4 C_6, 4 C_{12}, 3 C_{18}, 6 C_{36}, 2 D_2, 3 D_3, D_4, 3 D_6, 6 D_9, 3 D_{12}, 6 D_{18}, 6 D_{36}	2 C_2, 2 C_3, 3 C_9, 2 D_2, 3 D_3, 6 D_9
R55.2	2 **Tet**, **Oct**, 2 C_2, 4 C_3, 3 C_4, 4 C_6, C_8, 11 C_{12}, 2 C_{24}, 3 D_2, 2 D_3, 2 D_4, D_6, 2 D_{12}	2 **Tet**, **Oct**, 2 C_2, 4 C_3, 3 C_4, 4 C_6, 10 C_{12}, 3 D_2, 2 D_3, 2 D_4, D_6, 2 D_{12}	2 **Tet**, **Oct**, 2 C_2, 2 C_4, 3 C_6, 4 C_{12}, 3 D_2, 2 D_3, 2 D_4, D_6, 2 D_{12}	**Tet**, 2 C_2, 2 C_3, 3 D_2, 2 D_3
R55.3	2 C_2, 3 C_3, 2 C_4, 2 C_5, 4 C_6, 2 C_{10}, 6 C_{12}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 4 C_{60}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}	2 C_2, 3 C_3, 2 C_4, C_5, 4 C_6, C_{10}, 5 C_{12}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_4, 3 C_6, C_{10}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5
R55.4	**Tet**, 2 **Oct**, 5 C_2, 4 C_3, 2 C_4, 8 C_6, C_9, C_{12}, 16 D_2, 12 D_3, 4 D_4, 15 D_6, D_9, D_{12}	**Tet**, 2 **Oct**, 5 C_2, 4 C_3, 2 C_4, 8 C_6, C_9, C_{12}, 16 D_2, 12 D_3, 4 D_4, 15 D_6, D_9, D_{12}	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, 3 C_6, C_{12}, 16 D_2, 9 D_3, 4 D_4, 15 D_6, D_9, D_{12}	**Tet**, 5 C_2, 4 C_3, 5 C_6, C_9, 16 D_2, 11 D_3, 9 D_6, D_9

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R55.5	**Tet**, 2 **Oct**, 5 C_2, 4 C_3, 2 C_4, 8 C_6, C_9, C_{12}, 16 D_2, 12 D_3, 4 D_4, 15 D_6, D_9, D_{12}	**Tet**, 2 **Oct**, 5 C_2, 4 C_3, 2 C_4, 8 C_6, C_9, C_{12}, 16 D_2, 12 D_3, 4 D_4, 15 D_6, D_9, D_{12}	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, 3 C_6, C_{12}, 16 D_2, 9 D_3, 4 D_4, 15 D_6, D_9, D_{12}	**Tet**, 5 C_2, 4 C_3, 5 C_6, C_9, 16 D_2, 11 D_3, 9 D_6, D_9
R55.6	**Tet**, 2 **Oct**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, 6 D_2, 2 D_3, 3 D_4, 4 D_5, D_6, 2 D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 2 C_2, 2 C_4, C_6, C_{10}, 6 D_2, D_3, 3 D_4, D_5, D_6, D_{10}	**Tet**, 3 C_2, C_3, C_5, 6 D_2, 2 D_3, D_5
R55.7	**Tet**, 2 **Oct**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, 6 D_2, 2 D_3, 3 D_4, 4 D_5, D_6, 2 D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_4, C_6, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, **Oct**, 3 C_2, C_3, C_4, C_5, 6 D_2, 2 D_3, 2 D_4, 2 D_5
R55.8	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, 2 C_8, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, 2 D_8, 2 D_{10}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, 2 C_8, C_{10}, 3 D_2, D_3, 2 D_4, 2 D_5, 2 D_8, D_{10}	**Tet**, **Oct**, **Ico**, 2 C_2, C_{10}, 3 D_2, D_3, 2 D_4, 2 D_5, 2 D_8, D_{10}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_5, 3 D_2, D_3, 2 D_4, 2 D_5
R55.9	3 C_2, 7 C_3, 2 C_4, 7 C_6, 7 C_{12}, 3 D_2, 8 D_3, 3 D_6	3 C_2, 7 C_3, 2 C_4, 7 C_6, 6 C_{12}, 3 D_2, 8 D_3, 3 D_6	2 C_2, 2 C_4, 4 C_6, 6 C_{12}, 3 D_2, 7 D_3, 3 D_6	3 C_2, 6 C_3, 3 C_6, 3 D_2, 8 D_3, 2 D_6
R55.10	5 C_2, 2 C_3, 3 C_4, 5 C_6, 4 C_8, 2 C_{12}, 4 C_{16}, 4 C_{24}, 13 D_2, 7 D_3, 3 D_4, 11 D_6, 6 D_8, 3 D_{12}, 4 D_{24}	5 C_2, 2 C_3, 3 C_4, 5 C_6, 3 C_8, 2 C_{12}, C_{16}, 4 C_{24}, 13 D_2, 7 D_3, 3 D_4, 11 D_6, 5 D_8, 3 D_{12}, 4 D_{24}	3 C_2, 2 C_4, 2 C_6, 13 D_2, 5 D_3, 2 D_4, 11 D_6, 3 D_8, 3 D_{12}, 4 D_{24}	5 C_2, 2 C_3, C_4, 3 C_6, 13 D_2, 7 D_3, 2 D_4, 6 D_6
R55.11	3 C_2, 2 C_3, 4 C_4, 2 C_6, 2 C_8, 5 C_{12}, 2 C_{16}, 3 C_{24}, 4 D_2, 5 D_3, 2 D_4, 5 D_6, D_8, 6 D_{12}, 3 D_{24}	3 C_2, 2 C_3, 4 C_4, 2 C_6, C_8, 5 C_{12}, 3 C_{24}, 4 D_2, 5 D_3, 2 D_4, 5 D_6, D_8, 6 D_{12}, 3 D_{24}	3 C_2, 3 C_4, 2 C_6, 3 C_{12}, 4 D_2, 5 D_3, 2 D_4, 5 D_6, D_8, 6 D_{12}, 3 D_{24}	3 C_2, 2 C_3, C_4, 4 D_2, 5 D_3, D_4
R55.12	3 C_2, 2 C_3, 2 C_4, 2 C_6, 3 C_7, 3 C_{14}, 6 C_{21}, 3 C_{28}, 3 D_2, 4 D_3, 2 D_6, 6 D_7, 3 D_{14}, 6 D_{21}	3 C_2, 2 C_3, 2 C_4, 2 C_6, C_7, C_{14}, 2 C_{21}, 3 D_2, 4 D_3, 2 D_6, 2 D_7, D_{14}, 2 D_{21}	2 C_2, 2 C_4, C_{14}, 3 D_2, 4 D_3, 2 D_6, D_7, D_{14}, 2 D_{21}	3 C_2, 2 C_3, 2 C_6, C_7, 3 D_2, 4 D_3, 2 D_6, D_7
R55.13	5 C_2, 3 C_4, 3 C_7, 4 C_8, 9 C_{14}, 4 C_{16}, 12 C_{28}, 24 C_{56}, 24 C_{112}, 13 D_2, 3 D_4, 6 D_7, 6 D_8, 12 D_{14}, 18 D_{28}, 36 D_{56}	5 C_2, 3 C_4, C_7, 3 C_8, 3 C_{14}, C_{16}, 3 C_{28}, 3 C_{56}, C_{112}, 13 D_2, 3 D_4, 2 D_7, 5 D_8, 4 D_{14}, 4 D_{28}, 5 D_{56}	3 C_2, 2 C_4, C_{14}, 13 D_2, 2 D_4, D_7, 3 D_8, 3 D_{14}, 3 D_{28}, 3 D_{56}	5 C_2, C_4, C_7, C_8, C_{14}, C_{28}, C_{56}, 13 D_2, 2 D_4, 2 D_7, D_8, 2 D_{14}, 2 D_{28}, D_{56}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R55.14	3 C_2, 4 C_4, 3 C_7, 2 C_8, 6 C_{14}, 2 C_{16}, 9 C_{28}, 12 C_{56}, 12 C_{112}, 4 D_2, 2 D_4, 3 D_7, D_8, 3 D_{14}, 6 D_{28}, 6 D_{56}	3 C_2, 4 C_4, C_7, C_8, 2 C_{14}, 2 C_{28}, C_{56}, 4 D_2, 2 D_4, D_7, D_8, D_{14}, D_{28}, D_{56}	3 C_2, 3 C_4, C_{14}, 4 D_2, 2 D_4, D_7, D_8, D_{14}, D_{28}, D_{56}	3 C_2, C_4, C_7, C_{14}, C_{28}, 4 D_2, D_4, D_7, D_{14}, D_{28}
R55.15	3 C_2, 2 C_4, 2 C_5, 2 C_{10}, 5 C_{11}, 2 C_{20}, 5 C_{22}, 5 C_{44}, 20 C_{55}, 20 C_{110}, 20 C_{220}, 3 D_2, 4 D_5, 2 D_{10}, 10 D_{11}, 5 D_{22}, 40 D_{55}, 20 D_{110}	3 C_2, 2 C_4, C_5, C_{10}, C_{11}, C_{22}, C_{55}, C_{110}, 3 D_2, 2 D_5, D_{10}, 2 D_{11}, D_{22}, 2 D_{55}, D_{110}	2 C_2, 2 C_4, C_{10}, C_{22}, C_{110}, 3 D_2, D_5, D_{10}, D_{11}, D_{22}, D_{55}, D_{110}	3 C_2, C_5, C_{11}, C_{55}, 3 D_2, D_5, D_{11}, D_{55}
R55.16	C_2, 8 C_3, 2 C_5, 4 C_6, 4 D_3, 2 D_5	C_2, 8 C_3, C_5, 4 C_6, 4 D_3, D_5	C_2, 4 C_6, 4 D_3, D_5	C_2, 7 C_3, C_5, 4 D_3, D_5
R55.17	**Tet**, 3 C_2, 4 C_3, 4 C_6, C_9, 6 D_2, 6 D_3, 5 D_6	**Tet**, 3 C_2, 4 C_3, 4 C_6, C_9, 6 D_2, 6 D_3, 5 D_6	**Tet**, 2 C_2, 2 C_6, 6 D_2, 5 D_3, 5 D_6	**Tet**, 3 C_2, 4 C_3, 2 C_6, C_9, 6 D_2, 6 D_3, 3 D_6
R55.18	**Tet**, 3 C_2, 4 C_3, 4 C_6, C_9, 6 D_2, 6 D_3, 5 D_6	**Tet**, 3 C_2, 4 C_3, 4 C_6, C_9, 6 D_2, 6 D_3, 5 D_6	**Tet**, 2 C_2, 2 C_6, 6 D_2, 5 D_3, 5 D_6	**Tet**, 3 C_2, 4 C_3, 2 C_6, C_9, 6 D_2, 6 D_3, 3 D_6
R55.19	C_2, 8 C_3, C_6, 12 C_9, 6 D_3, 9 D_9	C_2, 8 C_3, C_6, 10 C_9, 6 D_3, 9 D_9	C_2, C_6, 6 D_3, 9 D_9	C_2, 7 C_3, 9 C_9, 6 D_3, 9 D_9
R55.20	C_2, 11 C_3, 4 C_6, 6 C_9, 3 D_3, 3 D_9	C_2, 11 C_3, 4 C_6, 4 C_9, 3 D_3, 3 D_9	C_2, 4 C_6, 3 D_3, 3 D_9	C_2, 9 C_3, 3 C_9, 3 D_3, 3 D_9
R55.21	C_2, 10 C_3, 4 C_6, 3 C_9, 5 D_3	C_2, 10 C_3, 4 C_6, C_9, 5 D_3	C_2, 4 C_6, 5 D_3	C_2, 8 C_3, 5 D_3
R55.22	C_2, 7 C_3, 4 C_6, 6 C_9, 2 D_3, 3 D_9	C_2, 7 C_3, 4 C_6, 5 C_9, 2 D_3, 3 D_9	C_2, 4 C_6, 2 D_3, 3 D_9	C_2, 5 C_3, 3 C_9, 2 D_3, 3 D_9
R55.23	C_2, 7 C_3, 4 C_6, 6 C_9, 2 D_3, 3 D_9	C_2, 7 C_3, 4 C_6, 4 C_9, 2 D_3, 3 D_9	C_2, 4 C_6, 2 D_3, 3 D_9	C_2, 5 C_3, 3 C_9, 2 D_3, 3 D_9
R55.24	4 **Tet**, 3 **Oct**, 5 C_2, 7 C_3, 2 C_4, 11 C_6, 4 C_{12}, 16 D_2, 6 D_3, 4 D_4, 6 D_6, D_{12}	4 **Tet**, 3 **Oct**, 5 C_2, 7 C_3, 2 C_4, 11 C_6, 3 C_{12}, 16 D_2, 6 D_3, 4 D_4, 6 D_6, D_{12}	4 **Tet**, 2 **Oct**, 3 C_2, C_4, 7 C_6, C_{12}, 16 D_2, 4 D_3, 4 D_4, 6 D_6, D_{12}	3 **Tet**, **Oct**, 5 C_2, 5 C_3, C_4, 3 C_6, 16 D_2, 6 D_3, 2 D_4, 2 D_6
R55.25	2 C_2, 4 C_3, 2 C_4, 4 C_6, 5 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, 3 D_{12}	2 C_2, 4 C_3, 2 C_4, 4 C_6, 4 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, 3 D_{12}	2 C_2, 2 C_4, 4 C_6, 4 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, 3 D_{12}	2 C_2, 2 C_3, 2 D_2, 3 D_3
R55.26	2 **Tet**, 2 **Oct**, 5 C_2, 4 C_3, 2 C_4, 12 C_6, 2 C_{12}, 16 D_2, 4 D_3, 4 D_4, 5 D_6	2 **Tet**, 2 **Oct**, 5 C_2, 4 C_3, 2 C_4, 12 C_6, C_{12}, 16 D_2, 4 D_3, 4 D_4, 5 D_6	2 **Tet**, 2 **Oct**, 3 C_2, 2 C_4, 7 C_6, 16 D_2, 2 D_3, 4 D_4, 5 D_6	**Tet**, 5 C_2, 2 C_3, C_6, 16 D_2, 4 D_3, D_6
R55.27	2 **Tet**, 3 **Oct**, 5 C_2, 4 C_3, 2 C_4, 6 C_6, 2 C_{12}, 16 D_2, 10 D_3, 4 D_4, 13 D_6, 2 D_{12}	2 **Tet**, 3 **Oct**, 5 C_2, 4 C_3, 2 C_4, 6 C_6, C_{12}, 16 D_2, 10 D_3, 4 D_4, 13 D_6, D_{12}	2 **Tet**, 3 **Oct**, 3 C_2, 2 C_4, 4 C_6, C_{12}, 16 D_2, 5 D_3, 4 D_4, 12 D_6, D_{12}	2 **Tet**, 5 C_2, 4 C_3, C_6, 16 D_2, 9 D_3, 3 D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R55.28	C_2, 4 C_3, C_6, 3 C_7, 18 C_{21}, 2 D_3, 3 D_7, 9 D_{21}	C_2, 4 C_3, C_6, C_7, 5 C_{21}, 2 D_3, D_7, 3 D_{21}	C_2, C_6, 2 D_3, D_7, 3 D_{21}	C_2, 2 C_3, C_7, 2 D_3, D_7
R55.29	2 **Tet**, 2 **Ico**, 3 C_2, 3 C_3, 2 C_5, 5 C_6, 2 C_{10}, 2 C_{15}, 2 C_{30}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	2 **Tet**, **Ico**, 3 C_2, 3 C_3, C_5, 5 C_6, C_{10}, 7 D_2, 2 D_3, 2 D_5, D_6, D_{10}	2 **Tet**, **Ico**, 2 C_2, 4 C_6, C_{10}, 7 D_2, D_3, D_5, D_6, D_{10}	**Tet**, 3 C_2, C_3, C_5, 7 D_2, 2 D_3, D_5
R55.30	C_2, 3 C_3, C_6, 9 C_{19}, 45 C_{57}, D_3, 9 D_{19}, 18 D_{57}	C_2, 3 C_3, C_6, C_{19}, 4 C_{57}, D_3, D_{19}, 2 D_{57}	C_2, C_6, D_3, D_{19}, 2 D_{57}	C_2, C_3, C_{19}, D_3, D_{19}
R55.31	C_2, C_3, 2 C_5, C_6, 5 C_{11}, 2 C_{15}, 5 C_{33}, 20 C_{55}, 20 C_{165}, 2 D_5, 5 D_{11}, 20 D_{55}	C_2, C_3, C_5, C_6, C_{11}, C_{55}, D_5, D_{11}, D_{55}	C_2, C_6, D_5, D_{11}, D_{55}	C_2, C_5, C_{11}, C_{55}, D_5, D_{11}, D_{55}
R55.32	C_2, C_3, 3 C_7, 3 C_9, 3 D_2, D_3, 3 D_7, 3 D_9	C_2, C_3, 3 C_9, 3 D_2, D_3, 3 D_9	C_2, 3 D_2, D_3, 3 D_9	C_2, C_3, 3 C_9, 3 D_2, D_3, 3 D_9
R55.33	C_2, 8 C_3, C_4, 4 C_6, 8 C_{12}, 2 D_3	C_2, 8 C_3, C_4, 4 C_6, 6 C_{12}, 2 D_3	C_2, C_4, 4 C_6, 6 C_{12}, 2 D_3	C_2, 6 C_3, 2 D_3
R55.34	3 C_2, 3 C_3, 3 C_4, 5 C_6, 3 C_8, 7 C_{12}, 4 C_{24}, 4 D_2, D_3, 3 D_4, D_6, 2 D_8	3 C_2, 3 C_3, 3 C_4, 5 C_6, 2 C_8, 5 C_{12}, 4 D_2, D_3, 3 D_4, D_6, D_8	2 C_2, 3 C_4, 4 C_6, 2 C_8, 3 C_{12}, 4 D_2, D_3, 3 D_4, D_6, D_8	3 C_2, C_3, 4 D_2, D_3
R55.35	4 C_2, 3 C_3, 2 C_4, 6 C_6, 2 C_8, 6 C_{12}, 2 C_{24}, 12 D_2, 2 D_3, 4 D_4, 2 D_6, 2 D_8, 2 D_{12}	4 C_2, 3 C_3, 2 C_4, 6 C_6, C_8, 4 C_{12}, 12 D_2, 2 D_3, 4 D_4, 2 D_6, D_8, 2 D_{12}	2 C_2, 2 C_4, 4 C_6, C_8, 3 C_{12}, 12 D_2, D_3, 4 D_4, 2 D_6, D_8, 2 D_{12}	4 C_2, C_3, 12 D_2, 2 D_3
R55.36	5 C_2, 3 C_3, 3 C_4, 11 C_6, 2 C_8, 14 C_{12}, 4 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_{12}	5 C_2, 3 C_3, 3 C_4, 11 C_6, C_8, 12 C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_{12}	3 C_2, 2 C_4, 6 C_6, 9 C_{12}, 13 D_2, D_3, 3 D_4, 4 D_6, 3 D_{12}	5 C_2, C_3, C_4, C_6, 13 D_2, 2 D_3, D_4, D_6
R55.37	3 C_2, 3 C_3, 5 C_4, 8 C_6, C_8, 27 C_{12}, 2 C_{24}, 4 D_2, D_3, 2 D_4, D_6, 2 D_{12}	3 C_2, 3 C_3, 5 C_4, 8 C_6, 25 C_{12}, 4 D_2, D_3, 2 D_4, D_6, 2 D_{12}	3 C_2, 3 C_4, 6 C_6, 10 C_{12}, 4 D_2, D_3, 2 D_4, D_6, 2 D_{12}	3 C_2, C_3, 4 D_2, D_3
R55.38	5 C_2, 3 C_3, 3 C_4, 11 C_6, 2 C_8, 12 C_{12}, 16 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_{12}	5 C_2, 3 C_3, 3 C_4, 11 C_6, C_8, 10 C_{12}, 6 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_{12}	3 C_2, 2 C_4, 6 C_6, 5 C_{12}, 13 D_2, D_3, 3 D_4, 4 D_6, 6 D_{12}	5 C_2, C_3, C_4, C_6, 13 D_2, 2 D_3, D_4, D_6
R55.39	3 C_2, 3 C_3, 5 C_4, 7 C_6, C_8, 13 C_{12}, 8 C_{24}, 4 D_2, D_3, 2 D_4, D_6, D_{12}	3 C_2, 3 C_3, 5 C_4, 7 C_6, 11 C_{12}, 4 D_2, D_3, 2 D_4, D_6, D_{12}	3 C_2, 4 C_4, 6 C_6, 4 C_{12}, 4 D_2, D_3, 2 D_4, D_6, D_{12}	3 C_2, C_3, 4 D_2, D_3
R55.40	4 C_2, 3 C_3, 2 C_4, 4 C_6, 2 C_8, 3 C_{12}, 2 C_{24}, 12 D_2, 6 D_3, 4 D_4, 7 D_6, 2 D_8, 4 D_{12}, 2 D_{24}	4 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, C_{12}, 12 D_2, 6 D_3, 4 D_4, 7 D_6, D_8, D_{12}	2 C_2, 2 C_4, 3 C_6, C_8, C_{12}, 12 D_2, 4 D_3, 4 D_4, 7 D_6, D_8, D_{12}	4 C_2, 3 C_3, 12 D_2, 5 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R55.41	3 C_2, 3 C_3, 3 C_4, 3 C_6, 3 C_8, 3 C_{12}, 2 C_{24}, 4 D_2, 4 D_3, 3 D_4, 4 D_6, 2 D_8, 3 D_{12}, 2 D_{24}	3 C_2, 3 C_3, 3 C_4, 3 C_6, 2 C_8, C_{12}, 4 D_2, 4 D_3, 3 D_4, 4 D_6, D_8, D_{12}	2 C_2, 3 C_4, 3 C_6, 2 C_8, C_{12}, 4 D_2, 3 D_3, 3 D_4, 4 D_6, D_8, D_{12}	3 C_2, 3 C_3, 4 D_2, 4 D_3
R55.42	5 C_2, 3 C_3, 3 C_4, 9 C_6, 2 C_8, 12 C_{12}, 4 C_{24}, 13 D_2, 6 D_3, 3 D_4, 12 D_6, 15 D_{12}	5 C_2, 3 C_3, 3 C_4, 9 C_6, C_8, 10 C_{12}, C_{24}, 13 D_2, 6 D_3, 3 D_4, 12 D_6, 14 D_{12}	3 C_2, 2 C_4, 4 C_6, 3 C_{12}, 13 D_2, 3 D_3, 3 D_4, 11 D_6, 12 D_{12}	5 C_2, 3 C_3, C_4, 3 C_6, C_{12}, 13 D_2, 6 D_3, D_4, 4 D_6, D_{12}
R55.43	3 C_2, 3 C_3, 5 C_4, 6 C_6, C_8, 12 C_{12}, 2 C_{24}, 4 D_2, 3 D_3, 2 D_4, 3 D_6, 5 D_{12}	3 C_2, 3 C_3, 5 C_4, 6 C_6, 10 C_{12}, 4 D_2, 3 D_3, 2 D_4, 3 D_6, 5 D_{12}	3 C_2, 4 C_4, 4 C_6, 4 C_{12}, 4 D_2, 3 D_3, 2 D_4, 3 D_6, 5 D_{12}	3 C_2, 3 C_3, C_6, 4 D_2, 3 D_3, D_6
R55.44	3 C_2, C_3, 2 C_4, 3 C_6, 5 C_{11}, 4 C_{12}, 5 C_{22}, 5 C_{33}, 5 C_{44}, 5 C_{66}, 10 C_{132}, 3 D_2, 10 D_{11}, 5 D_{22}	3 C_2, C_3, 2 C_4, 3 C_6, C_{11}, 2 C_{12}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	2 C_2, 2 C_4, C_6, C_{22}, 3 D_2, D_{11}, D_{22}	3 C_2, C_{11}, 3 D_2, D_{11}
R55.45	C_2, 4 C_3, 2 C_5, C_6, 2 C_{10}, 12 C_{15}, 4 C_{30}, 2 D_3	C_2, 4 C_3, C_6, 2 D_3	C_2, C_6, 2 D_3	C_2, 2 C_3, 2 D_3
R55.46	3 C_2, 2 C_3, 2 C_4, 2 C_6, 4 C_8, 2 C_{12}, 8 C_{16}, 4 C_{24}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 2 C_3, 2 C_4, 2 C_6, 3 C_8, 2 C_{12}, 2 C_{16}, 4 C_{24}, 3 D_2, 4 D_3, 2 D_6	2 C_2, C_4, 2 C_6, 3 D_2, 2 D_3, 2 D_6	3 C_2, 2 C_3, C_4, 3 D_2, 4 D_3
R55.47	2 C_2, 2 C_3, 2 C_4, 2 C_6, 3 C_8, 2 C_{12}, 4 C_{16}, 3 C_{24}, 2 D_2, 3 D_3, 2 D_6	2 C_2, 2 C_3, 2 C_4, 2 C_6, C_8, 2 C_{12}, 3 C_{24}, 2 D_2, 3 D_3, 2 D_6	2 C_2, C_4, 2 C_6, 2 D_2, 3 D_3, 2 D_6	2 C_2, 2 C_3, C_4, 2 D_2, 3 D_3
R55.48	3 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 4 C_8, 2 C_{10}, 4 C_{12}, 2 C_{15}, 2 C_{20}, 8 C_{24}, 2 C_{30}, 4 C_{40}, 4 C_{60}, 8 C_{120}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_3, 2 C_4, C_5, 3 C_6, 2 C_8, C_{10}, 2 C_{12}, 3 D_2, 2 D_5, D_{10}	2 C_2, C_4, C_6, C_{10}, 3 D_2, D_5, D_{10}	3 C_2, C_5, 3 D_2, D_5
R55.49	2 C_2, C_3, 2 C_4, 2 C_5, 2 C_6, 2 C_8, 2 C_{10}, 3 C_{12}, 2 C_{15}, 2 C_{20}, 4 C_{24}, 2 C_{30}, 4 C_{40}, 4 C_{60}, 8 C_{120}, 2 D_2, 2 D_5, 2 D_{10}	2 C_2, C_3, 2 C_4, C_5, 2 C_6, C_{10}, 2 C_{12}, 2 D_2, D_5, D_{10}	2 C_2, C_4, C_6, C_{10}, 2 D_2, D_5, D_{10}	2 C_2, C_5, 2 D_2, D_5
R55.50	C_2, 2 C_3, C_4, 3 C_7, 3 C_{14}, 6 C_{21}, 6 C_{28}, 2 D_3	C_2, 2 C_3, C_4, C_7, C_{14}, 2 C_{21}, 2 D_3	C_2, C_4, C_{14}, 2 D_3	C_2, 2 C_3, C_7, 2 D_3
R55.51	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 4 C_{10}, 2 C_{12}, 4 C_{15}, 6 C_{20}, 4 C_{30}, 8 C_{60}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, C_6, C_{12}, 2 D_2, D_4	2 C_2, 2 C_4, C_6, C_{12}, 2 D_2, D_4	2 C_2, 2 D_2
R55.52	C_2, 3 C_3, C_6, 6 C_{13}, 6 C_{26}, 30 C_{39}, 12 C_{78}, D_3	C_2, 3 C_3, C_6, D_3	C_2, C_6, D_3	C_2, C_3, D_3
R55.53	C_2, 2 C_5, 11 C_{23}, 11 C_{46}, 22 C_{115}, 2 D_5	C_2, C_5, D_5	C_2, D_5	C_2, C_5, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R55.54	C_2, C_3, C_6, 18 C_{37}, 18 C_{74}, 36 C_{111}, 36 C_{222}	C_2, C_3, C_6	C_2, C_6	C_2
R55.55	2 C_2, 2 C_4, 3 C_7, 3 C_8, 6 C_{14}, 4 C_{16}, 9 C_{28}, 18 C_{56}, 24 C_{112}, 2 D_2	2 C_2, 2 C_4, C_7, C_8, 2 C_{14}, 2 C_{28}, C_{56}, 2 D_2	2 C_2, C_4, C_{14}, 2 D_2	2 C_2, C_4, C_7, C_{14}, C_{28}, 2 D_2
R55.56	3 C_2, 2 C_4, 3 C_7, 4 C_8, 9 C_{14}, 8 C_{16}, 12 C_{28}, 24 C_{56}, 48 C_{112}, 3 D_2	3 C_2, 2 C_4, C_7, 3 C_8, 3 C_{14}, 2 C_{16}, 3 C_{28}, 3 C_{56}, 2 C_{112}, 3 D_2	2 C_2, C_4, C_{14}, 3 D_2	3 C_2, C_4, C_7, C_8, C_{14}, C_{28}, C_{56}, 3 D_2
R55.57	C_2, C_4, 2 C_5, 2 C_{10}, 5 C_{11}, 4 C_{20}, 5 C_{22}, 10 C_{44}, 20 C_{55}, 20 C_{110}, 40 C_{220}	C_2, C_4, C_5, C_{10}, C_{11}, C_{22}, C_{55}, C_{110}	C_2, C_4, C_{10}, C_{22}, C_{110}	C_2, C_5, C_{11}, C_{55}
Genus 56				
R56.1	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, C_{11}, C_{12}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, D_{12}	**Tet**, **Oct**, 2 **Ico**, 2 C_2, 2 C_{10}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, D_{12}	**Tet**, **Oct**, 2 C_2, C_3, C_4, 2 C_5, C_{11}, 3 D_2, 2 D_3, D_4, 4 D_5, D_{11}
R56.2	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, C_{11}, C_{12}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, D_{12}	**Tet**, **Oct**, 2 **Ico**, 2 C_2, 2 C_{10}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, D_{12}	**Tet**, **Oct**, 2 C_2, C_3, C_4, 2 C_5, C_{11}, 3 D_2, 2 D_3, D_4, 4 D_5, D_{11}
R56.3	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_4, C_6, 2 C_{10}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, 2 D_{12}	**Tet**, 2 C_2, C_3, 2 C_5, C_{11}, 3 D_2, 2 D_3, 4 D_5, D_{11}
R56.4	3 C_2, C_3, C_4, 2 C_6, 9 C_{19}, 18 C_{38}, 18 C_{57}, 36 C_{114}, 4 D_2, D_3, D_4, D_6, 9 D_{19}, 9 D_{38}, 18 D_{57}, 18 D_{114}	3 C_2, C_3, C_4, 2 C_6, C_{19}, 2 C_{38}, C_{57}, 2 C_{114}, 4 D_2, D_3, D_4, D_6, D_{19}, D_{38}, D_{57}, D_{114}	3 C_2, C_4, C_6, C_{38}, C_{114}, 4 D_2, D_3, D_4, D_6, D_{19}, D_{38}, D_{57}, D_{114}	3 C_2, C_3, C_{19}, C_{57}, 4 D_2, D_3, D_{19}, D_{57}
R56.5	2 C_2, 2 C_4, 3 C_7, 2 C_8, 3 C_{14}, 4 C_{16}, 6 C_{28}, 4 C_{32}, 12 C_{56}, 24 C_{112}, 24 C_{224}, 2 D_2, D_4, 3 D_7, 2 D_8, 3 D_{14}, 4 D_{16}, 6 D_{28}, 12 D_{56}, 24 D_{112}	2 C_2, 2 C_4, C_7, C_8, C_{14}, C_{16}, C_{28}, C_{56}, C_{112}, 2 D_2, D_4, D_7, D_8, D_{14}, D_{16}, D_{28}, D_{56}, D_{112}	2 C_2, 2 C_4, C_8, C_{14}, C_{16}, C_{28}, C_{56}, C_{112}, 2 D_2, D_4, D_7, D_8, D_{14}, D_{16}, D_{28}, D_{56}, D_{112}	2 C_2, C_7, 2 D_2, D_7

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R56.6	**Tet**, 4 **Ico**, C_2, C_3, 2 C_5, C_6, C_{11}, D_2, 2 D_3, 2 D_5, D_6	**Tet**, 4 **Ico**, C_2, C_3, 2 C_5, C_6, C_{11}, D_2, 2 D_3, 2 D_5, D_6	**Tet**, 4 **Ico**, C_2, C_6, D_2, 2 D_3, 2 D_5, D_6	**Tet**, C_2, C_3, 2 C_5, C_{11}, D_2, 2 D_3, 2 D_5
R56.7	3 C_2, C_3, C_6, 14 C_{29}, 14 C_{58}, 14 C_{87}, 3 D_2, 2 D_3, D_6, 28 D_{29}, 14 D_{58}, 14 D_{87}	3 C_2, C_3, C_6, C_{29}, C_{58}, C_{87}, 3 D_2, 2 D_3, D_6, 2 D_{29}, D_{58}, D_{87}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_{29}, D_{58}, D_{87}	3 C_2, C_3, C_{29}, 3 D_2, 2 D_3, 2 D_{29}
R56.8	3 C_2, C_3, C_4, 3 C_6, 3 C_7, 2 C_8, C_{12}, 3 C_{14}, 3 C_{21}, 2 C_{24}, 6 C_{28}, 3 C_{42}, 12 C_{56}, 6 C_{84}, 12 C_{168}, 4 D_2, 2 D_4, 6 D_7, 2 D_8, 6 D_{14}, 12 D_{28}, 12 D_{56}	3 C_2, C_3, C_4, 3 C_6, C_7, C_8, C_{14}, C_{28}, C_{56}, 4 D_2, 2 D_4, 2 D_7, D_8, 2 D_{14}, 2 D_{28}, D_{56}	3 C_2, C_6, 4 D_2, 2 D_4, 2 D_7, D_8, 2 D_{14}, 2 D_{28}, D_{56}	3 C_2, C_4, C_7, C_8, C_{14}, C_{28}, C_{56}, 4 D_2, 2 D_4, 2 D_7, D_8, 2 D_{14}, 2 D_{28}, D_{56}
R56.9	3 C_2, C_4, 5 C_5, 2 C_8, 9 C_{10}, 4 D_2, 2 D_4, 4 D_5, 2 D_8, 4 D_{10}	3 C_2, C_4, 4 C_5, C_8, 7 C_{10}, 4 D_2, 2 D_4, 3 D_5, D_8, 3 D_{10}	3 C_2, C_4, C_8, 6 C_{10}, 4 D_2, 2 D_4, 3 D_5, D_8, 3 D_{10}	3 C_2, 4 C_5, 4 D_2, 3 D_5
R56.10	2 C_2, C_3, C_4, C_6, 3 C_7, C_8, 3 C_{14}, 6 C_{21}, 3 C_{28}, 6 C_{42}, 2 D_2, D_3, D_4, D_6, 3 D_7, 3 D_{14}, 6 D_{21}, 3 D_{28}, 6 D_{42}	2 C_2, C_3, C_4, C_6, C_7, C_{14}, C_{21}, C_{28}, C_{42}, 2 D_2, D_3, D_4, D_6, D_7, D_{14}, D_{21}, D_{28}, D_{42}	2 C_2, C_4, C_6, C_{14}, C_{28}, C_{42}, 2 D_2, D_3, D_4, D_6, D_7, D_{14}, D_{21}, D_{28}, D_{42}	2 C_2, C_3, C_7, 2 D_2, D_3, D_7
R56.11	2 C_2, 2 C_4, C_8, 9 C_{19}, 9 C_{38}, 18 C_{76}, 2 D_2, D_4, 9 D_{19}, 9 D_{38}, 9 D_{76}	2 C_2, 2 C_4, C_{19}, C_{38}, C_{76}, 2 D_2, D_4, D_{19}, D_{38}, D_{76}	2 C_2, 2 C_4, C_{38}, 2 D_2, D_4, D_{19}, D_{38}, D_{76}	2 C_2, C_{19}, 2 D_2, D_{19}
R56.12	3 C_2, C_3, 8 C_5, C_6, 4 C_{10}, 14 C_{15}, 4 C_{30}, 3 D_2, 2 D_3, 12 D_5, D_6, 4 D_{10}, 18 D_{15}, 4 D_{30}	3 C_2, C_3, 6 C_5, C_6, 2 C_{10}, 10 C_{15}, C_{30}, 3 D_2, 2 D_3, 8 D_5, D_6, 2 D_{10}, 11 D_{15}, D_{30}	3 C_2, 3 D_2, 2 D_3, 8 D_5, D_6, 2 D_{10}, 11 D_{15}, D_{30}	3 C_2, C_3, 6 C_5, C_{15}, 3 D_2, 2 D_3, 8 D_5, 2 D_{15}
R56.13	3 C_2, C_3, 8 C_5, C_6, 12 C_{10}, 14 C_{15}, 14 C_{30}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 8 D_{15}, 4 D_{30}	3 C_2, C_3, 6 C_5, C_6, 8 C_{10}, 10 C_{15}, 10 C_{30}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 8 D_{15}, 4 D_{30}	3 C_2, 7 C_{10}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 8 D_{15}, 4 D_{30}	3 C_2, C_3, 4 C_5, C_6, 3 D_2, 2 D_3, 4 D_5, D_6
R56.14	3 C_2, C_3, 8 C_5, C_6, 12 C_{10}, 8 C_{15}, 2 C_{30}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 2 D_{15}	3 C_2, C_3, 6 C_5, C_6, 8 C_{10}, 5 C_{15}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 2 D_{15}	3 C_2, 7 C_{10}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 2 D_{15}	3 C_2, C_3, 4 C_5, 3 D_2, 2 D_3, 4 D_5
R56.15	3 C_2, C_4, 2 C_5, 3 C_7, 6 C_{10}, 3 C_{14}, 2 C_{20}, 6 C_{28}, 6 C_{35}, 6 C_{70}, 12 C_{140}, 4 D_2, D_4, 6 D_7, 6 D_{14}, 6 D_{28}	3 C_2, C_4, C_5, C_7, 3 C_{10}, C_{14}, C_{28}, 4 D_2, D_4, 2 D_7, 2 D_{14}, D_{28}	3 C_2, C_{10}, 4 D_2, D_4, 2 D_7, 2 D_{14}, D_{28}	3 C_2, C_4, C_7, C_{14}, C_{28}, 4 D_2, D_4, 2 D_7, 2 D_{14}, D_{28}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R56.16	3 C_2, C_3, C_4, 2 C_6, 2 C_8, 3 C_9, C_{12}, 4 C_{16}, 6 C_{18}, 2 C_{24}, 3 C_{36}, 6 C_{72}, 4 D_2, D_3, 2 D_4, D_6, 4 D_8, 3 D_9, D_{12}, 4 D_{16}, 3 D_{18}, 2 D_{24}, 3 D_{36}, 6 D_{72}	3 C_2, C_3, C_4, 2 C_6, C_8, C_9, C_{12}, C_{16}, 2 C_{18}, C_{24}, C_{36}, C_{72}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_9, D_{12}, D_{16}, D_{18}, D_{24}, D_{36}, D_{72}	3 C_2, C_6, C_{18}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_9, D_{12}, D_{16}, D_{18}, D_{24}, D_{36}, D_{72}	3 C_2, C_3, C_4, C_8, C_9, 4 D_2, D_3, 2 D_4, 2 D_8, D_9
R56.17	3 C_2, C_3, 3 C_6, 3 C_7, 3 C_9, 3 C_{14}, 9 C_{18}, 3 C_{21}, 3 C_{42}, 9 C_{63}, 9 C_{126}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, C_3, 3 C_6, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}	3 C_2, C_6, 3 D_2, 2 D_7, D_{14}	3 C_2, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}
R56.18	C_2, 8 C_5, 2 C_{10}, 30 C_{25}, 10 C_{50}, 2 D_5	C_2, 6 C_5, 2 D_5	C_2, 2 D_5	C_2, 6 C_5, 2 D_5
R56.19	3 C_2, C_3, C_4, 2 C_5, 3 C_6, 2 C_8, 6 C_{10}, C_{12}, 4 C_{15}, 2 C_{20}, 2 C_{24}, 12 C_{30}, 4 C_{40}, 4 C_{60}, 8 C_{120}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_3, C_4, C_5, 3 C_6, C_8, 3 C_{10}, 4 D_2, 2 D_4, D_8	3 C_2, C_6, C_{10}, 4 D_2, 2 D_4, D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8
R56.20	C_2, 3 C_7, 8 C_{17}, 8 C_{34}, 24 C_{119}, 3 D_7	C_2, C_7, D_7	C_2, D_7	C_2, C_7, D_7
R56.21	2 C_2, C_3, 2 C_4, 2 C_5, C_6, C_8, 4 C_{10}, 2 C_{12}, 2 C_{15}, 4 C_{20}, 2 C_{30}, 4 C_{40}, 6 C_{60}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, C_3, 2 C_4, C_5, C_6, 2 C_{10}, C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_4, C_6, C_{10}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, C_3, 2 D_2, D_3
R56.22	3 C_2, C_4, 14 C_{29}, 42 C_{58}, 14 C_{116}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R56.23	C_2, 56 C_{113}, 56 C_{226}	C_2	C_2	C_2
R56.24	3 C_2, C_3, 3 C_6, 9 C_{19}, 27 C_{38}, 18 C_{57}, 54 C_{114}, 3 D_2	3 C_2, C_3, 3 C_6, C_{19}, 3 C_{38}, C_{57}, 3 C_{114}, 3 D_2	3 C_2, C_6, C_{38}, C_{114}, 3 D_2	3 C_2, C_3, C_{19}, C_{57}, 3 D_2
R56.25	C_2, C_4, 3 C_7, 2 C_8, 3 C_{14}, 4 C_{16}, 6 C_{28}, 8 C_{32}, 12 C_{56}, 24 C_{112}, 48 C_{224}	C_2, C_4, C_7, C_8, C_{14}, C_{16}, C_{28}, C_{56}, C_{112}	C_2, C_4, C_8, C_{14}, C_{16}, C_{28}, C_{56}, C_{112}	C_2, C_7
Genus 57				
R57.1	3 C_2, C_3, C_6, 3 C_7, 3 C_9, 3 C_{14}, 3 C_{18}, 15 D_2, 2 D_3, D_6, 6 D_7, 6 D_9, 3 D_{14}, 3 D_{18}	3 C_2, C_3, C_6, 3 C_7, C_9, 3 C_{14}, C_{18}, 15 D_2, 2 D_3, D_6, 6 D_7, 2 D_9, 3 D_{14}, D_{18}	2 C_2, C_6, 3 C_{14}, C_{18}, 12 D_2, D_3, D_6, 3 D_7, D_9, 3 D_{14}, D_{18}	3 C_2, C_3, 3 C_7, 15 D_2, D_3, 6 D_7

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R57.2	**Tet**, 2 **Oct**, 5 C_2, C_3, 5 C_4, 3 C_6, C_7, 4 C_8, C_{12}, C_{14}, C_{28}, 18 D_2, 4 D_3, 10 D_4, 7 D_6, 2 D_7, 8 D_8, D_{12}, 2 D_{14}, D_{28}	**Tet**, 2 **Oct**, 5 C_2, C_3, 5 C_4, 3 C_6, C_7, 4 C_8, C_{12}, C_{14}, C_{28}, 18 D_2, 4 D_3, 10 D_4, 7 D_6, 2 D_7, 8 D_8, D_{12}, 2 D_{14}, D_{28}	**Oct**, 3 C_2, C_4, C_6, 17 D_2, 3 D_3, 9 D_4, 7 D_6, 2 D_7, 8 D_8, D_{12}, 2 D_{14}, D_{28}	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_7, 4 C_8, C_{14}, C_{28}, 18 D_2, 4 D_3, 9 D_4, 2 D_7, 8 D_8, 2 D_{14}, D_{28}
R57.3	6 C_2, C_3, 5 C_4, 4 C_6, 3 C_9, C_{12}, 3 C_{18}, 27 D_2, 2 D_3, 13 D_4, 5 D_6, 6 D_9, D_{12}, 3 D_{18}	6 C_2, C_3, 5 C_4, 4 C_6, C_9, C_{12}, C_{18}, 27 D_2, 2 D_3, 13 D_4, 5 D_6, 2 D_9, D_{12}, D_{18}	3 C_2, C_4, C_6, 21 D_2, D_3, 11 D_4, 4 D_6, D_9, D_{12}, D_{18}	6 C_2, C_3, 4 C_4, 27 D_2, 2 D_3, 11 D_4
R57.4	4 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 3 C_9, 3 C_{12}, 6 C_{18}, 3 C_{36}, 8 D_2, D_3, 5 D_4, 2 D_6, 2 D_8, 3 D_9, 2 D_{12}, 3 D_{18}, 3 D_{36}	4 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, C_9, 3 C_{12}, 2 C_{18}, C_{36}, 8 D_2, D_3, 5 D_4, 2 D_6, 2 D_8, D_9, 2 D_{12}, D_{18}, D_{36}	3 C_2, C_4, C_6, 8 D_2, D_3, 5 D_4, 2 D_6, 2 D_8, D_9, 2 D_{12}, D_{18}, D_{36}	4 C_2, C_3, 3 C_4, 2 C_8, 8 D_2, D_3, 5 D_4, 2 D_8
R57.5	9 C_2, 8 C_4, 8 C_8, 8 C_{16}, 8 C_{32}, 54 D_2, 14 D_4, 12 D_8, 12 D_{16}	9 C_2, 8 C_4, 7 C_8, 5 C_{16}, C_{32}, 54 D_2, 14 D_4, 11 D_8, 12 D_{16}	3 C_2, 5 C_4, 39 D_2, 11 D_4, 7 D_8, 8 D_{16}	9 C_2, 3 C_4, C_8, 54 D_2, 10 D_4, D_8
R57.6	5 C_2, 7 C_4, 7 C_8, 6 C_{16}, 8 C_{32}, 15 D_2, 6 D_4, 6 D_8, 2 D_{16}	5 C_2, 7 C_4, 6 C_8, 2 C_{16}, 15 D_2, 6 D_4, 6 D_8, 2 D_{16}	3 C_2, 6 C_4, 2 C_8, 13 D_2, 6 D_4, 6 D_8, 2 D_{16}	5 C_2, C_4, 15 D_2, D_4
R57.7	6 C_2, 6 C_4, 7 C_8, 6 C_{16}, 4 C_{32}, 26 D_2, 8 D_4, 12 D_8, 12 D_{16}	6 C_2, 6 C_4, 6 C_8, 4 C_{16}, 26 D_2, 8 D_4, 11 D_8, 12 D_{16}	3 C_2, 5 C_4, 2 C_8, 21 D_2, 7 D_4, 9 D_8, 8 D_{16}	6 C_2, C_4, C_8, 26 D_2, 2 D_4, D_8
R57.8	6 C_2, 9 C_4, 4 C_8, 4 C_{16}, 4 C_{32}, 29 D_2, 8 D_4, 2 D_8, 2 D_{16}	6 C_2, 9 C_4, 3 C_8, 2 C_{16}, 29 D_2, 8 D_4, 2 D_8, 2 D_{16}	3 C_2, 5 C_4, 23 D_2, 8 D_4, 2 D_8, 2 D_{16}	6 C_2, 4 C_4, 29 D_2, 5 D_4
R57.9	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, 2 C_5, C_6, 6 C_{10}, 2 C_{12}, 4 C_{15}, 8 C_{20}, 4 C_{30}, 8 C_{60}, 18 D_2, 2 D_3, 6 D_4, 4 D_5, 2 D_6, 12 D_{10}, 2 D_{12}, 8 D_{15}, 8 D_{20}, 8 D_{30}, 8 D_{60}	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_5, C_6, 3 C_{10}, C_{12}, C_{15}, 3 C_{20}, C_{30}, C_{60}, 18 D_2, 2 D_3, 6 D_4, 2 D_5, 2 D_6, 6 D_{10}, D_{12}, 2 D_{15}, 3 D_{20}, 2 D_{30}, D_{60}	**Tet**, 2 **Oct**, 3 C_2, 3 C_4, C_6, C_{10}, 16 D_2, D_3, 6 D_4, D_5, 2 D_6, 4 D_{10}, D_{12}, D_{15}, 3 D_{20}, D_{30}, D_{60}	**Tet**, 5 C_2, C_3, C_4, C_5, C_{10}, C_{20}, 18 D_2, D_3, D_4, 2 D_5, 2 D_{10}, D_{20}
R57.10	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, 2 C_5, C_6, 6 C_{10}, C_{12}, 4 C_{15}, 4 C_{20}, 4 C_{30}, 4 C_{60}, 16 D_2, 2 D_3, 4 D_4, 4 D_5, D_6, 8 D_{10}, 8 D_{15}, 4 D_{30}	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, C_5, C_6, 3 C_{10}, C_{15}, C_{20}, C_{30}, 16 D_2, 2 D_3, 4 D_4, 2 D_5, D_6, 4 D_{10}, 2 D_{15}, D_{30}	**Oct**, 3 C_2, 3 C_4, C_6, C_{10}, 13 D_2, D_3, 3 D_4, D_5, D_6, 3 D_{10}, D_{15}, D_{30}	**Tet**, 5 C_2, C_3, 2 C_4, C_5, C_{10}, 16 D_2, D_3, 4 D_4, 2 D_5, D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R57.11	5 C_2, C_3, 3 C_4, 2 C_5, 4 C_6, 8 C_{10}, 2 C_{12}, 4 C_{15}, 4 C_{20}, 16 C_{30}, 8 C_{60}, 13 D_2, D_3, 2 D_4, 2 D_5, 2 D_6, 4 D_{10}, 4 D_{15}, 8 D_{30}	5 C_2, C_3, 3 C_4, C_5, 4 C_6, 4 C_{10}, C_{12}, C_{15}, C_{20}, 4 C_{30}, C_{60}, 13 D_2, D_3, 2 D_4, D_5, 2 D_6, 2 D_{10}, D_{15}, 2 D_{30}	3 C_2, 2 C_4, C_6, C_{10}, C_{30}, 11 D_2, D_3, 2 D_4, D_5, 2 D_6, 2 D_{10}, D_{15}, 2 D_{30}	5 C_2, C_3, C_4, C_5, C_{15}, 13 D_2, D_3, 2 D_4, D_5, D_{15}
R57.12	5 C_2, 2 C_4, 14 C_{29}, 42 C_{58}, 28 C_{116}, 13 D_2, 28 D_{29}, 56 D_{58}	5 C_2, 2 C_4, C_{29}, 3 C_{58}, C_{116}, 13 D_2, 2 D_{29}, 4 D_{58}	3 C_2, 2 C_4, C_{58}, 11 D_2, D_{29}, 3 D_{58}	5 C_2, C_{29}, C_{58}, 13 D_2, 2 D_{29}, D_{58}
R57.13	3 C_2, C_3, 2 C_4, C_6, C_{12}, 9 C_{19}, 9 C_{38}, 18 C_{57}, 9 C_{76}, 18 C_{114}, 18 C_{228}, 3 D_2, 2 D_3, D_6, 18 D_{19}, 9 D_{38}, 36 D_{57}, 18 D_{114}	3 C_2, C_3, 2 C_4, C_6, C_{19}, C_{38}, C_{57}, C_{114}, 3 D_2, 2 D_3, D_6, 2 D_{19}, D_{38}, 2 D_{57}, D_{114}	2 C_2, 2 C_4, C_6, C_{38}, C_{114}, 3 D_2, D_3, D_6, D_{19}, D_{38}, D_{57}, D_{114}	3 C_2, C_3, C_{19}, C_{57}, 3 D_2, D_3, D_{19}, D_{57}
R57.14	4 C_2, 3 C_4, 2 C_5, 3 C_8, 6 C_{10}, 9 D_2, 6 D_4, 4 D_5, 8 D_{10}	4 C_2, 3 C_4, C_5, 2 C_8, 3 C_{10}, 9 D_2, 6 D_4, 2 D_5, 4 D_{10}	2 C_2, C_4, C_{10}, 9 D_2, 6 D_4, 2 D_5, 4 D_{10}	4 C_2, 2 C_4, C_5, 2 C_8, 9 D_2, 4 D_4, 2 D_5
R57.15	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Oct**, 3 C_2, 15 D_2, 3 D_3, 5 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_7, 4 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 2 D_7, 8 D_8, D_{14}
R57.16	4 C_2, C_3, 4 C_4, 2 C_5, 3 C_6, 6 C_{10}, C_{12}, 2 C_{20}, 6 D_2, D_3, 4 D_4, 2 D_5, D_6, 2 D_{10}	4 C_2, C_3, 4 C_4, C_5, 3 C_6, 3 C_{10}, C_{12}, C_{20}, 6 D_2, D_3, 4 D_4, D_5, D_6, D_{10}	3 C_2, 2 C_6, 2 C_{10}, 6 D_2, D_3, 4 D_4, D_5, D_6, D_{10}	4 C_2, C_3, 4 C_4, C_5, 6 D_2, D_3, 4 D_4, D_5
R57.17	5 C_2, C_3, 2 C_4, C_5, 5 C_6, 2 C_8, 3 C_{10}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	5 C_2, C_3, 2 C_4, 5 C_6, 2 C_8, 13 D_2, 2 D_3, 3 D_4, 4 D_6	3 C_2, 2 C_6, 13 D_2, 2 D_3, 3 D_4, 4 D_6	5 C_2, C_3, 2 C_4, 2 C_8, 13 D_2, 2 D_3, 3 D_4
R57.18	6 C_2, C_3, 7 C_4, 5 C_6, 4 C_8, 4 C_{12}, 4 C_{24}, 19 D_2, 8 D_4, 4 D_8	6 C_2, C_3, 7 C_4, 5 C_6, 3 C_8, 3 C_{12}, 19 D_2, 8 D_4, 4 D_8	3 C_2, C_4, 2 C_6, 2 C_8, C_{12}, 19 D_2, 8 D_4, 4 D_8	6 C_2, 6 C_4, 19 D_2, 5 D_4
R57.19	**Tet**, 3 C_2, C_3, 3 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 9 D_2, 2 D_4, 2 D_8	**Tet**, 3 C_2, C_3, 3 C_4, C_6, 3 C_8, C_{12}, C_{24}, 9 D_2, 2 D_4, 2 D_8	2 C_2, 3 C_4, C_6, 3 C_8, C_{12}, C_{24}, 8 D_2, 2 D_4, 2 D_8	3 C_2, 9 D_2
R57.20	**Tet**, 2 **Oct**, 5 C_2, C_3, 13 C_4, C_6, 4 C_8, C_{12}, 16 D_2, 2 D_3, 7 D_4, D_6	**Tet**, 2 **Oct**, 5 C_2, C_3, 13 C_4, C_6, 3 C_8, 16 D_2, 2 D_3, 7 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, 7 C_4, C_6, 2 C_8, 16 D_2, D_3, 7 D_4, D_6	**Tet**, 5 C_2, C_3, 4 C_4, 16 D_2, D_3
R57.21	**Tet**, **Oct**, 4 C_2, C_3, 9 C_4, C_6, 4 C_8, C_{12}, 12 D_2, D_3, 3 D_4, D_6	**Tet**, **Oct**, 4 C_2, C_3, 9 C_4, C_6, 3 C_8, 12 D_2, D_3, 3 D_4, D_6	**Oct**, 3 C_2, 5 C_4, C_6, 3 C_8, 11 D_2, D_3, 3 D_4, D_6	**Tet**, 4 C_2, C_3, 3 C_4, 12 D_2, D_3, 2 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R57.22	**Tet**, 2 **Oct**, 5 C_2, C_3, 10 C_4, C_6, 2 C_8, 2 C_{12}, 18 D_2, 2 D_3, 11 D_4, 2 D_6, 2 D_{12}	**Tet**, 2 **Oct**, 5 C_2, C_3, 10 C_4, C_6, C_8, C_{12}, 18 D_2, 2 D_3, 11 D_4, 2 D_6, D_{12}	**Tet**, 2 **Oct**, 3 C_2, 6 C_4, C_6, 16 D_2, D_3, 11 D_4, 2 D_6, D_{12}	**Tet**, 5 C_2, C_3, 3 C_4, 18 D_2, D_3, 2 D_4
R57.23	**Tet**, 2 **Oct**, 5 C_2, C_3, 8 C_4, C_6, 2 C_8, 2 C_{12}, 18 D_2, 2 D_3, 10 D_4, 2 D_6, 2 D_{12}	**Tet**, 2 **Oct**, 5 C_2, C_3, 8 C_4, C_6, C_8, C_{12}, 18 D_2, 2 D_3, 10 D_4, 2 D_6, D_{12}	**Oct**, 3 C_2, 3 C_4, C_6, C_8, 15 D_2, D_3, 9 D_4, 2 D_6, D_{12}	**Tet**, 5 C_2, C_3, 5 C_4, 18 D_2, D_3, 7 D_4
R57.24	9 C_2, C_3, 8 C_4, 7 C_6, 4 C_8, 4 C_{12}, 45 D_2, 2 D_3, 6 D_4, 10 D_6	9 C_2, C_3, 8 C_4, 7 C_6, 3 C_8, 3 C_{12}, 45 D_2, 2 D_3, 6 D_4, 10 D_6	3 C_2, 6 C_4, 2 C_6, 3 C_8, 3 C_{12}, 35 D_2, D_3, 6 D_4, 8 D_6	9 C_2, C_3, 2 C_4, 45 D_2, 2 D_3
R57.25	4 C_2, C_3, 8 C_4, 3 C_6, 4 C_8, 4 C_{12}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	4 C_2, C_3, 8 C_4, 3 C_6, 3 C_8, 3 C_{12}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	3 C_2, 6 C_4, 2 C_6, 2 C_8, 3 C_{12}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	4 C_2, C_3, 2 C_4, C_8, 9 D_2, D_3, 2 D_4
R57.26	**Tet**, **Oct**, 4 C_2, C_3, 7 C_4, C_6, 3 C_8, C_{12}, 12 D_2, D_3, 3 D_4, D_6	**Tet**, **Oct**, 4 C_2, C_3, 7 C_4, C_6, 2 C_8, 12 D_2, D_3, 3 D_4, D_6	**Oct**, 2 C_2, 4 C_4, C_6, 2 C_8, 9 D_2, D_3, 3 D_4, D_6	**Tet**, 4 C_2, C_3, 3 C_4, 12 D_2, D_3, 2 D_4
R57.27	**Tet**, 2 **Oct**, 5 C_2, C_3, 7 C_4, C_6, 2 C_8, 2 C_{12}, 18 D_2, 2 D_3, 9 D_4, 2 D_6, 2 D_{12}	**Tet**, 2 **Oct**, 5 C_2, C_3, 7 C_4, C_6, C_8, C_{12}, 18 D_2, 2 D_3, 9 D_4, 2 D_6, D_{12}	**Oct**, 2 C_2, 3 C_4, C_6, C_8, C_{12}, 11 D_2, D_3, 7 D_4, 2 D_6, D_{12}	**Tet**, 5 C_2, C_3, 4 C_4, 18 D_2, D_3, 6 D_4
R57.28	2 **Tet**, 4 **Oct**, 5 C_2, C_3, 6 C_4, C_6, C_8, 2 C_{12}, 27 D_2, 2 D_3, 10 D_4, 2 D_6, D_8, 2 D_{12}	2 **Tet**, 4 **Oct**, 5 C_2, C_3, 6 C_4, C_6, C_{12}, 27 D_2, 2 D_3, 10 D_4, 2 D_6, D_{12}	3 **Oct**, 2 C_2, 2 C_4, C_6, C_{12}, 19 D_2, D_3, 8 D_4, 2 D_6, D_{12}	2 **Tet**, 5 C_2, C_3, 4 C_4, 27 D_2, D_3, 6 D_4
R57.29	2 **Tet**, 4 **Oct**, 5 C_2, C_3, 7 C_4, C_6, C_8, C_{12}, 25 D_2, 2 D_3, 6 D_4, D_6	2 **Tet**, 4 **Oct**, 5 C_2, C_3, 7 C_4, C_6, 25 D_2, 2 D_3, 6 D_4, D_6	2 **Oct**, 2 C_2, 3 C_4, C_6, 17 D_2, D_3, 4 D_4, D_6	2 **Tet**, 5 C_2, C_3, 4 C_4, 25 D_2, D_3, 4 D_4
R57.30	**Tet**, 2 **Oct**, 5 C_2, C_3, 10 C_4, C_6, 3 C_8, C_{12}, 16 D_2, 2 D_3, 7 D_4, D_6	**Tet**, 2 **Oct**, 5 C_2, C_3, 10 C_4, C_6, 2 C_8, 16 D_2, 2 D_3, 7 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, 8 C_4, C_6, 2 C_8, 16 D_2, D_3, 7 D_4, D_6	**Tet**, 5 C_2, C_3, 2 C_4, 16 D_2, D_3, D_4
R57.31	**Tet**, **Oct**, 5 C_2, C_3, 6 C_4, C_6, 3 C_8, C_{12}, 22 D_2, D_3, 9 D_4, D_6, 2 D_8	**Tet**, **Oct**, 5 C_2, C_3, 6 C_4, C_6, 2 C_8, 22 D_2, D_3, 9 D_4, D_6, D_8	**Oct**, 3 C_2, 5 C_4, C_6, 2 C_8, 17 D_2, D_3, 9 D_4, D_6, D_8	**Tet**, 5 C_2, C_3, C_4, 22 D_2, D_3, 2 D_4
R57.32	**Tet**, 2 **Oct**, 7 C_2, C_3, 5 C_4, C_6, 4 C_8, 2 C_{12}, 47 D_2, 2 D_3, 17 D_4, 2 D_6, 8 D_8, 2 D_{12}	**Tet**, 2 **Oct**, 7 C_2, C_3, 5 C_4, C_6, 3 C_8, C_{12}, 47 D_2, 2 D_3, 17 D_4, 2 D_6, 6 D_8, D_{12}	**Oct**, 3 C_2, 3 C_4, C_6, 3 C_8, C_{12}, 37 D_2, D_3, 14 D_4, 2 D_6, 6 D_8, D_{12}	**Tet**, 7 C_2, C_3, 2 C_4, 47 D_2, D_3, 8 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R57.33	**Tet**, 2 **Oct**, 5 C_2, C_3, 8 C_4, C_6, 2 C_8, 2 C_{12}, 18 D_2, 2 D_3, 10 D_4, 2 D_6, 2 D_{12}	**Tet**, 2 **Oct**, 5 C_2, C_3, 8 C_4, C_6, C_8, C_{12}, 18 D_2, 2 D_3, 10 D_4, 2 D_6, D_{12}	**Tet**, 2 **Oct**, 3 C_2, 7 C_4, C_6, C_8, C_{12}, 16 D_2, D_3, 10 D_4, 2 D_6, D_{12}	**Tet**, 5 C_2, C_3, C_4, 18 D_2, D_3, D_4
R57.34	**Tet**, **Oct**, 6 C_2, C_3, 11 C_4, 2 C_6, 2 C_8, 7 C_{12}, 26 D_2, D_3, 7 D_4, D_6, 2 D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 11 C_4, 2 C_6, C_8, 6 C_{12}, 26 D_2, D_3, 7 D_4, D_6, 2 D_{12}	**Oct**, 3 C_2, 8 C_4, 2 C_6, C_8, 5 C_{12}, 19 D_2, D_3, 7 D_4, D_6, 2 D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 2 C_4, 26 D_2, D_3, 3 D_4
R57.35	5 C_2, C_3, 8 C_4, 4 C_6, 3 C_8, 2 C_{12}, 13 D_2, D_3, 4 D_4, 2 D_6	5 C_2, C_3, 8 C_4, 4 C_6, 2 C_8, C_{12}, 13 D_2, D_3, 4 D_4, 2 D_6	3 C_2, 7 C_4, 2 C_6, 2 C_8, C_{12}, 13 D_2, D_3, 4 D_4, 2 D_6	5 C_2, C_3, C_4, 13 D_2, D_3
R57.36	**Tet**, 2 **Oct**, 9 C_2, C_3, 8 C_4, 3 C_6, 4 C_8, 4 C_{12}, 55 D_2, 2 D_3, 14 D_4, 4 D_6, 3 D_{12}	**Tet**, 2 **Oct**, 9 C_2, C_3, 8 C_4, 3 C_6, 3 C_8, 3 C_{12}, 55 D_2, 2 D_3, 14 D_4, 4 D_6, 3 D_{12}	**Oct**, 3 C_2, 6 C_4, 2 C_6, 3 C_8, 3 C_{12}, 35 D_2, D_3, 10 D_4, 4 D_6, 3 D_{12}	**Tet**, 2 **Oct**, 9 C_2, C_3, 2 C_4, 55 D_2, 2 D_3, 8 D_4
R57.37	5 C_2, C_3, 6 C_4, 3 C_6, 7 C_8, 4 C_{12}, 15 D_2, D_3, 10 D_4, 3 D_6, 8 D_8, 3 D_{12}	5 C_2, C_3, 6 C_4, 3 C_6, 6 C_8, 3 C_{12}, 15 D_2, D_3, 10 D_4, 3 D_6, 7 D_8, 3 D_{12}	3 C_2, 4 C_4, 2 C_6, 4 C_8, C_{12}, 13 D_2, D_3, 8 D_4, 3 D_6, 7 D_8, 3 D_{12}	5 C_2, C_3, 2 C_4, 2 C_8, 15 D_2, D_3, 4 D_4, 4 D_8
R57.38	4 C_2, C_3, 7 C_4, 3 C_6, 4 C_8, 4 C_{12}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	4 C_2, C_3, 7 C_4, 3 C_6, 3 C_8, 3 C_{12}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	2 C_2, 2 C_4, C_6, C_8, C_{12}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	4 C_2, C_3, 5 C_4, 2 C_8, 9 D_2, D_3, 4 D_4
R57.39	9 C_2, C_3, 6 C_4, 7 C_6, 2 C_8, 7 C_{12}, 54 D_2, 2 D_3, 11 D_4, 10 D_6, 6 D_{12}	9 C_2, C_3, 6 C_4, 7 C_6, C_8, 6 C_{12}, 54 D_2, 2 D_3, 11 D_4, 10 D_6, 6 D_{12}	3 C_2, 3 C_4, C_6, C_8, C_{12}, 37 D_2, D_3, 8 D_4, 7 D_6, 4 D_{12}	9 C_2, C_3, 3 C_4, 54 D_2, 2 D_3, 11 D_4
R57.40	4 C_2, C_3, 4 C_4, 3 C_6, 3 C_8, 6 C_{12}, 10 D_2, D_3, 5 D_4, 2 D_6, 3 D_8, 6 D_{12}	4 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 5 C_{12}, 10 D_2, D_3, 5 D_4, 2 D_6, 3 D_8, 6 D_{12}	3 C_2, 3 C_4, C_6, 2 C_8, 2 C_{12}, 10 D_2, D_3, 5 D_4, 2 D_6, 3 D_8, 6 D_{12}	4 C_2, C_3, C_4, 10 D_2, D_3, 2 D_4
R57.41	5 C_2, C_3, 5 C_4, 4 C_6, 3 C_8, 5 C_{12}, 14 D_2, D_3, 7 D_4, 2 D_6, D_8, D_{12}	5 C_2, C_3, 5 C_4, 4 C_6, 2 C_8, 4 C_{12}, 14 D_2, D_3, 7 D_4, 2 D_6, D_8, D_{12}	3 C_2, 2 C_4, C_6, C_{12}, 12 D_2, D_3, 6 D_4, 2 D_6, D_8, D_{12}	5 C_2, C_3, 3 C_4, C_8, 14 D_2, D_3, 6 D_4, D_8
R57.42	4 C_2, C_3, 5 C_4, 3 C_6, 3 C_8, 5 C_{12}, 8 D_2, D_3, 4 D_4, D_6, D_8, 2 D_{12}	4 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 4 C_{12}, 8 D_2, D_3, 4 D_4, D_6, D_8, 2 D_{12}	3 C_2, 2 C_4, C_6, C_8, C_{12}, 8 D_2, D_3, 4 D_4, D_6, D_8, 2 D_{12}	4 C_2, C_3, 3 C_4, C_8, 8 D_2, D_3, 4 D_4, D_8
R57.43	5 C_2, 5 C_4, 2 C_5, 4 C_8, 6 C_{10}, 16 C_{20}, 8 C_{40}, 15 D_2, 6 D_4, 4 D_5, 12 D_{10}, 20 D_{20}	5 C_2, 5 C_4, C_5, 2 C_8, 3 C_{10}, 7 C_{20}, C_{40}, 15 D_2, 6 D_4, 2 D_5, 6 D_{10}, 9 D_{20}	3 C_2, 2 C_4, C_{10}, C_{20}, 13 D_2, 5 D_4, D_5, 4 D_{10}, 7 D_{20}	5 C_2, 3 C_4, C_5, C_{10}, C_{20}, 15 D_2, 4 D_4, 2 D_5, 2 D_{10}, D_{20}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R57.44	5 C_2, 6 C_4, 2 C_5, 6 C_8, 6 C_{10}, 16 C_{20}, 16 C_{40}, 13 D_2, 3 D_4, 4 D_5, 8 D_{10}, 12 D_{20}	5 C_2, 6 C_4, C_5, 4 C_8, 3 C_{10}, 7 C_{20}, 3 C_{40}, 13 D_2, 3 D_4, 2 D_5, 4 D_{10}, 6 D_{20}	3 C_2, 3 C_4, 3 C_8, C_{10}, C_{20}, 11 D_2, 2 D_4, D_5, 3 D_{10}, 4 D_{20}	5 C_2, 2 C_4, C_5, C_{10}, 13 D_2, 3 D_4, 2 D_5, D_{10}
R57.45	4 C_2, 4 C_4, 2 C_5, 4 C_8, 6 C_{10}, 10 C_{20}, 8 C_{40}, 9 D_2, D_4, 2 D_5, 6 D_{10}, 4 D_{20}	4 C_2, 4 C_4, C_5, 2 C_8, 3 C_{10}, 4 C_{20}, C_{40}, 9 D_2, D_4, D_5, 3 D_{10}, 2 D_{20}	3 C_2, 2 C_4, 2 C_8, C_{10}, C_{20}, 9 D_2, D_4, D_5, 3 D_{10}, 2 D_{20}	4 C_2, 2 C_4, C_5, C_{10}, 9 D_2, D_4, D_5, D_{10}
R57.46	7 C_2, 3 C_4, 2 C_5, 4 C_8, 10 C_{10}, 6 C_{20}, 8 C_{40}, 30 D_2, 4 D_5, 14 D_{10}	7 C_2, 3 C_4, C_5, 2 C_8, 5 C_{10}, 2 C_{20}, C_{40}, 30 D_2, 2 D_5, 7 D_{10}	2 C_2, 2 C_4, 2 C_8, C_{10}, 2 C_{20}, C_{40}, 19 D_2, D_5, 5 D_{10}	7 C_2, C_4, C_5, 30 D_2, 2 D_5
R57.47	3 C_2, 4 C_4, 2 C_5, 2 C_8, 4 C_{10}, 6 C_{20}, 4 C_{40}, 8 D_2, D_4, 2 D_5, 6 D_{10}, 4 D_{20}	3 C_2, 4 C_4, C_5, 2 C_{10}, 2 C_{20}, 8 D_2, D_4, D_5, 3 D_{10}, 2 D_{20}	2 C_2, 3 C_4, C_{10}, 2 C_{20}, 8 D_2, D_4, D_5, 3 D_{10}, 2 D_{20}	3 C_2, C_4, C_5, 8 D_2, D_5
R57.48	5 C_2, 6 C_4, 2 C_5, 6 C_8, 6 C_{10}, 10 C_{20}, 8 C_{40}, 13 D_2, 3 D_4, 4 D_5, 8 D_{10}, 6 D_{20}	5 C_2, 6 C_4, C_5, 4 C_8, 3 C_{10}, 4 C_{20}, 13 D_2, 3 D_4, 2 D_5, 4 D_{10}, 3 D_{20}	3 C_2, 3 C_4, 3 C_8, C_{10}, C_{20}, 11 D_2, 2 D_4, D_5, 3 D_{10}, 2 D_{20}	5 C_2, 2 C_4, C_5, C_{10}, 13 D_2, 3 D_4, 2 D_5, D_{10}
R57.49	3 C_2, 2 C_4, 4 C_8, 9 C_{19}, 9 C_{38}, 9 C_{76}, 18 C_{152}, 3 D_2, 18 D_{19}, 9 D_{38}	3 C_2, 2 C_4, 2 C_8, C_{19}, C_{38}, 3 D_2, 2 D_{19}, D_{38}	2 C_2, C_4, C_{38}, 3 D_2, D_{19}, D_{38}	3 C_2, C_{19}, 3 D_2, D_{19}
R57.50	2 C_2, 2 C_4, 2 C_8, 9 C_{19}, 9 C_{38}, 9 C_{76}, 18 C_{152}, 2 D_2, 9 D_{19}, 9 D_{38}	2 C_2, 2 C_4, C_{19}, C_{38}, 2 D_2, D_{19}, D_{38}	2 C_2, C_4, C_{38}, 2 D_2, D_{19}, D_{38}	2 C_2, C_{19}, 2 D_2, D_{19}
R57.51	4 C_2, 4 C_4, 2 C_5, 2 C_{10}, 4 C_{20}, 13 D_2, 8 D_4	4 C_2, 4 C_4, 13 D_2, 8 D_4	2 C_2, 4 C_4, 11 D_2, 8 D_4	4 C_2, 13 D_2
R57.52	4 C_2, 4 C_4, 2 C_5, 2 C_{10}, 4 C_{20}, 13 D_2, 8 D_4	4 C_2, 4 C_4, 13 D_2, 8 D_4	2 C_2, 4 C_4, 11 D_2, 8 D_4	4 C_2, 13 D_2
R57.53	C_2, C_3, 15 C_7, 3 C_{14}, 27 C_{21}, D_3, 3 D_7, 6 D_{21}	C_2, C_3, 11 C_7, C_{14}, 20 C_{21}, D_3, 3 D_7, 6 D_{21}	C_2, C_{14}, D_3, 3 D_7, 6 D_{21}	C_2, C_3, 9 C_7, D_3, 3 D_7
R57.54	C_2, 3 C_7, 3 C_{14}, 9 C_{19}, 27 C_{133}, 9 D_{19}	C_2, C_7, C_{14}, C_{19}, D_{19}	C_2, C_{14}, D_{19}	C_2, C_{19}, D_{19}
R57.55	4 C_2, C_3, 4 C_4, 4 C_6, 3 C_9, 4 C_{12}, 9 C_{18}, 3 C_{36}, 6 D_2, 4 D_4	4 C_2, C_3, 4 C_4, 4 C_6, C_9, 4 C_{12}, 3 C_{18}, C_{36}, 6 D_2, 4 D_4	3 C_2, C_6, 6 D_2, 4 D_4	4 C_2, C_3, 4 C_4, 6 D_2, 4 D_4
R57.56	4 C_2, C_3, C_4, 4 C_6, 3 C_9, C_{12}, 3 C_{18}, 16 D_2, 2 D_4	4 C_2, C_3, C_4, 4 C_6, C_9, C_{12}, C_{18}, 16 D_2, 2 D_4	2 C_2, C_6, 12 D_2, 2 D_4	4 C_2, C_3, C_4, 16 D_2, 2 D_4
R57.57	3 C_2, 4 C_4, 6 C_8, 10 C_{16}, 12 C_{32}, 4 D_2, 2 D_4, D_8	3 C_2, 4 C_4, 4 C_8, 2 C_{16}, 4 D_2, 2 D_4, D_8	2 C_2, 2 C_4, 2 C_8, 4 D_2, 2 D_4, D_8	3 C_2, C_4, 4 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R57.58	5 C_2, 6 C_4, 8 C_8, 16 C_{16}, 24 C_{32}, 13 D_2, 3 D_4	5 C_2, 6 C_4, 6 C_8, 6 C_{16}, 4 C_{32}, 13 D_2, 3 D_4	2 C_2, 2 C_4, 2 C_8, 11 D_2, 2 D_4	5 C_2, 4 C_4, 13 D_2, 3 D_4
R57.59	3 C_2, 5 C_4, 7 C_8, 12 C_{16}, 20 C_{32}, 4 D_2, 2 D_4, 2 D_8	3 C_2, 5 C_4, 5 C_8, 3 C_{16}, 4 D_2, 2 D_4, 2 D_8	2 C_2, 2 C_4, 3 C_8, 4 D_2, 2 D_4, 2 D_8	3 C_2, 2 C_4, 4 D_2
R57.60	4 C_2, 5 C_4, 6 C_8, 10 C_{16}, 16 C_{32}, 9 D_2, D_4	4 C_2, 5 C_4, 4 C_8, 3 C_{16}, C_{32}, 9 D_2, D_4	2 C_2, 2 C_4, C_8, 9 D_2, D_4	4 C_2, 3 C_4, 9 D_2, D_4
R57.61	5 C_2, 4 C_4, 6 C_8, 10 C_{16}, 16 C_{32}, 15 D_2, 2 D_4	5 C_2, 4 C_4, 4 C_8, 2 C_{16}, 15 D_2, 2 D_4	2 C_2, 3 C_4, 11 D_2, 2 D_4	5 C_2, C_4, 15 D_2
R57.62	7 C_2, 4 C_4, 8 C_8, 12 C_{16}, 16 C_{32}, 30 D_2	7 C_2, 4 C_4, 7 C_8, 6 C_{16}, 2 C_{32}, 30 D_2	2 C_2, 3 C_4, 19 D_2	7 C_2, C_4, C_8, 30 D_2
R57.63	5 C_2, 4 C_4, 6 C_8, 6 C_{16}, 8 C_{32}, 23 D_2	5 C_2, 4 C_4, 4 C_8, 2 C_{16}, 23 D_2	2 C_2, 3 C_4, 17 D_2	5 C_2, C_4, 23 D_2
R57.64	4 C_2, 4 C_4, 5 C_8, 8 C_{16}, 8 C_{32}, 12 D_2, 2 D_4	4 C_2, 4 C_4, 4 C_8, 4 C_{16}, 12 D_2, 2 D_4	2 C_2, 3 C_4, 10 D_2, 2 D_4	4 C_2, C_4, C_8, 12 D_2
R57.65	3 C_2, C_3, 2 C_4, 2 C_5, C_6, 4 C_8, 6 C_{10}, C_{12}, 2 C_{15}, 8 C_{20}, 2 C_{24}, 2 C_{30}, 16 C_{40}, 4 C_{60}, 8 C_{120}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 2 C_8, 3 D_2, 2 D_3, D_6	2 C_2, C_4, C_6, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, D_3
R57.66	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_8, 4 C_{10}, C_{12}, 2 C_{15}, 6 C_{20}, 2 C_{24}, 2 C_{30}, 8 C_{40}, 4 C_{60}, 8 C_{120}, 2 D_2, D_3, D_6	2 C_2, C_3, 2 C_4, C_6, 2 D_2, D_3, D_6	2 C_2, C_4, C_6, 2 D_2, D_3, D_6	2 C_2, C_3, 2 D_2, D_3
R57.67	**Tet**, 3 C_2, C_3, 2 C_4, 2 C_5, C_6, 6 C_{10}, 2 C_{12}, 4 C_{15}, 8 C_{20}, 4 C_{30}, 8 C_{60}, 6 D_2	**Tet**, 3 C_2, C_3, 2 C_4, C_5, C_6, 3 C_{10}, C_{15}, 2 C_{20}, C_{30}, 6 D_2	2 C_2, C_4, C_6, C_{10}, 5 D_2	**Tet**, 3 C_2, C_3, C_5, C_{10}, 6 D_2
R57.68	**Tet**, 3 C_2, C_3, 2 C_4, 2 C_5, C_6, 6 C_{10}, 2 C_{12}, 4 C_{15}, 8 C_{20}, 4 C_{30}, 8 C_{60}, 6 D_2	**Tet**, 3 C_2, C_3, 2 C_4, C_5, C_6, 3 C_{10}, C_{12}, C_{15}, 3 C_{20}, C_{30}, C_{60}, 6 D_2	**Tet**, 2 C_2, C_4, C_6, C_{10}, 6 D_2	**Tet**, 3 C_2, C_3, C_4, C_5, C_{10}, C_{20}, 6 D_2
R57.69	5 C_2, C_3, 2 C_4, 2 C_5, 5 C_6, 10 C_{10}, 4 C_{12}, 4 C_{15}, 8 C_{20}, 20 C_{30}, 16 C_{60}, 13 D_2	5 C_2, C_3, 2 C_4, C_5, 5 C_6, 5 C_{10}, 2 C_{12}, C_{15}, 2 C_{20}, 5 C_{30}, 2 C_{60}, 13 D_2	3 C_2, 2 C_4, C_6, C_{10}, C_{30}, 11 D_2	5 C_2, C_3, C_5, C_{15}, 13 D_2
R57.70	C_2, 2 C_5, 2 C_{10}, 11 C_{23}, 11 C_{46}, 44 C_{115}, 44 C_{230}	C_2	C_2	C_2
R57.71	3 C_2, 2 C_4, 14 C_{29}, 42 C_{58}, 56 C_{116}, 3 D_2	3 C_2, 2 C_4, C_{29}, 3 C_{58}, 2 C_{116}, 3 D_2	2 C_2, 2 C_4, C_{58}, 3 D_2	3 C_2, C_{29}, C_{58}, 3 D_2
R57.72	C_2, C_3, C_4, C_6, 2 C_{12}, 9 C_{19}, 9 C_{38}, 18 C_{57}, 18 C_{76}, 18 C_{114}, 36 C_{228}	C_2, C_3, C_4, C_6, C_{19}, C_{38}, C_{57}, C_{114}	C_2, C_4, C_6, C_{38}, C_{114}	C_2, C_3, C_{19}, C_{57}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 58				
R58.1	3 C_2, 2 C_3, C_4, 2 C_6, 3 C_7, 6 C_{14}, 6 C_{21}, 3 C_{42}, 4 D_2, 4 D_3, D_4, 2 D_6, 3 D_7, 3 D_{14}, 3 D_{21}	3 C_2, 2 C_3, C_4, 2 C_6, C_7, 2 C_{14}, C_{21}, 4 D_2, 4 D_3, D_4, 2 D_6, D_7, D_{14}, D_{21}	3 C_2, C_4, C_6, C_{14}, 4 D_2, 4 D_3, D_4, 2 D_6, D_7, D_{14}, D_{21}	3 C_2, 2 C_3, C_7, 4 D_2, 4 D_3, D_7
R58.2	3 C_2, C_4, 29 C_{59}, 58 C_{118}, 4 D_2, D_4, 29 D_{59}, 29 D_{118}	3 C_2, C_4, C_{59}, 2 C_{118}, 4 D_2, D_4, D_{59}, D_{118}	3 C_2, C_4, C_{118}, 4 D_2, D_4, D_{59}, D_{118}	3 C_2, C_{59}, 4 D_2, D_{59}
R58.3	2 C_2, 2 C_4, C_8, 14 C_{29}, 14 C_{58}, 28 C_{116}, 28 C_{232}, 2 D_2, D_4, 14 D_{29}, 14 D_{58}, 28 D_{116}	2 C_2, 2 C_4, C_{29}, C_{58}, C_{116}, 2 D_2, D_4, D_{29}, D_{58}, D_{116}	2 C_2, 2 C_4, C_{58}, C_{116}, 2 D_2, D_4, D_{29}, D_{58}, D_{116}	2 C_2, C_{29}, 2 D_2, D_{29}
R58.4	3 C_2, 3 C_3, C_4, 2 C_5, 5 C_6, 2 C_{10}, 5 C_{12}, 10 C_{15}, 4 C_{20}, 10 C_{30}, 20 C_{60}, 4 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 4 D_{10}, 2 D_{12}, 8 D_{15}, 4 D_{20}, 8 D_{30}, 8 D_{60}	3 C_2, 3 C_3, C_4, C_5, 5 C_6, C_{10}, 4 C_{12}, 4 C_{15}, C_{20}, 4 C_{30}, 4 C_{60}, 4 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, 2 D_{10}, 2 D_{12}, 4 D_{15}, D_{20}, 4 D_{30}, 2 D_{60}	3 C_2, 4 C_6, 4 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, 2 D_{10}, 2 D_{12}, 4 D_{15}, D_{20}, 4 D_{30}, 2 D_{60}	3 C_2, C_3, C_4, C_5, C_{10}, C_{20}, 4 D_2, 2 D_3, D_4, 2 D_5, 2 D_{10}, D_{20}
R58.5	3 C_2, 3 C_3, C_4, 2 C_5, 4 C_6, 2 C_{10}, 2 C_{12}, 10 C_{15}, 4 C_{20}, 10 C_{30}, 8 C_{60}, 4 D_2, 4 D_3, D_4, 4 D_5, 4 D_6, 4 D_{10}, 2 D_{12}, 14 D_{15}, 4 D_{20}, 14 D_{30}, 8 D_{60}	3 C_2, 3 C_3, C_4, C_5, 4 C_6, C_{10}, C_{12}, 4 C_{15}, C_{20}, 4 C_{30}, C_{60}, 4 D_2, 4 D_3, D_4, 2 D_5, 4 D_6, 2 D_{10}, D_{12}, 5 D_{15}, D_{20}, 5 D_{30}, D_{60}	3 C_2, C_4, 2 C_6, 4 D_2, 4 D_3, D_4, 2 D_5, 4 D_6, 2 D_{10}, D_{12}, 5 D_{15}, D_{20}, 5 D_{30}, D_{60}	3 C_2, 3 C_3, C_5, C_6, C_{10}, C_{15}, C_{30}, 4 D_2, 4 D_3, 2 D_5, 2 D_6, 2 D_{10}, 2 D_{15}, 2 D_{30}
R58.6	3 C_2, 3 C_3, C_4, 2 C_5, 8 C_6, 2 C_{10}, C_{12}, 6 C_{15}, 4 C_{20}, 6 C_{30}, 4 C_{60}, 4 D_2, D_3, D_4, 4 D_5, D_6, 4 D_{10}, 2 D_{15}, 4 D_{20}, 2 D_{30}	3 C_2, 3 C_3, C_4, C_5, 8 C_6, C_{10}, 2 C_{15}, C_{20}, 2 C_{30}, 4 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, D_{15}, D_{20}, D_{30}	3 C_2, C_4, 6 C_6, 4 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, D_{15}, D_{20}, D_{30}	3 C_2, C_3, C_5, C_{10}, 4 D_2, D_3, 2 D_5, 2 D_{10}
R58.7	3 C_2, C_3, 3 C_6, 14 C_{29}, 14 C_{58}, 14 C_{87}, 14 C_{174}, 3 D_2, 28 D_{29}, 14 D_{58}	3 C_2, C_3, 3 C_6, C_{29}, C_{58}, 3 D_2, 2 D_{29}, D_{58}	3 C_2, C_6, 3 D_2, 2 D_{29}, D_{58}	3 C_2, C_{29}, C_{58}, 3 D_2, 2 D_{29}, D_{58}
R58.8	C_2, 2 C_5, 2 C_{10}, 14 C_{29}, 28 C_{145}, 14 D_{29}	C_2, C_{29}, D_{29}	C_2, D_{29}	C_2, C_{29}, D_{29}
R58.9	2 C_2, 3 C_3, 2 C_4, 4 C_6, 2 C_8, 7 C_{12}, 2 C_{16}, 6 C_{24}, 4 C_{48}, 2 D_2, D_3, D_4, D_6, 2 D_8, D_{12}, 2 D_{24}	2 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, 5 C_{12}, 2 C_{24}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{24}	2 C_2, 2 C_4, 4 C_6, C_8, 5 C_{12}, 2 C_{24}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{24}	2 C_2, C_3, 2 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R58.10	2 C_2, 3 C_3, 2 C_4, 4 C_6, 2 C_8, 6 C_{12}, 2 C_{16}, 10 C_{24}, 16 C_{48}, 2 D_2, D_3, D_4, D_6, 2 D_8, 2 D_{12}, 4 D_{24}	2 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, 4 C_{12}, 4 C_{24}, 2 D_2, D_3, D_4, D_6, D_8, 2 D_{12}, 2 D_{24}	2 C_2, 2 C_4, 4 C_6, C_8, 3 C_{12}, 3 C_{24}, 2 D_2, D_3, D_4, D_6, D_8, 2 D_{12}, 2 D_{24}	2 C_2, C_3, 2 D_2, D_3
R58.11	2 C_2, 3 C_3, 2 C_4, 3 C_6, 2 C_8, 6 C_{12}, 2 C_{16}, 10 C_{24}, 4 C_{48}, 2 D_2, 3 D_3, D_4, 3 D_6, 2 D_8, 5 D_{12}, 10 D_{24}	2 C_2, 3 C_3, 2 C_4, 3 C_6, C_8, 4 C_{12}, 4 C_{24}, 2 D_2, 3 D_3, D_4, 3 D_6, D_8, 4 D_{12}, 4 D_{24}	2 C_2, 2 C_4, 3 C_6, C_8, 3 C_{12}, 3 C_{24}, 2 D_2, 3 D_3, D_4, 3 D_6, D_8, 4 D_{12}, 4 D_{24}	2 C_2, 3 C_3, 2 D_2, 3 D_3
R58.12	C_2, 3 C_3, 2 C_5, C_6, 6 C_9, 10 C_{15}, 3 C_{18}, 18 C_{45}, D_3, 2 D_5, 4 D_{15}	C_2, 3 C_3, C_5, C_6, 2 C_9, 4 C_{15}, C_{18}, D_3, D_5, 2 D_{15}	C_2, C_6, C_{18}, D_3, D_5, 2 D_{15}	C_2, 2 C_3, C_5, D_3, D_5
R58.13	3 C_2, 3 C_3, 2 C_6, 3 C_7, 9 C_{14}, 9 C_{21}, 6 C_{42}, 3 D_2, 5 D_3, 2 D_6	3 C_2, 3 C_3, 2 C_6, C_7, 3 C_{14}, C_{21}, 3 D_2, 5 D_3, 2 D_6	3 C_2, C_{14}, 3 D_2, 5 D_3, 2 D_6	3 C_2, 3 C_3, C_7, 3 D_2, 5 D_3
R58.14	3 C_2, 3 C_3, 5 C_6, 3 C_7, 9 C_{14}, 15 C_{21}, 27 C_{42}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, 5 C_6, C_7, 3 C_{14}, 3 C_{21}, 5 C_{42}, 3 D_2, 2 D_3, D_6	3 C_2, 4 C_6, C_{14}, C_{42}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_7, 3 D_2, 2 D_3
R58.15	2 C_2, C_3, 2 C_4, 2 C_5, 2 C_6, C_8, 4 C_{10}, 2 C_{12}, 4 C_{15}, 4 C_{20}, 2 C_{24}, 8 C_{30}, 4 C_{40}, 8 C_{60}, 8 C_{120}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, 2 C_6, 2 D_2, D_4	2 C_2, 2 C_4, C_6, 2 D_2, D_4	2 C_2, 2 D_2
R58.16	C_2, C_3, C_6, 3 C_9, 6 C_{13}, 3 C_{18}, 6 C_{26}, 12 C_{39}, 12 C_{78}, 36 C_{117}, 36 C_{234}	C_2, C_3, C_6	C_2, C_6	C_2
R58.17	3 C_2, 29 C_{59}, 87 C_{118}, 3 D_2	3 C_2, C_{59}, 3 C_{118}, 3 D_2	3 C_2, C_{118}, 3 D_2	3 C_2, C_{59}, 3 D_2
R58.18	C_2, C_4, 2 C_8, 14 C_{29}, 14 C_{58}, 28 C_{116}, 56 C_{232}	C_2, C_4, C_{29}, C_{58}, C_{116}	C_2, C_4, C_{58}, C_{116}	C_2, C_{29}
Genus 59				
R59.1	5 C_2, C_3, 3 C_4, 2 C_5, 3 C_6, 2 C_8, 6 C_{10}, 4 C_{12}, 4 C_{15}, 8 C_{20}, 4 C_{24}, 12 C_{30}, 8 C_{40}, 16 C_{60}, 16 C_{120}, 13 D_2, 2 D_3, 3 D_4, 4 D_5, 4 D_6, 8 D_{10}, 6 D_{12}, 8 D_{15}, 12 D_{20}, 16 D_{30}, 24 D_{60}	5 C_2, C_3, 3 C_4, C_5, 3 C_6, C_8, 3 C_{10}, 3 C_{12}, C_{15}, 3 C_{20}, C_{24}, 3 C_{30}, C_{40}, 3 C_{60}, C_{120}, 13 D_2, 2 D_3, 3 D_4, 2 D_5, 4 D_6, 4 D_{10}, 5 D_{12}, 2 D_{15}, 5 D_{20}, 4 D_{30}, 5 D_{60}	3 C_2, 2 C_4, C_6, C_{10}, C_{30}, 13 D_2, D_3, 3 D_4, D_5, 3 D_6, 3 D_{10}, 3 D_{12}, D_{15}, 3 D_{20}, 3 D_{30}, 3 D_{60}	5 C_2, C_3, C_4, C_5, C_6, C_{10}, C_{12}, C_{15}, C_{20}, C_{30}, C_{60}, 13 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, 2 D_{10}, D_{12}, 2 D_{15}, D_{20}, 2 D_{30}, D_{60}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R59.2	3 C_2, C_3, 5 C_4, 2 C_5, 2 C_6, C_8, 4 C_{10}, 2 C_{12}, 4 C_{15}, 4 C_{20}, 2 C_{24}, 8 C_{30}, 4 C_{40}, 8 C_{60}, 8 C_{120}, 4 D_2, D_3, 2 D_4, 2 D_5, D_6, 2 D_{10}, D_{12}, 4 D_{15}, 2 D_{20}, 4 D_{30}, 4 D_{60}	3 C_2, C_3, 5 C_4, C_5, 2 C_6, 2 C_{10}, C_{12}, C_{15}, C_{20}, 2 C_{30}, C_{60}, 4 D_2, D_3, 2 D_4, D_5, D_6, D_{10}, D_{12}, D_{15}, D_{20}, D_{30}, D_{60}	3 C_2, 4 C_4, C_6, C_{10}, C_{30}, 4 D_2, D_3, 2 D_4, D_5, D_6, D_{10}, D_{12}, D_{15}, D_{20}, D_{30}, D_{60}	3 C_2, C_3, C_5, C_6, C_{10}, C_{15}, C_{30}, 4 D_2, D_3, D_5, D_6, D_{10}, D_{15}, D_{30}
R59.3	3 C_2, 2 C_4, 29 C_{59}, 29 C_{118}, 29 C_{236}, 3 D_2, 58 D_{59}, 29 D_{118}	3 C_2, 2 C_4, C_{59}, C_{118}, 3 D_2, 2 D_{59}, D_{118}	2 C_2, 2 C_4, C_{118}, 3 D_2, D_{59}, D_{118}	3 C_2, C_{59}, 3 D_2, D_{59}
R59.4	C_2, C_3, C_6, 29 C_{59}, 29 C_{177}, 29 D_{59}	C_2, C_3, C_6, C_{59}, D_{59}	C_2, C_6, D_{59}	C_2, C_{59}, D_{59}
R59.5	4 C_2, 2 C_4, 2 C_5, 4 C_8, 4 C_{10}, 2 C_{16}, 6 C_{20}, 12 C_{40}, 8 C_{80}, 9 D_2, 3 D_4, 4 D_5, 4 D_8, 6 D_{10}, 10 D_{20}, 16 D_{40}	4 C_2, 2 C_4, C_5, 2 C_8, 2 C_{10}, 2 C_{20}, 2 C_{40}, 9 D_2, 3 D_4, 2 D_5, 3 D_8, 3 D_{10}, 3 D_{20}, 3 D_{40}	2 C_2, 2 C_4, 2 C_8, C_{10}, C_{20}, 2 C_{40}, 9 D_2, 3 D_4, D_5, 3 D_8, 3 D_{10}, 3 D_{20}, 3 D_{40}	4 C_2, C_5, 9 D_2, 2 D_5
R59.6	3 C_2, 3 C_4, 2 C_5, 4 C_8, 4 C_{10}, 4 C_{16}, 6 C_{20}, 12 C_{40}, 16 C_{80}, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, 4 D_{20}, 8 D_{40}	3 C_2, 3 C_4, C_5, 2 C_8, 2 C_{10}, 2 C_{20}, 2 C_{40}, 4 D_2, 2 D_4, D_5, 2 D_8, D_{10}, D_{20}, 2 D_{40}	2 C_2, 3 C_4, 2 C_8, C_{10}, C_{20}, 2 C_{40}, 4 D_2, 2 D_4, D_5, 2 D_8, D_{10}, D_{20}, 2 D_{40}	3 C_2, C_5, 4 D_2, D_5
R59.7	3 C_2, 2 C_4, 2 C_5, 3 C_7, 2 C_{10}, 3 C_{14}, 2 C_{20}, 3 C_{28}, 6 C_{35}, 6 C_{70}, 3 D_2, 4 D_5, 6 D_7, 2 D_{10}, 3 D_{14}, 12 D_{35}, 6 D_{70}	3 C_2, 2 C_4, C_5, C_7, C_{10}, C_{14}, C_{35}, C_{70}, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, 2 D_{35}, D_{70}	2 C_2, 2 C_4, C_{10}, C_{14}, 3 D_2, D_5, D_7, D_{10}, D_{14}, D_{35}, D_{70}	3 C_2, C_5, C_7, 3 D_2, D_5, D_7
R59.8	C_2, 3 C_7, 3 C_{14}, 8 C_{17}, 8 C_{34}, 48 C_{119}, 48 C_{238}	C_2	C_2	C_2
R59.9	2 C_2, C_3, 2 C_4, 2 C_5, 2 C_6, 2 C_8, 4 C_{10}, 3 C_{12}, 4 C_{15}, 6 C_{20}, 4 C_{24}, 8 C_{30}, 8 C_{40}, 12 C_{60}, 16 C_{120}, 2 D_2	2 C_2, C_3, 2 C_4, C_5, 2 C_6, 2 C_{10}, C_{12}, C_{15}, C_{20}, 2 C_{30}, C_{60}, 2 D_2	2 C_2, C_4, C_6, C_{10}, C_{30}, 2 D_2	2 C_2, C_3, C_5, C_6, C_{10}, C_{15}, C_{30}, 2 D_2
R59.10	3 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 4 C_8, 6 C_{10}, 4 C_{12}, 4 C_{15}, 8 C_{20}, 8 C_{24}, 12 C_{30}, 16 C_{40}, 16 C_{60}, 32 C_{120}, 3 D_2	3 C_2, C_3, 2 C_4, C_5, 3 C_6, 2 C_8, 3 C_{10}, 3 C_{12}, C_{15}, 3 C_{20}, 2 C_{24}, 3 C_{30}, 2 C_{40}, 3 C_{60}, 2 C_{120}, 3 D_2	2 C_2, C_4, C_6, C_{10}, C_{30}, 3 D_2	3 C_2, C_3, C_4, C_5, C_6, C_{10}, C_{12}, C_{15}, C_{20}, C_{30}, C_{60}, 3 D_2
R59.11	C_2, C_4, 29 C_{59}, 29 C_{118}, 58 C_{236}	C_2, C_4, C_{59}, C_{118}	C_2, C_4, C_{118}	C_2, C_{59}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 60				
R60.1	2 C_2, C_3, C_4, C_6, 3 C_7, 3 C_9, 3 C_{14}, 6 C_{21}, 6 C_{42}, 18 C_{63}, 3 D_2, D_3, D_4, D_6, 3 D_7, 3 D_9, 3 D_{14}, 6 D_{21}, 6 D_{42}, 18 D_{63}	2 C_2, C_3, C_4, C_6, C_7, C_9, C_{14}, C_{21}, C_{42}, C_{63}, 3 D_2, D_3, D_4, D_6, D_7, D_9, D_{14}, D_{21}, D_{42}, D_{63}	2 C_2, C_4, C_6, C_{14}, C_{42}, 3 D_2, D_3, D_4, D_6, D_7, D_9, D_{14}, D_{21}, D_{42}, D_{63}	2 C_2, C_3, C_7, C_{21}, 3 D_2, D_3, D_7, D_{21}
R60.2	3 C_2, C_4, 30 C_{61}, 60 C_{122}, 4 D_2, D_4, 30 D_{61}, 30 D_{122}	3 C_2, C_4, C_{61}, 2 C_{122}, 4 D_2, D_4, D_{61}, D_{122}	3 C_2, C_4, C_{122}, 4 D_2, D_4, D_{61}, D_{122}	3 C_2, C_{61}, 4 D_2, D_{61}
R60.3	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_8, 2 C_{10}, 2 C_{12}, 4 C_{15}, 2 C_{16}, 4 C_{20}, 4 C_{24}, 4 C_{30}, 8 C_{40}, 4 C_{48}, 8 C_{60}, 8 C_{80}, 16 C_{120}, 16 C_{240}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_8, 2 D_{10}, 2 D_{12}, 4 D_{15}, 4 D_{20}, 4 D_{24}, 4 D_{30}, 8 D_{40}, 8 D_{60}, 16 D_{120}	2 C_2, C_3, 2 C_4, C_5, C_6, C_8, C_{10}, C_{12}, C_{15}, C_{20}, C_{24}, C_{30}, C_{40}, C_{60}, C_{120}, 2 D_2, D_3, D_4, D_5, D_6, D_8, D_{10}, D_{12}, D_{15}, D_{20}, D_{24}, D_{30}, D_{40}, D_{60}, D_{120}	2 C_2, 2 C_4, C_6, C_8, C_{10}, C_{12}, C_{20}, C_{24}, C_{30}, C_{40}, C_{60}, C_{120}, 2 D_2, D_3, D_4, D_5, D_6, D_8, D_{10}, D_{12}, D_{15}, D_{20}, D_{24}, D_{30}, D_{40}, D_{60}, D_{120}	2 C_2, C_3, C_5, C_{15}, 2 D_2, D_3, D_5, D_{15}
R60.4	3 C_2, C_3, C_6, 15 C_{31}, 15 C_{62}, 15 C_{93}, 3 D_2, 2 D_3, D_6, 30 D_{31}, 15 D_{62}, 15 D_{93}	3 C_2, C_3, C_6, C_{31}, C_{62}, C_{93}, 3 D_2, 2 D_3, D_6, 2 D_{31}, D_{62}, D_{93}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_{31}, D_{62}, D_{93}	3 C_2, C_3, C_{31}, 3 D_2, 2 D_3, 2 D_{31}
R60.5	2 C_2, C_3, C_4, C_6, 3 C_7, C_8, 3 C_{14}, 6 C_{21}, 3 C_{28}, 6 C_{42}, 2 D_2, D_3, D_4, D_6, 3 D_7, 3 D_{14}, 6 D_{21}, 3 D_{28}, 6 D_{42}	2 C_2, C_3, C_4, C_6, C_7, C_{14}, C_{21}, C_{28}, C_{42}, 2 D_2, D_3, D_4, D_6, D_7, D_{14}, D_{21}, D_{28}, D_{42}	2 C_2, C_4, C_6, C_{14}, C_{28}, C_{42}, 2 D_2, D_3, D_4, D_6, D_7, D_{14}, D_{21}, D_{28}, D_{42}	2 C_2, C_3, C_7, 2 D_2, D_3, D_7
R60.6	3 C_2, C_3, C_4, 2 C_6, 3 C_7, 2 C_8, C_{12}, 6 C_{14}, 6 C_{21}, 3 C_{28}, 12 C_{42}, 6 C_{84}, 4 D_2, D_3, 2 D_4, D_6, 3 D_7, 2 D_8, D_{12}, 3 D_{14}, 6 D_{21}, 3 D_{28}, 6 D_{42}, 6 D_{84}	3 C_2, C_3, C_4, 2 C_6, C_7, C_8, C_{12}, 2 C_{14}, C_{21}, C_{28}, 2 C_{42}, C_{84}, 4 D_2, D_3, 2 D_4, D_6, D_7, D_8, D_{12}, D_{14}, D_{21}, D_{28}, D_{42}, D_{84}	3 C_2, C_6, C_{14}, C_{42}, 4 D_2, D_3, 2 D_4, D_6, D_7, D_8, D_{12}, D_{14}, D_{21}, D_{28}, D_{42}, D_{84}	3 C_2, C_3, C_4, C_7, C_{21}, 4 D_2, D_3, 2 D_4, D_7, D_{21}
R60.7	3 C_2, C_4, 2 C_5, 2 C_8, 4 C_{10}, 4 C_{16}, 2 C_{20}, 8 C_{32}, 4 C_{40}, 8 C_{80}, 4 D_2, 2 D_4, 2 D_5, 4 D_8, 2 D_{10}, 8 D_{16}, 2 D_{20}, 8 D_{32}, 4 D_{40}, 8 D_{80}	3 C_2, C_4, C_5, C_8, 2 C_{10}, C_{16}, C_{20}, C_{32}, C_{40}, C_{80}, 4 D_2, 2 D_4, D_5, 2 D_8, D_{10}, 2 D_{16}, D_{20}, D_{32}, D_{40}, D_{80}	3 C_2, C_{10}, 4 D_2, 2 D_4, D_5, 2 D_8, D_{10}, 2 D_{16}, D_{20}, D_{32}, D_{40}, D_{80}	3 C_2, C_4, C_5, C_8, C_{16}, 4 D_2, 2 D_4, D_5, 2 D_8, 2 D_{16}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R60.8	3 C_2, C_3, C_4, C_6, 2 C_{12}, 6 C_{13}, 12 C_{26}, 6 C_{39}, 6 C_{78}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}, 6 D_{13}, 6 D_{26}, 6 D_{39}, 6 D_{78}	3 C_2, C_3, C_4, C_6, C_{12}, C_{13}, 2 C_{26}, C_{39}, C_{78}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}, D_{13}, D_{26}, D_{39}, D_{78}	3 C_2, C_4, C_{26}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}, D_{13}, D_{26}, D_{39}, D_{78}	3 C_2, C_3, C_6, C_{13}, 4 D_2, 2 D_3, 2 D_6, D_{13}
R60.9	3 C_2, 3 C_7, 5 C_{11}, 3 C_{14}, 5 C_{22}, 15 C_{77}, 3 D_2, 6 D_7, 10 D_{11}, 3 D_{14}, 5 D_{22}, 15 D_{77}	3 C_2, C_7, C_{11}, C_{14}, C_{22}, C_{77}, 3 D_2, 2 D_7, 2 D_{11}, D_{14}, D_{22}, D_{77}	3 C_2, 3 D_2, 2 D_7, 2 D_{11}, D_{14}, D_{22}, D_{77}	3 C_2, C_7, C_{11}, 3 D_2, 2 D_7, 2 D_{11}
R60.10	3 C_2, C_4, 2 C_5, 3 C_7, 2 C_{10}, 9 C_{14}, 4 C_{20}, 3 C_{28}, 6 C_{35}, 6 C_{70}, 12 C_{140}, 4 D_2, D_4, 4 D_5, 4 D_{10}, 4 D_{20}	3 C_2, C_4, C_5, C_{10}, C_{20}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}	3 C_2, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}	3 C_2, C_4, C_5, C_{10}, C_{20}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}
R60.11	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 3 C_9, 2 C_{12}, 2 C_{16}, 3 C_{18}, 2 C_{24}, 6 C_{36}, 6 C_{72}, 2 D_2, D_3, D_4, D_6, 2 D_8, 3 D_9, D_{12}, 3 D_{18}, 2 D_{24}, 3 D_{36}, 6 D_{72}	2 C_2, C_3, 2 C_4, C_6, C_8, C_9, C_{12}, C_{18}, C_{24}, C_{36}, C_{72}, 2 D_2, D_3, D_4, D_6, D_8, D_9, D_{12}, D_{18}, D_{24}, D_{36}, D_{72}	2 C_2, 2 C_4, C_6, C_8, C_{18}, 2 D_2, D_3, D_4, D_6, D_8, D_9, D_{12}, D_{18}, D_{24}, D_{36}, D_{72}	2 C_2, C_3, C_9, 2 D_2, D_3, D_9
R60.12	3 C_2, C_3, C_4, C_6, 5 C_{11}, 2 C_{12}, 15 C_{22}, 5 C_{33}, 5 C_{44}, 5 C_{66}, 10 C_{132}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, C_3, C_4, C_6, C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}	3 C_2, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}	3 C_2, C_3, C_4, C_6, C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}
R60.13	3 C_2, 2 C_5, 2 C_{10}, 6 C_{13}, 18 C_{26}, 12 C_{65}, 12 C_{130}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}	3 C_2, 3 D_2, 2 D_5, D_{10}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}
R60.14	**Tet**, **Oct**, 2 C_2, C_3, C_4, 5 C_{11}, 10 C_{22}, 5 C_{33}, 5 C_{44}, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 D_2, D_3, D_4
R60.15	3 C_2, C_4, 15 C_{31}, 45 C_{62}, 15 C_{124}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R60.16	C_2, C_3, C_6, 3 C_7, 3 C_9, 3 C_{14}, 6 C_{21}, 6 C_{42}, 18 C_{63}, D_2	C_2, C_3, C_6, C_7, C_9, C_{14}, C_{21}, C_{42}, C_{63}, D_2	C_2, C_6, C_{14}, C_{42}, D_2	C_2, C_3, C_7, C_{21}, D_2
R60.17	C_2, C_3, 20 C_{41}, 20 C_{82}, 20 C_{123}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R60.18	C_2, 5 C_{11}, 5 C_{22}, 55 C_{121}, 55 C_{242}	C_2	C_2	C_2
R60.19	3 C_2, 30 C_{61}, 90 C_{122}, 3 D_2	3 C_2, C_{61}, 3 C_{122}, 3 D_2	3 C_2, C_{122}, 3 D_2	3 C_2, C_{61}, 3 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R60.20	C_2, C_3, C_4, 2 C_5, C_6, 2 C_8, 2 C_{10}, 2 C_{12}, 4 C_{15}, 4 C_{16}, 4 C_{20}, 4 C_{24}, 4 C_{30}, 8 C_{40}, 8 C_{48}, 8 C_{60}, 16 C_{80}, 16 C_{120}, 32 C_{240}	C_2, C_3, C_4, C_5, C_6, C_8, C_{10}, C_{12}, C_{15}, C_{20}, C_{24}, C_{30}, C_{40}, C_{60}, C_{120}	C_2, C_4, C_6, C_8, C_{10}, C_{12}, C_{20}, C_{24}, C_{30}, C_{40}, C_{60}, C_{120}	C_2, C_3, C_5, C_{15}
Genus 61				
R61.1	2 **Tet**, **Oct**, **Ico**, 6 C_2, 3 C_3, 3 C_4, C_5, 9 C_6, 2 C_{10}, 2 C_{12}, C_{15}, C_{30}, 26 D_2, 7 D_3, 5 D_4, 3 D_5, 14 D_6, 4 D_{10}, D_{12}, D_{15}, D_{30}	2 **Tet**, **Oct**, **Ico**, 6 C_2, 3 C_3, 3 C_4, C_5, 9 C_6, 2 C_{10}, 2 C_{12}, C_{15}, C_{30}, 26 D_2, 7 D_3, 5 D_4, 3 D_5, 14 D_6, 4 D_{10}, D_{12}, D_{15}, D_{30}	**Oct**, 3 C_2, C_4, 4 C_6, 23 D_2, 5 D_3, 5 D_4, 2 D_5, 13 D_6, 4 D_{10}, D_{12}, D_{15}, D_{30}	2 **Tet**, **Oct**, **Ico**, 6 C_2, 3 C_3, 2 C_4, C_5, 4 C_6, 2 C_{10}, 2 C_{12}, C_{15}, C_{30}, 26 D_2, 7 D_3, 4 D_4, 3 D_5, 9 D_6, 4 D_{10}, D_{12}, D_{15}, D_{30}
R61.2	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, 2 C_8, C_{10}, 7 D_2, 2 D_3, 5 D_4, 2 D_5, D_6, 2 D_8, D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, 2 C_8, C_{10}, 7 D_2, 2 D_3, 5 D_4, 2 D_5, D_6, 2 D_8, D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, 3 C_4, C_6, 2 C_8, C_{10}, 7 D_2, 2 D_3, 5 D_4, 2 D_5, D_6, 2 D_8, D_{10}	**Tet**, 3 C_2, C_3, C_5, 7 D_2, 2 D_3, 2 D_5
R61.3	**Tet**, 4 **Oct**, 7 C_2, C_3, 4 C_4, 3 C_6, C_7, 3 C_{14}, 31 D_2, 4 D_3, 10 D_4, 6 D_6	**Tet**, 4 **Oct**, 7 C_2, C_3, 4 C_4, 3 C_6, 31 D_2, 4 D_3, 10 D_4, 6 D_6	**Tet**, 3 **Oct**, 3 C_2, 3 C_4, C_6, 28 D_2, 2 D_3, 10 D_4, 5 D_6	**Tet**, **Oct**, 7 C_2, C_3, C_4, 2 C_6, 31 D_2, 4 D_3, 2 D_4, 4 D_6
R61.4	6 C_2, 2 C_3, 5 C_4, 7 C_6, 2 C_8, 5 C_{12}, 4 C_{24}, 19 D_2, 5 D_3, 3 D_4, 11 D_6, 4 D_{12}	6 C_2, 2 C_3, 5 C_4, 7 C_6, C_8, 4 C_{12}, 19 D_2, 5 D_3, 3 D_4, 11 D_6, 4 D_{12}	3 C_2, 4 C_4, 3 C_6, C_8, C_{12}, 17 D_2, 3 D_3, 3 D_4, 9 D_6, 4 D_{12}	6 C_2, 2 C_3, C_4, 2 C_6, 2 C_{12}, 19 D_2, 5 D_3, 2 D_4, 5 D_6, 4 D_{12}
R61.5	6 C_2, 2 C_3, 3 C_4, 7 C_6, C_8, 7 C_{12}, 2 C_{24}, 27 D_2, 6 D_3, 3 D_4, 18 D_6, 9 D_{12}	6 C_2, 2 C_3, 3 C_4, 7 C_6, 6 C_{12}, 27 D_2, 6 D_3, 3 D_4, 18 D_6, 8 D_{12}	3 C_2, 2 C_4, 3 C_6, 3 C_{12}, 21 D_2, 3 D_3, 3 D_4, 13 D_6, 8 D_{12}	6 C_2, 2 C_3, C_4, 3 C_6, 2 C_{12}, 27 D_2, 6 D_3, 2 D_4, 9 D_6, 4 D_{12}
R61.6	6 C_2, 6 C_4, 6 C_8, 12 C_{16}, 16 C_{32}, 16 C_{64}, 19 D_2, 4 D_4, 4 D_8, 8 D_{16}, 8 D_{32}	6 C_2, 6 C_4, 5 C_8, 5 C_{16}, 3 C_{32}, C_{64}, 19 D_2, 4 D_4, 3 D_8, 3 D_{16}, 2 D_{32}	3 C_2, 4 C_4, 17 D_2, 4 D_4, 3 D_8, 3 D_{16}, 2 D_{32}	6 C_2, 2 C_4, C_8, C_{16}, 19 D_2, 3 D_4, D_8, D_{16}
R61.7	4 C_2, 6 C_4, 4 C_8, 8 C_{16}, 8 C_{32}, 8 C_{64}, 12 D_2, 4 D_4, 4 D_8, 8 D_{16}, 8 D_{32}	4 C_2, 6 C_4, 3 C_8, 3 C_{16}, C_{32}, 12 D_2, 4 D_4, 3 D_8, 3 D_{16}, 2 D_{32}	3 C_2, 4 C_4, 12 D_2, 4 D_4, 3 D_8, 3 D_{16}, 2 D_{32}	4 C_2, 2 C_4, C_8, C_{16}, 12 D_2, 3 D_4, D_8, D_{16}
R61.8	5 C_2, 2 C_4, 15 C_{31}, 45 C_{62}, 30 C_{124}, 13 D_2, 30 D_{31}, 60 D_{62}	5 C_2, 2 C_4, C_{31}, 3 C_{62}, C_{124}, 13 D_2, 2 D_{31}, 4 D_{62}	3 C_2, 2 C_4, C_{62}, 11 D_2, D_{31}, 3 D_{62}	5 C_2, C_{31}, C_{62}, 13 D_2, 2 D_{31}, D_{62}
R61.9	3 C_2, 2 C_4, 30 C_{61}, 30 C_{122}, 30 C_{244}, 3 D_2, 60 D_{61}, 30 D_{122}	3 C_2, 2 C_4, C_{61}, C_{122}, 3 D_2, 2 D_{61}, D_{122}	2 C_2, 2 C_4, C_{122}, 3 D_2, D_{61}, D_{122}	3 C_2, C_{61}, 3 D_2, D_{61}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R61.10	**Tet**, 2 **Ico**, 3 C_2, C_3, 8 C_5, C_6, 4 C_{10}, 2 C_{15}, 7 D_2, 2 D_3, 12 D_5, D_6, 6 D_{10}, 2 D_{15}	**Tet**, **Ico**, 3 C_2, C_3, 6 C_5, C_6, 3 C_{10}, 2 C_{15}, 7 D_2, 2 D_3, 9 D_5, D_6, 5 D_{10}, 2 D_{15}	2 C_2, C_6, C_{10}, 6 D_2, D_3, 8 D_5, D_6, 5 D_{10}, 2 D_{15}	**Tet**, 3 C_2, C_3, 6 C_5, 2 C_{10}, 2 C_{15}, 7 D_2, 2 D_3, 8 D_5, 4 D_{10}, 2 D_{15}
R61.11	**Tet**, 2 **Ico**, 3 C_2, C_3, 8 C_5, C_6, 12 C_{10}, 2 C_{15}, 2 C_{30}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, 2 **Ico**, 3 C_2, C_3, 6 C_5, C_6, 10 C_{10}, 2 C_{15}, 2 C_{30}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	2 C_2, C_6, 8 C_{10}, 2 C_{30}, 6 D_2, D_3, 2 D_5, D_6, 2 D_{10}	**Tet**, 2 **Ico**, 3 C_2, C_3, 4 C_5, 2 C_{10}, 2 C_{15}, 7 D_2, 2 D_3, 4 D_5
R61.12	2 **Tet**, 2 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 11 C_6, C_{10}, 2 C_{12}, C_{15}, C_{30}, 16 D_2, 4 D_3, 4 D_4, 2 D_5, 6 D_6, D_{10}	2 **Tet**, 2 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 11 C_6, C_{10}, 2 C_{12}, C_{15}, C_{30}, 16 D_2, 4 D_3, 4 D_4, 2 D_5, 6 D_6, D_{10}	2 **Oct**, 3 C_2, 7 C_6, 15 D_2, 3 D_3, 4 D_4, D_5, 6 D_6, D_{10}	2 **Tet**, 2 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 3 C_6, C_{10}, 2 C_{12}, C_{15}, C_{30}, 16 D_2, 4 D_3, 4 D_4, 2 D_5, 2 D_6, D_{10}
R61.13	2 **Tet**, 3 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 6 C_6, C_{10}, C_{12}, C_{15}, 16 D_2, 9 D_3, 4 D_4, 2 D_5, 12 D_6, D_{10}, D_{12}, D_{15}	2 **Tet**, 3 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 6 C_6, C_{10}, C_{12}, C_{15}, 16 D_2, 9 D_3, 4 D_4, 2 D_5, 12 D_6, D_{10}, D_{12}, D_{15}	3 **Oct**, 3 C_2, 3 C_6, 15 D_2, 7 D_3, 4 D_4, D_5, 12 D_6, D_{10}, D_{12}, D_{15}	2 **Tet**, 2 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, C_{15}, 16 D_2, 9 D_3, 4 D_4, 2 D_5, 3 D_6, D_{10}, D_{12}, D_{15}
R61.14	2 **Tet**, 4 **Oct**, 2 **Ico**, 3 C_2, 2 C_3, 2 C_4, C_5, 2 C_6, 9 D_2, 4 D_3, 4 D_4, D_5, 2 D_6	2 **Tet**, 4 **Oct**, 2 **Ico**, 3 C_2, 2 C_3, 2 C_4, C_5, 2 C_6, 9 D_2, 4 D_3, 4 D_4, D_5, 2 D_6	2 **Tet**, 4 **Oct**, 2 **Ico**, 3 C_2, 2 C_4, 2 C_6, 9 D_2, 4 D_3, 4 D_4, D_5, 2 D_6	2 **Tet**, 3 C_2, 2 C_3, C_5, 9 D_2, 4 D_3, D_5
R61.15	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 3 C_4, C_5, 3 C_6, 3 C_{10}, C_{12}, 29 D_2, 4 D_3, 6 D_4, 4 D_5, 7 D_6, 6 D_{10}, D_{12}	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 3 C_4, C_5, 3 C_6, 3 C_{10}, 29 D_2, 4 D_3, 6 D_4, 4 D_5, 7 D_6, 6 D_{10}	**Oct**, 3 C_2, C_4, C_6, C_{10}, 26 D_2, 2 D_3, 6 D_4, 2 D_5, 7 D_6, 6 D_{10}	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 2 C_4, C_5, 2 C_{10}, 29 D_2, 4 D_3, 4 D_4, 4 D_5, 4 D_{10}
R61.16	3 C_2, C_3, 3 C_4, C_5, 2 C_6, 3 C_8, C_{10}, 3 C_{12}, C_{20}, 4 D_2, 2 D_3, 3 D_4, D_5, 2 D_6, 2 D_8, D_{10}, 2 D_{12}	3 C_2, C_3, 3 C_4, C_5, 2 C_6, 3 C_8, C_{10}, 2 C_{12}, C_{20}, 4 D_2, 2 D_3, 3 D_4, D_5, 2 D_6, 2 D_8, D_{10}, D_{12}	3 C_2, 3 C_4, C_6, 3 C_8, C_{10}, 2 C_{12}, C_{20}, 4 D_2, 2 D_3, 3 D_4, D_5, 2 D_6, 2 D_8, D_{10}, D_{12}	3 C_2, C_3, C_5, 4 D_2, 2 D_3, D_5
R61.17	2 **Tet**, 7 C_2, 3 C_3, 7 C_6, 6 C_9, 12 C_{18}, 31 D_2, 4 D_3, 9 D_6, 12 D_9, 27 D_{18}	2 **Tet**, 7 C_2, 3 C_3, 7 C_6, 4 C_9, 10 C_{18}, 31 D_2, 4 D_3, 9 D_6, 12 D_9, 27 D_{18}	3 C_2, 3 C_6, 23 D_2, 2 D_3, 7 D_6, 6 D_9, 21 D_{18}	**Tet**, 7 C_2, 2 C_3, C_6, 31 D_2, 4 D_3, 2 D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R61.18	**Tet**, 7 C_2, C_3, 2 C_4, 3 C_6, 4 C_8, C_{12}, 8 C_{16}, 2 C_{24}, 4 C_{48}, 34 D_2, 8 D_4, 16 D_8, 20 D_{16}	**Tet**, 7 C_2, C_3, 2 C_4, 3 C_6, 3 C_8, 3 C_{16}, 34 D_2, 8 D_4, 12 D_8, 8 D_{16}	3 C_2, C_4, 2 C_6, 27 D_2, 6 D_4, 8 D_8, 6 D_{16}	7 C_2, C_4, C_8, C_{16}, 34 D_2, 4 D_4, 4 D_8, 2 D_{16}
R61.19	4 C_2, C_3, 4 C_4, 2 C_6, 3 C_8, 2 C_{12}, 4 C_{16}, 2 C_{24}, 4 C_{48}, 8 D_2, 6 D_4, 5 D_8, 2 D_{16}	4 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, C_{12}, C_{16}, 8 D_2, 6 D_4, 3 D_8, D_{16}	3 C_2, 3 C_4, 2 C_6, C_{12}, 8 D_2, 6 D_4, 3 D_8, D_{16}	4 C_2, C_4, C_8, 8 D_2, 2 D_4, 2 D_8
R61.20	C_2, 3 C_3, C_6, 3 C_7, 6 C_9, 15 C_{21}, 36 C_{63}, D_3, 3 D_7, 3 D_9, 6 D_{21}, 18 D_{63}	C_2, 3 C_3, C_6, C_7, 4 C_9, 4 C_{21}, 4 C_{63}, D_3, D_7, 3 D_9, D_{21}, 3 D_{63}	C_2, C_6, D_3, D_7, 3 D_9, D_{21}, 3 D_{63}	C_2, 2 C_3, C_7, C_{21}, D_3, D_7, D_{21}
R61.21	C_2, C_3, C_6, 30 C_{61}, 30 C_{183}, 30 D_{61}	C_2, C_3, C_6, C_{61}, D_{61}	C_2, C_6, D_{61}	C_2, C_{61}, D_{61}
R61.22	2 **Tet**, 2 **Ico**, 3 C_2, 3 C_3, 2 C_5, 2 C_6, 2 C_{10}, 2 C_{15}, 7 D_2, 5 D_3, 4 D_5, 3 D_6, 2 D_{10}, 2 D_{15}	2 **Tet**, 3 C_2, 3 C_3, 2 C_6, 7 D_2, 5 D_3, 3 D_6	2 C_2, C_6, 6 D_2, 4 D_3, 3 D_6	2 **Tet**, 3 C_2, 3 C_3, 7 D_2, 5 D_3
R61.23	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, C_7, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 2 C_2, 2 C_4, C_6, 6 D_2, D_3, 3 D_4, D_6	**Tet**, 3 C_2, C_3, 6 D_2, 2 D_3
R61.24	5 C_2, C_3, 4 C_4, 5 C_6, 3 C_9, 6 C_{12}, 9 C_{18}, 12 C_{36}, 13 D_2, 3 D_4	5 C_2, C_3, 4 C_4, 5 C_6, 5 C_{12}, 13 D_2, 3 D_4	3 C_2, 3 C_4, C_6, 13 D_2, 3 D_4	5 C_2, 13 D_2
R61.25	7 C_2, C_3, 2 C_4, 7 C_6, 3 C_9, 2 C_{12}, 9 C_{18}, 3 C_{36}, 34 D_2, 5 D_4	7 C_2, C_3, 2 C_4, 7 C_6, C_{12}, 34 D_2, 5 D_4	3 C_2, C_4, C_6, 27 D_2, 5 D_4	7 C_2, C_4, 34 D_2, 2 D_4
R61.26	4 C_2, 3 C_3, 2 C_4, 8 C_6, 2 C_8, 8 C_{12}, 10 C_{24}, 10 D_2, 2 D_3, 2 D_4, 4 D_6, 3 D_{12}	4 C_2, 3 C_3, 2 C_4, 8 C_6, 6 C_{12}, 10 D_2, 2 D_3, 2 D_4, 4 D_6, 3 D_{12}	2 C_2, 2 C_4, 4 C_6, 5 C_{12}, 8 D_2, D_3, 2 D_4, 3 D_6, 3 D_{12}	4 C_2, C_3, C_6, 10 D_2, 2 D_3, 2 D_6
R61.27	5 C_2, 3 C_3, 3 C_4, 11 C_6, 4 C_8, 12 C_{12}, 20 C_{24}, 13 D_2, 2 D_3, 4 D_6	5 C_2, 3 C_3, 3 C_4, 11 C_6, 2 C_8, 10 C_{12}, 7 C_{24}, 13 D_2, 2 D_3, 4 D_6	2 C_2, 3 C_4, 4 C_6, 2 C_8, 8 C_{12}, 5 C_{24}, 11 D_2, D_3, 3 D_6	5 C_2, C_3, 2 C_6, 13 D_2, 2 D_3, 3 D_6
R61.28	4 C_2, 3 C_3, 2 C_4, 7 C_6, 2 C_8, 10 C_{12}, 4 C_{24}, 10 D_2, 6 D_3, 2 D_4, 14 D_6, 10 D_{12}	4 C_2, 3 C_3, 2 C_4, 7 C_6, 8 C_{12}, 10 D_2, 6 D_3, 2 D_4, 14 D_6, 8 D_{12}	2 C_2, 2 C_4, 3 C_6, 6 C_{12}, 8 D_2, 3 D_3, 2 D_4, 10 D_6, 8 D_{12}	4 C_2, 3 C_3, 2 C_6, 10 D_2, 6 D_3, 4 D_6
R61.29	5 C_2, 3 C_3, 3 C_4, 9 C_6, 4 C_8, 6 C_{12}, 8 C_{24}, 13 D_2, 6 D_3, 12 D_6	5 C_2, 3 C_3, 3 C_4, 9 C_6, 2 C_8, 4 C_{12}, 13 D_2, 6 D_3, 12 D_6	2 C_2, 3 C_4, 3 C_6, 2 C_8, 2 C_{12}, 11 D_2, 3 D_3, 9 D_6	5 C_2, 3 C_3, 2 C_6, 13 D_2, 6 D_3, 3 D_6
R61.30	C_2, 3 C_3, 2 C_5, C_6, 6 C_9, 2 C_{10}, 10 C_{15}, 4 C_{30}, 18 C_{45}, D_3, 3 D_9	C_2, 3 C_3, C_5, C_6, 4 C_9, C_{10}, 3 C_{15}, C_{30}, D_3, 3 D_9	C_2, C_6, C_{10}, C_{30}, D_3, 3 D_9	C_2, 2 C_3, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R61.31	**Tet**, 3 C_2, C_3, C_6, 5 C_{11}, 15 C_{22}, 10 C_{33}, 10 C_{66}, 6 D_2	**Tet**, 3 C_2, C_3, C_6, 6 D_2	2 C_2, C_6, 5 D_2	3 C_2, 6 D_2
R61.32	5 C_2, 3 C_4, 6 C_8, 12 C_{16}, 24 C_{32}, 32 C_{64}, 13 D_2	5 C_2, 3 C_4, 5 C_8, 5 C_{16}, 4 C_{32}, 2 C_{64}, 13 D_2	2 C_2, 2 C_4, 11 D_2	5 C_2, C_4, C_8, C_{16}, 13 D_2
R61.33	3 C_2, 3 C_4, 4 C_8, 8 C_{16}, 16 C_{32}, 24 C_{64}, 4 D_2, 2 D_4	3 C_2, 3 C_4, 3 C_8, 2 C_{16}, 4 D_2, 2 D_4	2 C_2, 2 C_4, 4 D_2, 2 D_4	3 C_2, C_4, C_8, 4 D_2
R61.34	3 C_2, 3 C_4, 4 C_8, 8 C_{16}, 12 C_{32}, 16 C_{64}, 6 D_2	3 C_2, 3 C_4, 3 C_8, 3 C_{16}, C_{32}, 6 D_2	2 C_2, 2 C_4, 6 D_2	3 C_2, C_4, C_8, C_{16}, 6 D_2
R61.35	C_2, C_3, C_6, 20 C_{41}, 20 C_{82}, 40 C_{123}, 40 C_{246}	C_2, C_3, C_6	C_2, C_6	C_2
R61.36	3 C_2, 2 C_4, 15 C_{31}, 45 C_{62}, 60 C_{124}, 3 D_2	3 C_2, 2 C_4, C_{31}, 3 C_{62}, 2 C_{124}, 3 D_2	2 C_2, 2 C_4, C_{62}, 3 D_2	3 C_2, C_{31}, C_{62}, 3 D_2
R61.37	C_2, C_4, 30 C_{61}, 30 C_{122}, 60 C_{244}	C_2, C_4, C_{61}, C_{122}	C_2, C_4, C_{122}	C_2, C_{61}
Genus 62				
R62.1	3 C_2, C_3, C_4, 2 C_6, 3 C_7, 3 C_9, 6 C_{14}, 6 C_{18}, 6 C_{21}, 12 C_{42}, 18 C_{63}, 36 C_{126}, 4 D_2, D_3, D_4, D_6, 3 D_7, 3 D_9, 3 D_{14}, 3 D_{18}, 6 D_{21}, 6 D_{42}, 18 D_{63}, 18 D_{126}	3 C_2, C_3, C_4, 2 C_6, C_7, C_9, 2 C_{14}, 2 C_{18}, C_{21}, 2 C_{42}, C_{63}, 2 C_{126}, 4 D_2, D_3, D_4, D_6, D_7, D_9, D_{14}, D_{18}, D_{21}, D_{42}, D_{63}, D_{126}	3 C_2, C_4, C_6, C_{14}, C_{18}, C_{42}, C_{126}, 4 D_2, D_3, D_4, D_6, D_7, D_9, D_{14}, D_{18}, D_{21}, D_{42}, D_{63}, D_{126}	3 C_2, C_3, C_7, C_9, C_{21}, C_{63}, 4 D_2, D_3, D_7, D_9, D_{21}, D_{63}
R62.2	2 C_2, 2 C_4, C_8, 15 C_{31}, 15 C_{62}, 30 C_{124}, 30 C_{248}, 2 D_2, D_4, 15 D_{31}, 15 D_{62}, 30 D_{124}	2 C_2, 2 C_4, C_{31}, C_{62}, C_{124}, 2 D_2, D_4, D_{31}, D_{62}, D_{124}	2 C_2, 2 C_4, C_{62}, C_{124}, 2 D_2, D_4, D_{31}, D_{62}, D_{124}	2 C_2, C_{31}, 2 D_2, D_{31}
R62.3	3 C_2, C_3, C_4, 2 C_6, 2 C_8, C_{12}, 4 C_{16}, 2 C_{24}, 8 C_{32}, 4 C_{48}, 16 C_{64}, 8 C_{96}, 4 D_2, D_3, 2 D_4, D_6, 4 D_8, D_{12}, 8 D_{16}, 2 D_{24}, 16 D_{32}, 4 D_{48}, 16 D_{64}, 8 D_{96}	3 C_2, C_3, C_4, 2 C_6, C_8, C_{12}, C_{16}, C_{24}, C_{32}, C_{48}, C_{64}, C_{96}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{16}, D_{24}, 2 D_{32}, D_{48}, D_{64}, D_{96}	3 C_2, C_6, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{16}, D_{24}, 2 D_{32}, D_{48}, D_{64}, D_{96}	3 C_2, C_3, C_4, C_8, C_{16}, C_{32}, 4 D_2, D_3, 2 D_4, 2 D_8, 2 D_{16}, 2 D_{32}
R62.4	3 C_2, C_3, 3 C_6, 15 C_{31}, 15 C_{62}, 15 C_{93}, 15 C_{186}, 3 D_2, 30 D_{31}, 15 D_{62}	3 C_2, C_3, 3 C_6, C_{31}, C_{62}, 3 D_2, 2 D_{31}, D_{62}	3 C_2, C_6, 3 D_2, 2 D_{31}, D_{62}	3 C_2, C_{31}, C_{62}, 3 D_2, 2 D_{31}, D_{62}
R62.5	2 C_2, C_3, 2 C_4, C_6, 3 C_7, C_8, 2 C_{12}, 3 C_{14}, 6 C_{21}, 6 C_{28}, 6 C_{42}, 12 C_{84}, 2 D_2, D_3, D_4, D_6, 3 D_7, D_{12}, 3 D_{14}, 6 D_{21}, 3 D_{28}, 6 D_{42}, 6 D_{84}	2 C_2, C_3, 2 C_4, C_6, C_7, C_{12}, C_{14}, C_{21}, C_{28}, C_{42}, C_{84}, 2 D_2, D_3, D_4, D_6, D_7, D_{12}, D_{14}, D_{21}, D_{28}, D_{42}, D_{84}	2 C_2, 2 C_4, C_6, C_{14}, C_{42}, 2 D_2, D_3, D_4, D_6, D_7, D_{12}, D_{14}, D_{21}, D_{28}, D_{42}, D_{84}	2 C_2, C_3, C_7, C_{21}, 2 D_2, D_3, D_7, D_{21}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R62.6	C_2, 2 C_5, 2 C_{10}, 15 C_{31}, 30 C_{155}, 15 D_{31}	C_2, C_{31}, D_{31}	C_2, D_{31}	C_2, C_{31}, D_{31}
R62.7	3 C_2, C_4, 2 C_5, 3 C_7, 6 C_{10}, 6 C_{14}, 2 C_{20}, 6 C_{35}, 18 C_{70}, 4 D_2, D_4, 3 D_7, 3 D_{14}	3 C_2, C_4, C_5, C_7, 3 C_{10}, 2 C_{14}, 4 D_2, D_4, D_7, D_{14}	3 C_2, C_4, C_{10}, C_{14}, 4 D_2, D_4, D_7, D_{14}	3 C_2, C_7, 4 D_2, D_7
R62.8	3 C_2, C_3, C_4, 2 C_6, 5 C_{11}, 15 C_{22}, 5 C_{33}, 5 C_{44}, 15 C_{66}, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, C_4, 2 C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_4, C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, 4 D_2, D_3
R62.9	C_2, 2 C_5, 2 C_{10}, 10 C_{25}, 10 C_{50}, 50 C_{125}, 50 C_{250}	C_2	C_2	C_2
R62.10	3 C_2, C_3, 3 C_6, 3 C_7, 3 C_9, 9 C_{14}, 9 C_{18}, 6 C_{21}, 18 C_{42}, 18 C_{63}, 54 C_{126}, 3 D_2	3 C_2, C_3, 3 C_6, C_7, C_9, 3 C_{14}, 3 C_{18}, C_{21}, 3 C_{42}, C_{63}, 3 C_{126}, 3 D_2	3 C_2, C_6, C_{14}, C_{18}, C_{42}, C_{126}, 3 D_2	3 C_2, C_3, C_7, C_9, C_{21}, C_{63}, 3 D_2
R62.11	C_2, C_4, 2 C_8, 15 C_{31}, 15 C_{62}, 30 C_{124}, 60 C_{248}	C_2, C_4, C_{31}, C_{62}, C_{124}	C_2, C_4, C_{62}, C_{124}	C_2, C_{31}
Genus 63				
R63.1	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, 5 C_{11}, 15 C_{22}, 10 C_{33}, 10 C_{66}, 16 D_2, 2 D_3, 4 D_4, D_6, 10 D_{11}, 20 D_{22}, 20 D_{33}, 10 D_{66}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, C_{11}, 3 C_{22}, C_{33}, C_{66}, 16 D_2, 2 D_3, 4 D_4, D_6, 2 D_{11}, 4 D_{22}, 2 D_{33}, D_{66}	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, C_6, C_{22}, 16 D_2, D_3, 4 D_4, D_6, D_{11}, 4 D_{22}, D_{33}, D_{66}	**Tet**, 5 C_2, C_3, C_{11}, C_{22}, 16 D_2, D_3, 2 D_{11}, D_{22}
R63.2	5 C_2, 3 C_4, 4 C_8, 8 C_{16}, 16 C_{32}, 32 C_{64}, 32 C_{128}, 13 D_2, 3 D_4, 6 D_8, 12 D_{16}, 24 D_{32}, 48 D_{64}	5 C_2, 3 C_4, 3 C_8, 3 C_{16}, 3 C_{32}, 3 C_{64}, C_{128}, 13 D_2, 3 D_4, 4 D_8, 4 D_{16}, 4 D_{32}, 5 D_{64}	3 C_2, 2 C_4, 13 D_2, 2 D_4, 3 D_8, 3 D_{16}, 3 D_{32}, 3 D_{64}	5 C_2, C_4, C_8, C_{16}, C_{32}, C_{64}, 13 D_2, 2 D_4, 2 D_8, 2 D_{16}, 2 D_{32}, D_{64}
R63.3	3 C_2, 4 C_4, 3 C_8, 6 C_{16}, 12 C_{32}, 16 C_{64}, 16 C_{128}, 4 D_2, 2 D_4, 2 D_8, 4 D_{16}, 8 D_{32}, 8 D_{64}	3 C_2, 4 C_4, 2 C_8, 2 C_{16}, 2 C_{32}, C_{64}, 4 D_2, 2 D_4, D_8, D_{16}, D_{32}, D_{64}	3 C_2, 3 C_4, 4 D_2, 2 D_4, D_8, D_{16}, D_{32}, D_{64}	3 C_2, C_4, C_8, C_{16}, C_{32}, 4 D_2, D_4, D_8, D_{16}, D_{32}
R63.4	3 C_2, C_3, 2 C_4, C_6, 3 C_7, 3 C_9, C_{12}, 3 C_{14}, 3 C_{18}, 6 C_{21}, 3 C_{28}, 3 C_{36}, 6 C_{42}, 18 C_{63}, 6 C_{84}, 18 C_{126}, 18 C_{252}, 3 D_2, 2 D_3, D_6, 6 D_7, 6 D_9, 3 D_{14}, 3 D_{18}, 12 D_{21}, 6 D_{42}, 36 D_{63}, 18 D_{126}	3 C_2, C_3, 2 C_4, C_6, C_7, C_9, C_{14}, C_{18}, C_{21}, C_{42}, C_{63}, C_{126}, 3 D_2, 2 D_3, D_6, 2 D_7, 2 D_9, D_{14}, D_{18}, 2 D_{21}, D_{42}, 2 D_{63}, D_{126}	2 C_2, 2 C_4, C_6, C_{14}, C_{18}, C_{42}, C_{126}, 3 D_2, D_3, D_6, D_7, D_9, D_{14}, D_{18}, D_{21}, D_{42}, D_{63}, D_{126}	3 C_2, C_3, C_7, C_9, C_{21}, C_{63}, 3 D_2, D_3, D_7, D_9, D_{21}, D_{63}
R63.5	C_2, C_3, 3 C_7, 3 C_9, 3 D_2, D_3, 3 D_7, 3 D_9	C_2, C_3, C_7, C_9, 3 D_2, D_3, D_7, D_9	C_2, 3 D_2, D_3, D_7, D_9	C_2, C_3, C_7, C_9, 3 D_2, D_3, D_7, D_9

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R63.6	C_2, C_3, 3 C_7, 3 C_9, 3 D_2, D_3, 3 D_7, 3 D_9	C_2, C_3, C_7, C_9, 3 D_2, D_3, D_7, D_9	C_2, 3 D_2, D_3, D_7, D_9	C_2, C_3, C_7, C_9, 3 D_2, D_3, D_7, D_9
R63.7	C_2, C_3, 3 C_7, 3 C_9, 3 D_2, D_3, 3 D_7, 3 D_9	C_2, C_3, C_7, C_9, 3 D_2, D_3, D_7, D_9	C_2, 3 D_2, D_3, D_7, D_9	C_2, C_3, C_7, C_9, 3 D_2, D_3, D_7, D_9
R63.8	5 C_2, 3 C_4, 2 C_8, 5 C_{11}, 15 C_{22}, 20 C_{44}, 13 D_2, 3 D_4, 10 D_{11}, 20 D_{22}, 15 D_{44}	5 C_2, 3 C_4, C_8, C_{11}, 3 C_{22}, 3 C_{44}, 13 D_2, 3 D_4, 2 D_{11}, 4 D_{22}, 3 D_{44}	3 C_2, 2 C_4, C_{22}, C_{44}, 13 D_2, 3 D_4, D_{11}, 4 D_{22}, 3 D_{44}	5 C_2, C_4, C_{11}, C_{22}, 13 D_2, D_4, 2 D_{11}, D_{22}
R63.9	3 C_2, 5 C_4, C_8, 5 C_{11}, 10 C_{22}, 35 C_{44}, 4 D_2, 2 D_4, 5 D_{11}, 5 D_{22}, 10 D_{44}	3 C_2, 5 C_4, C_{11}, 2 C_{22}, 6 C_{44}, 4 D_2, 2 D_4, D_{11}, D_{22}, 2 D_{44}	3 C_2, 3 C_4, C_{22}, 2 C_{44}, 4 D_2, 2 D_4, D_{11}, D_{22}, 2 D_{44}	3 C_2, C_{11}, 4 D_2, D_{11}
R63.10	2 C_2, C_3, 2 C_4, C_6, 3 C_7, 2 C_8, C_{12}, 3 C_{14}, 6 C_{21}, 2 C_{24}, 3 C_{28}, 6 C_{42}, 6 C_{56}, 6 C_{84}, 12 C_{168}, 2 D_2, D_3, D_6, 3 D_7, 3 D_{14}, 6 D_{21}, 6 D_{42}	2 C_2, C_3, 2 C_4, C_6, C_7, C_{14}, C_{21}, C_{42}, 2 D_2, D_3, D_6, D_7, D_{14}, D_{21}, D_{42}	2 C_2, C_4, C_6, C_{14}, C_{42}, 2 D_2, D_3, D_6, D_7, D_{14}, D_{21}, D_{42}	2 C_2, C_3, C_7, C_{21}, 2 D_2, D_3, D_7, D_{21}
R63.11	3 C_2, C_3, 2 C_4, C_6, 3 C_7, 4 C_8, C_{12}, 3 C_{14}, 6 C_{21}, 2 C_{24}, 3 C_{28}, 6 C_{42}, 6 C_{56}, 6 C_{84}, 12 C_{168}, 3 D_2, 2 D_3, D_6, 6 D_7, 3 D_{14}, 12 D_{21}, 6 D_{42}	3 C_2, C_3, 2 C_4, C_6, C_7, 2 C_8, C_{14}, C_{21}, C_{42}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 2 D_{21}, D_{42}	2 C_2, C_4, C_6, C_{14}, C_{42}, 3 D_2, D_3, D_6, D_7, D_{14}, D_{21}, D_{42}	3 C_2, C_3, C_7, C_{21}, 3 D_2, D_3, D_7, D_{21}
R63.12	2 C_2, C_3, 2 C_4, C_6, 3 C_7, 2 C_{12}, 3 C_{14}, 3 C_{21}, 3 C_{28}, 3 C_{42}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 3 D_{28}	2 C_2, C_3, 2 C_4, C_6, C_7, C_{12}, C_{14}, C_{28}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, 2 C_4, C_6, C_{12}, C_{14}, C_{28}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, C_7, 2 D_2, D_7
R63.13	3 C_2, C_3, 2 C_4, C_6, C_{12}, 6 C_{13}, 6 C_{26}, 6 C_{39}, 6 C_{52}, 6 C_{78}, 3 D_2, 2 D_3, D_6, 12 D_{13}, 6 D_{26}, 12 D_{39}, 6 D_{78}	3 C_2, C_3, 2 C_4, C_6, C_{13}, C_{26}, C_{39}, C_{78}, 3 D_2, 2 D_3, D_6, 2 D_{13}, D_{26}, 2 D_{39}, D_{78}	2 C_2, 2 C_4, C_6, C_{26}, 3 D_2, D_3, D_6, D_{13}, D_{26}, D_{39}, D_{78}	3 C_2, C_3, C_{13}, 3 D_2, D_3, D_{13}
R63.14	5 C_2, 3 C_4, 2 C_5, 4 C_8, 6 C_{10}, 4 C_{16}, 8 C_{20}, 8 C_{40}, 13 D_2, 3 D_4, 4 D_5, 6 D_8, 8 D_{10}, 6 D_{20}, 12 D_{40}	5 C_2, 3 C_4, C_5, 3 C_8, 3 C_{10}, C_{16}, 3 C_{20}, 3 C_{40}, 13 D_2, 3 D_4, 2 D_5, 5 D_8, 4 D_{10}, 3 D_{20}, 5 D_{40}	3 C_2, 2 C_4, C_{10}, C_{20}, 13 D_2, 2 D_4, D_5, 3 D_8, 4 D_{10}, 2 D_{20}, 3 D_{40}	5 C_2, C_4, C_5, C_8, C_{10}, 13 D_2, 2 D_4, 2 D_5, D_8, D_{10}
R63.15	3 C_2, 4 C_4, 2 C_5, 2 C_8, 4 C_{10}, 2 C_{16}, 8 C_{20}, 6 C_{40}, 4 D_2, 2 D_4, 2 D_5, D_8, 2 D_{10}, 2 D_{20}, 4 D_{40}	3 C_2, 4 C_4, C_5, C_8, 2 C_{10}, 3 C_{20}, 2 C_{40}, 4 D_2, 2 D_4, D_5, D_8, D_{10}, D_{20}, 2 D_{40}	3 C_2, 3 C_4, C_{10}, C_{20}, 4 D_2, 2 D_4, D_5, D_8, D_{10}, D_{20}, 2 D_{40}	3 C_2, C_4, C_5, 4 D_2, D_4, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R63.16	3 C_2, C_3, 2 C_4, C_6, 4 C_8, 3 C_9, C_{12}, 8 C_{16}, 3 C_{18}, 2 C_{24}, 3 C_{36}, 4 C_{48}, 6 C_{72}, 12 C_{144}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, C_3, 2 C_4, C_6, 3 C_8, C_9, 2 C_{16}, C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	2 C_2, C_4, C_6, C_{18}, 3 D_2, D_3, D_6, D_9, D_{18}	3 C_2, C_3, C_9, 3 D_2, D_3, D_9
R63.17	2 C_2, C_3, 2 C_4, C_6, 3 C_8, 3 C_9, C_{12}, 4 C_{16}, 3 C_{18}, 2 C_{24}, 3 C_{36}, 4 C_{48}, 6 C_{72}, 12 C_{144}, 2 D_2, D_3, D_6, 3 D_9, 3 D_{18}	2 C_2, C_3, 2 C_4, C_6, C_8, C_9, C_{18}, 2 D_2, D_3, D_6, D_9, D_{18}	2 C_2, C_4, C_6, C_{18}, 2 D_2, D_3, D_6, D_9, D_{18}	2 C_2, C_3, C_9, 2 D_2, D_3, D_9
R63.18	3 C_2, 2 C_4, 2 C_5, 3 C_7, 6 C_{10}, 3 C_{14}, 8 C_{20}, 3 C_{28}, 6 C_{35}, 6 C_{70}, 12 C_{140}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, 2 C_4, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}	2 C_2, 2 C_4, C_{14}, 3 D_2, D_7, D_{14}	3 C_2, C_7, 3 D_2, D_7
R63.19	C_2, 3 C_7, 9 C_{19}, 9 C_{38}, 27 C_{133}, 3 D_7	C_2, C_7, D_7	C_2, D_7	C_2, C_7, D_7
R63.20	3 C_2, C_3, 2 C_4, C_6, 5 C_{11}, C_{12}, 15 C_{22}, 5 C_{33}, 20 C_{44}, 5 C_{66}, 10 C_{132}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 3 D_2, 2 D_3, D_6	2 C_2, 2 C_4, C_6, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, D_3
R63.21	**Tet**, 3 C_2, C_3, C_6, 5 C_{11}, 15 C_{22}, 10 C_{33}, 10 C_{66}, 6 D_2	**Tet**, 3 C_2, C_3, C_6, C_{11}, 3 C_{22}, C_{33}, C_{66}, 6 D_2	**Tet**, 2 C_2, C_6, C_{22}, 6 D_2	**Tet**, 3 C_2, C_3, C_{11}, C_{22}, 6 D_2
R63.22	C_2, C_3, 21 C_{43}, 21 C_{86}, 21 C_{129}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R63.23	C_2, 63 C_{127}, 63 C_{254}	C_2	C_2	C_2
R63.24	2 C_2, 2 C_4, 3 C_8, 6 C_{16}, 12 C_{32}, 24 C_{64}, 32 C_{128}, 2 D_2	2 C_2, 2 C_4, 2 C_8, 2 C_{16}, 2 C_{32}, C_{64}, 2 D_2	2 C_2, C_4, 2 D_2	2 C_2, C_4, C_8, C_{16}, C_{32}, 2 D_2
R63.25	3 C_2, 2 C_4, 4 C_8, 8 C_{16}, 16 C_{32}, 32 C_{64}, 64 C_{128}, 3 D_2	3 C_2, 2 C_4, 3 C_8, 3 C_{16}, 3 C_{32}, 3 C_{64}, 2 C_{128}, 3 D_2	2 C_2, C_4, 3 D_2	3 C_2, C_4, C_8, C_{16}, C_{32}, C_{64}, 3 D_2
R63.26	C_2, C_3, C_4, C_6, 3 C_7, 3 C_9, 2 C_{12}, 3 C_{14}, 3 C_{18}, 6 C_{21}, 6 C_{28}, 6 C_{36}, 6 C_{42}, 18 C_{63}, 12 C_{84}, 18 C_{126}, 36 C_{252}	C_2, C_3, C_4, C_6, C_7, C_9, C_{14}, C_{18}, C_{21}, C_{42}, C_{63}, C_{126}	C_2, C_4, C_6, C_{14}, C_{18}, C_{42}, C_{126}	C_2, C_3, C_7, C_9, C_{21}, C_{63}
Genus 64				
R64.1	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 4 C_6, C_7, 2 C_8, C_{12}, C_{21}, 2 C_{24}, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 4 C_6, C_7, C_8, C_{21}, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	2 **Tet**, **Oct**, 2 C_2, 3 C_6, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	2 C_2, C_3, C_4, C_7, C_8, 3 D_2, 2 D_3, 2 D_4, D_7, D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R64.2	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 4 C_6, C_7, 2 C_8, C_{12}, C_{21}, 2 C_{24}, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 4 C_6, C_7, C_8, C_{21}, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	2 **Tet**, **Oct**, 2 C_2, 3 C_6, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, D_8	2 C_2, C_3, C_4, C_7, C_8, 3 D_2, 2 D_3, 2 D_4, D_7, D_8
R64.3	C_2, 3 C_3, C_6, 7 C_7, 3 C_{14}, 11 C_{21}, 6 C_{42}, D_3, 3 D_7	C_2, 3 C_3, C_6, 5 C_7, C_{14}, 6 C_{21}, C_{42}, D_3, 3 D_7	C_2, C_6, C_{14}, C_{42}, D_3, 3 D_7	C_2, C_3, 4 C_7, D_3, 3 D_7
R64.4	3 C_2, 2 C_3, C_4, 2 C_6, 12 C_9, 6 C_{18}, 4 D_2, 4 D_3, D_4, 2 D_6, 18 D_9, 6 D_{18}	3 C_2, 2 C_3, C_4, 2 C_6, 10 C_9, 4 C_{18}, 4 D_2, 4 D_3, D_4, 2 D_6, 14 D_9, 4 D_{18}	3 C_2, C_6, 3 C_{18}, 4 D_2, 4 D_3, D_4, 2 D_6, 14 D_9, 4 D_{18}	3 C_2, 2 C_3, C_4, 7 C_9, 4 D_2, 4 D_3, D_4, 11 D_9
R64.5	3 C_2, 5 C_3, C_4, 5 C_6, 9 C_9, 9 C_{18}, 4 D_2, 6 D_3, D_4, 3 D_6, 6 D_9, 3 D_{18}	3 C_2, 5 C_3, C_4, 5 C_6, 7 C_9, 7 C_{18}, 4 D_2, 6 D_3, D_4, 3 D_6, 6 D_9, 3 D_{18}	3 C_2, C_4, 4 C_6, 3 C_{18}, 4 D_2, 6 D_3, D_4, 3 D_6, 6 D_9, 3 D_{18}	3 C_2, 5 C_3, 4 D_2, 6 D_3
R64.6	3 C_2, C_4, 2 C_5, 4 C_{10}, 6 C_{13}, 12 C_{26}, 24 C_{65}, 48 C_{130}, 4 D_2, D_4, 2 D_5, 2 D_{10}, 6 D_{13}, 6 D_{26}, 24 D_{65}, 24 D_{130}	3 C_2, C_4, C_5, 2 C_{10}, C_{13}, 2 C_{26}, C_{65}, 2 C_{130}, 4 D_2, D_4, D_5, D_{10}, D_{13}, D_{26}, D_{65}, D_{130}	3 C_2, C_4, C_{10}, C_{26}, C_{130}, 4 D_2, D_4, D_5, D_{10}, D_{13}, D_{26}, D_{65}, D_{130}	3 C_2, C_5, C_{13}, C_{65}, 4 D_2, D_5, D_{13}, D_{65}
R64.7	2 C_2, 2 C_4, 2 C_8, 4 C_{16}, 8 C_{32}, 16 C_{64}, 32 C_{128}, 32 C_{256}, 2 D_2, D_4, 2 D_8, 4 D_{16}, 8 D_{32}, 16 D_{64}, 32 D_{128}	2 C_2, 2 C_4, C_8, C_{16}, C_{32}, C_{64}, C_{128}, 2 D_2, D_4, D_8, D_{16}, D_{32}, D_{64}, D_{128}	2 C_2, 2 C_4, C_8, C_{16}, C_{32}, C_{64}, C_{128}, 2 D_2, D_4, D_8, D_{16}, D_{32}, D_{64}, D_{128}	2 C_2, 2 D_2
R64.8	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, 2 C_8, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, 2 D_8, 2 D_{10}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_8, C_{10}, 3 D_2, D_3, 2 D_4, 2 D_5, D_8, D_{10}	**Tet**, **Oct**, **Ico**, 2 C_2, C_{10}, 3 D_2, D_3, 2 D_4, 2 D_5, D_8, D_{10}	2 C_2, C_3, C_4, C_5, C_8, 3 D_2, D_3, 2 D_4, 2 D_5, D_8
R64.9	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, 2 C_8, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, 2 D_8, 2 D_{10}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_8, C_{10}, 3 D_2, D_3, 2 D_4, 2 D_5, D_8, D_{10}	**Tet**, **Oct**, **Ico**, 2 C_2, C_{10}, 3 D_2, D_3, 2 D_4, 2 D_5, D_8, D_{10}	2 C_2, C_3, C_4, C_5, C_8, 3 D_2, D_3, 2 D_4, 2 D_5, D_8
R64.10	3 C_2, 3 C_3, C_4, 5 C_6, 2 C_8, 2 C_{12}, 4 C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_8, 4 D_{12}, 4 D_{24}	3 C_2, 3 C_3, C_4, 5 C_6, C_8, C_{12}, C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 2 D_{12}, D_{24}	3 C_2, C_4, 3 C_6, C_8, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 2 D_{12}, D_{24}	3 C_2, 3 C_3, C_6, 4 D_2, 4 D_3, 2 D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R64.11	3 C_2, 3 C_3, C_4, 5 C_6, 2 C_8, 2 C_{12}, 4 C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_8, 4 D_{12}, 4 D_{24}	3 C_2, 3 C_3, C_4, 5 C_6, C_8, C_{12}, C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 2 D_{12}, D_{24}	3 C_2, C_4, 3 C_6, C_8, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 2 D_{12}, D_{24}	3 C_2, 3 C_3, C_6, 4 D_2, 4 D_3, 2 D_6
R64.12	3 C_2, 5 C_3, C_4, 7 C_6, 2 C_8, 2 C_{12}, 4 C_{24}, 4 D_2, 6 D_3, 2 D_4, 6 D_6, 2 D_8, 4 D_{12}, 4 D_{24}	3 C_2, 5 C_3, C_4, 7 C_6, C_8, C_{12}, C_{24}, 4 D_2, 6 D_3, 2 D_4, 6 D_6, D_8, 2 D_{12}, D_{24}	3 C_2, C_4, 5 C_6, C_8, 4 D_2, 6 D_3, 2 D_4, 6 D_6, D_8, 2 D_{12}, D_{24}	3 C_2, 5 C_3, C_6, 4 D_2, 6 D_3, 2 D_6
R64.13	3 C_2, 5 C_3, C_4, 13 C_6, 2 C_8, C_{12}, 2 C_{24}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8	3 C_2, 5 C_3, C_4, 13 C_6, C_8, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8	3 C_2, C_4, 11 C_6, C_8, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8	3 C_2, 3 C_3, 4 D_2, 2 D_3
R64.14	3 C_2, 7 C_3, C_4, 12 C_6, 2 C_8, 11 C_{12}, 10 C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_8, 7 D_{12}, 4 D_{24}	3 C_2, 7 C_3, C_4, 12 C_6, C_8, 10 C_{12}, 4 C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 7 D_{12}, 2 D_{24}	3 C_2, 11 C_6, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 7 D_{12}, 2 D_{24}	3 C_2, 5 C_3, C_4, 4 D_2, 4 D_3, 2 D_4
R64.15	3 C_2, 4 C_3, C_4, 6 C_6, 2 C_8, 6 C_{12}, 4 C_{24}, 4 D_2, 5 D_3, 2 D_4, 5 D_6, 2 D_8, 8 D_{12}, 4 D_{24}	3 C_2, 4 C_3, C_4, 6 C_6, C_8, 5 C_{12}, C_{24}, 4 D_2, 5 D_3, 2 D_4, 5 D_6, D_8, 6 D_{12}, D_{24}	3 C_2, 5 C_6, 4 D_2, 5 D_3, 2 D_4, 5 D_6, D_8, 6 D_{12}, D_{24}	3 C_2, 4 C_3, C_4, 4 D_2, 5 D_3, 2 D_4
R64.16	3 C_2, 4 C_3, C_4, 10 C_6, 2 C_8, 4 C_{12}, 2 C_{24}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 2 D_{12}	3 C_2, 4 C_3, C_4, 10 C_6, C_8, 3 C_{12}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}	3 C_2, 10 C_6, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}	3 C_2, 2 C_3, C_4, 4 D_2, 2 D_3, 2 D_4
R64.17	3 C_2, 4 C_3, C_4, 6 C_6, 2 C_8, 6 C_{12}, 12 C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_8, 6 D_{12}, 6 D_{24}	3 C_2, 4 C_3, C_4, 6 C_6, C_8, 5 C_{12}, 5 C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 6 D_{12}, 3 D_{24}	3 C_2, 5 C_6, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 6 D_{12}, 3 D_{24}	3 C_2, 2 C_3, C_4, C_8, 4 D_2, 4 D_3, 2 D_4, D_8
R64.18	2 C_2, 4 C_3, C_4, 5 C_6, C_8, 3 C_{12}, 2 C_{24}, 2 D_2, 2 D_3, D_4, 2 D_6, D_{12}	2 C_2, 4 C_3, C_4, 5 C_6, 2 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, D_{12}	2 C_2, C_4, 5 C_6, 2 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_3, 2 D_2, 2 D_3
R64.19	3 C_2, 3 C_3, 5 C_6, 5 C_{11}, 5 C_{22}, 15 C_{33}, 5 C_{66}, 3 D_2, 2 D_3, D_6, 10 D_{11}, 5 D_{22}, 5 D_{33}	3 C_2, 3 C_3, 5 C_6, C_{11}, C_{22}, 2 C_{33}, 3 D_2, 2 D_3, D_6, 2 D_{11}, D_{22}, D_{33}	3 C_2, 4 C_6, 3 D_2, 2 D_3, D_6, 2 D_{11}, D_{22}, D_{33}	3 C_2, C_3, C_{11}, 3 D_2, 2 D_3, 2 D_{11}
R64.20	3 C_2, 3 C_3, 5 C_6, 5 C_{11}, 5 C_{22}, 25 C_{33}, 25 C_{66}, 3 D_2, 2 D_3, D_6, 10 D_{11}, 5 D_{22}, 20 D_{33}, 10 D_{66}	3 C_2, 3 C_3, 5 C_6, C_{11}, C_{22}, 4 C_{33}, 4 C_{66}, 3 D_2, 2 D_3, D_6, 2 D_{11}, D_{22}, 4 D_{33}, 2 D_{66}	3 C_2, 4 C_6, 3 D_2, 2 D_3, D_6, 2 D_{11}, D_{22}, 4 D_{33}, 2 D_{66}	3 C_2, C_3, C_{11}, C_{22}, 3 D_2, 2 D_3, 2 D_{11}, D_{22}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R64.21	3 C_2, 3 C_3, 2 C_6, 5 C_{11}, 5 C_{22}, 25 C_{33}, 10 C_{66}, 3 D_2, 5 D_3, 2 D_6, 10 D_{11}, 5 D_{22}, 35 D_{33}, 10 D_{66}	3 C_2, 3 C_3, 2 C_6, C_{11}, C_{22}, 4 C_{33}, C_{66}, 3 D_2, 5 D_3, 2 D_6, 2 D_{11}, D_{22}, 5 D_{33}, D_{66}	3 C_2, 3 D_2, 5 D_3, 2 D_6, 2 D_{11}, D_{22}, 5 D_{33}, D_{66}	3 C_2, 3 C_3, C_{11}, C_{33}, 3 D_2, 5 D_3, 2 D_{11}, 2 D_{33}
R64.22	3 C_2, C_3, C_4, 3 C_6, 2 C_8, C_{12}, 4 C_{16}, 2 C_{24}, 8 C_{32}, 4 C_{48}, 16 C_{64}, 8 C_{96}, 16 C_{192}, 4 D_2, 2 D_4, 4 D_8, 8 D_{16}, 16 D_{32}, 16 D_{64}	3 C_2, C_3, C_4, 3 C_6, C_8, C_{16}, C_{32}, C_{64}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}, 2 D_{32}, D_{64}	3 C_2, C_6, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}, 2 D_{32}, D_{64}	3 C_2, C_4, C_8, C_{16}, C_{32}, C_{64}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}, 2 D_{32}, D_{64}
R64.23	2 C_2, 5 C_3, 2 C_4, 6 C_6, C_8, 6 C_{12}, 2 D_2, 4 D_3, D_4, 3 D_6, D_{12}	2 C_2, 5 C_3, 2 C_4, 6 C_6, 5 C_{12}, 2 D_2, 4 D_3, D_4, 3 D_6, D_{12}	2 C_2, 2 C_4, 6 C_6, 5 C_{12}, 2 D_2, 4 D_3, D_4, 3 D_6, D_{12}	2 C_2, 4 C_3, 2 D_2, 4 D_3
R64.24	2 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, 4 C_{12}, 2 C_{24}, 2 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	2 C_2, 3 C_3, 2 C_4, 4 C_6, 3 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	2 C_2, 2 C_4, 4 C_6, 3 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	2 C_2, 3 C_3, 2 D_2, 2 D_3
R64.25	3 C_2, 2 C_5, 2 C_{10}, 8 C_{17}, 8 C_{34}, 16 C_{85}, 3 D_2, 4 D_5, 2 D_{10}, 16 D_{17}, 8 D_{34}, 16 D_{85}	3 C_2, C_5, C_{10}, C_{17}, C_{34}, C_{85}, 3 D_2, 2 D_5, D_{10}, 2 D_{17}, D_{34}, D_{85}	3 C_2, 3 D_2, 2 D_5, D_{10}, 2 D_{17}, D_{34}, D_{85}	3 C_2, C_5, C_{17}, 3 D_2, 2 D_5, 2 D_{17}
R64.26	3 C_2, C_4, 2 C_5, 2 C_8, 6 C_{10}, 4 C_{16}, 2 C_{20}, 8 C_{32}, 4 C_{40}, 8 C_{80}, 16 C_{160}, 4 D_2, 2 D_4, 4 D_8, 8 D_{16}, 8 D_{32}	3 C_2, C_4, C_5, C_8, 3 C_{10}, C_{16}, C_{32}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}, D_{32}	3 C_2, C_{10}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}, D_{32}	3 C_2, C_4, C_8, C_{16}, C_{32}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}, D_{32}
R64.27	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_5, 2 C_6, 2 C_{10}, C_{12}, 10 C_{15}, 2 C_{30}, 3 D_2, D_3, D_4, 2 D_5, 2 D_{10}, 4 D_{15}	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, C_5, 2 C_6, C_{10}, 4 C_{15}, C_{30}, 3 D_2, D_3, D_4, D_5, D_{10}, 2 D_{15}	2 **Tet**, **Oct**, 2 C_2, C_4, C_6, C_{10}, 3 D_2, D_3, D_4, D_5, D_{10}, 2 D_{15}	2 C_2, C_3, C_5, 3 D_2, D_3, D_5
R64.28	2 **Tet**, **Oct**, **Ico**, 2 C_2, 3 C_3, C_4, C_5, 4 C_6, C_{12}, C_{15}, 3 D_2, 2 D_3, D_4, D_5, D_6	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 4 C_6, 3 D_2, 2 D_3, D_4, D_6	2 **Tet**, **Oct**, 2 C_2, 3 C_6, 3 D_2, 2 D_3, D_4, D_6	2 C_2, 2 C_3, C_4, 3 D_2, 2 D_3, D_4
R64.29	3 C_2, C_3, C_4, 3 C_6, C_{12}, 6 C_{13}, 12 C_{26}, 6 C_{39}, 18 C_{78}, 4 D_2, D_4, 6 D_{13}, 6 D_{26}	3 C_2, C_3, C_4, 3 C_6, C_{13}, 2 C_{26}, 4 D_2, D_4, D_{13}, D_{26}	3 C_2, C_4, C_6, C_{26}, 4 D_2, D_4, D_{13}, D_{26}	3 C_2, C_{13}, 4 D_2, D_{13}
R64.30	3 C_2, 5 C_3, 7 C_6, 6 C_9, 12 C_{18}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 5 C_3, 7 C_6, 2 C_9, 4 C_{18}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 5 C_6, C_{18}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 5 C_3, 3 D_2, 4 D_3
R64.31	3 C_2, 7 C_3, 7 C_6, 12 C_9, 15 C_{18}, 3 D_2, 5 D_3, 2 D_6	3 C_2, 7 C_3, 7 C_6, 8 C_9, 11 C_{18}, 3 D_2, 5 D_3, 2 D_6	3 C_2, 5 C_6, 3 C_{18}, 3 D_2, 5 D_3, 2 D_6	3 C_2, 7 C_3, 3 D_2, 5 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R64.32	3 C_2, 3 C_3, 5 C_6, 21 C_9, 27 C_{18}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, 3 C_3, 5 C_6, 17 C_9, 19 C_{18}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, 4 C_6, 18 C_{18}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, C_3, 6 C_9, 3 D_2, 2 D_3, 6 D_9
R64.33	3 C_2, 3 C_3, 5 C_6, 4 C_9, 10 C_{18}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 3 C_3, 5 C_6, C_9, 3 C_{18}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 3 C_6, C_{18}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 2 C_3, 3 D_2, 4 D_3
R64.34	3 C_2, 3 C_3, 2 C_6, 21 C_9, 6 C_{18}, 3 D_2, 5 D_3, 2 D_6, 27 D_9, 6 D_{18}	3 C_2, 3 C_3, 2 C_6, 17 C_9, 2 C_{18}, 3 D_2, 5 D_3, 2 D_6, 19 D_9, 2 D_{18}	3 C_2, 3 D_2, 5 D_3, 2 D_6, 19 D_9, 2 D_{18}	3 C_2, 3 C_3, 11 C_9, 3 D_2, 5 D_3, 13 D_9
R64.35	3 C_2, C_3, C_4, 3 C_6, 2 C_8, 3 C_9, C_{12}, 4 C_{16}, 9 C_{18}, 2 C_{24}, 3 C_{36}, 4 C_{48}, 6 C_{72}, 12 C_{144}, 4 D_2, 2 D_4, 4 D_8, 4 D_{16}	3 C_2, C_3, C_4, 3 C_6, C_8, C_9, C_{16}, 3 C_{18}, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, C_6, C_{18}, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, C_4, C_8, C_{16}, 4 D_2, 2 D_4, 2 D_8, D_{16}
R64.36	C_2, C_3, C_6, 15 C_7, 3 C_{14}, 27 C_{21}, 6 C_{42}, 3 D_7	C_2, C_3, C_6, 11 C_7, C_{14}, 17 C_{21}, C_{42}, 3 D_7	C_2, C_6, C_{14}, C_{42}, 3 D_7	C_2, 9 C_7, 3 D_7
R64.37	3 C_2, C_4, 2 C_5, 3 C_7, 4 C_{10}, 9 C_{14}, 3 C_{28}, 6 C_{35}, 18 C_{70}, 4 D_2, D_4, 2 D_5, 2 D_{10}	3 C_2, C_4, C_5, C_7, 2 C_{10}, 3 C_{14}, 4 D_2, D_4, D_5, D_{10}	3 C_2, C_4, C_{10}, C_{14}, 4 D_2, D_4, D_5, D_{10}	3 C_2, C_5, 4 D_2, D_5
R64.38	3 C_2, C_4, 2 C_8, 8 C_{17}, 24 C_{34}, 8 C_{68}, 16 C_{136}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8	3 C_2, 4 D_2, 2 D_4, D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8
R64.39	C_2, 3 C_3, 2 C_5, C_6, 6 C_9, 2 C_{10}, 10 C_{15}, 3 C_{18}, 4 C_{30}, 24 C_{45}, 12 C_{90}, D_3	C_2, 3 C_3, C_6, 2 C_9, C_{18}, D_3	C_2, C_6, C_{18}, D_3	C_2, 2 C_3, D_3
R64.40	3 C_2, C_3, C_4, 3 C_6, 5 C_{11}, C_{12}, 15 C_{22}, 10 C_{33}, 5 C_{44}, 30 C_{66}, 10 C_{132}, 4 D_2, D_4	3 C_2, C_3, C_4, 3 C_6, 4 D_2, D_4	3 C_2, C_6, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R64.41	C_2, C_3, C_6, 21 C_{43}, 21 C_{86}, 42 C_{129}, 42 C_{258}	C_2, C_3, C_6	C_2, C_6	C_2
R64.42	3 C_2, 2 C_5, 6 C_{10}, 6 C_{13}, 18 C_{26}, 24 C_{65}, 72 C_{130}, 3 D_2	3 C_2, C_5, 3 C_{10}, C_{13}, 3 C_{26}, C_{65}, 3 C_{130}, 3 D_2	3 C_2, C_{10}, C_{26}, C_{130}, 3 D_2	3 C_2, C_5, C_{13}, C_{65}, 3 D_2
R64.43	C_2, C_4, 2 C_8, 4 C_{16}, 8 C_{32}, 16 C_{64}, 32 C_{128}, 64 C_{256}	C_2, C_4, C_8, C_{16}, C_{32}, C_{64}, C_{128}	C_2, C_4, C_8, C_{16}, C_{32}, C_{64}, C_{128}	C_2
Genus 65				
R65.1	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 7 C_4, C_6, 4 C_8, 41 D_2, D_3, 23 D_4, D_6, 4 D_8	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 7 C_4, C_6, 3 C_8, 41 D_2, D_3, 23 D_4, D_6, 4 D_8	3 **Oct**, 2 C_2, C_4, C_8, 22 D_2, D_3, 19 D_4, D_6, 4 D_8	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 6 C_4, 2 C_8, 41 D_2, D_3, 23 D_4, 4 D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R65.2	5 **Tet**, 6 **Oct**, 2 **Ico**, 5 C_2, C_3, 6 C_4, 2 C_5, C_6, 2 C_{10}, 35 D_2, 2 D_3, 19 D_4, 4 D_5, D_6, 2 D_{10}	5 **Tet**, 6 **Oct**, **Ico**, 5 C_2, C_3, 6 C_4, C_5, C_6, C_{10}, 35 D_2, 2 D_3, 19 D_4, 2 D_5, D_6, D_{10}	3 **Oct**, 2 C_2, C_{10}, 20 D_2, D_3, 13 D_4, D_5, D_6, D_{10}	5 **Tet**, 6 **Oct**, 5 C_2, C_3, 6 C_4, C_5, 35 D_2, 2 D_3, 19 D_4, D_5
R65.3	**Tet**, 5 C_2, C_3, 8 C_4, 3 C_6, 2 C_8, 4 C_{12}, 19 D_2, 8 D_4, 2 D_8	**Tet**, 5 C_2, C_3, 8 C_4, 3 C_6, 2 C_8, 3 C_{12}, 19 D_2, 8 D_4, 2 D_8	2 C_2, 2 C_4, C_6, 3 C_{12}, 14 D_2, 8 D_4, 2 D_8	5 C_2, 6 C_4, 2 C_8, 19 D_2, 8 D_4, 2 D_8
R65.4	6 C_2, 8 C_4, 2 C_5, 3 C_8, 55 D_2, 27 D_4, 2 D_5, 6 D_8	6 C_2, 8 C_4, C_5, 3 C_8, 55 D_2, 27 D_4, D_5, 6 D_8	2 C_2, C_4, 30 D_2, 22 D_4, D_5, 6 D_8	6 C_2, 7 C_4, C_5, 3 C_8, 55 D_2, 27 D_4, D_5, 6 D_8
R65.5	3 **Tet**, 4 **Oct**, 9 C_2, C_3, 7 C_4, 3 C_6, 6 C_8, 61 D_2, 2 D_3, 31 D_4, 4 D_6, 20 D_8	3 **Tet**, 4 **Oct**, 9 C_2, C_3, 7 C_4, 3 C_6, 6 C_8, 61 D_2, 2 D_3, 31 D_4, 4 D_6, 20 D_8	**Tet**, 3 **Oct**, 3 C_2, 2 C_4, C_6, 40 D_2, D_3, 21 D_4, 3 D_6, 17 D_8	3 **Tet**, 2 **Oct**, 9 C_2, C_3, 5 C_4, 6 C_8, 61 D_2, 2 D_3, 27 D_4, 20 D_8
R65.6	3 **Tet**, **Oct**, 7 C_2, C_3, 7 C_4, 2 C_6, 8 C_8, 41 D_2, D_3, 17 D_4, D_6, 14 D_8	3 **Tet**, **Oct**, 7 C_2, C_3, 7 C_4, 2 C_6, 8 C_8, 41 D_2, D_3, 17 D_4, D_6, 14 D_8	**Tet**, **Oct**, 3 C_2, C_4, C_6, 30 D_2, D_3, 15 D_4, D_6, 14 D_8	3 **Tet**, **Oct**, 7 C_2, C_3, 6 C_4, 8 C_8, 41 D_2, D_3, 17 D_4, 14 D_8
R65.7	3 **Tet**, **Oct**, 7 C_2, C_3, 8 C_4, 2 C_6, 6 C_8, 41 D_2, D_3, 19 D_4, D_6, 14 D_8	3 **Tet**, **Oct**, 7 C_2, C_3, 8 C_4, 2 C_6, 6 C_8, 41 D_2, D_3, 19 D_4, D_6, 14 D_8	**Oct**, 3 C_2, C_4, C_6, 29 D_2, D_3, 17 D_4, D_6, 14 D_8	3 **Tet**, **Oct**, 7 C_2, C_3, 7 C_4, 6 C_8, 41 D_2, D_3, 19 D_4, 14 D_8
R65.8	**Tet**, **Oct**, 9 C_2, C_3, 10 C_4, 5 C_6, 5 C_8, 2 C_{12}, 64 D_2, D_3, 27 D_4, 3 D_6, 16 D_8, 3 D_{12}	**Tet**, **Oct**, 9 C_2, C_3, 10 C_4, 5 C_6, 5 C_8, 2 C_{12}, 64 D_2, D_3, 27 D_4, 3 D_6, 16 D_8, 3 D_{12}	**Oct**, 3 C_2, 2 C_4, C_6, 42 D_2, D_3, 25 D_4, 3 D_6, 16 D_8, 3 D_{12}	**Tet**, **Oct**, 9 C_2, C_3, 8 C_4, 5 C_8, 64 D_2, D_3, 27 D_4, 16 D_8
R65.9	**Tet**, 8 C_2, C_3, 7 C_4, 5 C_6, 6 C_8, C_{12}, 44 D_2, 2 D_3, 20 D_4, 10 D_6, 18 D_8	**Tet**, 8 C_2, C_3, 7 C_4, 5 C_6, 6 C_8, C_{12}, 44 D_2, 2 D_3, 20 D_4, 10 D_6, 18 D_8	3 C_2, C_4, C_6, 28 D_2, 2 D_3, 18 D_4, 10 D_6, 18 D_8	**Tet**, 8 C_2, C_3, 6 C_4, 6 C_8, 44 D_2, 2 D_3, 20 D_4, 18 D_8
R65.10	6 C_2, C_3, 10 C_4, 3 C_6, 5 C_8, 4 C_{12}, 27 D_2, D_3, 24 D_4, 3 D_6, 8 D_8, 3 D_{12}	6 C_2, C_3, 10 C_4, 3 C_6, 5 C_8, 4 C_{12}, 27 D_2, D_3, 24 D_4, 3 D_6, 8 D_8, 3 D_{12}	3 C_2, C_4, C_6, 21 D_2, D_3, 23 D_4, 3 D_6, 8 D_8, 3 D_{12}	6 C_2, C_3, 9 C_4, 5 C_8, 27 D_2, D_3, 24 D_4, 8 D_8
R65.11	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 10 C_4, 2 C_6, 5 C_8, 31 D_2, D_3, 26 D_4, D_6, 7 D_8	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 10 C_4, 2 C_6, 5 C_8, 31 D_2, D_3, 26 D_4, D_6, 7 D_8	3 **Oct**, 3 C_2, C_4, C_6, 22 D_2, D_3, 23 D_4, D_6, 7 D_8	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 9 C_4, 5 C_8, 31 D_2, D_3, 26 D_4, 7 D_8
R65.12	3 **Tet**, 2 **Oct**, 10 C_2, C_3, 10 C_4, 2 C_6, 2 C_8, 111 D_2, D_3, 48 D_4, D_6, 4 D_8	3 **Tet**, 2 **Oct**, 10 C_2, C_3, 10 C_4, 2 C_6, 2 C_8, 111 D_2, D_3, 48 D_4, D_6, 4 D_8	2 **Oct**, 3 C_2, C_4, C_6, 49 D_2, D_3, 36 D_4, D_6, 4 D_8	3 **Tet**, 2 **Oct**, 10 C_2, C_3, 9 C_4, 2 C_8, 111 D_2, D_3, 48 D_4, 4 D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R65.13	7 C_2, 9 C_4, 9 C_8, 6 C_{16}, 30 D_2, 15 D_4, 20 D_8, 12 D_{16}	7 C_2, 9 C_4, 8 C_8, 6 C_{16}, 30 D_2, 15 D_4, 20 D_8, 12 D_{16}	3 C_2, 3 C_4, C_8, 22 D_2, 12 D_4, 17 D_8, 12 D_{16}	7 C_2, 6 C_4, 7 C_8, 6 C_{16}, 30 D_2, 15 D_4, 20 D_8, 12 D_{16}
R65.14	9 C_2, 9 C_4, 14 C_8, 10 C_{16}, 47 D_2, 21 D_4, 47 D_8, 40 D_{16}	9 C_2, 9 C_4, 13 C_8, 10 C_{16}, 47 D_2, 21 D_4, 47 D_8, 40 D_{16}	3 C_2, 3 C_4, C_8, 32 D_2, 14 D_4, 32 D_8, 30 D_{16}	9 C_2, 6 C_4, 12 C_8, 10 C_{16}, 47 D_2, 21 D_4, 47 D_8, 40 D_{16}
R65.15	12 C_2, 12 C_4, 13 C_8, 100 D_2, 36 D_4, 26 D_8	12 C_2, 12 C_4, 12 C_8, 100 D_2, 36 D_4, 26 D_8	3 C_2, 3 C_4, 3 C_8, 53 D_2, 22 D_4, 26 D_8	12 C_2, 9 C_4, 9 C_8, 100 D_2, 36 D_4, 26 D_8
R65.16	10 C_2, 13 C_4, 9 C_8, 61 D_2, 25 D_4, 18 D_8	10 C_2, 13 C_4, 8 C_8, 61 D_2, 25 D_4, 18 D_8	3 C_2, 4 C_4, 3 C_8, 40 D_2, 21 D_4, 18 D_8	10 C_2, 9 C_4, 5 C_8, 61 D_2, 25 D_4, 18 D_8
R65.17	14 C_2, 12 C_4, 7 C_8, 135 D_2, 45 D_4, 12 D_8	14 C_2, 12 C_4, 6 C_8, 135 D_2, 45 D_4, 12 D_8	3 C_2, 3 C_4, 3 C_8, 67 D_2, 30 D_4, 9 D_8	14 C_2, 9 C_4, 3 C_8, 135 D_2, 45 D_4, 12 D_8
R65.18	8 C_2, 10 C_4, 7 C_8, 58 D_2, 26 D_4, 10 D_8	8 C_2, 10 C_4, 6 C_8, 58 D_2, 26 D_4, 10 D_8	3 C_2, 2 C_4, C_8, 32 D_2, 20 D_4, 8 D_8	8 C_2, 8 C_4, 5 C_8, 58 D_2, 26 D_4, 10 D_8
R65.19	10 C_2, 12 C_4, 6 C_8, 79 D_2, 29 D_4, D_8	10 C_2, 12 C_4, 5 C_8, 79 D_2, 29 D_4, D_8	3 C_2, 3 C_4, 3 C_8, 39 D_2, 23 D_4, D_8	10 C_2, 9 C_4, 2 C_8, 79 D_2, 29 D_4, D_8
R65.20	9 C_2, 11 C_4, 5 C_8, 74 D_2, 30 D_4, 6 D_8	9 C_2, 11 C_4, 4 C_8, 74 D_2, 30 D_4, 6 D_8	3 C_2, 2 C_4, C_8, 40 D_2, 23 D_4, 4 D_8	9 C_2, 9 C_4, 3 C_8, 74 D_2, 30 D_4, 6 D_8
R65.21	7 C_2, 13 C_4, 8 C_8, 33 D_2, 16 D_4, 3 D_8	7 C_2, 13 C_4, 7 C_8, 33 D_2, 16 D_4, 3 D_8	3 C_2, 3 C_4, 3 C_8, 23 D_2, 16 D_4, 3 D_8	7 C_2, 10 C_4, 4 C_8, 33 D_2, 16 D_4, 3 D_8
R65.22	10 C_2, 11 C_4, 4 C_8, 84 D_2, 35 D_4, 4 D_8	10 C_2, 11 C_4, 3 C_8, 84 D_2, 35 D_4, 4 D_8	3 C_2, 2 C_4, C_8, 42 D_2, 27 D_4, 4 D_8	10 C_2, 9 C_4, 2 C_8, 84 D_2, 35 D_4, 4 D_8
R65.23	14 C_2, 13 C_4, 2 C_8, 206 D_2, 35 D_4	14 C_2, 13 C_4, C_8, 206 D_2, 35 D_4	3 C_2, 3 C_4, C_8, 77 D_2, 30 D_4	14 C_2, 10 C_4, 206 D_2, 35 D_4
R65.24	4 C_2, 5 C_4, 10 C_8, 16 C_{16}, 12 D_2, 8 D_4, 25 D_8, 30 D_{16}	4 C_2, 5 C_4, 9 C_8, 16 C_{16}, 12 D_2, 8 D_4, 25 D_8, 30 D_{16}	3 C_2, 3 C_4, 3 C_8, 6 C_{16}, 12 D_2, 8 D_4, 25 D_8, 30 D_{16}	4 C_2, 2 C_4, 6 C_8, 10 C_{16}, 12 D_2, 6 D_4, 18 D_8, 20 D_{16}
R65.25	2 **Tet**, 4 **Oct**, 9 C_2, C_3, 9 C_4, 3 C_6, 2 C_8, 4 C_{12}, 78 D_2, 2 D_3, 24 D_4, 6 D_6, 4 D_8, 4 D_{12}	2 **Tet**, 4 **Oct**, 9 C_2, C_3, 9 C_4, 3 C_6, 2 C_8, 3 C_{12}, 78 D_2, 2 D_3, 24 D_4, 6 D_6, 4 D_8, 3 D_{12}	**Tet**, 3 **Oct**, 3 C_2, 4 C_4, C_6, 3 C_{12}, 46 D_2, D_3, 19 D_4, 4 D_6, 4 D_8, 3 D_{12}	2 **Tet**, 2 **Oct**, 9 C_2, C_3, 5 C_4, 2 C_8, 78 D_2, 2 D_3, 18 D_4, 4 D_8
R65.26	2 **Tet**, 2 **Oct**, 9 C_2, C_3, 10 C_4, 3 C_6, 2 C_8, 2 C_{12}, 60 D_2, 2 D_3, 18 D_4, 4 D_6, 4 D_8	2 **Tet**, 2 **Oct**, 9 C_2, C_3, 10 C_4, 3 C_6, 2 C_8, C_{12}, 60 D_2, 2 D_3, 18 D_4, 4 D_6, 4 D_8	**Oct**, 3 C_2, 4 C_4, C_6, C_{12}, 39 D_2, D_3, 11 D_4, 3 D_6, 3 D_8	2 **Tet**, 2 **Oct**, 9 C_2, C_3, 6 C_4, 2 C_8, 60 D_2, 2 D_3, 18 D_4, 4 D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R65.27	2 **Tet**, 2 **Oct**, 9 C_2, C_3, 9 C_4, 3 C_6, 2 C_8, 2 C_{12}, 60 D_2, 2 D_3, 18 D_4, 4 D_6, 4 D_8	2 **Tet**, 2 **Oct**, 9 C_2, C_3, 9 C_4, 3 C_6, 2 C_8, C_{12}, 60 D_2, 2 D_3, 18 D_4, 4 D_6, 4 D_8	**Oct**, 3 C_2, 2 C_4, C_6, C_{12}, 39 D_2, D_3, 11 D_4, 3 D_6, 3 D_8	2 **Tet**, 2 **Oct**, 9 C_2, C_3, 7 C_4, 2 C_8, 60 D_2, 2 D_3, 18 D_4, 4 D_8
R65.28	2 **Tet**, **Oct**, 8 C_2, C_3, 8 C_4, 3 C_6, 2 C_8, 2 C_{12}, 50 D_2, D_3, 14 D_4, 3 D_6, 4 D_8	2 **Tet**, **Oct**, 8 C_2, C_3, 8 C_4, 3 C_6, 2 C_8, C_{12}, 50 D_2, D_3, 14 D_4, 3 D_6, 4 D_8	**Oct**, 3 C_2, 4 C_4, C_6, 2 C_8, C_{12}, 38 D_2, D_3, 14 D_4, 3 D_6, 4 D_8	2 **Tet**, **Oct**, 8 C_2, C_3, 4 C_4, 50 D_2, D_3, 4 D_4
R65.29	2 **Tet**, **Oct**, 8 C_2, C_3, 9 C_4, 3 C_6, 2 C_8, 2 C_{12}, 50 D_2, D_3, 14 D_4, 3 D_6, 4 D_8	2 **Tet**, **Oct**, 8 C_2, C_3, 9 C_4, 3 C_6, 2 C_8, C_{12}, 50 D_2, D_3, 14 D_4, 3 D_6, 4 D_8	**Tet**, **Oct**, 3 C_2, 3 C_4, C_6, C_{12}, 36 D_2, D_3, 11 D_4, 3 D_6, 4 D_8	2 **Tet**, **Oct**, 8 C_2, C_3, 6 C_4, 2 C_8, 50 D_2, D_3, 14 D_4, 4 D_8
R65.30	3 **Tet**, 6 **Oct**, 17 C_2, C_3, 12 C_4, 3 C_6, 2 C_{12}, 289 D_2, 2 D_3, 48 D_4, 4 D_6	3 **Tet**, 6 **Oct**, 17 C_2, C_3, 12 C_4, 3 C_6, C_{12}, 289 D_2, 2 D_3, 48 D_4, 4 D_6	3 **Oct**, 3 C_2, 3 C_4, C_6, C_{12}, 109 D_2, D_3, 27 D_4, 3 D_6	3 **Tet**, 6 **Oct**, 17 C_2, C_3, 9 C_4, 289 D_2, 2 D_3, 48 D_4
R65.31	**Tet**, **Oct**, 6 C_2, C_3, 9 C_4, C_6, 4 C_8, 2 C_{12}, 33 D_2, D_3, 13 D_4, D_6, 4 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 9 C_4, C_6, 4 C_8, C_{12}, 33 D_2, D_3, 13 D_4, D_6, 4 D_8, D_{12}	**Oct**, 3 C_2, 7 C_4, C_6, 4 C_8, C_{12}, 26 D_2, D_3, 13 D_4, D_6, 4 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 2 C_4, 33 D_2, D_3, 3 D_4
R65.32	2 **Tet**, 3 **Oct**, 5 C_2, C_3, 10 C_4, C_6, 2 C_8, 2 C_{12}, 28 D_2, D_3, 15 D_4, D_6, D_{12}	2 **Tet**, 3 **Oct**, 5 C_2, C_3, 10 C_4, C_6, 2 C_8, C_{12}, 28 D_2, D_3, 15 D_4, D_6, D_{12}	3 **Oct**, 3 C_2, 6 C_4, C_6, 2 C_8, C_{12}, 24 D_2, D_3, 15 D_4, D_6, D_{12}	2 **Tet**, 3 **Oct**, 5 C_2, C_3, 4 C_4, 28 D_2, D_3, 6 D_4
R65.33	6 C_2, C_3, 9 C_4, 4 C_6, 3 C_8, 3 C_{12}, 24 D_2, D_3, 10 D_4, 6 D_6, 2 D_8	6 C_2, C_3, 9 C_4, 4 C_6, 3 C_8, 2 C_{12}, 24 D_2, D_3, 10 D_4, 6 D_6, 2 D_8	3 C_2, 3 C_4, C_6, C_{12}, 18 D_2, D_3, 10 D_4, 6 D_6, 2 D_8	6 C_2, C_3, 6 C_4, 3 C_8, 24 D_2, D_3, 10 D_4, 2 D_8
R65.34	8 C_2, C_3, 11 C_4, 5 C_6, 3 C_8, 7 C_{12}, 40 D_2, D_3, 11 D_4, 3 D_6, 3 D_8, 2 D_{12}	8 C_2, C_3, 11 C_4, 5 C_6, 3 C_8, 6 C_{12}, 40 D_2, D_3, 11 D_4, 3 D_6, 3 D_8, 2 D_{12}	3 C_2, 4 C_4, C_6, 3 C_{12}, 29 D_2, D_3, 9 D_4, 3 D_6, 3 D_8, 2 D_{12}	8 C_2, C_3, 7 C_4, 3 C_8, 40 D_2, D_3, 11 D_4, 3 D_8
R65.35	**Tet**, **Oct**, 10 C_2, C_3, 11 C_4, 4 C_6, 3 C_{12}, 82 D_2, D_3, 25 D_4, 3 D_6, 2 D_{12}	**Tet**, **Oct**, 10 C_2, C_3, 11 C_4, 4 C_6, 2 C_{12}, 82 D_2, D_3, 25 D_4, 3 D_6, 2 D_{12}	**Oct**, 3 C_2, 3 C_4, C_6, C_{12}, 48 D_2, D_3, 24 D_4, 3 D_6, 2 D_{12}	**Tet**, **Oct**, 10 C_2, C_3, 8 C_4, 82 D_2, D_3, 25 D_4
R65.36	5 C_2, C_3, 5 C_4, 4 C_6, 9 C_8, 5 C_{12}, 3 C_{24}, 16 D_2, D_3, 11 D_4, 3 D_6, 18 D_8, 6 D_{12}, 6 D_{24}	5 C_2, C_3, 5 C_4, 4 C_6, 9 C_8, 4 C_{12}, 3 C_{24}, 16 D_2, D_3, 11 D_4, 3 D_6, 18 D_8, 6 D_{12}, 6 D_{24}	3 C_2, 2 C_4, C_6, 14 D_2, D_3, 11 D_4, 3 D_6, 18 D_8, 6 D_{12}, 6 D_{24}	5 C_2, C_3, 3 C_4, 9 C_8, 16 D_2, D_3, 11 D_4, 18 D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R65.37	6 C_2, 6 C_4, 2 C_5, 4 C_8, 2 C_{10}, 4 C_{20}, 37 D_2, 18 D_4, 4 D_5, 8 D_8, 4 D_{10}, 4 D_{20}	6 C_2, 6 C_4, C_5, 4 C_8, C_{10}, C_{20}, 37 D_2, 18 D_4, 2 D_5, 8 D_8, 2 D_{10}, D_{20}	3 C_2, 5 C_4, 4 C_8, C_{10}, 37 D_2, 18 D_4, D_5, 8 D_8, 2 D_{10}, D_{20}	6 C_2, C_4, C_5, 37 D_2, D_4, D_5
R65.38	9 C_2, 14 C_4, 2 C_5, 2 C_{10}, 2 C_{20}, 87 D_2, 24 D_4, 4 D_5, 2 D_{10}	9 C_2, 14 C_4, C_5, C_{10}, 87 D_2, 24 D_4, 2 D_5, D_{10}	3 C_2, 5 C_4, C_{10}, 49 D_2, 14 D_4, D_5, D_{10}	9 C_2, 8 C_4, C_5, 87 D_2, 24 D_4, D_5
R65.39	9 C_2, 10 C_4, 2 C_5, 2 C_{10}, 4 C_{20}, 91 D_2, 28 D_4, 4 D_5, 4 D_{10}, 4 D_{20}	9 C_2, 10 C_4, C_5, C_{10}, C_{20}, 91 D_2, 28 D_4, 2 D_5, 2 D_{10}, D_{20}	3 C_2, 5 C_4, C_{10}, 51 D_2, 22 D_4, D_5, 2 D_{10}, D_{20}	9 C_2, 5 C_4, C_5, 91 D_2, 17 D_4, D_5
R65.40	5 C_2, 8 C_4, 2 C_5, 4 C_8, 2 C_{10}, 2 C_{20}, 19 D_2, 16 D_4, 2 D_5, 4 D_8, 2 D_{10}	5 C_2, 8 C_4, C_5, 4 C_8, C_{10}, 19 D_2, 16 D_4, D_5, 4 D_8, D_{10}	3 C_2, 6 C_4, 4 C_8, C_{10}, 19 D_2, 16 D_4, D_5, 4 D_8, D_{10}	5 C_2, C_4, C_5, 19 D_2, 2 D_4, D_5
R65.41	5 C_2, 5 C_4, 2 C_5, 3 C_8, 8 C_{10}, 10 C_{20}, 14 D_2, 8 D_4, 2 D_5, 6 D_8, 4 D_{10}, 12 D_{20}	5 C_2, 5 C_4, C_5, 3 C_8, 4 C_{10}, 4 C_{20}, 14 D_2, 8 D_4, D_5, 6 D_8, 2 D_{10}, 6 D_{20}	3 C_2, 2 C_4, C_{10}, 12 D_2, 8 D_4, D_5, 6 D_8, 2 D_{10}, 6 D_{20}	5 C_2, 3 C_4, C_5, 3 C_8, 14 D_2, 8 D_4, D_5, 6 D_8
R65.42	9 C_2, C_3, 6 C_4, 7 C_6, 3 C_9, 4 C_{12}, 9 C_{18}, 6 C_{36}, 55 D_2, 2 D_3, 8 D_4, 10 D_6, 6 D_9, 12 D_{18}	9 C_2, C_3, 6 C_4, 7 C_6, C_9, 3 C_{12}, 3 C_{18}, C_{36}, 55 D_2, 2 D_3, 8 D_4, 10 D_6, 2 D_9, 4 D_{18}	3 C_2, 3 C_4, C_6, 38 D_2, D_3, 5 D_4, 7 D_6, D_9, 3 D_{18}	9 C_2, C_3, 3 C_4, C_6, 55 D_2, 2 D_3, 8 D_4, D_6
R65.43	4 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 3 C_9, 3 C_{12}, 3 C_{18}, 6 C_{36}, 10 D_2, D_3, 8 D_4, 2 D_6, 2 D_8, 3 D_9, 2 D_{12}, 3 D_{18}, 3 D_{36}	4 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, C_9, 2 C_{12}, C_{18}, C_{36}, 10 D_2, D_3, 8 D_4, 2 D_6, 2 D_8, D_9, 2 D_{12}, D_{18}, D_{36}	3 C_2, 5 C_4, C_6, 2 C_8, 10 D_2, D_3, 8 D_4, 2 D_6, 2 D_8, D_9, 2 D_{12}, D_{18}, D_{36}	4 C_2, C_3, C_6, 10 D_2, D_3, D_6
R65.44	5 C_2, C_3, 5 C_4, 4 C_6, 3 C_9, 3 C_{12}, 12 C_{18}, 9 C_{36}, 16 D_2, D_3, 6 D_4, 3 D_6, 3 D_9, 2 D_{12}, 9 D_{18}, 6 D_{36}	5 C_2, C_3, 5 C_4, 4 C_6, C_9, 2 C_{12}, 4 C_{18}, 2 C_{36}, 16 D_2, D_3, 6 D_4, 3 D_6, D_9, 2 D_{12}, 3 D_{18}, 2 D_{36}	3 C_2, 2 C_4, C_6, C_{18}, 14 D_2, D_3, 6 D_4, 3 D_6, D_9, 2 D_{12}, 3 D_{18}, 2 D_{36}	5 C_2, C_3, 3 C_4, C_9, 16 D_2, D_3, 6 D_4, D_9
R65.45	5 C_2, 3 C_4, 8 C_{17}, 32 C_{34}, 16 C_{68}, 13 D_2, 2 D_4, 8 D_{17}, 16 D_{34}	5 C_2, 3 C_4, C_{17}, 4 C_{34}, C_{68}, 13 D_2, 2 D_4, D_{17}, 2 D_{34}	3 C_2, 2 C_4, C_{34}, 11 D_2, 2 D_4, D_{17}, 2 D_{34}	5 C_2, C_4, C_{17}, 13 D_2, 2 D_4, D_{17}
R65.46	5 C_2, C_3, 2 C_4, 3 C_6, 5 C_{11}, 2 C_{12}, 15 C_{22}, 10 C_{33}, 10 C_{44}, 30 C_{66}, 20 C_{132}, 13 D_2, 2 D_3, 4 D_6, 10 D_{11}, 20 D_{22}, 20 D_{33}, 40 D_{66}	5 C_2, C_3, 2 C_4, 3 C_6, C_{11}, C_{12}, 3 C_{22}, C_{33}, C_{44}, 3 C_{66}, C_{132}, 13 D_2, 2 D_3, 4 D_6, 2 D_{11}, 4 D_{22}, 2 D_{33}, 4 D_{66}	3 C_2, 2 C_4, C_6, C_{22}, C_{66}, 11 D_2, D_3, 3 D_6, D_{11}, 3 D_{22}, D_{33}, 3 D_{66}	5 C_2, C_3, C_6, C_{11}, C_{22}, C_{33}, C_{66}, 13 D_2, 2 D_3, D_6, 2 D_{11}, D_{22}, 2 D_{33}, D_{66}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R65.47	3 C_2, 2 C_4, 2 C_5, 2 C_{10}, 6 C_{13}, 2 C_{20}, 6 C_{26}, 6 C_{52}, 24 C_{65}, 24 C_{130}, 24 C_{260}, 3 D_2, 4 D_5, 2 D_{10}, 12 D_{13}, 6 D_{26}, 48 D_{65}, 24 D_{130}	3 C_2, 2 C_4, C_5, C_{10}, C_{13}, C_{26}, C_{65}, C_{130}, 3 D_2, 2 D_5, D_{10}, 2 D_{13}, D_{26}, 2 D_{65}, D_{130}	2 C_2, 2 C_4, C_{10}, C_{26}, C_{130}, 3 D_2, D_5, D_{10}, D_{13}, D_{26}, D_{65}, D_{130}	3 C_2, C_5, C_{13}, C_{65}, 3 D_2, D_5, D_{13}, D_{65}
R65.48	5 C_2, 4 C_4, 2 C_5, 47 D_2, 20 D_4	5 C_2, 4 C_4, C_5, 47 D_2, 20 D_4	C_2, 22 D_2, 14 D_4	5 C_2, 4 C_4, C_5, 47 D_2, 20 D_4
R65.49	2 **Tet**, **Oct**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 2 C_5, 2 C_6, 10 D_2, D_3, 5 D_4, 2 D_5, D_6	2 **Tet**, **Oct**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, 2 C_6, 10 D_2, D_3, 5 D_4, D_5, D_6	2 **Tet**, **Oct**, **Ico**, 2 C_2, C_4, C_6, 10 D_2, D_3, 5 D_4, D_5, D_6	2 **Tet**, 3 C_2, C_3, C_4, C_5, 10 D_2, D_3, 3 D_4, D_5
R65.50	**Tet**, 7 C_2, C_3, 4 C_4, 3 C_6, 12 C_8, 33 D_2, 18 D_4, 44 D_8	**Tet**, 7 C_2, C_3, 4 C_4, 3 C_6, 12 C_8, 33 D_2, 18 D_4, 44 D_8	3 C_2, 2 C_6, 24 D_2, 12 D_4, 32 D_8	**Tet**, 7 C_2, C_3, 4 C_4, 12 C_8, 33 D_2, 18 D_4, 44 D_8
R65.51	4 **Tet**, 12 C_2, C_3, 8 C_4, 3 C_6, 165 D_2, 48 D_4	4 **Tet**, 12 C_2, C_3, 8 C_4, 3 C_6, 165 D_2, 48 D_4	3 C_2, 2 C_6, 68 D_2, 30 D_4	4 **Tet**, 12 C_2, C_3, 8 C_4, 165 D_2, 48 D_4
R65.52	**Tet**, 5 C_2, C_3, 4 C_4, 3 C_6, 6 C_8, 17 D_2, 12 D_4, 12 D_8	**Tet**, 5 C_2, C_3, 4 C_4, 3 C_6, 6 C_8, 17 D_2, 12 D_4, 12 D_8	3 C_2, 2 C_6, 14 D_2, 10 D_4, 12 D_8	**Tet**, 5 C_2, C_3, 4 C_4, 6 C_8, 17 D_2, 12 D_4, 12 D_8
R65.53	3 **Tet**, 6 C_2, C_3, 5 C_4, 3 C_6, 4 C_8, 27 D_2, 15 D_4, 8 D_8	3 **Tet**, 6 C_2, C_3, 5 C_4, 3 C_6, 4 C_8, 27 D_2, 15 D_4, 8 D_8	3 C_2, 2 C_6, 18 D_2, 12 D_4, 8 D_8	3 **Tet**, 6 C_2, C_3, 5 C_4, 4 C_8, 27 D_2, 15 D_4, 8 D_8
R65.54	4 **Tet**, 7 C_2, C_3, 4 C_4, 3 C_6, 4 C_8, 43 D_2, 12 D_4, 12 D_8	4 **Tet**, 7 C_2, C_3, 4 C_4, 3 C_6, 4 C_8, 43 D_2, 12 D_4, 12 D_8	3 C_2, 2 C_6, 30 D_2, 10 D_4, 12 D_8	4 **Tet**, 7 C_2, C_3, 4 C_4, 4 C_8, 43 D_2, 12 D_4, 12 D_8
R65.55	**Tet**, 10 C_2, C_3, 8 C_4, 7 C_6, 2 C_{12}, 77 D_2, 20 D_4	**Tet**, 10 C_2, C_3, 8 C_4, 7 C_6, 2 C_{12}, 77 D_2, 20 D_4	3 C_2, 2 C_6, 49 D_2, 18 D_4	**Tet**, 10 C_2, C_3, 8 C_4, 77 D_2, 20 D_4
R65.56	**Tet**, 8 C_2, C_3, 6 C_4, 6 C_6, 2 C_8, 2 C_{12}, 43 D_2, 13 D_4, 4 D_8	**Tet**, 8 C_2, C_3, 6 C_4, 6 C_6, 2 C_8, 2 C_{12}, 43 D_2, 13 D_4, 4 D_8	3 C_2, 2 C_6, 27 D_2, 11 D_4, 4 D_8	**Tet**, 8 C_2, C_3, 6 C_4, 2 C_8, 43 D_2, 13 D_4, 4 D_8
R65.57	6 C_2, C_3, 9 C_4, 4 C_6, 2 C_8, 5 C_{12}, 17 D_2, 15 D_4, 2 D_8	6 C_2, C_3, 9 C_4, 4 C_6, 2 C_8, 5 C_{12}, 17 D_2, 15 D_4, 2 D_8	3 C_2, 2 C_6, 11 D_2, 14 D_4, 2 D_8	6 C_2, C_3, 9 C_4, 2 C_8, 17 D_2, 15 D_4, 2 D_8
R65.58	4 **Tet**, 7 C_2, C_3, 3 C_4, 3 C_6, 3 C_8, 43 D_2, 12 D_4, 12 D_8	4 **Tet**, 7 C_2, C_3, 3 C_4, 3 C_6, 3 C_8, 43 D_2, 12 D_4, 12 D_8	**Tet**, 2 C_2, C_6, 29 D_2, 8 D_4, 9 D_8	4 **Tet**, 7 C_2, C_3, 3 C_4, 3 C_8, 43 D_2, 12 D_4, 12 D_8
R65.59	4 **Tet**, 7 C_2, C_3, 3 C_4, 3 C_6, 3 C_8, 43 D_2, 12 D_4, 12 D_8	4 **Tet**, 7 C_2, C_3, 3 C_4, 3 C_6, 3 C_8, 43 D_2, 12 D_4, 12 D_8	2 **Tet**, 3 C_2, 2 C_6, 32 D_2, 10 D_4, 12 D_8	4 **Tet**, 7 C_2, C_3, 3 C_4, 3 C_8, 43 D_2, 12 D_4, 12 D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R65.60	2 C_2, C_3, C_4, 2 C_6, C_7, 2 C_8, C_{14}, 2 C_{16}, 2 D_2, D_3, D_4, D_6, D_7, 2 D_8, D_{14}	2 C_2, C_3, C_4, 2 C_6, 2 C_8, 2 C_{16}, 2 D_2, D_3, D_4, D_6, 2 D_8	C_2, C_6, 2 D_2, D_3, D_4, D_6, 2 D_8	2 C_2, C_3, C_4, 2 C_8, 2 C_{16}, 2 D_2, D_3, D_4, 2 D_8
R65.61	**Tet**, 3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, 2 C_{15}, 6 C_{20}, 7 D_2, 4 D_4, 4 D_5, 6 D_{10}, 12 D_{20}	**Tet**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, 3 C_{20}, 7 D_2, 4 D_4, 2 D_5, 3 D_{10}, 6 D_{20}	2 C_2, C_6, 6 D_2, 4 D_4, 2 D_5, 3 D_{10}, 6 D_{20}	3 C_2, 2 C_4, C_5, 7 D_2, 4 D_4, 2 D_5
R65.62	**Tet**, 3 C_2, C_3, C_6, 8 C_{17}, 8 C_{34}, 8 C_{51}, 6 D_2, 16 D_{17}, 16 D_{34}	**Tet**, 3 C_2, C_3, C_6, C_{17}, C_{34}, 6 D_2, 2 D_{17}, 2 D_{34}	2 C_2, C_6, 5 D_2, 2 D_{17}, 2 D_{34}	3 C_2, C_{17}, 6 D_2, 2 D_{17}
R65.63	C_2, C_3, 2 C_5, C_6, 6 C_{13}, 2 C_{15}, 6 C_{39}, 24 C_{65}, 24 C_{195}, 2 D_5, 6 D_{13}, 24 D_{65}	C_2, C_3, C_5, C_6, C_{13}, C_{65}, D_5, D_{13}, D_{65}	C_2, C_6, D_5, D_{13}, D_{65}	C_2, C_5, C_{13}, C_{65}, D_5, D_{13}, D_{65}
R65.64	11 C_2, 15 C_4, 10 C_8, 62 D_2, 20 D_4	11 C_2, 15 C_4, 8 C_8, 62 D_2, 20 D_4	3 C_2, 6 C_4, 6 C_8, 38 D_2, 14 D_4	11 C_2, 9 C_4, 2 C_8, 62 D_2, 20 D_4
R65.65	15 C_2, 11 C_4, 8 C_8, 141 D_2, 19 D_4	15 C_2, 11 C_4, 6 C_8, 141 D_2, 19 D_4	3 C_2, 5 C_4, 6 C_8, 63 D_2, 11 D_4	15 C_2, 6 C_4, 141 D_2, 19 D_4
R65.66	15 C_2, 12 C_4, 11 C_8, 135 D_2, 40 D_4	15 C_2, 12 C_4, 9 C_8, 135 D_2, 40 D_4	3 C_2, 4 C_4, 6 C_8, 64 D_2, 16 D_4	15 C_2, 8 C_4, 3 C_8, 135 D_2, 40 D_4
R65.67	15 C_2, 11 C_4, 8 C_8, 141 D_2, 22 D_4	15 C_2, 11 C_4, 6 C_8, 141 D_2, 22 D_4	3 C_2, 4 C_4, 6 C_8, 65 D_2, 14 D_4	15 C_2, 7 C_4, 141 D_2, 22 D_4
R65.68	13 C_2, 14 C_4, 14 C_8, 89 D_2, 17 D_4	13 C_2, 14 C_4, 12 C_8, 89 D_2, 17 D_4	3 C_2, 6 C_4, 10 C_8, 50 D_2, 11 D_4	13 C_2, 8 C_4, 2 C_8, 89 D_2, 17 D_4
R65.69	9 C_2, 9 C_4, 9 C_8, 51 D_2, 9 D_4	9 C_2, 9 C_4, 7 C_8, 51 D_2, 9 D_4	3 C_2, 5 C_4, 4 C_8, 34 D_2, 9 D_4	9 C_2, 4 C_4, 3 C_8, 51 D_2, 6 D_4
R65.70	9 C_2, 10 C_4, 8 C_8, 51 D_2, 9 D_4	9 C_2, 10 C_4, 6 C_8, 51 D_2, 9 D_4	3 C_2, 7 C_4, 6 C_8, 32 D_2, 9 D_4	9 C_2, 3 C_4, 51 D_2, 6 D_4
R65.71	5 C_2, 8 C_4, 9 C_8, 15 D_2, 6 D_4, 4 D_8	5 C_2, 8 C_4, 7 C_8, 15 D_2, 6 D_4, 4 D_8	3 C_2, 6 C_4, 4 C_8, 15 D_2, 6 D_4, 4 D_8	5 C_2, 2 C_4, 3 C_8, 15 D_2, 3 D_4
R65.72	7 C_2, 9 C_4, 10 C_8, 37 D_2, 15 D_4, 10 D_8	7 C_2, 9 C_4, 8 C_8, 37 D_2, 15 D_4, 10 D_8	3 C_2, 5 C_4, 5 C_8, 30 D_2, 11 D_4, 10 D_8	7 C_2, 4 C_4, 3 C_8, 37 D_2, 12 D_4
R65.73	9 C_2, 9 C_4, 8 C_8, 51 D_2, 9 D_4	9 C_2, 9 C_4, 6 C_8, 51 D_2, 9 D_4	3 C_2, 4 C_4, 4 C_8, 33 D_2, 9 D_4	9 C_2, 5 C_4, 2 C_8, 51 D_2, 9 D_4
R65.74	5 C_2, 9 C_4, 9 C_8, 16 D_2, 11 D_4, 6 D_8	5 C_2, 9 C_4, 7 C_8, 16 D_2, 11 D_4, 6 D_8	3 C_2, 6 C_4, 5 C_8, 14 D_2, 9 D_4, 6 D_8	5 C_2, 3 C_4, 2 C_8, 16 D_2, 7 D_4, 4 D_8
R65.75	5 C_2, 11 C_4, 9 C_8, 16 D_2, 12 D_4, 4 D_8	5 C_2, 11 C_4, 7 C_8, 16 D_2, 12 D_4, 4 D_8	3 C_2, 6 C_4, 4 C_8, 14 D_2, 10 D_4, 4 D_8	5 C_2, 4 C_4, 2 C_8, 16 D_2, 8 D_4, 2 D_8
R65.76	7 C_2, 7 C_4, 6 C_8, 37 D_2, 15 D_4, 2 D_8	7 C_2, 7 C_4, 4 C_8, 37 D_2, 15 D_4, 2 D_8	3 C_2, 5 C_4, 4 C_8, 25 D_2, 15 D_4, 2 D_8	7 C_2, 2 C_4, 37 D_2, 6 D_4
R65.77	11 C_2, 8 C_4, 4 C_8, 109 D_2, 29 D_4	11 C_2, 8 C_4, 2 C_8, 109 D_2, 29 D_4	3 C_2, 3 C_4, 2 C_8, 54 D_2, 20 D_4	11 C_2, 5 C_4, 109 D_2, 23 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R65.78	3 C_2, 5 C_4, 11 C_8, 6 C_{16}, 6 D_2, 4 D_4, 12 D_8	3 C_2, 5 C_4, 9 C_8, 6 C_{16}, 6 D_2, 4 D_4, 12 D_8	2 C_2, 3 C_4, 3 C_8, 6 C_{16}, 6 D_2, 4 D_4, 12 D_8	3 C_2, 2 C_4, 6 C_8, 6 D_2, 2 D_4, 6 D_8
R65.79	7 C_2, 8 C_4, 16 C_8, 37 D_2, 15 D_4, 10 D_8	7 C_2, 8 C_4, 14 C_8, 37 D_2, 15 D_4, 10 D_8	2 C_2, 2 C_4, 2 C_8, 24 D_2, 10 D_4, 7 D_8	7 C_2, 6 C_4, 12 C_8, 37 D_2, 15 D_4, 10 D_8
R65.80	7 C_2, 8 C_4, 11 C_8, 37 D_2, 15 D_4, 10 D_8	7 C_2, 8 C_4, 9 C_8, 37 D_2, 15 D_4, 10 D_8	3 C_2, 2 C_4, 2 C_8, 27 D_2, 10 D_4, 7 D_8	7 C_2, 6 C_4, 7 C_8, 37 D_2, 15 D_4, 10 D_8
R65.81	9 C_2, 11 C_4, 9 C_8, 47 D_2, 7 D_4	9 C_2, 11 C_4, 7 C_8, 47 D_2, 7 D_4	3 C_2, 4 C_4, 6 C_8, 31 D_2, 7 D_4	9 C_2, 7 C_4, C_8, 47 D_2, 7 D_4
R65.82	12 C_2, 9 C_4, 9 C_8, 105 D_2, 17 D_4	12 C_2, 9 C_4, 7 C_8, 105 D_2, 17 D_4	3 C_2, 4 C_4, 6 C_8, 47 D_2, 10 D_4	12 C_2, 5 C_4, C_8, 105 D_2, 17 D_4
R65.83	9 C_2, 12 C_4, 9 C_8, 47 D_2, 8 D_4	9 C_2, 12 C_4, 7 C_8, 47 D_2, 8 D_4	3 C_2, 4 C_4, 6 C_8, 31 D_2, 8 D_4	9 C_2, 8 C_4, C_8, 47 D_2, 8 D_4
R65.84	7 C_2, 9 C_4, 6 C_8, 33 D_2, 14 D_4	7 C_2, 9 C_4, 4 C_8, 33 D_2, 14 D_4	3 C_2, 2 C_4, 2 C_8, 17 D_2, 12 D_4	7 C_2, 7 C_4, 2 C_8, 33 D_2, 14 D_4
R65.85	11 C_2, 9 C_4, 4 C_8, 109 D_2, 36 D_4	11 C_2, 9 C_4, 2 C_8, 109 D_2, 36 D_4	3 C_2, 2 C_4, 2 C_8, 51 D_2, 24 D_4	11 C_2, 7 C_4, 109 D_2, 36 D_4
R65.86	8 C_2, 8 C_4, 6 C_8, 41 D_2, 13 D_4	8 C_2, 8 C_4, 4 C_8, 41 D_2, 13 D_4	3 C_2, 2 C_4, 2 C_8, 21 D_2, 10 D_4	8 C_2, 6 C_4, 2 C_8, 41 D_2, 13 D_4
R65.87	14 C_2, 6 C_4, 4 C_8, 207 D_2, 22 D_4	14 C_2, 6 C_4, 2 C_8, 207 D_2, 22 D_4	3 C_2, 2 C_4, 2 C_8, 76 D_2, 14 D_4	14 C_2, 4 C_4, 207 D_2, 22 D_4
R65.88	4 C_2, C_3, 6 C_4, 3 C_6, 5 C_8, 4 C_{12}, 4 C_{24}, 9 D_2, D_3, 5 D_4, 3 D_6, 4 D_{12}	4 C_2, C_3, 6 C_4, 3 C_6, 3 C_8, 3 C_{12}, C_{24}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	3 C_2, 4 C_4, 2 C_6, 2 C_8, 2 C_{12}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	4 C_2, C_3, 2 C_4, 9 D_2, D_3, 2 D_4
R65.89	5 C_2, C_3, 5 C_4, 3 C_6, 8 C_8, 4 C_{12}, 8 C_{24}, 15 D_2, 2 D_3, 10 D_4, 6 D_6, 8 D_8, 8 D_{12}, 8 D_{24}	5 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, 3 C_{12}, 3 C_{24}, 15 D_2, 2 D_3, 10 D_4, 6 D_6, 7 D_8, 6 D_{12}, 3 D_{24}	3 C_2, 3 C_4, 2 C_6, 3 C_8, 2 C_{12}, 13 D_2, D_3, 8 D_4, 5 D_6, 7 D_8, 5 D_{12}, 3 D_{24}	5 C_2, C_3, 2 C_4, C_8, 15 D_2, 2 D_3, 4 D_4, D_8
R65.90	5 C_2, C_3, 6 C_4, 3 C_6, 16 C_8, 2 C_{12}, 4 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	5 C_2, C_3, 6 C_4, 3 C_6, 14 C_8, C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	3 C_2, 3 C_4, 2 C_6, 5 C_8, C_{12}, 11 D_2, D_3, 2 D_4, 3 D_6	5 C_2, C_3, 2 C_4, 4 C_8, 13 D_2, 2 D_3, 3 D_4
R65.91	4 C_2, C_3, 6 C_4, 3 C_6, 8 C_8, 2 C_{12}, 4 C_{24}, 9 D_2, D_3, 2 D_4, 3 D_6	4 C_2, C_3, 6 C_4, 3 C_6, 6 C_8, C_{12}, 9 D_2, D_3, 2 D_4, 3 D_6	3 C_2, 3 C_4, 2 C_6, 2 C_8, C_{12}, 9 D_2, D_3, 2 D_4, 3 D_6	4 C_2, C_3, 2 C_4, 2 C_8, 9 D_2, D_3, 2 D_4
R65.92	4 C_2, C_3, 6 C_4, 3 C_6, 7 C_8, 4 C_{12}, 4 C_{24}, 9 D_2, D_3, 5 D_4, 3 D_6, 4 D_{12}	4 C_2, C_3, 6 C_4, 3 C_6, 5 C_8, 3 C_{12}, C_{24}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	3 C_2, 4 C_4, 2 C_6, 4 C_8, 2 C_{12}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	4 C_2, C_3, 2 C_4, 9 D_2, D_3, 2 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R65.93	4 C_2, C_3, 6 C_4, 3 C_6, 6 C_8, 4 C_{12}, 4 C_{24}, 9 D_2, D_3, 5 D_4, 3 D_6, 4 D_{12}	4 C_2, C_3, 6 C_4, 3 C_6, 4 C_8, 3 C_{12}, C_{24}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	3 C_2, 3 C_4, 2 C_6, 3 C_8, 2 C_{12}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	4 C_2, C_3, 3 C_4, 9 D_2, D_3, 2 D_4
R65.94	5 C_2, C_3, 6 C_4, 3 C_6, 11 C_8, 2 C_{12}, 4 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	5 C_2, C_3, 6 C_4, 3 C_6, 9 C_8, C_{12}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	3 C_2, 3 C_4, 2 C_6, 5 C_8, C_{12}, 11 D_2, D_3, 2 D_4, 3 D_6	5 C_2, C_3, 2 C_4, 3 C_8, 13 D_2, 2 D_3, 3 D_4
R65.95	4 C_2, C_3, 6 C_4, 3 C_6, 9 C_8, 2 C_{12}, 4 C_{24}, 9 D_2, D_3, 2 D_4, 3 D_6	4 C_2, C_3, 6 C_4, 3 C_6, 7 C_8, C_{12}, 9 D_2, D_3, 2 D_4, 3 D_6	3 C_2, 3 C_4, 2 C_6, 3 C_8, C_{12}, 9 D_2, D_3, 2 D_4, 3 D_6	4 C_2, C_3, 2 C_4, 3 C_8, 9 D_2, D_3, 2 D_4
R65.96	**Tet**, 2 **Oct**, 9 C_2, C_3, 8 C_4, 3 C_6, 8 C_8, 2 C_{12}, 4 C_{24}, 55 D_2, 2 D_3, 8 D_4, 4 D_6	**Tet**, 2 **Oct**, 9 C_2, C_3, 8 C_4, 3 C_6, 6 C_8, C_{12}, 55 D_2, 2 D_3, 8 D_4, 4 D_6	**Oct**, 2 C_2, 5 C_4, C_6, 6 C_8, C_{12}, 27 D_2, D_3, 4 D_4, 3 D_6	**Tet**, 2 **Oct**, 9 C_2, C_3, 3 C_4, 55 D_2, 2 D_3, 8 D_4
R65.97	**Tet**, 2 **Oct**, 7 C_2, C_3, 6 C_4, 2 C_6, 4 C_8, 3 C_{12}, 2 C_{24}, 40 D_2, 2 D_3, 10 D_4, 4 D_6, 3 D_{12}	**Tet**, 2 **Oct**, 7 C_2, C_3, 6 C_4, 2 C_6, 2 C_8, 2 C_{12}, 40 D_2, 2 D_3, 10 D_4, 4 D_6, 2 D_{12}	**Oct**, 2 C_2, 4 C_4, C_6, 2 C_8, 2 C_{12}, 19 D_2, D_3, 7 D_4, 3 D_6, 2 D_{12}	**Tet**, 2 **Oct**, 7 C_2, C_3, 2 C_4, 40 D_2, 2 D_3, 6 D_4
R65.98	5 C_2, C_3, 6 C_4, 2 C_6, 6 C_8, 2 C_{12}, 2 C_{24}, 13 D_2, D_3, 7 D_4, D_6, 2 D_8, D_{12}	5 C_2, C_3, 6 C_4, 2 C_6, 4 C_8, C_{12}, 13 D_2, D_3, 7 D_4, D_6, 2 D_8, D_{12}	2 C_2, 5 C_4, C_6, 4 C_8, C_{12}, 10 D_2, D_3, 7 D_4, D_6, 2 D_8, D_{12}	5 C_2, C_3, C_4, 13 D_2, D_3
R65.99	7 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, 4 C_{12}, 4 C_{24}, 35 D_2, 2 D_3, 9 D_4, 4 D_6, 4 D_8, 6 D_{12}	7 C_2, C_3, 5 C_4, 3 C_6, 4 C_8, 3 C_{12}, C_{24}, 35 D_2, 2 D_3, 9 D_4, 4 D_6, 4 D_8, 5 D_{12}	2 C_2, 4 C_4, C_6, 4 C_8, 3 C_{12}, C_{24}, 26 D_2, D_3, 9 D_4, 4 D_6, 4 D_8, 5 D_{12}	7 C_2, C_3, C_4, 35 D_2, 2 D_3
R65.100	9 C_2, C_3, 7 C_4, 7 C_6, 8 C_8, 10 C_{12}, 8 C_{24}, 45 D_2, 2 D_3, 3 D_4, 10 D_6, 6 D_{12}	9 C_2, C_3, 7 C_4, 7 C_6, 6 C_8, 9 C_{12}, 3 C_{24}, 45 D_2, 2 D_3, 3 D_4, 10 D_6, 6 D_{12}	3 C_2, 4 C_4, C_6, 6 C_8, 2 C_{12}, 33 D_2, D_3, 2 D_4, 7 D_6, 4 D_{12}	9 C_2, C_3, 3 C_4, C_6, 45 D_2, 2 D_3, 3 D_4, D_6
R65.101	7 C_2, C_3, 5 C_4, 5 C_6, 4 C_8, 6 C_{12}, 4 C_{24}, 37 D_2, 2 D_3, 3 D_4, 10 D_6, 6 D_{12}	7 C_2, C_3, 5 C_4, 5 C_6, 2 C_8, 5 C_{12}, C_{24}, 37 D_2, 2 D_3, 3 D_4, 10 D_6, 6 D_{12}	3 C_2, 4 C_4, C_6, 2 C_8, 2 C_{12}, 30 D_2, D_3, 3 D_4, 7 D_6, 4 D_{12}	7 C_2, C_3, C_4, C_6, 37 D_2, 2 D_3, 2 D_6
R65.102	7 C_2, C_3, 5 C_4, 5 C_6, 4 C_8, 5 C_{12}, 4 C_{24}, 37 D_2, 2 D_3, 3 D_4, 10 D_6, 6 D_{12}	7 C_2, C_3, 5 C_4, 5 C_6, 2 C_8, 4 C_{12}, 37 D_2, 2 D_3, 3 D_4, 10 D_6, 6 D_{12}	3 C_2, 4 C_4, C_6, 2 C_8, 3 C_{12}, 30 D_2, D_3, 3 D_4, 8 D_6, 6 D_{12}	7 C_2, C_3, C_4, C_6, 37 D_2, 2 D_3, D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R65.103	11 C_2, C_3, 3 C_4, 7 C_6, 4 C_8, 3 C_{12}, 4 C_{24}, 100 D_2, 4 D_3, 26 D_6	11 C_2, C_3, 3 C_4, 7 C_6, 2 C_8, 2 C_{12}, C_{24}, 100 D_2, 4 D_3, 26 D_6	3 C_2, 2 C_4, C_6, 2 C_8, C_{12}, 52 D_2, D_3, 12 D_6	11 C_2, C_3, C_4, C_6, 100 D_2, 4 D_3, 2 D_6
R65.104	7 C_2, C_3, 6 C_4, 5 C_6, 4 C_8, 5 C_{12}, 4 C_{24}, 37 D_2, 2 D_3, 3 D_4, 10 D_6, 6 D_{12}	7 C_2, C_3, 6 C_4, 5 C_6, 2 C_8, 4 C_{12}, C_{24}, 37 D_2, 2 D_3, 3 D_4, 10 D_6, 6 D_{12}	2 C_2, 2 C_4, C_6, 2 C_8, 2 C_{12}, C_{24}, 24 D_2, D_3, 2 D_4, 7 D_6, 4 D_{12}	7 C_2, C_3, 4 C_4, 37 D_2, 2 D_3, 3 D_4
R65.105	4 C_2, C_3, 4 C_4, 3 C_6, 4 C_8, 4 C_{12}, 4 C_{24}, 10 D_2, D_3, 4 D_4, 2 D_6, D_{12}	4 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 3 C_{12}, C_{24}, 10 D_2, D_3, 4 D_4, 2 D_6, D_{12}	3 C_2, 4 C_4, C_6, 2 C_8, 2 C_{12}, 10 D_2, D_3, 4 D_4, 2 D_6, D_{12}	4 C_2, C_3, 10 D_2, D_3
R65.106	3 C_2, C_3, 6 C_4, 2 C_6, 4 C_8, 5 C_{12}, 4 C_{24}, 4 D_2, D_3, 3 D_4, D_6, 2 D_{12}	3 C_2, C_3, 6 C_4, 2 C_6, 2 C_8, 4 C_{12}, 4 D_2, D_3, 3 D_4, D_6, 2 D_{12}	3 C_2, 5 C_4, C_6, C_8, 3 C_{12}, 4 D_2, D_3, 3 D_4, D_6, 2 D_{12}	3 C_2, C_3, C_4, 4 D_2, D_3
R65.107	3 C_2, C_3, 5 C_4, 2 C_6, 4 C_8, 5 C_{12}, 2 C_{24}, 6 D_2, D_3, 4 D_4, 2 D_6, 6 D_{12}	3 C_2, C_3, 5 C_4, 2 C_6, 2 C_8, 4 C_{12}, 6 D_2, D_3, 4 D_4, 2 D_6, 6 D_{12}	2 C_2, 3 C_4, C_6, 2 C_8, 2 C_{12}, 6 D_2, D_3, 4 D_4, 2 D_6, 6 D_{12}	3 C_2, C_3, 2 C_4, 6 D_2, D_3, 2 D_4
R65.108	3 C_2, C_3, 6 C_4, 2 C_6, 4 C_8, 5 C_{12}, 2 C_{24}, 4 D_2, D_3, 3 D_4, D_6, 2 D_{12}	3 C_2, C_3, 6 C_4, 2 C_6, 2 C_8, 4 C_{12}, 4 D_2, D_3, 3 D_4, D_6, 2 D_{12}	3 C_2, 5 C_4, C_6, C_8, C_{12}, 4 D_2, D_3, 3 D_4, D_6, 2 D_{12}	3 C_2, C_3, C_4, C_6, 4 D_2, D_3, D_6
R65.109	4 C_2, C_3, 4 C_4, 3 C_6, 4 C_8, 3 C_{12}, 2 C_{24}, 10 D_2, D_3, 4 D_4, 2 D_6, D_{12}	4 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 2 C_{12}, 10 D_2, D_3, 4 D_4, 2 D_6, D_{12}	3 C_2, 4 C_4, C_6, 2 C_8, C_{12}, 10 D_2, D_3, 4 D_4, 2 D_6, D_{12}	4 C_2, C_3, C_6, 10 D_2, D_3, D_6
R65.110	4 C_2, 2 C_4, 2 C_8, 5 C_{11}, 10 C_{22}, 15 C_{44}, 10 C_{88}, 10 D_2, 2 D_4, 10 D_{11}, 20 D_{22}, 15 D_{44}	4 C_2, 2 C_4, C_{11}, 2 C_{22}, 2 C_{44}, 10 D_2, 2 D_4, 2 D_{11}, 4 D_{22}, 2 D_{44}	2 C_2, 2 C_4, C_{22}, C_{44}, 8 D_2, 2 D_4, D_{11}, 3 D_{22}, 2 D_{44}	4 C_2, C_{11}, 10 D_2, 2 D_{11}
R65.111	5 C_2, 3 C_4, 4 C_8, 5 C_{11}, 15 C_{22}, 10 C_{44}, 20 C_{88}, 13 D_2, 10 D_{11}, 20 D_{22}	5 C_2, 3 C_4, 2 C_8, C_{11}, 3 C_{22}, C_{44}, 13 D_2, 2 D_{11}, 4 D_{22}	2 C_2, 3 C_4, 2 C_8, C_{22}, 11 D_2, D_{11}, 3 D_{22}	5 C_2, C_{11}, 13 D_2, 2 D_{11}
R65.112	2 **Tet**, 7 C_2, C_3, 6 C_4, 3 C_6, 4 C_{12}, 36 D_2, 7 D_4	2 **Tet**, 7 C_2, C_3, 6 C_4, 3 C_6, 2 C_{12}, 36 D_2, 7 D_4	2 C_2, 4 C_4, C_6, 2 C_{12}, 24 D_2, 7 D_4	2 **Tet**, 7 C_2, C_3, 2 C_4, 36 D_2
R65.113	2 **Tet**, 7 C_2, C_3, 5 C_4, 3 C_6, 4 C_{12}, 36 D_2, 7 D_4	2 **Tet**, 7 C_2, C_3, 5 C_4, 3 C_6, 2 C_{12}, 36 D_2, 7 D_4	2 C_2, 2 C_4, C_6, 2 C_{12}, 21 D_2, 4 D_4	2 **Tet**, 7 C_2, C_3, 3 C_4, 36 D_2, 7 D_4
R65.114	2 **Tet**, 7 C_2, C_3, 5 C_4, 3 C_6, 4 C_{12}, 36 D_2, 7 D_4	2 **Tet**, 7 C_2, C_3, 5 C_4, 3 C_6, 2 C_{12}, 36 D_2, 7 D_4	**Tet**, 2 C_2, 2 C_4, C_6, 2 C_{12}, 22 D_2, 4 D_4	2 **Tet**, 7 C_2, C_3, 3 C_4, 36 D_2, 7 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R65.115	2 **Tet**, 7 C_2, C_3, 5 C_4, 3 C_6, 4 C_{12}, 36 D_2, 7 D_4	2 **Tet**, 7 C_2, C_3, 5 C_4, 3 C_6, 3 C_{12}, 36 D_2, 7 D_4	**Tet**, 2 C_2, 2 C_4, C_6, 3 C_{12}, 22 D_2, 4 D_4	2 **Tet**, 7 C_2, C_3, 3 C_4, 36 D_2, 7 D_4
R65.116	2 **Tet**, 7 C_2, C_3, 5 C_4, 3 C_6, 4 C_{12}, 36 D_2, 7 D_4	2 **Tet**, 7 C_2, C_3, 5 C_4, 3 C_6, 2 C_{12}, 36 D_2, 7 D_4	2 C_2, 2 C_4, C_6, 2 C_{12}, 21 D_2, 4 D_4	2 **Tet**, 7 C_2, C_3, 3 C_4, 36 D_2, 7 D_4
R65.117	2 **Tet**, 4 C_2, C_3, 8 C_4, C_6, 3 C_{12}, 14 D_2, 6 D_4	2 **Tet**, 4 C_2, C_3, 8 C_4, C_6, C_{12}, 14 D_2, 6 D_4	2 C_2, 6 C_4, C_6, C_{12}, 10 D_2, 6 D_4	2 **Tet**, 4 C_2, C_3, 2 C_4, 14 D_2
R65.118	**Tet**, 5 C_2, C_3, 8 C_4, C_6, 3 C_{12}, 24 D_2, 6 D_4	**Tet**, 5 C_2, C_3, 8 C_4, C_6, C_{12}, 24 D_2, 6 D_4	2 C_2, 6 C_4, C_6, C_{12}, 17 D_2, 6 D_4	**Tet**, 5 C_2, C_3, 2 C_4, 24 D_2
R65.119	3 **Tet**, 15 C_2, C_3, 4 C_4, 3 C_6, 4 C_{12}, 239 D_2	3 **Tet**, 15 C_2, C_3, 4 C_4, 3 C_6, 2 C_{12}, 239 D_2	2 C_2, 2 C_4, C_6, 2 C_{12}, 72 D_2	3 **Tet**, 15 C_2, C_3, 2 C_4, 239 D_2
R65.120	**Tet**, 7 C_2, C_3, 10 C_4, 3 C_6, 4 C_{12}, 33 D_2, 14 D_4	**Tet**, 7 C_2, C_3, 10 C_4, 3 C_6, 2 C_{12}, 33 D_2, 14 D_4	2 C_2, 4 C_4, C_6, 2 C_{12}, 19 D_2, 8 D_4	**Tet**, 7 C_2, C_3, 6 C_4, 33 D_2, 14 D_4
R65.121	9 C_2, C_3, 12 C_4, 7 C_6, 12 C_{12}, 45 D_2, 6 D_4	9 C_2, C_3, 12 C_4, 7 C_6, 10 C_{12}, 45 D_2, 6 D_4	3 C_2, 4 C_4, 2 C_6, 6 C_{12}, 33 D_2, 4 D_4	9 C_2, C_3, 8 C_4, 45 D_2, 6 D_4
R65.122	6 C_2, C_3, 10 C_4, 5 C_6, 5 C_{12}, 17 D_2, 8 D_4	6 C_2, C_3, 10 C_4, 5 C_6, 3 C_{12}, 17 D_2, 8 D_4	3 C_2, 4 C_4, 2 C_6, 2 C_{12}, 11 D_2, 8 D_4	6 C_2, C_3, 6 C_4, 17 D_2, 8 D_4
R65.123	**Tet**, 11 C_2, C_3, 6 C_4, 5 C_6, 5 C_{12}, 88 D_2, 10 D_4	**Tet**, 11 C_2, C_3, 6 C_4, 5 C_6, 3 C_{12}, 88 D_2, 10 D_4	3 C_2, 4 C_4, 2 C_6, 2 C_{12}, 46 D_2, 8 D_4	**Tet**, 11 C_2, C_3, 2 C_4, 88 D_2, 10 D_4
R65.124	**Tet**, 5 C_2, C_3, 8 C_4, C_6, 3 C_{12}, 26 D_2, 15 D_4	**Tet**, 5 C_2, C_3, 8 C_4, C_6, C_{12}, 26 D_2, 15 D_4	2 C_2, 4 C_4, C_6, C_{12}, 15 D_2, 11 D_4	**Tet**, 5 C_2, C_3, 4 C_4, 26 D_2, 12 D_4
R65.125	5 C_2, C_3, 5 C_4, 5 C_6, 3 C_8, 7 C_{12}, 3 C_{24}, 14 D_2, 8 D_4, 6 D_8	5 C_2, C_3, 5 C_4, 5 C_6, 3 C_8, 5 C_{12}, 3 C_{24}, 14 D_2, 8 D_4, 6 D_8	3 C_2, 2 C_4, C_6, 12 D_2, 8 D_4, 6 D_8	5 C_2, C_3, 3 C_4, 3 C_8, 14 D_2, 8 D_4, 6 D_8
R65.126	5 C_2, C_3, 2 C_4, 3 C_6, 3 C_7, 2 C_{12}, 9 C_{14}, 3 C_{21}, 6 C_{28}, 9 C_{42}, 13 D_2, 2 D_3, 4 D_6, 6 D_7, 12 D_{14}, 6 D_{21}, 12 D_{42}	5 C_2, C_3, 2 C_4, 3 C_6, C_7, C_{12}, 3 C_{14}, C_{21}, C_{28}, 3 C_{42}, 13 D_2, 2 D_3, 4 D_6, 2 D_7, 4 D_{14}, 2 D_{21}, 4 D_{42}	3 C_2, 2 C_4, C_6, C_{14}, 11 D_2, D_3, 3 D_6, D_7, 3 D_{14}, D_{21}, 3 D_{42}	5 C_2, C_3, C_6, C_7, C_{14}, 13 D_2, 2 D_3, D_6, 2 D_7, D_{14}
R65.127	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_{12}, 6 C_{13}, 6 C_{26}, 6 C_{39}, 6 C_{52}, 6 C_{78}, 12 C_{156}, 3 D_2, 12 D_{13}, 6 D_{26}	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, C_{13}, C_{26}, 3 D_2, 2 D_{13}, D_{26}	2 C_2, 2 C_4, C_6, C_{26}, 3 D_2, D_{13}, D_{26}	3 C_2, C_{13}, 3 D_2, D_{13}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R65.128	7 C_2, 4 C_4, 2 C_5, 2 C_{10}, 4 C_{20}, 63 D_2	7 C_2, 4 C_4, C_5, C_{10}, 63 D_2	2 C_2, 3 C_4, C_{10}, 31 D_2	7 C_2, C_5, 63 D_2
R65.129	4 C_2, 4 C_4, 2 C_5, 2 C_{10}, 4 C_{20}, 13 D_2, 8 D_4	4 C_2, 4 C_4, C_5, C_{10}, 13 D_2, 8 D_4	2 C_2, 3 C_4, C_{10}, 13 D_2, 8 D_4	4 C_2, C_5, 13 D_2
R65.130	7 C_2, 4 C_4, 2 C_5, 2 C_{10}, 4 C_{20}, 63 D_2	7 C_2, 4 C_4, C_5, C_{10}, C_{20}, 63 D_2	2 C_2, 3 C_4, C_{10}, 33 D_2	7 C_2, C_4, C_5, 63 D_2
R65.131	4 C_2, 4 C_4, 2 C_5, 2 C_{10}, 4 C_{20}, 13 D_2, 8 D_4	4 C_2, 4 C_4, C_5, C_{10}, C_{20}, 13 D_2, 8 D_4	2 C_2, 3 C_4, C_{10}, 13 D_2, 8 D_4	4 C_2, C_4, C_5, 13 D_2
R65.132	5 C_2, 5 C_4, 2 C_5, 10 C_{10}, 14 C_{20}, 16 D_2, 6 D_4	5 C_2, 5 C_4, C_5, 5 C_{10}, 5 C_{20}, 16 D_2, 6 D_4	3 C_2, 2 C_4, C_{10}, 14 D_2, 6 D_4	5 C_2, 3 C_4, C_5, 16 D_2, 6 D_4
R65.133	C_2, 5 C_{11}, 6 C_{13}, 5 C_{22}, 30 C_{143}, 6 D_{13}	C_2, C_{11}, C_{13}, C_{22}, D_{13}	C_2, C_{22}, D_{13}	C_2, C_{13}, D_{13}
R65.134	3 C_2, 2 C_4, 2 C_5, 3 C_7, 2 C_{10}, 9 C_{14}, 2 C_{20}, 12 C_{28}, 6 C_{35}, 6 C_{70}, 12 C_{140}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, 2 C_4, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_{10}, 3 D_2, D_5, D_{10}	3 C_2, C_5, 3 D_2, D_5
R65.135	7 C_2, C_3, 4 C_4, 7 C_6, 3 C_9, 8 C_{12}, 9 C_{18}, 12 C_{36}, 31 D_2	7 C_2, C_3, 4 C_4, 7 C_6, C_9, 6 C_{12}, 3 C_{18}, 2 C_{36}, 31 D_2	2 C_2, 4 C_4, C_6, 20 D_2	7 C_2, C_3, C_6, 31 D_2
R65.136	4 C_2, C_3, 4 C_4, 4 C_6, 3 C_9, 4 C_{12}, 3 C_{18}, 9 C_{36}, 9 D_2, 6 D_4	4 C_2, C_3, 4 C_4, 4 C_6, C_9, 2 C_{12}, C_{18}, C_{36}, 9 D_2, 6 D_4	2 C_2, 4 C_4, C_6, 9 D_2, 6 D_4	4 C_2, C_3, C_6, 9 D_2
R65.137	5 C_2, C_3, 3 C_4, 5 C_6, 3 C_9, 5 C_{12}, 15 C_{18}, 15 C_{36}, 13 D_2, 2 D_4	5 C_2, C_3, 3 C_4, 5 C_6, C_9, 3 C_{12}, 5 C_{18}, 3 C_{36}, 13 D_2, 2 D_4	3 C_2, 2 C_4, C_6, C_{18}, 11 D_2, 2 D_4	5 C_2, C_3, C_4, C_9, 13 D_2, 2 D_4
R65.138	C_2, C_3, 2 C_5, C_6, 3 C_9, 2 C_{15}, 3 C_{18}, 9 C_{27}, 6 C_{45}, 9 C_{54}, 18 C_{135}, 2 D_5	C_2, C_3, C_5, C_6, D_5	C_2, C_6, D_5	C_2, C_5, D_5
R65.139	5 C_2, 2 C_4, 8 C_{17}, 40 C_{34}, 32 C_{68}, 13 D_2	5 C_2, 2 C_4, C_{17}, 5 C_{34}, 2 C_{68}, 13 D_2	3 C_2, 2 C_4, C_{34}, 11 D_2	5 C_2, C_{17}, 13 D_2
R65.140	C_2, 65 C_{131}, 65 C_{262}	C_2	C_2	C_2
R65.141	3 C_2, C_3, 2 C_4, 3 C_6, 5 C_{11}, 4 C_{12}, 15 C_{22}, 10 C_{33}, 20 C_{44}, 30 C_{66}, 40 C_{132}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, C_{11}, 2 C_{12}, 3 C_{22}, C_{33}, 2 C_{44}, 3 C_{66}, 2 C_{132}, 3 D_2	2 C_2, 2 C_4, C_6, C_{22}, C_{66}, 3 D_2	3 C_2, C_3, C_6, C_{11}, C_{22}, C_{33}, C_{66}, 3 D_2
R65.142	C_2, C_4, 2 C_5, 2 C_{10}, 6 C_{13}, 4 C_{20}, 6 C_{26}, 12 C_{52}, 24 C_{65}, 24 C_{130}, 48 C_{260}	C_2, C_4, C_5, C_{10}, C_{13}, C_{26}, C_{65}, C_{130}	C_2, C_4, C_{10}, C_{26}, C_{130}	C_2, C_5, C_{13}, C_{65}
Genus 66				
R66.1	C_2, C_3, 20 C_{13}, 6 C_{26}, D_3, 6 D_{13}	C_2, C_3, 15 C_{13}, C_{26}, D_3, 6 D_{13}	C_2, C_{26}, D_3, 6 D_{13}	C_2, C_3, 14 C_{13}, D_3, 6 D_{13}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R66.2	3 C_2, C_3, C_4, 5 C_5, 2 C_6, 4 C_{10}, 5 C_{15}, 2 C_{30}, 4 D_2, D_3, D_4, 9 D_5, D_6, 4 D_{10}, 2 D_{15}	3 C_2, C_3, C_4, 4 C_5, 2 C_6, 3 C_{10}, 3 C_{15}, 4 D_2, D_3, D_4, 7 D_5, D_6, 3 D_{10}, 2 D_{15}	3 C_2, C_4, C_6, 2 C_{10}, 4 D_2, D_3, D_4, 7 D_5, D_6, 3 D_{10}, 2 D_{15}	3 C_2, C_3, 4 C_5, 4 D_2, D_3, 7 D_5
R66.3	**Tet**, **Oct**, 2 C_2, C_3, C_4, 11 C_{23}, 11 C_{46}, 22 C_{69}, 3 D_2, D_3, D_4, 11 D_{23}, 11 D_{46}, 22 D_{69}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_{23}, C_{46}, C_{69}, 3 D_2, D_3, D_4, D_{23}, D_{46}, D_{69}	**Tet**, **Oct**, 2 C_2, C_4, C_{46}, 3 D_2, D_3, D_4, D_{23}, D_{46}, D_{69}	**Tet**, 2 C_2, C_3, C_{23}, 3 D_2, D_3, D_{23}
R66.4	3 C_2, C_4, 33 C_{67}, 66 C_{134}, 4 D_2, D_4, 33 D_{67}, 33 D_{134}	3 C_2, C_4, C_{67}, 2 C_{134}, 4 D_2, D_4, D_{67}, D_{134}	3 C_2, C_4, C_{134}, 4 D_2, D_4, D_{67}, D_{134}	3 C_2, C_{67}, 4 D_2, D_{67}
R66.5	2 C_2, C_3, 2 C_4, C_6, C_8, 5 C_{11}, 2 C_{12}, 5 C_{22}, 2 C_{24}, 10 C_{33}, 10 C_{44}, 10 C_{66}, 10 C_{88}, 20 C_{132}, 20 C_{264}, 2 D_2, D_3, D_4, D_6, 5 D_{11}, 2 D_{12}, 5 D_{22}, 10 D_{33}, 10 D_{44}, 10 D_{66}, 20 D_{132}	2 C_2, C_3, 2 C_4, C_6, C_{11}, C_{12}, C_{22}, C_{33}, C_{44}, C_{66}, C_{132}, 2 D_2, D_3, D_4, D_6, D_{11}, D_{12}, D_{22}, D_{33}, D_{44}, D_{66}, D_{132}	2 C_2, C_4, C_6, C_{12}, C_{22}, C_{44}, C_{66}, C_{132}, 2 D_2, D_3, D_4, D_6, D_{11}, D_{12}, D_{22}, D_{33}, D_{44}, D_{66}, D_{132}	2 C_2, C_3, C_{11}, C_{33}, 2 D_2, D_3, D_{11}, D_{33}
R66.6	3 C_2, C_3, C_4, 2 C_6, 8 C_{17}, 8 C_{34}, 8 C_{51}, 16 C_{68}, 8 C_{102}, 4 D_2, D_3, D_4, D_6, 16 D_{17}, 16 D_{34}, 8 D_{51}, 16 D_{68}, 8 D_{102}	3 C_2, C_3, C_4, 2 C_6, C_{17}, C_{34}, C_{51}, C_{68}, C_{102}, 4 D_2, D_3, D_4, D_6, 2 D_{17}, 2 D_{34}, D_{51}, D_{68}, D_{102}	3 C_2, C_4, C_6, 4 D_2, D_3, D_4, D_6, 2 D_{17}, 2 D_{34}, D_{51}, D_{68}, D_{102}	3 C_2, C_3, C_{17}, C_{34}, 4 D_2, D_3, 2 D_{17}, 2 D_{34}
R66.7	2 C_2, 2 C_4, 5 C_5, C_8, 7 C_{10}, 4 C_{20}, 2 D_2, D_4, 2 D_5, 2 D_{10}	2 C_2, 2 C_4, 4 C_5, 6 C_{10}, C_{20}, 2 D_2, D_4, 2 D_5, 2 D_{10}	2 C_2, 2 C_4, 6 C_{10}, C_{20}, 2 D_2, D_4, 2 D_5, 2 D_{10}	2 C_2, 4 C_5, 2 D_2, 2 D_5
R66.8	3 C_2, C_4, 2 C_8, 11 C_{23}, 22 C_{46}, 11 C_{92}, 4 D_2, 2 D_4, 2 D_8, 11 D_{23}, 11 D_{46}, 11 D_{92}	3 C_2, C_4, C_8, C_{23}, 2 C_{46}, C_{92}, 4 D_2, 2 D_4, D_8, D_{23}, D_{46}, D_{92}	3 C_2, C_{46}, 4 D_2, 2 D_4, D_8, D_{23}, D_{46}, D_{92}	3 C_2, C_4, C_{23}, 4 D_2, 2 D_4, D_{23}
R66.9	C_2, C_3, 4 C_5, 3 C_9, 2 C_{10}, 4 C_{15}, D_3, 2 D_5, 3 D_9, 2 D_{15}	C_2, C_3, 3 C_5, C_9, C_{10}, 3 C_{15}, D_3, 2 D_5, D_9, 2 D_{15}	C_2, C_{10}, D_3, 2 D_5, D_9, 2 D_{15}	C_2, C_3, 2 C_5, D_3, 2 D_5
R66.10	C_2, 8 C_5, 3 C_7, 2 C_{10}, 42 C_{35}, 2 D_5, 3 D_7, 12 D_{35}	C_2, 6 C_5, C_7, C_{10}, 10 C_{35}, 2 D_5, D_7, 4 D_{35}	C_2, C_{10}, 2 D_5, D_7, 4 D_{35}	C_2, 4 C_5, C_7, 2 D_5, D_7
R66.11	C_2, C_3, 2 C_5, 2 C_{10}, 5 C_{11}, 2 C_{15}, 10 C_{33}, 10 C_{55}, 20 C_{165}, D_3, 5 D_{11}, 10 D_{33}	C_2, C_3, C_5, C_{10}, C_{11}, C_{33}, D_3, D_{11}, D_{33}	C_2, C_{10}, D_3, D_{11}, D_{33}	C_2, C_3, C_{11}, C_{33}, D_3, D_{11}, D_{33}
R66.12	C_2, 48 C_{13}, 6 C_{26}, 6 D_{13}	C_2, 38 C_{13}, C_{26}, 6 D_{13}	C_2, C_{26}, 6 D_{13}	C_2, 36 C_{13}, 6 D_{13}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R66.13	3 C_2, C_3, C_4, C_6, 3 C_7, 2 C_8, 2 C_{12}, 6 C_{14}, 3 C_{21}, 4 C_{24}, 3 C_{28}, 3 C_{42}, 6 C_{84}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 3 D_7, 2 D_8, 4 D_{12}, 3 D_{14}, 3 D_{21}, 4 D_{24}, 3 D_{28}, 3 D_{42}, 6 D_{84}	3 C_2, C_3, C_4, C_6, C_7, C_8, C_{12}, 2 C_{14}, C_{21}, C_{24}, C_{28}, C_{42}, C_{84}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_7, D_8, 2 D_{12}, D_{14}, D_{21}, D_{24}, D_{28}, D_{42}, D_{84}	3 C_2, C_{14}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_7, D_8, 2 D_{12}, D_{14}, D_{21}, D_{24}, D_{28}, D_{42}, D_{84}	3 C_2, C_3, C_4, C_6, C_7, C_{12}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_7, 2 D_{12}
R66.14	3 C_2, 3 C_7, 5 C_{11}, 9 C_{14}, 5 C_{22}, 15 C_{77}, 15 C_{154}, 3 D_2, 10 D_{11}, 5 D_{22}	3 C_2, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	3 C_2, 3 D_2, 2 D_{11}, D_{22}	3 C_2, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}
R66.15	C_2, 5 C_{11}, 6 C_{13}, 6 C_{26}, 30 C_{143}, 5 D_{11}	C_2, C_{11}, C_{13}, C_{26}, D_{11}	C_2, C_{26}, D_{11}	C_2, C_{11}, D_{11}
R66.16	3 C_2, C_3, 8 C_5, 3 C_6, 4 C_{10}, 8 C_{15}, 4 C_{30}, 3 D_2, 12 D_5, 4 D_{10}	3 C_2, C_3, 6 C_5, 3 C_6, 2 C_{10}, 4 C_{15}, 3 D_2, 8 D_5, 2 D_{10}	3 C_2, C_6, 3 D_2, 8 D_5, 2 D_{10}	3 C_2, C_3, 6 C_5, 3 D_2, 8 D_5
R66.17	3 C_2, C_3, 8 C_5, 3 C_6, 12 C_{10}, 14 C_{15}, 22 C_{30}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_3, 6 C_5, 3 C_6, 8 C_{10}, 8 C_{15}, 10 C_{30}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_6, 7 C_{10}, C_{30}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_3, 4 C_5, 3 D_2, 4 D_5
R66.18	3 C_2, C_3, C_6, 11 C_{23}, 33 C_{46}, 11 C_{69}, 11 C_{138}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6	3 C_2, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6
R66.19	2 C_2, 2 C_4, C_8, 8 C_{17}, 16 C_{34}, 16 C_{68}, 16 C_{136}, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 D_2
R66.20	**Tet**, C_2, C_3, 11 C_{23}, 11 C_{46}, 22 C_{69}, D_2	**Tet**, C_2, C_3, C_{23}, C_{46}, C_{69}, D_2	**Tet**, C_2, C_{46}, D_2	**Tet**, C_2, C_3, C_{23}, D_2
R66.21	C_2, 3 C_7, 3 C_{14}, 9 C_{19}, 9 C_{38}, 54 C_{133}, 54 C_{266}	C_2	C_2	C_2
R66.22	3 C_2, 33 C_{67}, 99 C_{134}, 3 D_2	3 C_2, C_{67}, 3 C_{134}, 3 D_2	3 C_2, C_{134}, 3 D_2	3 C_2, C_{67}, 3 D_2
R66.23	C_2, C_3, C_4, C_6, 2 C_8, 5 C_{11}, 2 C_{12}, 5 C_{22}, 4 C_{24}, 10 C_{33}, 10 C_{44}, 10 C_{66}, 20 C_{88}, 20 C_{132}, 40 C_{264}	C_2, C_3, C_4, C_6, C_{11}, C_{12}, C_{22}, C_{33}, C_{44}, C_{66}, C_{132}	C_2, C_4, C_6, C_{12}, C_{22}, C_{44}, C_{66}, C_{132}	C_2, C_3, C_{11}, C_{33}
Genus 67				
R67.1	5 C_2, 2 C_3, 3 C_4, 4 C_6, 4 C_8, 2 C_{12}, 4 C_{16}, 4 C_{24}, 4 C_{48}, 13 D_2, 6 D_3, 3 D_4, 8 D_6, 6 D_8, 2 D_{12}, 2 D_{24}	5 C_2, 2 C_3, 3 C_4, 4 C_6, 3 C_8, C_{12}, C_{16}, C_{24}, 13 D_2, 6 D_3, 3 D_4, 8 D_6, 5 D_8, 2 D_{12}, D_{24}	3 C_2, 2 C_4, 3 C_6, 13 D_2, 3 D_3, 2 D_4, 8 D_6, 3 D_8, D_{12}, D_{24}	5 C_2, 2 C_3, C_4, C_6, C_8, 13 D_2, 5 D_3, 2 D_4, 2 D_6, D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R67.2	3 C_2, 2 C_3, 4 C_4, 3 C_6, 2 C_8, 3 C_{12}, 2 C_{16}, 3 C_{24}, 4 C_{48}, 4 D_2, 3 D_3, 2 D_4, 3 D_6, D_8, 2 D_{12}	3 C_2, 2 C_3, 4 C_4, 3 C_6, C_8, 2 C_{12}, 4 D_2, 3 D_3, 2 D_4, 3 D_6, D_8, 2 D_{12}	3 C_2, 3 C_4, 3 C_6, C_{12}, 4 D_2, 3 D_3, 2 D_4, 3 D_6, D_8, 2 D_{12}	3 C_2, 2 C_3, C_4, 4 D_2, 3 D_3, D_4
R67.3	5 C_2, 3 C_4, 2 C_8, 8 C_{17}, 24 C_{34}, 32 C_{68}, 32 C_{136}, 13 D_2, 3 D_4, 16 D_{17}, 32 D_{34}, 48 D_{68}	5 C_2, 3 C_4, C_8, C_{17}, 3 C_{34}, 3 C_{68}, C_{136}, 13 D_2, 3 D_4, 2 D_{17}, 4 D_{34}, 5 D_{68}	3 C_2, 2 C_4, C_{34}, 13 D_2, 3 D_4, D_{17}, 3 D_{34}, 3 D_{68}	5 C_2, C_4, C_{17}, C_{34}, C_{68}, 13 D_2, D_4, 2 D_{17}, 2 D_{34}, D_{68}
R67.4	3 C_2, 5 C_4, C_8, 8 C_{17}, 16 C_{34}, 16 C_{68}, 16 C_{136}, 4 D_2, 2 D_4, 8 D_{17}, 8 D_{34}, 8 D_{68}	3 C_2, 5 C_4, C_{17}, 2 C_{34}, C_{68}, 4 D_2, 2 D_4, D_{17}, D_{34}, D_{68}	3 C_2, 4 C_4, C_{34}, 4 D_2, 2 D_4, D_{17}, D_{34}, D_{68}	3 C_2, C_{17}, C_{34}, 4 D_2, D_{17}, D_{34}
R67.5	3 C_2, 2 C_4, 33 C_{67}, 33 C_{134}, 33 C_{268}, 3 D_2, 66 D_{67}, 33 D_{134}	3 C_2, 2 C_4, C_{67}, C_{134}, 3 D_2, 2 D_{67}, D_{134}	2 C_2, 2 C_4, C_{134}, 3 D_2, D_{67}, D_{134}	3 C_2, C_{67}, 3 D_2, D_{67}
R67.6	2 **Tet**, 3 **Oct**, 5 C_2, 3 C_3, 2 C_4, 3 C_6, 6 C_9, C_{12}, 6 C_{18}, 3 C_{36}, 16 D_2, 6 D_3, 4 D_4, 6 D_6, 12 D_9, D_{12}, 15 D_{18}, 3 D_{36}	2 **Tet**, 3 **Oct**, 5 C_2, 3 C_3, 2 C_4, 3 C_6, 4 C_9, 2 C_{18}, 16 D_2, 6 D_3, 4 D_4, 6 D_6, 6 D_9, 5 D_{18}	2 **Tet**, 2 **Oct**, 3 C_2, C_4, C_6, 16 D_2, 4 D_3, 4 D_4, 5 D_6, 5 D_9, 4 D_{18}	2 **Tet**, 5 C_2, 3 C_3, C_4, C_9, 16 D_2, 5 D_3, 2 D_4, 3 D_9
R67.7	C_2, 3 C_3, C_6, 11 C_{23}, 55 C_{69}, D_3, 11 D_{23}, 22 D_{69}	C_2, 3 C_3, C_6, C_{23}, 4 C_{69}, D_3, D_{23}, 2 D_{69}	C_2, C_6, D_3, D_{23}, 2 D_{69}	C_2, C_3, C_{23}, D_3, D_{23}
R67.8	C_2, C_3, C_6, 33 C_{67}, 33 C_{201}, 33 D_{67}	C_2, C_3, C_6, C_{67}, D_{67}	C_2, C_6, D_{67}	C_2, C_{67}, D_{67}
R67.9	5 C_2, C_3, 2 C_4, C_5, 5 C_6, 2 C_8, 3 C_{10}, 13 D_2, 2 D_3, 3 D_4, 4 D_6	5 C_2, C_3, 2 C_4, 5 C_6, C_8, 13 D_2, 2 D_3, 3 D_4, 4 D_6	3 C_2, 2 C_4, 3 C_6, C_8, 13 D_2, D_3, 3 D_4, 4 D_6	5 C_2, C_3, 2 C_6, 13 D_2, 2 D_3, D_6
R67.10	3 C_2, C_3, 3 C_4, C_5, 3 C_6, 2 C_8, 3 C_{10}, C_{12}, 4 D_2, D_3, 2 D_4, D_6	3 C_2, C_3, 3 C_4, 3 C_6, C_8, C_{12}, 4 D_2, D_3, 2 D_4, D_6	3 C_2, 3 C_4, 3 C_6, C_8, C_{12}, 4 D_2, D_3, 2 D_4, D_6	3 C_2, C_3, 4 D_2, D_3
R67.11	2 C_2, 3 C_3, 2 C_4, 3 C_6, 6 C_9, 3 C_{12}, 6 C_{18}, 3 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 3 C_3, 2 C_4, 3 C_6, 4 C_9, 2 C_{12}, 4 C_{18}, 3 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 2 C_4, 3 C_6, 2 C_{12}, 4 C_{18}, 3 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 2 C_3, 2 D_2, D_3
R67.12	2 C_2, C_3, 2 C_4, C_6, 3 C_7, 2 C_{12}, 3 C_{14}, 3 C_{21}, 3 C_{28}, 3 C_{42}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 3 D_{28}	2 C_2, C_3, 2 C_4, C_6, C_7, C_{12}, C_{14}, C_{28}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, 2 C_4, C_6, C_{12}, C_{14}, C_{28}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, C_7, 2 D_2, D_7
R67.13	3 C_2, 3 C_4, 2 C_5, 4 C_8, 4 C_{10}, 4 C_{16}, 4 C_{20}, 10 C_{40}, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, 2 D_{20}, 4 D_{40}	3 C_2, 3 C_4, C_5, 2 C_8, 2 C_{10}, C_{20}, 2 C_{40}, 4 D_2, 2 D_4, D_5, 2 D_8, D_{10}, D_{20}, 2 D_{40}	2 C_2, 3 C_4, 2 C_8, C_{10}, 4 D_2, 2 D_4, D_5, 2 D_8, D_{10}, D_{20}, 2 D_{40}	3 C_2, C_5, 4 D_2, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R67.14	4 C_2, 2 C_4, 2 C_5, 4 C_8, 4 C_{10}, 2 C_{16}, 6 C_{20}, 12 C_{40}, 9 D_2, 3 D_4, 4 D_5, 4 D_8, 6 D_{10}, 8 D_{20}, 12 D_{40}	4 C_2, 2 C_4, C_5, 2 C_8, 2 C_{10}, 2 C_{20}, 3 C_{40}, 9 D_2, 3 D_4, 2 D_5, 3 D_8, 3 D_{10}, 3 D_{20}, 5 D_{40}	2 C_2, 2 C_4, 2 C_8, C_{10}, C_{20}, 9 D_2, 3 D_4, D_5, 3 D_8, 3 D_{10}, 2 D_{20}, 3 D_{40}	4 C_2, C_5, 9 D_2, 2 D_5
R67.15	5 C_2, C_3, 3 C_4, 5 C_6, 2 C_8, 3 C_9, 4 C_{12}, 15 C_{18}, 4 C_{24}, 12 C_{36}, 12 C_{72}, 13 D_2, 3 D_4	5 C_2, C_3, 3 C_4, 5 C_6, C_8, 2 C_{12}, 13 D_2, 3 D_4	3 C_2, 2 C_4, C_6, 13 D_2, 3 D_4	5 C_2, C_4, 13 D_2, D_4
R67.16	3 C_2, C_3, 5 C_4, 3 C_6, C_8, 3 C_9, 8 C_{12}, 9 C_{18}, 2 C_{24}, 24 C_{36}, 6 C_{72}, 4 D_2, 2 D_4	3 C_2, C_3, 5 C_4, 3 C_6, 6 C_{12}, 4 D_2, 2 D_4	3 C_2, 3 C_4, C_6, 4 D_2, 2 D_4	3 C_2, 4 D_2
R67.17	3 C_2, 3 C_3, 2 C_4, 5 C_6, 4 C_8, 7 C_{12}, 8 C_{16}, 14 C_{24}, 28 C_{48}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, 2 C_4, 5 C_6, 3 C_8, 5 C_{12}, 2 C_{16}, 5 C_{24}, 4 C_{48}, 3 D_2, 2 D_3, D_6	2 C_2, C_4, 4 C_6, 2 C_{12}, 3 D_2, D_3, D_6	3 C_2, C_3, C_4, C_8, 3 D_2, 2 D_3
R67.18	2 C_2, 3 C_3, 2 C_4, 4 C_6, 3 C_8, 6 C_{12}, 4 C_{16}, 12 C_{24}, 20 C_{48}, 2 D_2, D_3, D_6	2 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, 4 C_{12}, C_{24}, 2 D_2, D_3, D_6	2 C_2, C_4, 4 C_6, C_{12}, 2 D_2, D_3, D_6	2 C_2, C_3, C_4, 2 D_2, D_3
R67.19	3 C_2, 3 C_3, 2 C_4, 3 C_6, 4 C_8, 3 C_{12}, 8 C_{16}, 6 C_{24}, 8 C_{48}, 3 D_2, 6 D_3, 3 D_6	3 C_2, 3 C_3, 2 C_4, 3 C_6, 3 C_8, C_{12}, 2 C_{16}, C_{24}, 3 D_2, 6 D_3, 3 D_6	2 C_2, C_4, 3 C_6, 3 D_2, 3 D_3, 3 D_6	3 C_2, 3 C_3, C_4, C_8, 3 D_2, 4 D_3
R67.20	2 C_2, 3 C_3, 2 C_4, 3 C_6, 3 C_8, 3 C_{12}, 4 C_{16}, 6 C_{24}, 8 C_{48}, 2 D_2, 3 D_3, 3 D_6	2 C_2, 3 C_3, 2 C_4, 3 C_6, C_8, C_{12}, 2 D_2, 3 D_3, 3 D_6	2 C_2, C_4, 3 C_6, 2 D_2, 3 D_3, 3 D_6	2 C_2, 3 C_3, C_4, 2 D_2, 3 D_3
R67.21	C_2, C_3, 2 C_5, C_6, 3 C_9, 2 C_{10}, 4 C_{15}, 3 C_{18}, 9 C_{27}, 4 C_{30}, 12 C_{45}, 9 C_{54}, 12 C_{90}, 36 C_{135}, 36 C_{270}	C_2, C_3, C_6	C_2, C_6	C_2
R67.22	2 C_2, 2 C_4, 2 C_8, 8 C_{17}, 16 C_{34}, 24 C_{68}, 32 C_{136}, 2 D_2	2 C_2, 2 C_4, C_{17}, 2 C_{34}, C_{68}, 2 D_2	2 C_2, C_4, C_{34}, 2 D_2	2 C_2, C_{17}, C_{34}, 2 D_2
R67.23	3 C_2, 2 C_4, 4 C_8, 8 C_{17}, 24 C_{34}, 32 C_{68}, 64 C_{136}, 3 D_2	3 C_2, 2 C_4, 2 C_8, C_{17}, 3 C_{34}, 3 C_{68}, 2 C_{136}, 3 D_2	2 C_2, C_4, C_{34}, 3 D_2	3 C_2, C_4, C_{17}, C_{34}, C_{68}, 3 D_2
R67.24	C_2, C_4, 33 C_{67}, 33 C_{134}, 66 C_{268}	C_2, C_4, C_{67}, C_{134}	C_2, C_4, C_{134}	C_2, C_{67}
Genus 68				
R68.1	3 C_2, C_3, C_4, 2 C_6, 11 C_{23}, 22 C_{46}, 22 C_{69}, 44 C_{138}, 4 D_2, D_3, D_4, D_6, 11 D_{23}, 11 D_{46}, 22 D_{69}, 22 D_{138}	3 C_2, C_3, C_4, 2 C_6, C_{23}, 2 C_{46}, C_{69}, 2 C_{138}, 4 D_2, D_3, D_4, D_6, D_{23}, D_{46}, D_{69}, D_{138}	3 C_2, C_4, C_6, C_{46}, C_{138}, 4 D_2, D_3, D_4, D_6, D_{23}, D_{46}, D_{69}, D_{138}	3 C_2, C_3, C_{23}, C_{69}, 4 D_2, D_3, D_{23}, D_{69}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R68.2	2 C_2, 2 C_4, 2 C_8, 2 C_{16}, 8 C_{17}, 8 C_{34}, 16 C_{68}, 32 C_{136}, 32 C_{272}, 2 D_2, D_4, 2 D_8, 8 D_{17}, 8 D_{34}, 16 D_{68}, 32 D_{136}	2 C_2, 2 C_4, C_8, C_{17}, C_{34}, C_{68}, C_{136}, 2 D_2, D_4, D_8, D_{17}, D_{34}, D_{68}, D_{136}	2 C_2, 2 C_4, C_8, C_{34}, C_{68}, C_{136}, 2 D_2, D_4, D_8, D_{17}, D_{34}, D_{68}, D_{136}	2 C_2, C_{17}, 2 D_2, D_{17}
R68.3	3 C_2, C_3, 2 C_5, C_6, 3 C_7, 2 C_{10}, 3 C_{14}, 2 C_{15}, 3 C_{21}, 12 C_{35}, 12 C_{70}, 12 C_{105}, 3 D_2, 2 D_3, 4 D_5, D_6, 6 D_7, 2 D_{10}, 3 D_{14}, 2 D_{15}, 3 D_{21}, 24 D_{35}, 12 D_{70}, 12 D_{105}	3 C_2, C_3, C_5, C_6, C_7, C_{10}, C_{14}, C_{15}, C_{21}, C_{35}, C_{70}, C_{105}, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_7, D_{10}, D_{14}, D_{15}, D_{21}, 2 D_{35}, D_{70}, D_{105}	3 C_2, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_7, D_{10}, D_{14}, D_{15}, D_{21}, 2 D_{35}, D_{70}, D_{105}	3 C_2, C_3, C_5, C_7, C_{35}, 3 D_2, 2 D_3, 2 D_5, 2 D_7, 2 D_{35}
R68.4	3 C_2, C_3, C_4, 3 C_6, C_{12}, 8 C_{17}, 8 C_{34}, 8 C_{51}, 16 C_{68}, 8 C_{102}, 16 C_{204}, 4 D_2, D_4, 16 D_{17}, 16 D_{34}, 16 D_{68}	3 C_2, C_3, C_4, 3 C_6, C_{17}, C_{34}, C_{68}, 4 D_2, D_4, 2 D_{17}, 2 D_{34}, D_{68}	3 C_2, C_6, 4 D_2, D_4, 2 D_{17}, 2 D_{34}, D_{68}	3 C_2, C_4, C_{17}, C_{34}, C_{68}, 4 D_2, D_4, 2 D_{17}, 2 D_{34}, D_{68}
R68.5	2 C_2, 2 C_4, C_8, 11 C_{23}, 11 C_{46}, 22 C_{92}, 2 D_2, D_4, 11 D_{23}, 11 D_{46}, 11 D_{92}	2 C_2, 2 C_4, C_{23}, C_{46}, C_{92}, 2 D_2, D_4, D_{23}, D_{46}, D_{92}	2 C_2, 2 C_4, C_{46}, 2 D_2, D_4, D_{23}, D_{46}, D_{92}	2 C_2, C_{23}, 2 D_2, D_{23}
R68.6	3 C_2, C_3, C_4, 2 C_5, C_6, 3 C_9, 4 C_{10}, 2 C_{12}, 2 C_{15}, 3 C_{18}, 2 C_{30}, 6 C_{36}, 6 C_{45}, 6 C_{90}, 4 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, 6 D_9, 2 D_{10}, 2 D_{12}, 2 D_{15}, 6 D_{18}, 2 D_{30}, 6 D_{36}, 6 D_{45}, 6 D_{90}	3 C_2, C_3, C_4, C_5, C_6, C_9, 2 C_{10}, C_{12}, C_{15}, C_{18}, C_{30}, C_{36}, C_{45}, C_{90}, 4 D_2, 2 D_3, D_4, D_5, 2 D_6, 2 D_9, D_{10}, D_{12}, D_{15}, 2 D_{18}, D_{30}, D_{36}, D_{45}, D_{90}	3 C_2, C_4, C_{10}, 4 D_2, 2 D_3, D_4, D_5, 2 D_6, 2 D_9, D_{10}, D_{12}, D_{15}, 2 D_{18}, D_{30}, D_{36}, D_{45}, D_{90}	3 C_2, C_3, C_5, C_6, C_9, C_{18}, 4 D_2, 2 D_3, D_5, 2 D_6, 2 D_9, 2 D_{18}
R68.7	3 C_2, 2 C_5, 6 C_{10}, 8 C_{17}, 8 C_{34}, 16 C_{85}, 16 C_{170}, 3 D_2, 16 D_{17}, 8 D_{34}	3 C_2, C_{17}, C_{34}, 3 D_2, 2 D_{17}, D_{34}	3 C_2, 3 D_2, 2 D_{17}, D_{34}	3 C_2, C_{17}, C_{34}, 3 D_2, 2 D_{17}, D_{34}
R68.8	2 C_2, C_3, 2 C_4, C_6, 3 C_7, C_8, 2 C_{12}, 3 C_{14}, 3 C_{21}, 6 C_{28}, 3 C_{42}, 6 C_{56}, 6 C_{84}, 2 D_2, D_3, D_4, D_6, 3 D_7, D_{12}, 3 D_{14}, 3 D_{21}, 6 D_{28}, 3 D_{42}, 6 D_{84}	2 C_2, C_3, 2 C_4, C_6, C_7, C_{12}, C_{14}, C_{21}, C_{28}, C_{42}, C_{84}, 2 D_2, D_3, D_4, D_6, D_7, D_{12}, D_{14}, D_{21}, D_{28}, D_{42}, D_{84}	2 C_2, 2 C_4, C_6, C_{14}, C_{28}, 2 D_2, D_3, D_4, D_6, D_7, D_{12}, D_{14}, D_{21}, D_{28}, D_{42}, D_{84}	2 C_2, C_3, C_7, 2 D_2, D_3, D_7
R68.9	C_2, C_3, C_6, 3 C_9, 8 C_{17}, 3 C_{18}, 8 C_{51}, 24 C_{153}, 8 D_{17}	C_2, C_3, C_6, C_{17}, D_{17}	C_2, C_6, D_{17}	C_2, C_{17}, D_{17}
R68.10	2 C_2, 2 C_4, 2 C_5, 2 C_8, 2 C_{10}, 4 C_{16}, 4 C_{20}, 4 C_{32}, 4 C_{40}, 8 C_{80}, 2 D_2, D_4, 2 D_5, 2 D_8, 2 D_{10}, 4 D_{16}, 2 D_{20}, 4 D_{40}, 8 D_{80}	2 C_2, 2 C_4, C_5, C_8, C_{10}, C_{16}, C_{20}, C_{40}, C_{80}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{16}, D_{20}, D_{40}, D_{80}	2 C_2, 2 C_4, C_8, C_{10}, C_{16}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{16}, D_{20}, D_{40}, D_{80}	2 C_2, C_5, 2 D_2, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R68.11	2 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 3 C_9, 2 C_{12}, 2 C_{16}, 6 C_{18}, 2 C_{24}, 6 C_{36}, 4 C_{48}, 6 C_{72}, 12 C_{144}, 2 D_2, D_4, 2 D_8	2 C_2, C_3, 2 C_4, 2 C_6, C_8, 2 D_2, D_4, D_8	2 C_2, 2 C_4, C_6, C_8, 2 D_2, D_4, D_8	2 C_2, 2 D_2
R68.12	3 C_2, C_4, 2 C_5, 3 C_7, 6 C_{10}, 9 C_{14}, 2 C_{20}, 3 C_{28}, 12 C_{35}, 36 C_{70}, 12 C_{140}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R68.13	C_2, 68 C_{137}, 68 C_{274}	C_2	C_2	C_2
R68.14	3 C_2, C_3, 3 C_6, 11 C_{23}, 33 C_{46}, 22 C_{69}, 66 C_{138}, 3 D_2	3 C_2, C_3, 3 C_6, C_{23}, 3 C_{46}, C_{69}, 3 C_{138}, 3 D_2	3 C_2, C_6, C_{46}, C_{138}, 3 D_2	3 C_2, C_3, C_{23}, C_{69}, 3 D_2
R68.15	C_2, C_4, 2 C_8, 4 C_{16}, 8 C_{17}, 8 C_{34}, 16 C_{68}, 32 C_{136}, 64 C_{272}	C_2, C_4, C_8, C_{17}, C_{34}, C_{68}, C_{136}	C_2, C_4, C_8, C_{34}, C_{68}, C_{136}	C_2, C_{17}
Genus 69				
R69.1	**Tet**, **Oct**, C_2, C_3, C_4, 2 C_8, 3 C_9, C_{17}, D_2, D_3, D_4, 2 D_8, 3 D_9, D_{17}	**Tet**, **Oct**, C_2, C_3, C_4, 2 C_8, C_9, C_{17}, D_2, D_3, D_4, 2 D_8, D_9, D_{17}	**Tet**, **Oct**, C_2, C_4, 2 C_8, D_2, D_3, D_4, 2 D_8, D_9, D_{17}	**Tet**, C_2, C_3, C_{17}, D_2, D_3, D_{17}
R69.2	**Tet**, **Oct**, C_2, C_3, C_4, 2 C_8, 3 C_9, C_{17}, D_2, D_3, D_4, 2 D_8, 3 D_9, D_{17}	**Tet**, **Oct**, C_2, C_3, C_4, 2 C_8, C_9, C_{17}, D_2, D_3, D_4, 2 D_8, D_9, D_{17}	**Tet**, **Oct**, C_2, C_4, 2 C_8, D_2, D_3, D_4, 2 D_8, D_9, D_{17}	**Tet**, C_2, C_3, C_{17}, D_2, D_3, D_{17}
R69.3	2 **Tet**, 2 **Oct**, C_2, C_3, C_4, 2 C_8, 3 C_9, 2 C_{17}, 2 D_2, D_3, 2 D_4, 2 D_8, 3 D_9, 2 D_{17}	2 **Tet**, 2 **Oct**, C_2, C_3, C_4, 2 C_8, C_9, 2 C_{17}, 2 D_2, D_3, 2 D_4, 2 D_8, D_9, 2 D_{17}	2 **Tet**, 2 **Oct**, C_2, C_4, 2 C_8, 2 D_2, D_3, 2 D_4, 2 D_8, D_9, 2 D_{17}	2 **Tet**, C_2, C_3, 2 C_{17}, 2 D_2, D_3, 2 D_{17}
R69.4	5 C_2, C_3, 4 C_4, 3 C_6, 4 C_8, 3 C_9, 4 C_{12}, 3 C_{18}, 8 C_{24}, 6 C_{36}, 12 C_{72}, 18 D_2, 2 D_3, 8 D_4, 6 D_6, 4 D_8, 6 D_9, 8 D_{12}, 6 D_{18}, 8 D_{24}, 12 D_{36}, 12 D_{72}	5 C_2, C_3, 4 C_4, 3 C_6, 3 C_8, C_9, 3 C_{12}, C_{18}, 3 C_{24}, C_{36}, C_{72}, 18 D_2, 2 D_3, 8 D_4, 6 D_6, 3 D_8, 2 D_9, 6 D_{12}, 2 D_{18}, 3 D_{24}, 2 D_{36}, D_{72}	3 C_2, 3 C_4, C_6, 16 D_2, D_3, 7 D_4, 4 D_6, 3 D_8, D_9, 3 D_{12}, D_{18}, 3 D_{24}, D_{36}, D_{72}	5 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}, 18 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}, D_{24}
R69.5	4 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 3 C_9, 4 C_{12}, 3 C_{18}, 4 C_{24}, 6 C_{36}, 6 C_{72}, 12 D_2, D_3, 4 D_4, 3 D_6, 3 D_9, 4 D_{12}, 3 D_{18}, 6 D_{36}	4 C_2, C_3, 5 C_4, 3 C_6, C_8, C_9, 3 C_{12}, C_{18}, C_{24}, C_{36}, 12 D_2, D_3, 4 D_4, 3 D_6, D_9, 3 D_{12}, D_{18}, D_{36}	3 C_2, 3 C_4, C_6, 11 D_2, D_3, 4 D_4, 3 D_6, D_9, 3 D_{12}, D_{18}, D_{36}	4 C_2, C_3, 2 C_4, C_6, C_{12}, 12 D_2, D_3, 3 D_4, D_6, D_{12}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R69.6	3 C_2, C_3, 5 C_4, 2 C_6, 7 C_8, 3 C_9, 2 C_{12}, 3 C_{18}, 3 C_{24}, 3 C_{36}, 6 C_{72}, 4 D_2, D_3, 3 D_4, D_6, 2 D_8, 3 D_9, D_{12}, 3 D_{18}	3 C_2, C_3, 5 C_4, 2 C_6, 6 C_8, C_9, C_{12}, C_{18}, 4 D_2, D_3, 3 D_4, D_6, 2 D_8, D_9, D_{12}, D_{18}	3 C_2, 4 C_4, C_6, 3 C_8, 4 D_2, D_3, 3 D_4, D_6, 2 D_8, D_9, D_{12}, D_{18}	3 C_2, C_3, C_6, 4 D_2, D_3, D_6
R69.7	3 C_2, C_3, 4 C_4, 2 C_6, 5 C_8, 3 C_9, 2 C_{12}, 3 C_{18}, 3 C_{24}, 3 C_{36}, 6 C_{72}, 4 D_2, D_3, 3 D_4, D_6, D_8, 3 D_9, D_{12}, 3 D_{18}	3 C_2, C_3, 4 C_4, 2 C_6, 4 C_8, C_9, C_{12}, C_{18}, 4 D_2, D_3, 3 D_4, D_6, D_8, D_9, D_{12}, D_{18}	3 C_2, 3 C_4, C_6, 2 C_8, 4 D_2, D_3, 3 D_4, D_6, D_8, D_9, D_{12}, D_{18}	3 C_2, C_3, C_6, 4 D_2, D_3, D_6
R69.8	6 C_2, C_3, 5 C_4, 5 C_6, 2 C_8, 3 C_9, 4 C_{12}, 15 C_{18}, 4 C_{24}, 12 C_{36}, 12 C_{72}, 19 D_2, D_3, 3 D_4, 3 D_6, 3 D_9, 2 D_{12}, 9 D_{18}, 6 D_{36}	6 C_2, C_3, 5 C_4, 5 C_6, C_8, C_9, 3 C_{12}, 5 C_{18}, C_{24}, 3 C_{36}, C_{72}, 19 D_2, D_3, 3 D_4, 3 D_6, D_9, 2 D_{12}, 3 D_{18}, 2 D_{36}	3 C_2, 4 C_4, C_6, C_8, C_{18}, 17 D_2, D_3, 3 D_4, 3 D_6, D_9, 2 D_{12}, 3 D_{18}, 2 D_{36}	6 C_2, C_3, C_4, C_6, C_9, C_{18}, 19 D_2, D_3, 2 D_4, D_6, D_9, D_{18}
R69.9	6 C_2, C_3, 3 C_4, 4 C_6, C_8, 3 C_9, C_{12}, 12 C_{18}, 2 C_{24}, 3 C_{36}, 6 C_{72}, 27 D_2, 2 D_3, 3 D_4, 7 D_6, 6 D_9, 21 D_{18}	6 C_2, C_3, 3 C_4, 4 C_6, C_9, 4 C_{18}, 27 D_2, 2 D_3, 3 D_4, 7 D_6, 2 D_9, 7 D_{18}	3 C_2, 2 C_4, C_6, C_{18}, 21 D_2, D_3, 3 D_4, 5 D_6, D_9, 5 D_{18}	6 C_2, C_3, C_4, C_6, C_9, C_{18}, 27 D_2, 2 D_3, 2 D_4, D_6, 2 D_9, D_{18}
R69.10	5 C_2, 2 C_4, 2 C_5, 3 C_7, 6 C_{10}, 9 C_{14}, 4 C_{20}, 6 C_{28}, 12 C_{35}, 36 C_{70}, 24 C_{140}, 13 D_2, 4 D_5, 6 D_7, 8 D_{10}, 12 D_{14}, 24 D_{35}, 48 D_{70}	5 C_2, 2 C_4, C_5, C_7, 3 C_{10}, 3 C_{14}, C_{20}, C_{28}, C_{35}, 3 C_{70}, C_{140}, 13 D_2, 2 D_5, 2 D_7, 4 D_{10}, 4 D_{14}, 2 D_{35}, 4 D_{70}	3 C_2, 2 C_4, C_{10}, C_{14}, C_{70}, 11 D_2, D_5, D_7, 3 D_{10}, 3 D_{14}, D_{35}, 3 D_{70}	5 C_2, C_5, C_7, C_{10}, C_{14}, C_{35}, C_{70}, 13 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, 2 D_{35}, D_{70}
R69.11	3 C_2, C_3, 2 C_4, C_6, C_{12}, 11 C_{23}, 11 C_{46}, 22 C_{69}, 11 C_{92}, 22 C_{138}, 22 C_{276}, 3 D_2, 2 D_3, D_6, 22 D_{23}, 11 D_{46}, 44 D_{69}, 22 D_{138}	3 C_2, C_3, 2 C_4, C_6, C_{23}, C_{46}, C_{69}, C_{138}, 3 D_2, 2 D_3, D_6, 2 D_{23}, D_{46}, 2 D_{69}, D_{138}	2 C_2, 2 C_4, C_6, C_{46}, C_{138}, 3 D_2, D_3, D_6, D_{23}, D_{46}, D_{69}, D_{138}	3 C_2, C_3, C_{23}, C_{69}, 3 D_2, D_3, D_{23}, D_{69}
R69.12	5 C_2, C_3, 4 C_4, 2 C_5, 3 C_6, 6 C_{10}, 2 C_{12}, 4 C_{20}, 13 D_2, 2 D_3, 4 D_4, 4 D_5, 4 D_6, 8 D_{10}	5 C_2, C_3, 4 C_4, C_5, 3 C_6, 3 C_{10}, 2 C_{12}, C_{20}, 13 D_2, 2 D_3, 4 D_4, 2 D_5, 4 D_6, 4 D_{10}	3 C_2, 3 C_4, 2 C_6, 2 C_{10}, C_{12}, C_{20}, 13 D_2, D_3, 4 D_4, D_5, 4 D_6, 4 D_{10}	5 C_2, C_3, C_5, 13 D_2, 2 D_3, 2 D_5
R69.13	**Tet**, 2 **Ico**, 7 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 6 C_{10}, C_{12}, 2 C_{20}, 39 D_2, 4 D_3, 6 D_4, 8 D_5, 7 D_6, 14 D_{10}, D_{12}, 2 D_{20}	**Tet**, **Ico**, 7 C_2, C_3, 2 C_4, C_5, 3 C_6, 3 C_{10}, C_{12}, 39 D_2, 4 D_3, 6 D_4, 4 D_5, 7 D_6, 7 D_{10}, D_{12}	3 C_2, C_4, 2 C_6, 2 C_{10}, 29 D_2, D_3, 6 D_4, D_5, 7 D_6, 7 D_{10}, D_{12}	**Tet**, **Ico**, 7 C_2, C_3, C_4, C_5, 39 D_2, 4 D_3, 2 D_4, 4 D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R69.14	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_5, 2 C_6, 6 C_{10}, 2 C_{15}, 8 C_{20}, 2 C_{30}, 26 D_2, D_3, 5 D_4, 6 D_5, D_6, 18 D_{10}, 2 D_{15}, 12 D_{20}, 2 D_{30}	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, C_5, 2 C_6, 3 C_{10}, C_{15}, 3 C_{20}, C_{30}, 26 D_2, D_3, 5 D_4, 3 D_5, D_6, 9 D_{10}, D_{15}, 5 D_{20}, D_{30}	**Oct**, 3 C_2, C_4, C_6, 21 D_2, D_3, 5 D_4, 2 D_5, D_6, 6 D_{10}, D_{15}, 5 D_{20}, D_{30}	**Tet**, **Oct**, 6 C_2, C_3, 2 C_4, C_5, 26 D_2, D_3, 4 D_4, 3 D_5
R69.15	**Tet**, 2 **Oct**, **Ico**, 5 C_2, C_3, 4 C_4, C_5, 3 C_6, C_{10}, C_{12}, C_{20}, 18 D_2, 4 D_3, 6 D_4, 2 D_5, 7 D_6, D_{10}, D_{12}	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, 3 C_6, C_{12}, 18 D_2, 4 D_3, 6 D_4, 7 D_6, D_{12}	2 **Oct**, 3 C_2, C_4, 2 C_6, 15 D_2, 2 D_3, 6 D_4, 7 D_6, D_{12}	**Tet**, 2 **Oct**, 5 C_2, C_3, 3 C_4, 18 D_2, 4 D_3, 5 D_4
R69.16	4 C_2, C_3, 2 C_4, C_5, 3 C_6, 2 C_8, C_{10}, C_{12}, C_{20}, 9 D_2, 3 D_3, 4 D_4, D_5, 5 D_6, 2 D_8, D_{10}, D_{12}	4 C_2, C_3, 2 C_4, 3 C_6, 2 C_8, C_{12}, 9 D_2, 3 D_3, 4 D_4, 5 D_6, 2 D_8, D_{12}	3 C_2, C_4, 2 C_6, 2 C_8, 9 D_2, 2 D_3, 4 D_4, 5 D_6, 2 D_8, D_{12}	4 C_2, C_3, C_4, 9 D_2, 3 D_3, D_4
R69.17	3 C_2, C_3, 3 C_4, C_6, 5 C_8, 2 C_{12}, 4 C_{16}, 4 C_{24}, 4 C_{48}, 7 D_2, D_3, 3 D_4, D_6, 4 D_8, 2 D_{12}, 4 D_{24}	3 C_2, C_3, 3 C_4, C_6, 3 C_8, C_{12}, C_{16}, C_{24}, 7 D_2, D_3, 3 D_4, D_6, 3 D_8, D_{12}, D_{24}	2 C_2, 3 C_4, C_6, 3 C_8, C_{12}, C_{16}, C_{24}, 7 D_2, D_3, 3 D_4, D_6, 3 D_8, D_{12}, D_{24}	3 C_2, C_3, 7 D_2, D_3
R69.18	4 C_2, C_3, 2 C_4, C_6, 5 C_8, 2 C_{12}, 6 C_{16}, 4 C_{24}, 8 C_{48}, 12 D_2, 2 D_3, 5 D_4, 2 D_6, 8 D_8, 4 D_{12}, 8 D_{16}, 8 D_{24}, 8 D_{48}	4 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, 2 C_{16}, C_{24}, C_{48}, 12 D_2, 2 D_3, 5 D_4, 2 D_6, 5 D_8, 2 D_{12}, 3 D_{16}, 2 D_{24}, D_{48}	2 C_2, 2 C_4, C_6, 3 C_8, C_{12}, 2 C_{16}, C_{24}, C_{48}, 9 D_2, D_3, 5 D_4, 2 D_6, 5 D_8, 2 D_{12}, 3 D_{16}, 2 D_{24}, D_{48}	4 C_2, C_3, 12 D_2, D_3
R69.19	5 C_2, C_3, 6 C_4, 3 C_6, 8 C_8, 8 C_{12}, 8 C_{16}, 12 C_{24}, 16 C_{48}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_8, 6 D_{12}, 12 D_{24}	5 C_2, C_3, 6 C_4, 3 C_6, 6 C_8, 7 C_{12}, 3 C_{16}, 9 C_{24}, 3 C_{48}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_8, 5 D_{12}, 12 D_{24}	3 C_2, 3 C_4, C_6, 4 C_8, C_{12}, 13 D_2, D_3, 3 D_4, 3 D_6, 6 D_8, 3 D_{12}, 8 D_{24}	5 C_2, C_3, 2 C_4, C_6, C_{12}, 13 D_2, 2 D_3, D_4, 2 D_6, D_{12}
R69.20	5 C_2, C_3, 5 C_4, 3 C_6, 8 C_8, 8 C_{12}, 4 C_{16}, 12 C_{24}, 8 C_{48}, 15 D_2, 2 D_3, 7 D_4, 6 D_6, 8 D_8, 12 D_{12}, 16 D_{24}	5 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, 7 C_{12}, C_{16}, 7 C_{24}, C_{48}, 15 D_2, 2 D_3, 7 D_4, 6 D_6, 7 D_8, 10 D_{12}, 11 D_{24}	3 C_2, 2 C_4, C_6, 2 C_8, C_{12}, 13 D_2, D_3, 6 D_4, 4 D_6, 7 D_8, 7 D_{12}, 7 D_{24}	5 C_2, C_3, 3 C_4, C_6, C_8, C_{12}, C_{24}, 15 D_2, 2 D_3, 4 D_4, 2 D_6, D_8, 2 D_{12}, D_{24}
R69.21	4 C_2, C_3, 4 C_4, 3 C_6, 4 C_8, 4 C_{12}, 2 C_{16}, 4 C_{24}, 4 C_{48}, 12 D_2, D_3, 3 D_4, 3 D_6, 2 D_8, 4 D_{12}, 4 D_{24}	4 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 3 C_{12}, C_{24}, 12 D_2, D_3, 3 D_4, 3 D_6, 2 D_8, 3 D_{12}, 2 D_{24}	2 C_2, 3 C_4, C_6, 2 C_8, 3 C_{12}, C_{24}, 10 D_2, D_3, 3 D_4, 3 D_6, 2 D_8, 3 D_{12}, 2 D_{24}	4 C_2, C_3, C_4, 12 D_2, D_3, D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R69.22	5 C_2, C_3, 4 C_4, 4 C_6, 6 C_8, 5 C_{12}, 4 C_{16}, 8 C_{24}, 8 C_{48}, 15 D_2, D_3, 3 D_4, 3 D_6, 2 D_8, 4 D_{12}, 4 D_{24}	5 C_2, C_3, 4 C_4, 4 C_6, 4 C_8, 4 C_{12}, C_{16}, 3 C_{24}, C_{48}, 15 D_2, D_3, 3 D_4, 3 D_6, 2 D_8, 3 D_{12}, 2 D_{24}	2 C_2, 3 C_4, C_6, 4 C_8, 4 C_{12}, C_{16}, 3 C_{24}, C_{48}, 11 D_2, D_3, 3 D_4, 3 D_6, 2 D_8, 3 D_{12}, 2 D_{24}	5 C_2, C_3, C_4, 15 D_2, D_3, D_4
R69.23	5 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, 6 C_{12}, 4 C_{16}, 8 C_{24}, 8 C_{48}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_8, 6 D_{12}, 6 D_{24}	5 C_2, C_3, 5 C_4, 3 C_6, 4 C_8, 5 C_{12}, C_{16}, 5 C_{24}, C_{48}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_8, 5 D_{12}, 6 D_{24}	3 C_2, 2 C_4, C_6, 3 C_8, C_{12}, 13 D_2, D_3, 3 D_4, 3 D_6, 3 D_8, 3 D_{12}, 4 D_{24}	5 C_2, C_3, 3 C_4, C_6, C_{12}, 13 D_2, 2 D_3, D_4, 2 D_6, D_{12}
R69.24	4 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, 6 C_{12}, 4 C_{16}, 8 C_{24}, 8 C_{48}, 9 D_2, D_3, 2 D_4, 3 D_6, 2 D_8, 4 D_{12}, 4 D_{24}	4 C_2, C_3, 5 C_4, 3 C_6, 4 C_8, 5 C_{12}, 5 C_{24}, 9 D_2, D_3, 2 D_4, 3 D_6, 2 D_8, 3 D_{12}, 4 D_{24}	3 C_2, 3 C_4, C_6, 3 C_8, C_{12}, 9 D_2, D_3, 2 D_4, 3 D_6, 2 D_8, 3 D_{12}, 4 D_{24}	4 C_2, C_3, 2 C_4, C_6, C_{12}, 9 D_2, D_3, D_4, D_6, D_{12}
R69.25	3 C_2, C_3, 5 C_4, 2 C_6, 9 C_8, 4 C_{12}, 2 C_{16}, 6 C_{24}, 4 C_{48}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, 2 D_{24}	3 C_2, C_3, 5 C_4, 2 C_6, 7 C_8, 3 C_{12}, 3 C_{24}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, 2 D_{24}	3 C_2, 3 C_4, C_6, 4 C_8, C_{12}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, 2 D_{24}	3 C_2, C_3, C_6, 4 D_2, D_3, D_6
R69.26	3 C_2, C_3, 5 C_4, 2 C_6, 15 C_8, 4 C_{12}, 2 C_{16}, 6 C_{24}, 4 C_{48}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{24}	3 C_2, C_3, 5 C_4, 2 C_6, 13 C_8, 3 C_{12}, 3 C_{24}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{24}	3 C_2, 3 C_4, C_6, 7 C_8, C_{12}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{24}	3 C_2, C_3, C_6, 4 D_2, D_3, D_6
R69.27	3 C_2, 2 C_4, 4 C_8, 11 C_{23}, 11 C_{46}, 11 C_{92}, 22 C_{184}, 3 D_2, 22 D_{23}, 11 D_{46}	3 C_2, 2 C_4, 2 C_8, C_{23}, C_{46}, 3 D_2, 2 D_{23}, D_{46}	2 C_2, C_4, C_{46}, 3 D_2, D_{23}, D_{46}	3 C_2, C_{23}, 3 D_2, D_{23}
R69.28	2 C_2, 2 C_4, 2 C_8, 11 C_{23}, 11 C_{46}, 11 C_{92}, 22 C_{184}, 2 D_2, 11 D_{23}, 11 D_{46}	2 C_2, 2 C_4, C_{23}, C_{46}, 2 D_2, D_{23}, D_{46}	2 C_2, C_4, C_{46}, 2 D_2, D_{23}, D_{46}	2 C_2, C_{23}, 2 D_2, D_{23}
R69.29	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{16}, 2 C_{24}, 12 D_2, D_3, 4 D_4, D_6, 4 D_8, D_{12}, 2 D_{24}	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 3 C_8, C_{12}, 2 C_{16}, 2 C_{24}, 12 D_2, D_3, 4 D_4, D_6, 3 D_8, D_{12}, 2 D_{24}	**Oct**, 2 C_2, 4 C_4, C_6, 3 C_8, C_{12}, 2 C_{16}, 2 C_{24}, 9 D_2, D_3, 4 D_4, D_6, 3 D_8, D_{12}, 2 D_{24}	**Tet**, **Oct**, 4 C_2, C_3, C_4, 12 D_2, D_3, 2 D_4
R69.30	4 C_2, C_3, 3 C_4, C_6, 4 C_8, 2 C_{12}, 6 C_{16}, 2 C_{24}, 10 D_2, D_3, 6 D_4, D_6, 7 D_8, D_{12}, 6 D_{16}, 2 D_{24}	4 C_2, C_3, 3 C_4, C_6, 3 C_8, C_{12}, 2 C_{16}, 2 C_{24}, 10 D_2, D_3, 6 D_4, D_6, 5 D_8, D_{12}, 2 D_{16}, 2 D_{24}	2 C_2, 3 C_4, C_6, 3 C_8, C_{12}, 2 C_{16}, 2 C_{24}, 8 D_2, D_3, 6 D_4, D_6, 5 D_8, D_{12}, 2 D_{16}, 2 D_{24}	4 C_2, C_3, 10 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R69.31	**Tet**, **Oct**, 3 C_2, C_3, 3 C_4, C_6, 2 C_8, 2 C_{12}, 2 C_{16}, 9 D_2, D_3, 3 D_4, D_6, 2 D_8, 2 D_{12}	**Tet**, **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_8, C_{12}, 9 D_2, D_3, 3 D_4, D_6, 2 D_8, D_{12}	**Oct**, 2 C_2, 2 C_4, C_6, C_8, C_{12}, 8 D_2, D_3, 3 D_4, D_6, 2 D_8, D_{12}	**Tet**, 3 C_2, C_3, C_4, 9 D_2, D_3, D_4
R69.32	**Tet**, **Oct**, 3 C_2, C_3, 3 C_4, C_6, 2 C_8, 2 C_{12}, 2 C_{16}, 9 D_2, D_3, 3 D_4, D_6, 2 D_8, 2 D_{12}	**Tet**, **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_8, C_{12}, 9 D_2, D_3, 3 D_4, D_6, 2 D_8, D_{12}	**Oct**, 2 C_2, 2 C_4, C_6, C_8, C_{12}, 8 D_2, D_3, 3 D_4, D_6, 2 D_8, D_{12}	**Tet**, 3 C_2, C_3, C_4, 9 D_2, D_3, D_4
R69.33	6 C_2, C_3, 6 C_4, 5 C_6, 4 C_8, 7 C_{12}, 4 C_{16}, 6 C_{24}, 19 D_2, D_3, 4 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	6 C_2, C_3, 6 C_4, 5 C_6, 3 C_8, 6 C_{12}, C_{16}, 5 C_{24}, 19 D_2, D_3, 4 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	3 C_2, 4 C_4, C_6, 2 C_{12}, 17 D_2, D_3, 4 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	6 C_2, C_3, 2 C_4, 19 D_2, D_3, 3 D_4
R69.34	4 C_2, C_3, 6 C_4, 3 C_6, 2 C_8, 7 C_{12}, 2 C_{16}, 3 C_{24}, 12 D_2, D_3, 4 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	4 C_2, C_3, 6 C_4, 3 C_6, C_8, 6 C_{12}, 2 C_{24}, 12 D_2, D_3, 4 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	3 C_2, 4 C_4, C_6, 2 C_{12}, 12 D_2, D_3, 4 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	4 C_2, C_3, 2 C_4, 12 D_2, D_3, 3 D_4
R69.35	5 C_2, C_3, 2 C_4, 5 C_6, 3 C_7, 4 C_{12}, 9 C_{14}, 3 C_{21}, 6 C_{28}, 9 C_{42}, 12 C_{84}, 13 D_2, 6 D_7, 12 D_{14}	5 C_2, C_3, 2 C_4, 5 C_6, C_7, 2 C_{12}, 3 C_{14}, C_{28}, 13 D_2, 2 D_7, 4 D_{14}	3 C_2, 2 C_4, C_6, C_{14}, 11 D_2, D_7, 3 D_{14}	5 C_2, C_7, C_{14}, 13 D_2, 2 D_7, D_{14}
R69.36	C_2, 3 C_7, 3 C_{14}, 11 C_{23}, 33 C_{161}, 11 D_{23}	C_2, C_7, C_{14}, C_{23}, D_{23}	C_2, C_{14}, D_{23}	C_2, C_{23}, D_{23}
R69.37	5 C_2, 3 C_4, 2 C_5, 6 C_8, 6 C_{10}, 8 C_{16}, 4 C_{20}, 8 C_{40}, 16 C_{80}, 13 D_2, 4 D_5, 8 D_{10}	5 C_2, 3 C_4, C_5, 4 C_8, 3 C_{10}, 2 C_{16}, C_{20}, 13 D_2, 2 D_5, 4 D_{10}	2 C_2, 2 C_4, C_{10}, C_{20}, 11 D_2, D_5, 3 D_{10}	5 C_2, C_5, 13 D_2, 2 D_5
R69.38	3 C_2, 3 C_4, 2 C_5, 4 C_8, 4 C_{10}, 6 C_{16}, 4 C_{20}, 6 C_{40}, 8 C_{80}, 4 D_2, 2 D_4, 2 D_5, 2 D_{10}, 2 D_{20}	3 C_2, 3 C_4, C_5, 2 C_8, 2 C_{10}, C_{20}, 4 D_2, 2 D_4, D_5, D_{10}, D_{20}	2 C_2, 2 C_4, C_{10}, C_{20}, 4 D_2, 2 D_4, D_5, D_{10}, D_{20}	3 C_2, C_5, 4 D_2, D_5
R69.39	3 C_2, 3 C_4, 2 C_5, 4 C_8, 4 C_{10}, 6 C_{16}, 6 C_{20}, 8 C_{40}, 16 C_{80}, 4 D_2, 2 D_4, 2 D_5, 2 D_{10}, 4 D_{20}	3 C_2, 3 C_4, C_5, 2 C_8, 2 C_{10}, 2 C_{20}, 4 D_2, 2 D_4, D_5, D_{10}, 2 D_{20}	2 C_2, 2 C_4, C_{10}, 2 C_{20}, 4 D_2, 2 D_4, D_5, D_{10}, 2 D_{20}	3 C_2, C_5, 4 D_2, D_5
R69.40	3 C_2, 3 C_4, 2 C_5, 3 C_8, 4 C_{10}, 4 C_{16}, 4 C_{20}, 6 C_{40}, 8 C_{80}, 6 D_2, 2 D_5, 4 D_{10}	3 C_2, 3 C_4, C_5, C_8, 2 C_{10}, C_{20}, 6 D_2, D_5, 2 D_{10}	2 C_2, 2 C_4, C_{10}, C_{20}, 6 D_2, D_5, 2 D_{10}	3 C_2, C_5, 6 D_2, D_5
R69.41	6 C_2, 5 C_4, 2 C_5, 2 C_8, 12 C_{10}, 16 C_{20}, 8 C_{40}, 19 D_2, 3 D_4	6 C_2, 5 C_4, C_8, 19 D_2, 3 D_4	3 C_2, 4 C_4, C_8, 17 D_2, 3 D_4	6 C_2, C_4, 19 D_2, 2 D_4
R69.42	6 C_2, 3 C_4, 2 C_5, C_8, 12 C_{10}, 8 C_{20}, 4 C_{40}, 27 D_2, 3 D_4	6 C_2, 3 C_4, 27 D_2, 3 D_4	3 C_2, 2 C_4, 21 D_2, 3 D_4	6 C_2, C_4, 27 D_2, 2 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R69.43	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_8, 3 C_9, 3 C_{12}, 3 C_{18}, 6 C_{24}, 6 C_{36}, 12 C_{72}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, C_9, C_{12}, C_{18}, 2 D_2, D_4	2 C_2, C_4, C_6, 2 D_2, D_4	2 C_2, C_3, C_6, 2 D_2
R69.44	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_8, 3 C_9, 3 C_{12}, 3 C_{18}, 6 C_{24}, 6 C_{36}, 12 C_{72}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, 2 C_6, C_8, C_9, C_{12}, C_{18}, 2 D_2, D_4	2 C_2, C_4, C_6, 2 D_2, D_4	2 C_2, C_3, C_6, 2 D_2
R69.45	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_8, 3 C_9, 4 C_{12}, 3 C_{18}, 8 C_{24}, 6 C_{36}, 12 C_{72}, 6 D_2	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_8, C_9, 3 C_{12}, C_{18}, 2 C_{24}, C_{36}, 6 D_2	2 C_2, C_4, C_6, 5 D_2	3 C_2, C_3, C_4, C_6, C_{12}, 6 D_2
R69.46	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_8, 3 C_9, 4 C_{12}, 3 C_{18}, 8 C_{24}, 6 C_{36}, 12 C_{72}, 6 D_2	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_8, C_9, 3 C_{12}, C_{18}, 3 C_{24}, C_{36}, C_{72}, 6 D_2	2 C_2, C_4, C_6, 6 D_2	3 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}, 6 D_2
R69.47	5 C_2, C_3, 3 C_4, 5 C_6, 4 C_8, 3 C_9, 6 C_{12}, 15 C_{18}, 8 C_{24}, 18 C_{36}, 24 C_{72}, 13 D_2	5 C_2, C_3, 3 C_4, 5 C_6, 2 C_8, C_9, 4 C_{12}, 5 C_{18}, 2 C_{24}, 4 C_{36}, 2 C_{72}, 13 D_2	2 C_2, 3 C_4, C_6, 2 C_8, C_{18}, 11 D_2	5 C_2, C_3, C_6, C_9, C_{18}, 13 D_2
R69.48	4 C_2, C_3, 2 C_4, 4 C_6, 2 C_8, 3 C_9, 2 C_{12}, 12 C_{18}, 4 C_{24}, 6 C_{36}, 12 C_{72}, 10 D_2, 2 D_4	4 C_2, C_3, 2 C_4, 4 C_6, C_9, 4 C_{18}, 10 D_2, 2 D_4	2 C_2, 2 C_4, C_6, C_{18}, 8 D_2, 2 D_4	4 C_2, C_3, C_6, C_9, C_{18}, 10 D_2
R69.49	C_2, C_3, 23 C_{47}, 23 C_{94}, 23 C_{141}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R69.50	C_2, 69 C_{139}, 69 C_{278}	C_2	C_2	C_2
R69.51	3 C_2, 2 C_4, 2 C_5, 3 C_7, 6 C_{10}, 9 C_{14}, 8 C_{20}, 12 C_{28}, 12 C_{35}, 36 C_{70}, 48 C_{140}, 3 D_2	3 C_2, 2 C_4, C_5, C_7, 3 C_{10}, 3 C_{14}, 2 C_{20}, 2 C_{28}, C_{35}, 3 C_{70}, 2 C_{140}, 3 D_2	2 C_2, 2 C_4, C_{10}, C_{14}, C_{70}, 3 D_2	3 C_2, C_5, C_7, C_{10}, C_{14}, C_{35}, C_{70}, 3 D_2
R69.52	C_2, C_3, C_4, C_6, 2 C_{12}, 11 C_{23}, 11 C_{46}, 22 C_{69}, 22 C_{92}, 22 C_{138}, 44 C_{276}	C_2, C_3, C_4, C_6, C_{23}, C_{46}, C_{69}, C_{138}	C_2, C_4, C_6, C_{46}, C_{138}	C_2, C_3, C_{23}, C_{69}
Genus 70				
R70.1	3 C_2, C_4, 35 C_{71}, 70 C_{142}, 4 D_2, D_4, 35 D_{71}, 35 D_{142}	3 C_2, C_4, C_{71}, 2 C_{142}, 4 D_2, D_4, D_{71}, D_{142}	3 C_2, C_4, C_{142}, 4 D_2, D_4, D_{71}, D_{142}	3 C_2, C_{71}, 4 D_2, D_{71}
R70.2	2 C_2, 2 C_4, 2 C_5, 3 C_7, C_8, 2 C_{10}, 3 C_{14}, 4 C_{20}, 6 C_{28}, 12 C_{35}, 4 C_{40}, 6 C_{56}, 12 C_{70}, 24 C_{140}, 24 C_{280}, 2 D_2, D_4, 2 D_5, 3 D_7, 2 D_{10}, 3 D_{14}, 4 D_{20}, 6 D_{28}, 12 D_{35}, 12 D_{70}, 24 D_{140}	2 C_2, 2 C_4, C_5, C_7, C_{10}, C_{14}, C_{20}, C_{28}, C_{35}, C_{70}, C_{140}, 2 D_2, D_4, D_5, D_7, D_{10}, D_{14}, D_{20}, D_{28}, D_{35}, D_{70}, D_{140}	2 C_2, 2 C_4, C_{10}, C_{14}, C_{20}, C_{28}, C_{70}, C_{140}, 2 D_2, D_4, D_5, D_7, D_{10}, D_{14}, D_{20}, D_{28}, D_{35}, D_{70}, D_{140}	2 C_2, C_5, C_7, C_{35}, 2 D_2, D_5, D_7, D_{35}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R70.3	**Tet**, 2 **Ico**, C_2, C_3, 2 C_5, C_6, C_{11}, D_2, D_3, 2 D_5, D_6	**Tet**, **Ico**, C_2, C_3, C_5, C_6, D_2, D_3, D_5, D_6	**Tet**, **Ico**, C_2, C_6, D_2, D_3, D_5, D_6	C_2, C_3, C_5, D_2, D_3, D_5
R70.4	**Tet**, 2 **Ico**, C_2, C_3, 2 C_5, C_6, C_{11}, D_2, D_3, 2 D_5, D_6	**Tet**, **Ico**, C_2, C_3, C_5, C_6, D_2, D_3, D_5, D_6	**Tet**, **Ico**, C_2, C_6, D_2, D_3, D_5, D_6	C_2, C_3, C_5, D_2, D_3, D_5
R70.5	3 C_2, 3 C_3, C_4, 5 C_6, 2 C_8, 6 C_9, 5 C_{12}, 6 C_{18}, 10 C_{24}, 12 C_{36}, 24 C_{72}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 6 D_9, 4 D_{12}, 6 D_{18}, 4 D_{24}, 12 D_{36}, 12 D_{72}	3 C_2, 3 C_3, C_4, 5 C_6, C_8, 4 C_9, 4 C_{12}, 4 C_{18}, 4 C_{24}, 4 C_{36}, 4 C_{72}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 6 D_9, 2 D_{12}, 6 D_{18}, D_{24}, 6 D_{36}, 3 D_{72}	3 C_2, 3 C_6, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 6 D_9, 2 D_{12}, 6 D_{18}, D_{24}, 6 D_{36}, 3 D_{72}	3 C_2, 2 C_3, C_4, C_6, C_8, C_{12}, C_{24}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}, D_{24}
R70.6	3 C_2, 3 C_3, C_4, 4 C_6, 2 C_8, 6 C_9, 5 C_{12}, 6 C_{18}, 4 C_{24}, 12 C_{36}, 12 C_{72}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_8, 9 D_9, 7 D_{12}, 9 D_{18}, 4 D_{24}, 18 D_{36}, 12 D_{72}	3 C_2, 3 C_3, C_4, 4 C_6, C_8, 4 C_9, 4 C_{12}, 4 C_{18}, C_{24}, 4 C_{36}, C_{72}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 5 D_9, 5 D_{12}, 5 D_{18}, D_{24}, 5 D_{36}, D_{72}	3 C_2, 2 C_6, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 5 D_9, 5 D_{12}, 5 D_{18}, D_{24}, 5 D_{36}, D_{72}	3 C_2, 3 C_3, C_4, C_6, C_9, C_{12}, C_{18}, C_{36}, 4 D_2, 4 D_3, 2 D_4, 2 D_6, 2 D_9, 2 D_{12}, 2 D_{18}, 2 D_{36}
R70.7	3 C_2, C_3, 2 C_5, 3 C_6, 3 C_7, 2 C_{10}, 3 C_{14}, 2 C_{15}, 3 C_{21}, 2 C_{30}, 12 C_{35}, 3 C_{42}, 12 C_{70}, 12 C_{105}, 12 C_{210}, 3 D_2, 4 D_5, 6 D_7, 2 D_{10}, 3 D_{14}, 24 D_{35}, 12 D_{70}	3 C_2, C_3, C_5, 3 C_6, C_7, C_{10}, C_{14}, C_{35}, C_{70}, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, 2 D_{35}, D_{70}	3 C_2, C_6, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, 2 D_{35}, D_{70}	3 C_2, C_5, C_7, C_{10}, C_{14}, C_{35}, C_{70}, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, 2 D_{35}, D_{70}
R70.8	3 C_2, 3 C_3, C_4, 2 C_5, 5 C_6, 4 C_{10}, 5 C_{12}, 6 C_{15}, 10 C_{30}, 4 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, 2 D_{10}, 2 D_{12}, 2 D_{15}, 2 D_{30}	3 C_2, 3 C_3, C_4, C_5, 5 C_6, 2 C_{10}, 4 C_{12}, 2 C_{15}, 2 C_{30}, 4 D_2, 2 D_3, D_4, D_5, 2 D_6, D_{10}, 2 D_{12}, D_{15}, D_{30}	3 C_2, C_4, 4 C_6, C_{10}, 4 C_{12}, 2 C_{30}, 4 D_2, 2 D_3, D_4, D_5, 2 D_6, D_{10}, 2 D_{12}, D_{15}, D_{30}	3 C_2, C_3, C_5, 4 D_2, 2 D_3, D_5
R70.9	3 C_2, 3 C_3, C_4, 2 C_5, 8 C_6, 4 C_{10}, C_{12}, 10 C_{15}, 26 C_{30}, 4 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 4 D_{15}, 4 D_{30}	3 C_2, 3 C_3, C_4, C_5, 8 C_6, 2 C_{10}, 4 C_{15}, 10 C_{30}, 4 D_2, D_3, D_4, D_5, D_6, D_{10}, 2 D_{15}, 2 D_{30}	3 C_2, C_4, 6 C_6, C_{10}, 3 C_{30}, 4 D_2, D_3, D_4, D_5, D_6, D_{10}, 2 D_{15}, 2 D_{30}	3 C_2, C_3, C_5, 4 D_2, D_3, D_5
R70.10	3 C_2, 3 C_3, C_4, 2 C_5, 4 C_6, 4 C_{10}, 2 C_{12}, 10 C_{15}, 14 C_{30}, 4 D_2, 4 D_3, D_4, 2 D_5, 4 D_6, 2 D_{10}, 2 D_{12}, 10 D_{15}, 10 D_{30}	3 C_2, 3 C_3, C_4, C_5, 4 C_6, 2 C_{10}, C_{12}, 4 C_{15}, 5 C_{30}, 4 D_2, 4 D_3, D_4, D_5, 4 D_6, D_{10}, D_{12}, 4 D_{15}, 4 D_{30}	3 C_2, C_4, 2 C_6, C_{10}, 3 C_{30}, 4 D_2, 4 D_3, D_4, D_5, 4 D_6, D_{10}, D_{12}, 4 D_{15}, 4 D_{30}	3 C_2, 3 C_3, C_5, C_6, C_{15}, 4 D_2, 4 D_3, D_5, 2 D_6, D_{15}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R70.11	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_7, C_8, 2 C_{12}, 3 C_{14}, 3 C_{21}, 2 C_{24}, 6 C_{28}, 3 C_{42}, 6 C_{56}, 6 C_{84}, 12 C_{168}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 6 D_{28}	2 C_2, C_3, 2 C_4, 2 C_6, C_7, C_{14}, C_{28}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, 2 C_4, C_6, C_{14}, C_{28}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, C_7, 2 D_2, D_7
R70.12	3 C_2, C_4, 2 C_8, 5 C_{11}, 4 C_{16}, 10 C_{22}, 5 C_{44}, 10 C_{88}, 4 D_2, 2 D_4, 4 D_8, 5 D_{11}, 4 D_{16}, 5 D_{22}, 5 D_{44}, 10 D_{88}	3 C_2, C_4, C_8, C_{11}, C_{16}, 2 C_{22}, C_{44}, C_{88}, 4 D_2, 2 D_4, 2 D_8, D_{11}, D_{16}, D_{22}, D_{44}, D_{88}	3 C_2, C_{22}, 4 D_2, 2 D_4, 2 D_8, D_{11}, D_{16}, D_{22}, D_{44}, D_{88}	3 C_2, C_4, C_8, C_{11}, 4 D_2, 2 D_4, 2 D_8, D_{11}
R70.13	3 C_2, 3 C_7, 5 C_{11}, 3 C_{14}, 15 C_{22}, 15 C_{77}, 15 C_{154}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}	3 C_2, 3 D_2, 2 D_7, D_{14}	3 C_2, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}
R70.14	C_2, 2 C_5, 14 C_{29}, 14 C_{58}, 28 C_{145}, 2 D_5	C_2, C_5, D_5	C_2, D_5	C_2, C_5, D_5
R70.15	C_2, C_3, C_6, 23 C_{47}, 23 C_{94}, 46 C_{141}, 46 C_{282}	C_2, C_3, C_6	C_2, C_6	C_2
R70.16	3 C_2, 35 C_{71}, 105 C_{142}, 3 D_2	3 C_2, C_{71}, 3 C_{142}, 3 D_2	3 C_2, C_{142}, 3 D_2	3 C_2, C_{71}, 3 D_2
R70.17	C_2, C_4, 2 C_5, 3 C_7, 2 C_8, 2 C_{10}, 3 C_{14}, 4 C_{20}, 6 C_{28}, 12 C_{35}, 8 C_{40}, 12 C_{56}, 12 C_{70}, 24 C_{140}, 48 C_{280}	C_2, C_4, C_5, C_7, C_{10}, C_{14}, C_{20}, C_{28}, C_{35}, C_{70}, C_{140}	C_2, C_4, C_{10}, C_{14}, C_{20}, C_{28}, C_{70}, C_{140}	C_2, C_5, C_7, C_{35}
Genus 71				
R71.1	5 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 3 C_9, 4 C_{12}, 4 C_{16}, 9 C_{18}, 8 C_{24}, 12 C_{36}, 8 C_{48}, 24 C_{72}, 24 C_{144}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_8, 6 D_9, 6 D_{12}, 12 D_{18}, 12 D_{24}, 18 D_{36}, 36 D_{72}	5 C_2, C_3, 3 C_4, 3 C_6, 3 C_8, C_9, 3 C_{12}, C_{16}, 3 C_{18}, 3 C_{24}, 3 C_{36}, C_{48}, 3 C_{72}, C_{144}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 5 D_8, 2 D_9, 4 D_{12}, 4 D_{18}, 5 D_{24}, 4 D_{36}, 5 D_{72}	3 C_2, 2 C_4, C_6, C_{18}, 13 D_2, D_3, 2 D_4, 3 D_6, 3 D_8, D_9, 3 D_{12}, 3 D_{18}, 3 D_{24}, 3 D_{36}, 3 D_{72}	5 C_2, C_3, C_4, C_6, C_8, C_9, C_{12}, C_{18}, C_{24}, C_{36}, C_{72}, 13 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_9, 2 D_{12}, 2 D_{18}, D_{24}, 2 D_{36}, D_{72}
R71.2	3 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, 3 C_9, 3 C_{12}, 2 C_{16}, 6 C_{18}, 4 C_{24}, 9 C_{36}, 4 C_{48}, 12 C_{72}, 12 C_{144}, 4 D_2, D_3, 2 D_4, D_6, D_8, 3 D_9, 2 D_{12}, 3 D_{18}, 2 D_{24}, 6 D_{36}, 6 D_{72}	3 C_2, C_3, 4 C_4, 2 C_6, C_8, C_9, 2 C_{12}, 2 C_{18}, C_{24}, 2 C_{36}, C_{72}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_9, D_{12}, D_{18}, D_{24}, D_{36}, D_{72}	3 C_2, 3 C_4, C_6, C_{18}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_9, D_{12}, D_{18}, D_{24}, D_{36}, D_{72}	3 C_2, C_3, C_4, C_6, C_9, C_{12}, C_{18}, C_{36}, 4 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{36}
R71.3	3 C_2, 2 C_4, 35 C_{71}, 35 C_{142}, 35 C_{284}, 3 D_2, 70 D_{71}, 35 D_{142}	3 C_2, 2 C_4, C_{71}, C_{142}, 3 D_2, 2 D_{71}, D_{142}	2 C_2, 2 C_4, C_{142}, 3 D_2, D_{71}, D_{142}	3 C_2, C_{71}, 3 D_2, D_{71}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R71.4	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 3 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 6 D_8, D_{14}	**Tet**, 2 **Oct**, 3 C_2, C_4, 16 D_2, 3 D_3, 5 D_4, 6 D_6, D_7, 6 D_8, D_{14}	**Tet**, **Oct**, 5 C_2, C_3, C_4, C_6, C_7, C_8, C_{14}, 16 D_2, 4 D_3, 4 D_4, 2 D_6, 2 D_7, 2 D_8, D_{14}
R71.5	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 3 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 6 D_8, D_{14}	**Tet**, 2 **Oct**, 3 C_2, C_4, 2 C_6, C_{14}, 16 D_2, 2 D_3, 4 D_4, 6 D_6, D_7, 4 D_8, D_{14}	**Tet**, **Oct**, 5 C_2, C_3, C_4, C_7, C_8, 16 D_2, 4 D_3, 4 D_4, 2 D_7, 2 D_8
R71.6	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 3 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 6 D_8, D_{14}	**Tet**, 2 **Oct**, 3 C_2, C_4, 2 C_6, C_{14}, 16 D_2, 2 D_3, 4 D_4, 6 D_6, D_7, 4 D_8, D_{14}	**Tet**, **Oct**, 5 C_2, C_3, C_4, C_7, C_8, 16 D_2, 4 D_3, 4 D_4, 2 D_7, 2 D_8
R71.7	2 C_2, C_3, C_4, 2 C_6, C_7, 2 C_8, C_{14}, 2 C_{16}, 2 D_2, D_3, D_4, D_6, D_7, 2 D_8, D_{14}	2 C_2, C_3, C_4, 2 C_6, C_7, C_8, C_{14}, C_{16}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{14}	2 C_2, C_4, 2 C_6, C_8, C_{14}, C_{16}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{14}	2 C_2, C_3, C_7, 2 D_2, D_3, D_7
R71.8	2 C_2, C_3, C_4, 2 C_6, C_7, 2 C_8, C_{14}, 2 C_{16}, 2 D_2, D_3, D_4, D_6, D_7, 2 D_8, D_{14}	2 C_2, C_3, C_4, 2 C_6, C_7, C_8, C_{14}, C_{16}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{14}	2 C_2, C_4, 2 C_6, C_8, C_{14}, C_{16}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{14}	2 C_2, C_3, C_7, 2 D_2, D_3, D_7
R71.9	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 3 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 6 D_8, D_{14}	**Tet**, 2 **Oct**, 3 C_2, C_4, 16 D_2, 3 D_3, 5 D_4, 6 D_6, D_7, 6 D_8, D_{14}	**Tet**, **Oct**, 5 C_2, C_3, C_4, C_6, C_7, C_8, C_{14}, 16 D_2, 4 D_3, 4 D_4, 2 D_6, 2 D_7, 2 D_8, D_{14}
R71.10	C_2, C_3, C_6, 35 C_{71}, 35 C_{213}, 35 D_{71}	C_2, C_3, C_6, C_{71}, D_{71}	C_2, C_6, D_{71}	C_2, C_{71}, D_{71}
R71.11	2 C_2, C_3, 4 C_4, C_5, C_6, 2 C_8, C_{10}, 3 C_{12}, C_{20}, 2 D_2, 2 D_3, D_4, 2 D_5, D_6, D_{10}	2 C_2, C_3, 4 C_4, C_5, C_6, C_8, C_{10}, 2 C_{12}, C_{20}, 2 D_2, 2 D_3, D_4, 2 D_5, D_6, D_{10}	2 C_2, 4 C_4, C_6, C_8, C_{10}, 2 C_{12}, C_{20}, 2 D_2, 2 D_3, D_4, 2 D_5, D_6, D_{10}	2 C_2, C_3, C_5, 2 D_2, 2 D_3, 2 D_5
R71.12	3 C_2, C_3, 3 C_4, C_5, 2 C_6, 3 C_8, C_{10}, 3 C_{12}, C_{20}, 4 D_2, 2 D_3, 3 D_4, D_5, 2 D_6, 2 D_8, D_{10}, 2 D_{12}	3 C_2, C_3, 3 C_4, C_5, 2 C_6, 2 C_8, C_{10}, 2 C_{12}, C_{20}, 4 D_2, 2 D_3, 3 D_4, D_5, 2 D_6, 2 D_8, D_{10}, D_{12}	2 C_2, 3 C_4, C_6, 2 C_8, C_{10}, 2 C_{12}, C_{20}, 4 D_2, D_3, 3 D_4, D_5, 2 D_6, 2 D_8, D_{10}, D_{12}	3 C_2, C_3, C_5, 4 D_2, 2 D_3, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R71.13	4 C_2, C_3, 2 C_4, 2 C_6, 4 C_8, 3 C_{12}, 6 C_{16}, 6 C_{24}, 4 C_{32}, 12 C_{48}, 8 C_{96}, 9 D_2, 2 D_3, 3 D_4, 3 D_6, 5 D_8, 5 D_{12}, 8 D_{16}, 10 D_{24}, 16 D_{48}	4 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 2 C_{12}, 2 C_{16}, 2 C_{24}, 2 C_{48}, 9 D_2, 2 D_3, 3 D_4, 3 D_6, 3 D_8, 3 D_{12}, 3 D_{16}, 3 D_{24}, 3 D_{48}	2 C_2, 2 C_4, C_6, 2 C_8, C_{12}, 2 C_{16}, 2 C_{24}, 2 C_{48}, 9 D_2, D_3, 3 D_4, 3 D_6, 3 D_8, 3 D_{12}, 3 D_{16}, 3 D_{24}, 3 D_{48}	4 C_2, C_3, 9 D_2, 2 D_3
R71.14	3 C_2, C_3, 3 C_4, 2 C_6, 4 C_8, 3 C_{12}, 6 C_{16}, 6 C_{24}, 8 C_{32}, 12 C_{48}, 16 C_{96}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, 2 D_{12}, 4 D_{16}, 4 D_{24}, 8 D_{48}	3 C_2, C_3, 3 C_4, 2 C_6, 2 C_8, 2 C_{12}, 2 C_{16}, 2 C_{24}, 2 C_{48}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, 2 D_{16}, D_{24}, 2 D_{48}	2 C_2, 3 C_4, C_6, 2 C_8, C_{12}, 2 C_{16}, 2 C_{24}, 2 C_{48}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, 2 D_{16}, D_{24}, 2 D_{48}	3 C_2, C_3, 4 D_2, D_3
R71.15	C_2, C_3, 3 C_7, 3 C_9, 3 D_2, D_3, 3 D_7, 3 D_9	C_2, C_3, 3 C_7, 3 D_2, D_3, 3 D_7	C_2, 3 D_2, D_3, 3 D_7	C_2, C_3, 3 C_7, 3 D_2, D_3, 3 D_7
R71.16	5 C_2, 3 C_4, 2 C_5, 4 C_8, 10 C_{10}, 4 C_{16}, 8 C_{20}, 8 C_{40}, 16 C_{80}, 13 D_2, 3 D_4, 6 D_8	5 C_2, 3 C_4, C_5, 3 C_8, 5 C_{10}, C_{16}, 2 C_{20}, 13 D_2, 3 D_4, 5 D_8	3 C_2, 2 C_4, C_{10}, 13 D_2, 2 D_4, 3 D_8	5 C_2, C_4, C_8, 13 D_2, 2 D_4, D_8
R71.17	3 C_2, 4 C_4, 2 C_5, 2 C_8, 6 C_{10}, 2 C_{16}, 10 C_{20}, 6 C_{40}, 8 C_{80}, 4 D_2, 2 D_4, D_8	3 C_2, 4 C_4, C_5, C_8, 3 C_{10}, 3 C_{20}, 4 D_2, 2 D_4, D_8	3 C_2, 3 C_4, C_{10}, 4 D_2, 2 D_4, D_8	3 C_2, C_4, 4 D_2, D_4
R71.18	C_2, 5 C_{11}, 6 C_{13}, 5 C_{22}, 6 C_{26}, 60 C_{143}, 60 C_{286}	C_2	C_2	C_2
R71.19	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_8, 3 C_9, 3 C_{12}, 4 C_{16}, 6 C_{18}, 6 C_{24}, 9 C_{36}, 8 C_{48}, 18 C_{72}, 24 C_{144}, 2 D_2	2 C_2, C_3, 2 C_4, 2 C_6, C_8, C_9, 2 C_{12}, 2 C_{18}, C_{24}, 2 C_{36}, C_{72}, 2 D_2	2 C_2, C_4, C_6, C_{18}, 2 D_2	2 C_2, C_3, C_4, C_6, C_9, C_{12}, C_{18}, C_{36}, 2 D_2
R71.20	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_8, 3 C_9, 4 C_{12}, 8 C_{16}, 9 C_{18}, 8 C_{24}, 12 C_{36}, 16 C_{48}, 24 C_{72}, 48 C_{144}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_8, C_9, 3 C_{12}, 2 C_{16}, 3 C_{18}, 3 C_{24}, 3 C_{36}, 2 C_{48}, 3 C_{72}, 2 C_{144}, 3 D_2	2 C_2, C_4, C_6, C_{18}, 3 D_2	3 C_2, C_3, C_4, C_6, C_8, C_9, C_{12}, C_{18}, C_{24}, C_{36}, C_{72}, 3 D_2
R71.21	C_2, C_4, 35 C_{71}, 35 C_{142}, 70 C_{284}	C_2, C_4, C_{71}, C_{142}	C_2, C_4, C_{142}	C_2, C_{71}
Genus 72				
R72.1	**Tet**, **Oct**, 2 C_2, C_3, C_4, 2 C_5, 2 C_{10}, 4 C_{15}, 10 C_{25}, 10 C_{50}, 20 C_{75}, 3 D_2, D_3, D_4, 2 D_5, 2 D_{10}, 4 D_{15}, 10 D_{25}, 10 D_{50}, 20 D_{75}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_5, C_{10}, C_{15}, C_{25}, C_{50}, C_{75}, 3 D_2, D_3, D_4, D_5, D_{10}, D_{15}, D_{25}, D_{50}, D_{75}	**Tet**, **Oct**, 2 C_2, C_4, C_{10}, C_{50}, 3 D_2, D_3, D_4, D_5, D_{10}, D_{15}, D_{25}, D_{50}, D_{75}	**Tet**, 2 C_2, C_3, C_5, C_{25}, 3 D_2, D_3, D_5, D_{25}
R72.2	3 C_2, C_4, 36 C_{73}, 72 C_{146}, 4 D_2, D_4, 36 D_{73}, 36 D_{146}	3 C_2, C_4, C_{73}, 2 C_{146}, 4 D_2, D_4, D_{73}, D_{146}	3 C_2, C_4, C_{146}, 4 D_2, D_4, D_{73}, D_{146}	3 C_2, C_{73}, 4 D_2, D_{73}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R72.3	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 3 C_9, 2 C_{12}, 4 C_{16}, 3 C_{18}, 4 C_{24}, 4 C_{32}, 6 C_{36}, 8 C_{48}, 12 C_{72}, 8 C_{96}, 24 C_{144}, 24 C_{288}, 2 D_2, D_3, D_4, D_6, 2 D_8, 3 D_9, 2 D_{12}, 4 D_{16}, 3 D_{18}, 4 D_{24}, 6 D_{36}, 8 D_{48}, 12 D_{72}, 24 D_{144}	2 C_2, C_3, 2 C_4, C_6, C_8, C_9, C_{12}, C_{16}, C_{18}, C_{24}, C_{36}, C_{48}, C_{72}, C_{144}, 2 D_2, D_3, D_4, D_6, D_8, D_9, D_{12}, D_{16}, D_{18}, D_{24}, D_{36}, D_{48}, D_{72}, D_{144}	2 C_2, 2 C_4, C_6, C_8, C_{12}, C_{16}, C_{18}, C_{24}, C_{36}, C_{48}, C_{72}, C_{144}, 2 D_2, D_3, D_4, D_6, D_8, D_9, D_{12}, D_{16}, D_{18}, D_{24}, D_{36}, D_{48}, D_{72}, D_{144}	2 C_2, C_3, C_9, 2 D_2, D_3, D_9
R72.4	3 C_2, C_3, C_6, 18 C_{37}, 18 C_{74}, 18 C_{111}, 3 D_2, 2 D_3, D_6, 36 D_{37}, 18 D_{74}, 18 D_{111}	3 C_2, C_3, C_6, C_{37}, C_{74}, C_{111}, 3 D_2, 2 D_3, D_6, 2 D_{37}, D_{74}, D_{111}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_{37}, D_{74}, D_{111}	3 C_2, C_3, C_{37}, 3 D_2, 2 D_3, 2 D_{37}
R72.5	3 C_2, C_4, 2 C_5, 2 C_8, 4 C_{10}, 2 C_{20}, 10 C_{25}, 20 C_{50}, 10 C_{100}, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, 2 D_{20}, 10 D_{25}, 10 D_{50}, 10 D_{100}	3 C_2, C_4, C_5, C_8, 2 C_{10}, C_{20}, C_{25}, 2 C_{50}, C_{100}, 4 D_2, 2 D_4, D_5, D_8, D_{10}, D_{20}, D_{25}, D_{50}, D_{100}	3 C_2, C_{10}, C_{50}, 4 D_2, 2 D_4, D_5, D_8, D_{10}, D_{20}, D_{25}, D_{50}, D_{100}	3 C_2, C_4, C_5, C_{25}, 4 D_2, 2 D_4, D_5, D_{25}
R72.6	3 C_2, 2 C_5, 2 C_{10}, 9 C_{19}, 9 C_{38}, 18 C_{95}, 3 D_2, 4 D_5, 2 D_{10}, 18 D_{19}, 9 D_{38}, 18 D_{95}	3 C_2, C_5, C_{10}, C_{19}, C_{38}, C_{95}, 3 D_2, 2 D_5, D_{10}, 2 D_{19}, D_{38}, D_{95}	3 C_2, 3 D_2, 2 D_5, D_{10}, 2 D_{19}, D_{38}, D_{95}	3 C_2, C_5, C_{19}, 3 D_2, 2 D_5, 2 D_{19}
R72.7	3 C_2, C_3, C_4, 2 C_5, C_6, 3 C_9, 6 C_{10}, 2 C_{12}, 2 C_{15}, 3 C_{18}, 2 C_{20}, 2 C_{30}, 6 C_{36}, 6 C_{45}, 4 C_{60}, 6 C_{90}, 12 C_{180}, 4 D_2, 2 D_3, D_4, 2 D_6, 6 D_9, 2 D_{12}, 6 D_{18}, 6 D_{36}	3 C_2, C_3, C_4, C_6, C_9, C_{12}, C_{18}, C_{36}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_9, D_{12}, 2 D_{18}, D_{36}	3 C_2, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_9, D_{12}, 2 D_{18}, D_{36}	3 C_2, C_3, C_4, C_6, C_9, C_{12}, C_{18}, C_{36}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_9, D_{12}, 2 D_{18}, D_{36}
R72.8	3 C_2, 3 C_7, 6 C_{13}, 3 C_{14}, 6 C_{26}, 18 C_{91}, 3 D_2, 6 D_7, 12 D_{13}, 3 D_{14}, 6 D_{26}, 18 D_{91}	3 C_2, C_7, C_{13}, C_{14}, C_{26}, C_{91}, 3 D_2, 2 D_7, 2 D_{13}, D_{14}, D_{26}, D_{91}	3 C_2, 3 D_2, 2 D_7, 2 D_{13}, D_{14}, D_{26}, D_{91}	3 C_2, C_7, C_{13}, 3 D_2, 2 D_7, 2 D_{13}
R72.9	3 C_2, C_3, C_4, C_6, 3 C_7, 2 C_8, 2 C_{12}, 9 C_{14}, 3 C_{21}, 4 C_{24}, 3 C_{28}, 3 C_{42}, 6 C_{56}, 6 C_{84}, 12 C_{168}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 4 D_{12}, 4 D_{24}	3 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}, D_{24}	3 C_2, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}, D_{24}	3 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}, D_{24}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R72.10	3 C_2, C_3, C_4, 2 C_5, 2 C_6, 3 C_9, 2 C_{10}, 2 C_{15}, 6 C_{18}, 4 C_{20}, 2 C_{30}, 6 C_{45}, 6 C_{90}, 4 D_2, D_3, D_4, 4 D_5, D_6, 3 D_9, 4 D_{10}, 2 D_{15}, 3 D_{18}, 4 D_{20}, 2 D_{30}, 6 D_{45}, 6 D_{90}	3 C_2, C_3, C_4, C_5, 2 C_6, C_9, C_{10}, C_{15}, 2 C_{18}, C_{20}, C_{30}, C_{45}, C_{90}, 4 D_2, D_3, D_4, 2 D_5, D_6, D_9, 2 D_{10}, D_{15}, D_{18}, D_{20}, D_{30}, D_{45}, D_{90}	3 C_2, C_4, C_6, C_{18}, 4 D_2, D_3, D_4, 2 D_5, D_6, D_9, 2 D_{10}, D_{15}, D_{18}, D_{20}, D_{30}, D_{45}, D_{90}	3 C_2, C_3, C_5, C_9, C_{10}, 4 D_2, D_3, 2 D_5, D_9, 2 D_{10}
R72.11	2 C_2, 2 C_4, 2 C_5, 2 C_8, 4 C_{10}, 4 C_{16}, 4 C_{20}, 4 C_{32}, 4 C_{40}, 8 C_{80}, 16 C_{160}, 2 D_2, D_4, 2 D_8, 4 D_{16}	2 C_2, 2 C_4, C_8, C_{16}, 2 D_2, D_4, D_8, D_{16}	2 C_2, 2 C_4, C_8, C_{16}, 2 D_2, D_4, D_8, D_{16}	2 C_2, 2 D_2
R72.12	2 C_2, C_3, 2 C_4, C_6, 3 C_7, C_8, 2 C_{12}, 3 C_{14}, 3 C_{21}, 2 C_{24}, 6 C_{28}, 3 C_{42}, 6 C_{84}, 2 D_2, D_3, D_4, D_6, 3 D_7, 2 D_{12}, 3 D_{14}, 3 D_{21}, 3 D_{28}, 3 D_{42}, 6 D_{84}	2 C_2, C_3, 2 C_4, C_6, C_7, C_{12}, C_{14}, C_{21}, C_{28}, C_{42}, C_{84}, 2 D_2, D_3, D_4, D_6, D_7, D_{12}, D_{14}, D_{21}, D_{28}, D_{42}, D_{84}	2 C_2, 2 C_4, C_6, C_{12}, C_{14}, 2 D_2, D_3, D_4, D_6, D_7, D_{12}, D_{14}, D_{21}, D_{28}, D_{42}, D_{84}	2 C_2, C_3, C_7, 2 D_2, D_3, D_7
R72.13	3 C_2, C_3, C_4, C_6, 2 C_{12}, 6 C_{13}, 18 C_{26}, 6 C_{39}, 6 C_{52}, 6 C_{78}, 12 C_{156}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, C_3, C_4, C_6, C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}	3 C_2, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}	3 C_2, C_3, C_4, C_6, C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}
R72.14	C_2, C_3, 3 C_9, 8 C_{17}, 8 C_{34}, 8 C_{51}, 24 C_{153}, D_3, 3 D_9	C_2, C_3, C_9, D_3, D_9	C_2, D_3, D_9	C_2, C_3, C_9, D_3, D_9
R72.15	3 C_2, C_4, 2 C_8, 9 C_{19}, 27 C_{38}, 9 C_{76}, 18 C_{152}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8	3 C_2, 4 D_2, 2 D_4, D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8
R72.16	**Tet**, **Oct**, 2 C_2, C_3, C_4, 6 C_{13}, 12 C_{26}, 6 C_{39}, 6 C_{52}, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 D_2, D_3, D_4
R72.17	3 C_2, C_3, 2 C_5, C_6, 6 C_{10}, 2 C_{15}, 10 C_{25}, 2 C_{30}, 30 C_{50}, 10 C_{75}, 10 C_{150}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6	3 C_2, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6
R72.18	3 C_2, C_4, 18 C_{37}, 54 C_{74}, 18 C_{148}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R72.19	**Tet**, C_2, C_3, 2 C_5, 2 C_{10}, 4 C_{15}, 10 C_{25}, 10 C_{50}, 20 C_{75}, D_2	**Tet**, C_2, C_3, C_5, C_{10}, C_{15}, C_{25}, C_{50}, C_{75}, D_2	**Tet**, C_2, C_{10}, C_{50}, D_2	**Tet**, C_2, C_3, C_5, C_{25}, D_2
R72.20	C_2, C_3, 3 C_7, 3 C_{14}, 3 C_{21}, 21 C_{49}, 21 C_{98}, 21 C_{147}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R72.21	C_2, 2 C_5, 2 C_{10}, 14 C_{29}, 14 C_{58}, 56 C_{145}, 56 C_{290}	C_2	C_2	C_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R72.22	3 C_2, 36 C_{73}, 108 C_{146}, 3 D_2	3 C_2, C_{73}, 3 C_{146}, 3 D_2	3 C_2, C_{146}, 3 D_2	3 C_2, C_{73}, 3 D_2
R72.23	C_2, C_3, C_4, C_6, 2 C_8, 3 C_9, 2 C_{12}, 4 C_{16}, 3 C_{18}, 4 C_{24}, 8 C_{32}, 6 C_{36}, 8 C_{48}, 12 C_{72}, 16 C_{96}, 24 C_{144}, 48 C_{288}	C_2, C_3, C_4, C_6, C_8, C_9, C_{12}, C_{16}, C_{18}, C_{24}, C_{36}, C_{48}, C_{72}, C_{144}	C_2, C_4, C_6, C_8, C_{12}, C_{16}, C_{18}, C_{24}, C_{36}, C_{48}, C_{72}, C_{144}	C_2, C_3, C_9
Genus 73				
R73.1	2 **Tet**, **Oct**, 2 **Ico**, 2 C_2, 3 C_3, C_4, 2 C_5, C_6, 2 C_8, 2 C_{10}, C_{12}, 2 C_{15}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, D_6, 2 D_8, 2 D_{10}, D_{12}, 2 D_{15}	2 **Tet**, **Oct**, **Ico**, 2 C_2, 3 C_3, C_4, C_5, C_6, 2 C_8, C_{10}, C_{12}, C_{15}, 3 D_2, 2 D_3, 2 D_4, 2 D_5, D_6, 2 D_8, D_{10}, D_{12}, D_{15}	C_2, C_{10}, 2 D_2, D_3, D_4, D_5, D_6, 2 D_8, D_{10}, D_{12}, D_{15}	**Tet**, **Oct**, 2 C_2, 2 C_3, C_4, C_5, C_6, 2 C_8, C_{12}, 3 D_2, 2 D_3, 2 D_4, D_5, D_6, 2 D_8, D_{12}
R73.2	2 **Tet**, **Oct**, 2 **Ico**, 2 C_2, 2 C_3, C_4, 2 C_5, C_6, 2 C_8, 2 C_{10}, C_{12}, 2 C_{15}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, D_6, 2 D_8, 2 D_{10}, D_{12}, 2 D_{15}	2 **Tet**, **Oct**, **Ico**, 2 C_2, 2 C_3, C_4, C_5, C_6, 2 C_8, C_{10}, C_{12}, C_{15}, 3 D_2, 2 D_3, 2 D_4, 2 D_5, D_6, 2 D_8, D_{10}, D_{12}, D_{15}	C_2, C_{10}, 2 D_2, D_3, D_4, D_5, D_6, 2 D_8, D_{10}, D_{12}, D_{15}	2 **Tet**, 2 C_2, 2 C_3, C_4, C_5, C_6, 2 C_8, C_{12}, 3 D_2, D_3, 2 D_4, D_5, D_6, 2 D_8, D_{12}
R73.3	2 **Tet**, 2 **Oct**, 4 C_2, 4 C_3, 5 C_4, 10 C_6, 8 C_{12}, 12 D_2, 3 D_3, 4 D_4, 5 D_6, 4 D_{12}	2 **Tet**, 2 **Oct**, 4 C_2, 4 C_3, 5 C_4, 10 C_6, 7 C_{12}, 12 D_2, 3 D_3, 4 D_4, 5 D_6, 4 D_{12}	2 **Oct**, 2 C_2, C_4, 3 C_6, C_{12}, 11 D_2, 3 D_3, 4 D_4, 5 D_6, 4 D_{12}	**Tet**, 2 **Oct**, 4 C_2, 2 C_3, 4 C_4, 3 C_6, 4 C_{12}, 12 D_2, 3 D_3, 4 D_4, 4 D_6, 4 D_{12}
R73.4	2 **Tet**, 5 C_2, 4 C_3, 3 C_4, 10 C_6, 12 C_{12}, 23 D_2, 6 D_3, 6 D_4, 24 D_6, 36 D_{12}	2 **Tet**, 5 C_2, 4 C_3, 3 C_4, 10 C_6, 11 C_{12}, 23 D_2, 6 D_3, 6 D_4, 24 D_6, 36 D_{12}	2 C_2, C_4, 4 C_6, C_{12}, 16 D_2, 3 D_3, 4 D_4, 17 D_6, 26 D_{12}	5 C_2, 2 C_3, 2 C_4, 6 C_6, 10 C_{12}, 23 D_2, 6 D_3, 6 D_4, 21 D_6, 36 D_{12}
R73.5	**Tet**, 2 C_2, 3 C_3, 2 C_4, 2 C_5, 3 C_6, 2 C_{10}, 2 C_{12}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 3 D_2, D_3, 2 D_4, 2 D_5, D_6, 2 D_{10}, D_{12}, 2 D_{20}	**Tet**, 2 C_2, 3 C_3, 2 C_4, C_5, 3 C_6, C_{10}, 2 C_{12}, C_{20}, 3 D_2, D_3, 2 D_4, D_5, D_6, D_{10}, D_{12}, D_{20}	**Tet**, C_2, 3 D_2, D_3, 2 D_4, D_5, D_6, D_{10}, D_{12}, D_{20}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{12}, 3 D_2, D_3, 2 D_4, D_5, D_6, D_{12}
R73.6	2 **Tet**, 3 C_2, 3 C_3, 3 C_4, 4 C_6, 4 C_8, 6 C_{12}, 7 C_{24}, 9 D_2, D_3, 2 D_4, 3 D_6, 2 D_8, 2 D_{12}, 3 D_{24}	2 **Tet**, 3 C_2, 3 C_3, 3 C_4, 4 C_6, 3 C_8, 5 C_{12}, 4 C_{24}, 9 D_2, D_3, 2 D_4, 3 D_6, 2 D_8, 2 D_{12}, 3 D_{24}	2 C_2, 2 C_4, 3 C_6, 2 C_8, C_{12}, 3 C_{24}, 8 D_2, D_3, 2 D_4, 3 D_6, 2 D_8, 2 D_{12}, 3 D_{24}	3 C_2, C_3, C_6, 9 D_2, D_3, 2 D_6
R73.7	5 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 6 C_4, 3 C_6, 2 C_8, 4 C_{12}, 2 C_{24}, 24 D_2, 2 D_3, 9 D_4, 2 D_6	5 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 6 C_4, 3 C_6, C_8, 3 C_{12}, 24 D_2, 2 D_3, 9 D_4, 2 D_6	2 **Tet**, 2 **Oct**, 2 C_2, 5 C_4, C_6, 2 C_{12}, 20 D_2, D_3, 9 D_4, 2 D_6	**Tet**, 5 C_2, C_3, C_6, 24 D_2, 2 D_3, 2 D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R73.8	4 C_2, 3 C_3, 6 C_4, 9 C_6, 3 C_8, 6 C_{12}, 4 C_{24}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	4 C_2, 3 C_3, 6 C_4, 9 C_6, 2 C_8, 5 C_{12}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	2 C_2, 2 C_4, 3 C_6, 2 C_8, C_{12}, 9 D_2, D_3, 5 D_4, 3 D_6, 3 D_{12}	4 C_2, C_3, 4 C_4, 2 C_6, 2 C_{12}, 9 D_2, D_3, 3 D_4, 2 D_6, 3 D_{12}
R73.9	4 **Tet**, 2 **Ico**, 3 C_2, 7 C_3, 2 C_5, 7 C_6, 2 C_{10}, 6 C_{15}, 2 C_{30}, 7 D_2, 5 D_3, 4 D_5, 3 D_6, 2 D_{10}, 2 D_{15}	4 **Tet**, **Ico**, 3 C_2, 7 C_3, C_5, 7 C_6, C_{10}, 2 C_{15}, 7 D_2, 5 D_3, 2 D_5, 3 D_6, D_{10}, D_{15}	2 C_2, 3 C_6, C_{10}, 6 D_2, 4 D_3, D_5, 3 D_6, D_{10}, D_{15}	3 **Tet**, 3 C_2, 5 C_3, C_5, 2 C_6, 7 D_2, 5 D_3, D_5, 2 D_6
R73.10	2 **Tet**, 2 **Oct**, 3 C_2, 3 C_3, 2 C_4, 5 C_6, C_7, 2 C_{12}, C_{14}, 2 C_{21}, 2 C_{42}, 6 D_2, 2 D_3, 3 D_4, D_6	2 **Tet**, 2 **Oct**, 3 C_2, 3 C_3, 2 C_4, 5 C_6, 2 C_{12}, 6 D_2, 2 D_3, 3 D_4, D_6	**Oct**, 2 C_2, 3 C_6, 5 D_2, D_3, 2 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, 6 D_2, 2 D_3, 3 D_4
R73.11	4 C_2, 5 C_3, 4 C_4, 10 C_6, 2 C_8, 4 C_{12}, 2 C_{24}, 8 D_2, 6 D_3, 5 D_4, 7 D_6, 2 D_8, 5 D_{12}, 2 D_{24}	4 C_2, 5 C_3, 4 C_4, 10 C_6, 2 C_8, 4 C_{12}, 2 C_{24}, 8 D_2, 6 D_3, 5 D_4, 7 D_6, 2 D_8, 5 D_{12}, 2 D_{24}	3 C_2, C_4, 5 C_6, 8 D_2, 6 D_3, 5 D_4, 7 D_6, 2 D_8, 5 D_{12}, 2 D_{24}	4 C_2, 4 C_3, 3 C_4, 4 C_6, 2 C_8, 4 C_{12}, 2 C_{24}, 8 D_2, 6 D_3, 5 D_4, 6 D_6, 2 D_8, 5 D_{12}, 2 D_{24}
R73.12	3 **Tet**, 6 **Oct**, 7 C_2, 2 C_3, 6 C_4, 4 C_6, 2 C_8, 43 D_2, 4 D_3, 12 D_4, 5 D_6	3 **Tet**, 6 **Oct**, 7 C_2, 2 C_3, 6 C_4, 4 C_6, C_8, 43 D_2, 4 D_3, 12 D_4, 5 D_6	**Tet**, 6 **Oct**, 3 C_2, 4 C_4, C_8, 32 D_2, 4 D_3, 12 D_4, 5 D_6	3 **Tet**, 4 **Oct**, 7 C_2, 2 C_3, 2 C_4, 4 C_6, 43 D_2, 4 D_3, 8 D_4, 5 D_6
R73.13	**Tet**, 2 **Oct**, 3 C_2, 2 C_3, 4 C_4, 2 C_6, 3 C_8, C_{12}, 7 D_2, 3 D_3, 4 D_4, 2 D_6, D_8, D_{12}	**Tet**, 2 **Oct**, 3 C_2, 2 C_3, 4 C_4, 2 C_6, 2 C_8, C_{12}, 7 D_2, 3 D_3, 4 D_4, 2 D_6, D_8, D_{12}	**Tet**, 2 **Oct**, 2 C_2, 2 C_4, 7 D_2, 3 D_3, 4 D_4, 2 D_6, D_8, D_{12}	**Tet**, **Oct**, 3 C_2, 2 C_3, 2 C_4, 2 C_6, C_8, C_{12}, 7 D_2, 3 D_3, 3 D_4, 2 D_6, D_8, D_{12}
R73.14	**Tet**, 2 **Oct**, 3 C_2, 2 C_3, 4 C_4, 2 C_6, 3 C_8, C_{12}, 7 D_2, 3 D_3, 4 D_4, 2 D_6, D_8, D_{12}	**Tet**, 2 **Oct**, 3 C_2, 2 C_3, 4 C_4, 2 C_6, 2 C_8, C_{12}, 7 D_2, 3 D_3, 4 D_4, 2 D_6, D_8, D_{12}	**Tet**, 2 **Oct**, 2 C_2, 2 C_4, 7 D_2, 3 D_3, 4 D_4, 2 D_6, D_8, D_{12}	**Tet**, **Oct**, 3 C_2, 2 C_3, 2 C_4, 2 C_6, C_8, C_{12}, 7 D_2, 3 D_3, 3 D_4, 2 D_6, D_8, D_{12}
R73.15	3 **Tet**, 6 **Oct**, 7 C_2, 2 C_3, 6 C_4, 4 C_6, 2 C_8, 43 D_2, 4 D_3, 12 D_4, 5 D_6	3 **Tet**, 6 **Oct**, 7 C_2, 2 C_3, 6 C_4, 4 C_6, C_8, 43 D_2, 4 D_3, 12 D_4, 5 D_6	**Tet**, 6 **Oct**, 3 C_2, 4 C_4, C_8, 32 D_2, 4 D_3, 12 D_4, 5 D_6	3 **Tet**, 4 **Oct**, 7 C_2, 2 C_3, 2 C_4, 4 C_6, 43 D_2, 4 D_3, 8 D_4, 5 D_6
R73.16	5 C_2, 2 C_3, 5 C_4, 7 C_6, 3 C_8, 3 C_{12}, 5 C_{24}, 14 D_2, 5 D_3, 7 D_4, 11 D_6, D_8, 8 D_{12}, 5 D_{24}	5 C_2, 2 C_3, 5 C_4, 7 C_6, 2 C_8, 3 C_{12}, 5 C_{24}, 14 D_2, 5 D_3, 7 D_4, 11 D_6, D_8, 8 D_{12}, 5 D_{24}	3 C_2, 3 C_4, 2 C_6, C_8, 12 D_2, 5 D_3, 6 D_4, 11 D_6, D_8, 8 D_{12}, 5 D_{24}	5 C_2, 2 C_3, 2 C_4, 5 C_6, C_8, 3 C_{12}, 5 C_{24}, 14 D_2, 5 D_3, 5 D_4, 8 D_6, D_8, 8 D_{12}, 5 D_{24}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R73.17	4 C_2, 2 C_3, 5 C_4, 4 C_6, 3 C_8, 6 C_{12}, 5 C_{24}, 8 D_2, 5 D_3, 4 D_4, 8 D_6, D_8, 11 D_{12}, 5 D_{24}	4 C_2, 2 C_3, 5 C_4, 4 C_6, 2 C_8, 6 C_{12}, 5 C_{24}, 8 D_2, 5 D_3, 4 D_4, 8 D_6, D_8, 11 D_{12}, 5 D_{24}	3 C_2, 2 C_4, 2 C_6, C_8, 8 D_2, 5 D_3, 4 D_4, 8 D_6, D_8, 11 D_{12}, 5 D_{24}	4 C_2, 2 C_3, 3 C_4, 2 C_6, C_8, 6 C_{12}, 5 C_{24}, 8 D_2, 5 D_3, 4 D_4, 5 D_6, D_8, 11 D_{12}, 5 D_{24}
R73.18	9 C_2, 2 C_3, 6 C_4, 12 C_6, 2 C_8, 15 C_{12}, 54 D_2, 10 D_3, 11 D_4, 47 D_6, 58 D_{12}	9 C_2, 2 C_3, 6 C_4, 12 C_6, C_8, 15 C_{12}, 54 D_2, 10 D_3, 11 D_4, 47 D_6, 58 D_{12}	3 C_2, 3 C_4, 2 C_6, C_8, 37 D_2, 5 D_3, 8 D_4, 33 D_6, 43 D_{12}	9 C_2, 2 C_3, 3 C_4, 10 C_6, 15 C_{12}, 54 D_2, 10 D_3, 11 D_4, 42 D_6, 58 D_{12}
R73.19	4 C_2, 2 C_3, 4 C_4, 5 C_6, 3 C_8, 10 C_{12}, 10 C_{24}, 10 D_2, 5 D_3, 5 D_4, 12 D_6, 3 D_8, 25 D_{12}, 18 D_{24}	4 C_2, 2 C_3, 4 C_4, 5 C_6, 2 C_8, 10 C_{12}, 10 C_{24}, 10 D_2, 5 D_3, 5 D_4, 12 D_6, 3 D_8, 25 D_{12}, 18 D_{24}	3 C_2, 3 C_4, 2 C_6, 2 C_8, 5 C_{12}, 10 C_{24}, 10 D_2, 5 D_3, 5 D_4, 12 D_6, 3 D_8, 25 D_{12}, 18 D_{24}	4 C_2, 2 C_3, C_4, 3 C_6, 5 C_{12}, 10 D_2, 5 D_3, 2 D_4, 7 D_6, 10 D_{12}
R73.20	4 C_2, C_3, 4 C_4, C_5, 3 C_6, 2 C_8, 3 C_{10}, C_{12}, C_{20}, C_{24}, 10 D_2, 2 D_3, 5 D_4, D_5, 4 D_6, 2 D_8, D_{10}, D_{12}	4 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, C_{12}, C_{24}, 10 D_2, 2 D_3, 5 D_4, 4 D_6, 2 D_8, D_{12}	3 C_2, C_4, 2 C_6, 10 D_2, 2 D_3, 5 D_4, 4 D_6, 2 D_8, D_{12}	4 C_2, C_3, 3 C_4, C_6, 2 C_8, C_{12}, C_{24}, 10 D_2, 2 D_3, 5 D_4, 2 D_6, 2 D_8, D_{12}
R73.21	3 **Tet**, 4 **Oct**, 5 C_2, 5 C_3, 6 C_4, 5 C_6, 3 C_{12}, 16 D_2, 10 D_3, 4 D_4, 11 D_6, 2 D_{12}	3 **Tet**, 4 **Oct**, 5 C_2, 5 C_3, 6 C_4, 5 C_6, 2 C_{12}, 16 D_2, 10 D_3, 4 D_4, 11 D_6, 2 D_{12}	3 **Oct**, 3 C_2, 3 C_4, C_6, 13 D_2, 9 D_3, 3 D_4, 11 D_6, 2 D_{12}	3 **Tet**, 2 **Oct**, 5 C_2, 5 C_3, 2 C_4, 4 C_6, 2 C_{12}, 16 D_2, 9 D_3, 4 D_4, 10 D_6, 2 D_{12}
R73.22	5 C_2, 5 C_3, 3 C_4, 14 C_6, 7 C_{12}, 13 D_2, 13 D_3, 2 D_4, 23 D_6, 10 D_{12}	5 C_2, 5 C_3, 3 C_4, 14 C_6, 6 C_{12}, 13 D_2, 13 D_3, 2 D_4, 23 D_6, 10 D_{12}	3 C_2, 2 C_4, C_6, 11 D_2, 13 D_3, 2 D_4, 23 D_6, 10 D_{12}	5 C_2, 5 C_3, C_4, 10 C_6, 5 C_{12}, 13 D_2, 13 D_3, 2 D_4, 21 D_6, 10 D_{12}
R73.23	5 C_2, 5 C_3, 3 C_4, 15 C_6, 9 C_{12}, 13 D_2, 7 D_3, 2 D_4, 12 D_6, D_{12}	5 C_2, 5 C_3, 3 C_4, 15 C_6, 8 C_{12}, 13 D_2, 7 D_3, 2 D_4, 12 D_6, D_{12}	3 C_2, 2 C_4, 9 C_6, 7 C_{12}, 11 D_2, 5 D_3, 2 D_4, 10 D_6, D_{12}	5 C_2, 4 C_3, C_4, 5 C_6, C_{12}, 13 D_2, 7 D_3, 2 D_4, 8 D_6, D_{12}
R73.24	5 C_2, 3 C_3, 3 C_4, 10 C_6, 10 C_{12}, 13 D_2, 7 D_3, 2 D_4, 13 D_6, 10 D_{12}	5 C_2, 3 C_3, 3 C_4, 10 C_6, 9 C_{12}, 13 D_2, 7 D_3, 2 D_4, 13 D_6, 10 D_{12}	3 C_2, 2 C_4, 2 C_6, 2 C_{12}, 11 D_2, 7 D_3, 2 D_4, 13 D_6, 10 D_{12}	5 C_2, 2 C_3, C_4, 5 C_6, 5 C_{12}, 13 D_2, 7 D_3, 2 D_4, 13 D_6, 10 D_{12}
R73.25	5 C_2, 3 C_3, 3 C_4, 10 C_6, 5 C_{12}, 13 D_2, 6 D_3, 2 D_4, 11 D_6, D_{12}	5 C_2, 3 C_3, 3 C_4, 10 C_6, 4 C_{12}, 13 D_2, 6 D_3, 2 D_4, 11 D_6, D_{12}	3 C_2, 2 C_4, 6 C_6, 3 C_{12}, 11 D_2, 4 D_3, 2 D_4, 9 D_6, D_{12}	5 C_2, 3 C_3, C_4, 3 C_6, C_{12}, 13 D_2, 6 D_3, 2 D_4, 5 D_6, D_{12}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R73.26	5 C_2, 2 C_3, 2 C_4, 2 C_5, 5 C_6, 6 C_{10}, 4 C_{15}, 4 C_{20}, 4 C_{30}, 13 D_2, 7 D_3, 4 D_5, 10 D_6, 8 D_{10}, 6 D_{15}, 4 D_{30}	5 C_2, 2 C_3, 2 C_4, C_5, 5 C_6, 3 C_{10}, 2 C_{15}, C_{20}, 2 C_{30}, 13 D_2, 7 D_3, 2 D_5, 10 D_6, 4 D_{10}, 3 D_{15}, 2 D_{30}	3 C_2, 2 C_4, C_{10}, 11 D_2, 7 D_3, D_5, 10 D_6, 3 D_{10}, 3 D_{15}, 2 D_{30}	5 C_2, 2 C_3, C_5, 5 C_6, 13 D_2, 7 D_3, 2 D_5, 10 D_6
R73.27	**Tet**, 2 **Oct**, 3 C_2, C_3, 5 C_4, C_6, C_7, C_{12}, C_{14}, 2 C_{28}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 5 C_4, C_6, C_{12}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, 4 C_4, C_6, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 3 C_2, C_3, 6 D_2, 2 D_3
R73.28	**Tet**, 2 **Oct**, 3 C_2, C_3, 5 C_4, C_6, C_7, C_{12}, C_{14}, 2 C_{28}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 5 C_4, C_6, C_{12}, 6 D_2, 2 D_3, 3 D_4, D_6	**Oct**, 2 C_2, 2 C_4, C_6, 5 D_2, D_3, 2 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, 6 D_2, 2 D_3, 3 D_4
R73.29	3 C_2, 5 C_3, 2 C_4, 3 C_6, 9 C_9, C_{12}, 3 C_{18}, 3 C_{36}, 3 D_2, 8 D_3, 3 D_6, 12 D_9, 3 D_{18}	3 C_2, 5 C_3, 2 C_4, 3 C_6, 7 C_9, C_{18}, 3 D_2, 8 D_3, 3 D_6, 8 D_9, D_{18}	2 C_2, 2 C_4, C_6, C_{18}, 3 D_2, 7 D_3, 3 D_6, 7 D_9, D_{18}	3 C_2, 5 C_3, 2 C_6, C_9, 3 D_2, 7 D_3, 2 D_6, D_9
R73.30	9 C_2, 6 C_4, 2 C_5, 2 C_8, 14 C_{10}, 8 C_{20}, 8 C_{40}, 54 D_2, 11 D_4, 4 D_5, 20 D_{10}, 12 D_{20}	9 C_2, 6 C_4, C_5, C_8, 7 C_{10}, 3 C_{20}, C_{40}, 54 D_2, 11 D_4, 2 D_5, 10 D_{10}, 6 D_{20}	3 C_2, 3 C_4, C_8, C_{10}, 37 D_2, 8 D_4, D_5, 7 D_{10}, 4 D_{20}	9 C_2, 3 C_4, C_5, C_{10}, 54 D_2, 11 D_4, 2 D_5, D_{10}
R73.31	4 C_2, 5 C_4, 2 C_5, 3 C_8, 6 C_{10}, 8 C_{20}, 8 C_{40}, 8 D_2, 4 D_4, 2 D_5, D_8, 2 D_{10}, 4 D_{20}	4 C_2, 5 C_4, C_5, 2 C_8, 3 C_{10}, 3 C_{20}, C_{40}, 8 D_2, 4 D_4, D_5, D_8, D_{10}, 2 D_{20}	3 C_2, 2 C_4, C_8, C_{10}, 8 D_2, 4 D_4, D_5, D_8, D_{10}, 2 D_{20}	4 C_2, 3 C_4, C_5, C_8, 8 D_2, 4 D_4, D_5, D_8
R73.32	5 C_2, 5 C_4, 2 C_5, 3 C_8, 8 C_{10}, 6 C_{20}, 8 C_{40}, 14 D_2, 7 D_4, 2 D_5, D_8, 4 D_{10}, 2 D_{20}	5 C_2, 5 C_4, C_5, 2 C_8, 4 C_{10}, 2 C_{20}, 14 D_2, 7 D_4, D_5, D_8, 2 D_{10}, D_{20}	3 C_2, 2 C_4, C_{10}, 12 D_2, 6 D_4, D_5, D_8, 2 D_{10}, D_{20}	5 C_2, 3 C_4, C_5, C_8, 14 D_2, 6 D_4, D_5, D_8
R73.33	4 C_2, 4 C_4, 2 C_5, 3 C_8, 6 C_{10}, 8 C_{20}, 4 C_{40}, 10 D_2, 5 D_4, 2 D_5, 3 D_8, 4 D_{10}, 12 D_{20}	4 C_2, 4 C_4, C_5, 2 C_8, 3 C_{10}, 3 C_{20}, 10 D_2, 5 D_4, D_5, 3 D_8, 2 D_{10}, 6 D_{20}	3 C_2, 3 C_4, 2 C_8, C_{10}, 10 D_2, 5 D_4, D_5, 3 D_8, 2 D_{10}, 6 D_{20}	4 C_2, C_4, C_5, C_{10}, 10 D_2, 2 D_4, D_5, D_{10}
R73.34	5 C_2, 3 C_4, 9 C_{19}, 36 C_{38}, 18 C_{76}, 13 D_2, 2 D_4, 9 D_{19}, 18 D_{38}	5 C_2, 3 C_4, C_{19}, 4 C_{38}, C_{76}, 13 D_2, 2 D_4, D_{19}, 2 D_{38}	3 C_2, 2 C_4, C_{38}, 11 D_2, 2 D_4, D_{19}, 2 D_{38}	5 C_2, C_4, C_{19}, 13 D_2, 2 D_4, D_{19}
R73.35	5 C_2, 2 C_4, 18 C_{37}, 54 C_{74}, 36 C_{148}, 13 D_2, 36 D_{37}, 72 D_{74}	5 C_2, 2 C_4, C_{37}, 3 C_{74}, C_{148}, 13 D_2, 2 D_{37}, 4 D_{74}	3 C_2, 2 C_4, C_{74}, 11 D_2, D_{37}, 3 D_{74}	5 C_2, C_{37}, C_{74}, 13 D_2, 2 D_{37}, D_{74}
R73.36	3 C_2, 2 C_4, 36 C_{73}, 36 C_{146}, 36 C_{292}, 3 D_2, 72 D_{73}, 36 D_{146}	3 C_2, 2 C_4, C_{73}, C_{146}, 3 D_2, 2 D_{73}, D_{146}	2 C_2, 2 C_4, C_{146}, 3 D_2, D_{73}, D_{146}	3 C_2, C_{73}, 3 D_2, D_{73}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R73.37	**Tet**, 2 **Oct**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, 6 D_2, 2 D_3, 3 D_4, 4 D_5, D_6, 2 D_{10}	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, C_6, 6 D_2, 2 D_3, 3 D_4, D_6	**Oct**, 2 C_2, C_6, 5 D_2, D_3, 2 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 2 C_4, 6 D_2, 2 D_3, 3 D_4
R73.38	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, 2 C_8, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, 2 D_8, 2 D_{10}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, 2 C_8, C_{10}, 3 D_2, D_3, 2 D_4, 2 D_5, 2 D_8, D_{10}	C_2, C_{10}, 2 D_2, D_4, D_5, 2 D_8, D_{10}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_5, 2 C_8, 3 D_2, D_3, 2 D_4, D_5, 2 D_8
R73.39	4 C_2, 4 C_3, 4 C_4, 10 C_6, 7 C_{12}, 6 D_2, 5 D_3, 4 D_4, 5 D_6, 6 D_{12}	4 C_2, 4 C_3, 4 C_4, 10 C_6, 7 C_{12}, 6 D_2, 5 D_3, 4 D_4, 5 D_6, 6 D_{12}	3 C_2, 6 C_6, 6 D_2, 5 D_3, 4 D_4, 5 D_6, 6 D_{12}	4 C_2, 2 C_3, 4 C_4, 2 C_6, 6 C_{12}, 6 D_2, 5 D_3, 4 D_4, 5 D_6, 6 D_{12}
R73.40	7 **Tet**, 2 **Oct**, 3 C_2, 4 C_3, C_4, 5 C_6, 9 D_2, 2 D_3, 2 D_4, D_6	7 **Tet**, 2 **Oct**, 3 C_2, 4 C_3, C_4, 5 C_6, 9 D_2, 2 D_3, 2 D_4, D_6	3 **Tet**, 2 **Oct**, 2 C_2, 4 C_6, 7 D_2, 2 D_3, 2 D_4, D_6	3 **Tet**, 2 **Oct**, 3 C_2, 2 C_3, C_4, C_6, 9 D_2, 2 D_3, 2 D_4, D_6
R73.41	4 C_2, 7 C_3, 4 C_4, 15 C_6, 6 C_{12}, 6 D_2, 5 D_3, 4 D_4, 5 D_6, 5 D_{12}	4 C_2, 7 C_3, 4 C_4, 15 C_6, 6 C_{12}, 6 D_2, 5 D_3, 4 D_4, 5 D_6, 5 D_{12}	3 C_2, 8 C_6, 6 D_2, 5 D_3, 4 D_4, 5 D_6, 5 D_{12}	4 C_2, 5 C_3, 4 C_4, 5 C_6, 6 C_{12}, 6 D_2, 5 D_3, 4 D_4, 5 D_6, 5 D_{12}
R73.42	**Tet**, 3 C_2, 4 C_3, 4 C_6, C_9, 6 D_2, 6 D_3, 5 D_6	**Tet**, 3 C_2, 4 C_3, 4 C_6, 6 D_2, 6 D_3, 5 D_6	2 C_2, 3 C_6, 5 D_2, 4 D_3, 4 D_6	3 C_2, 3 C_3, C_6, 6 D_2, 6 D_3, 2 D_6
R73.43	**Tet**, 3 C_2, 4 C_3, 6 C_6, 2 C_9, 2 C_{18}, 6 D_2, 4 D_3, 5 D_6	**Tet**, 3 C_2, 4 C_3, 6 C_6, C_9, C_{18}, 6 D_2, 4 D_3, 5 D_6	2 C_2, 5 C_6, C_{18}, 5 D_2, 2 D_3, 4 D_6	3 C_2, 2 C_3, C_6, 6 D_2, 4 D_3, 2 D_6
R73.44	**Tet**, 3 C_2, 3 C_3, 4 C_6, 4 C_9, 6 C_{18}, 6 D_2, 5 D_3, 6 D_6, 9 D_9, 12 D_{18}	**Tet**, 3 C_2, 3 C_3, 4 C_6, 3 C_9, 6 C_{18}, 6 D_2, 5 D_3, 6 D_6, 9 D_9, 12 D_{18}	2 C_2, C_6, 5 D_2, 5 D_3, 6 D_6, 9 D_9, 12 D_{18}	3 C_2, 2 C_3, 2 C_6, 6 D_2, 5 D_3, 4 D_6
R73.45	**Tet**, 3 C_2, 6 C_3, 10 C_6, C_9, 6 D_2, 14 D_3, 18 D_6	**Tet**, 3 C_2, 6 C_3, 10 C_6, 6 D_2, 14 D_3, 18 D_6	2 C_2, C_6, 5 D_2, 14 D_3, 18 D_6	3 C_2, 5 C_3, 8 C_6, 6 D_2, 14 D_3, 16 D_6
R73.46	2 **Tet**, 3 C_2, 5 C_3, 4 C_6, 6 C_9, 6 C_{18}, 6 D_2, 6 D_3, 6 D_6, 9 D_9, 12 D_{18}	2 **Tet**, 3 C_2, 5 C_3, 4 C_6, 4 C_9, 6 C_{18}, 6 D_2, 6 D_3, 6 D_6, 9 D_9, 12 D_{18}	2 C_2, C_6, 5 D_2, 6 D_3, 6 D_6, 9 D_9, 12 D_{18}	**Tet**, 3 C_2, 4 C_3, 2 C_6, 6 D_2, 6 D_3, 4 D_6
R73.47	3 **Tet**, 3 C_2, 6 C_3, 9 C_6, C_9, 6 D_2, 5 D_3, 6 D_6	3 **Tet**, 3 C_2, 6 C_3, 9 C_6, 6 D_2, 5 D_3, 6 D_6	2 C_2, 5 C_6, 5 D_2, 5 D_3, 6 D_6	2 **Tet**, 3 C_2, 4 C_3, 3 C_6, 6 D_2, 5 D_3, 6 D_6
R73.48	2 **Tet**, 5 C_2, 3 C_3, 3 C_4, 5 C_6, 5 C_{12}, 23 D_2, 2 D_3, 6 D_4, 7 D_6, 10 D_{12}	2 **Tet**, 5 C_2, 3 C_3, 3 C_4, 5 C_6, 4 C_{12}, 23 D_2, 2 D_3, 6 D_4, 7 D_6, 10 D_{12}	2 C_2, C_4, 3 C_6, C_{12}, 16 D_2, D_3, 4 D_4, 5 D_6, 7 D_{12}	5 C_2, C_3, 2 C_4, 2 C_6, 3 C_{12}, 23 D_2, 2 D_3, 6 D_4, 6 D_6, 10 D_{12}

	Mapping necessary and sufficient	Immersion necessary	 sufficient	Embedding necessary
R73.49	2 **Tet**, **Oct**, 4 C_2, 3 C_3, 5 C_4, 5 C_6, 5 C_{12}, 12 D_2, D_3, 4 D_4, D_6, D_{12}	2 **Tet**, **Oct**, 4 C_2, 3 C_3, 5 C_4, 5 C_6, 4 C_{12}, 12 D_2, D_3, 4 D_4, D_6, D_{12}	**Oct**, 3 C_2, 4 C_4, 4 C_6, 4 C_{12}, 11 D_2, D_3, 4 D_4, D_6, D_{12}	**Tet**, **Oct**, 4 C_2, C_3, C_4, 12 D_2, D_3, 2 D_4
R73.50	5 **Tet**, 4 **Oct**, 11 C_2, 3 C_3, 4 C_4, 9 C_6, 2 C_{12}, 102 D_2, 4 D_3, 20 D_4, 9 D_6	5 **Tet**, 4 **Oct**, 11 C_2, 3 C_3, 4 C_4, 9 C_6, C_{12}, 102 D_2, 4 D_3, 20 D_4, 9 D_6	2 **Tet**, 3 **Oct**, 3 C_2, 3 C_4, 4 C_6, C_{12}, 61 D_2, D_3, 18 D_4, 6 D_6	**Tet**, **Oct**, 11 C_2, C_3, C_4, 2 C_6, 102 D_2, 4 D_3, 4 D_4, 7 D_6
R73.51	6 C_2, 3 C_3, 6 C_4, 17 C_6, 7 C_{12}, 19 D_2, D_3, 4 D_4, 3 D_6, 2 D_{12}	6 C_2, 3 C_3, 6 C_4, 17 C_6, 6 C_{12}, 19 D_2, D_3, 4 D_4, 3 D_6, 2 D_{12}	3 C_2, C_4, 7 C_6, C_{12}, 17 D_2, D_3, 4 D_4, 3 D_6, 2 D_{12}	6 C_2, C_3, 5 C_4, 3 C_6, 3 C_{12}, 19 D_2, D_3, 4 D_4, 2 D_6, 2 D_{12}
R73.52	6 **Tet**, 4 **Oct**, 6 C_2, 3 C_3, 5 C_4, 8 C_6, 5 C_{12}, 27 D_2, 2 D_3, 13 D_4, D_6	6 **Tet**, 4 **Oct**, 6 C_2, 3 C_3, 5 C_4, 8 C_6, 4 C_{12}, 27 D_2, 2 D_3, 13 D_4, D_6	2 **Tet**, 3 **Oct**, 3 C_2, C_4, 4 C_6, 21 D_2, D_3, 11 D_4, D_6	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 4 C_4, 27 D_2, 2 D_3, 11 D_4
R73.53	4 C_2, 3 C_3, 4 C_4, 9 C_6, 2 C_8, 7 C_{12}, 2 C_{24}, 8 D_2, D_3, 5 D_4, D_6, 2 D_8, D_{12}	4 C_2, 3 C_3, 4 C_4, 9 C_6, 2 C_8, 6 C_{12}, 2 C_{24}, 8 D_2, D_3, 5 D_4, D_6, 2 D_8, D_{12}	3 C_2, C_4, 5 C_6, 8 D_2, D_3, 5 D_4, D_6, 2 D_8, D_{12}	4 C_2, C_3, 3 C_4, C_6, 2 C_8, C_{12}, 8 D_2, D_3, 5 D_4, D_6, 2 D_8, D_{12}
R73.54	2 **Tet**, 2 **Oct**, 4 C_2, 3 C_3, 2 C_4, 5 C_6, C_{12}, 14 D_2, 2 D_3, 3 D_4, D_6	2 **Tet**, 2 **Oct**, 4 C_2, 3 C_3, 2 C_4, 5 C_6, 14 D_2, 2 D_3, 3 D_4, D_6	**Oct**, 2 C_2, C_4, 4 C_6, 10 D_2, D_3, 2 D_4, D_6	**Tet**, 2 **Oct**, 4 C_2, C_3, C_4, 14 D_2, 2 D_3, 2 D_4
R73.55	2 **Tet**, 2 **Oct**, 4 C_2, 3 C_3, 2 C_4, 5 C_6, C_{12}, 14 D_2, 2 D_3, 3 D_4, D_6	2 **Tet**, 2 **Oct**, 4 C_2, 3 C_3, 2 C_4, 5 C_6, 14 D_2, 2 D_3, 3 D_4, D_6	2 **Oct**, 3 C_2, C_4, 5 C_6, 12 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 4 C_2, C_3, C_4, 14 D_2, 2 D_3, 2 D_4
R73.56	6 C_2, 3 C_3, 6 C_4, 11 C_6, 14 C_{12}, 19 D_2, 3 D_3, 4 D_4, 7 D_6, 6 D_{12}	6 C_2, 3 C_3, 6 C_4, 11 C_6, 13 C_{12}, 19 D_2, 3 D_3, 4 D_4, 7 D_6, 6 D_{12}	3 C_2, C_4, 4 C_6, 7 C_{12}, 17 D_2, 2 D_3, 4 D_4, 6 D_6, 6 D_{12}	6 C_2, C_3, 5 C_4, 2 C_6, 4 C_{12}, 19 D_2, 3 D_3, 4 D_4, 5 D_6, 6 D_{12}
R73.57	6 **Tet**, 6 **Oct**, 6 C_2, 3 C_3, 5 C_4, 5 C_6, 2 C_{12}, 27 D_2, 5 D_3, 13 D_4, 5 D_6, D_{12}	6 **Tet**, 6 **Oct**, 6 C_2, 3 C_3, 5 C_4, 5 C_6, C_{12}, 27 D_2, 5 D_3, 13 D_4, 5 D_6, D_{12}	2 **Tet**, 5 **Oct**, 3 C_2, C_4, C_6, 21 D_2, 4 D_3, 11 D_4, 5 D_6, D_{12}	6 **Tet**, 2 **Oct**, 6 C_2, 3 C_3, 4 C_4, 27 D_2, 4 D_3, 11 D_4
R73.58	4 C_2, 3 C_3, 4 C_4, 5 C_6, 2 C_8, 8 C_{12}, 2 C_{24}, 8 D_2, 4 D_3, 5 D_4, 5 D_6, 2 D_8, 8 D_{12}, 2 D_{24}	4 C_2, 3 C_3, 4 C_4, 5 C_6, 2 C_8, 7 C_{12}, 2 C_{24}, 8 D_2, 4 D_3, 5 D_4, 5 D_6, 2 D_8, 8 D_{12}, 2 D_{24}	3 C_2, C_4, C_6, 8 D_2, 4 D_3, 5 D_4, 5 D_6, 2 D_8, 8 D_{12}, 2 D_{24}	4 C_2, 3 C_3, 3 C_4, C_6, 2 C_8, 2 C_{12}, 8 D_2, 4 D_3, 5 D_4, D_6, 2 D_8, 2 D_{12}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R73.59	2 **Tet**, 3 C_2, 3 C_3, 2 C_6, 3 C_7, 3 C_{14}, 15 C_{21}, 6 C_{42}, 6 D_2, 2 D_3, 2 D_6, 6 D_7, 6 D_{14}, 12 D_{21}, 12 D_{42}	2 **Tet**, 3 C_2, 3 C_3, 2 C_6, C_7, C_{14}, 4 C_{21}, 2 C_{42}, 6 D_2, 2 D_3, 2 D_6, 2 D_7, 2 D_{14}, 4 D_{21}, 4 D_{42}	2 C_2, C_6, 5 D_2, 2 D_3, 2 D_6, 2 D_7, 2 D_{14}, 4 D_{21}, 4 D_{42}	3 C_2, C_3, C_6, C_7, 6 D_2, 2 D_3, 2 D_6, 2 D_7
R73.60	C_2, 5 C_3, C_6, 9 C_9, 18 C_{27}, 3 D_3, 6 D_9, 9 D_{27}	C_2, 5 C_3, C_6, 7 C_9, 4 C_{27}, 3 D_3, 4 D_9, 3 D_{27}	C_2, C_6, 3 D_3, 4 D_9, 3 D_{27}	C_2, 4 C_3, C_9, 3 D_3, D_9
R73.61	C_2, 3 C_3, C_6, 5 C_9, 12 C_{27}, 2 D_3, 4 D_9, 9 D_{27}	C_2, 3 C_3, C_6, 3 C_9, 3 C_{27}, 2 D_3, 2 D_9, 3 D_{27}	C_2, C_6, 2 D_3, 2 D_9, 3 D_{27}	C_2, 2 C_3, C_9, 2 D_3, D_9
R73.62	C_2, 3 C_3, C_6, 5 C_9, 12 C_{27}, 2 D_3, 4 D_9, 9 D_{27}	C_2, 3 C_3, C_6, 3 C_9, 3 C_{27}, 2 D_3, 2 D_9, 3 D_{27}	C_2, C_6, 2 D_3, 2 D_9, 3 D_{27}	C_2, 2 C_3, C_9, 2 D_3, D_9
R73.63	4 C_2, C_3, 4 C_4, 2 C_5, 3 C_6, 4 C_{10}, C_{12}, 2 C_{15}, 4 C_{20}, 6 C_{30}, 6 D_2, 4 D_4, 4 D_5, 4 D_{10}, 4 D_{20}	4 C_2, C_3, 4 C_4, C_5, 3 C_6, 2 C_{10}, C_{12}, 2 C_{20}, 6 D_2, 4 D_4, 2 D_5, 2 D_{10}, 2 D_{20}	3 C_2, 2 C_6, 6 D_2, 4 D_4, 2 D_5, 2 D_{10}, 2 D_{20}	4 C_2, 4 C_4, C_5, 6 D_2, 4 D_4, 2 D_5
R73.64	**Tet**, 3 C_2, C_3, C_6, 9 C_{19}, 9 C_{38}, 9 C_{57}, 6 D_2, 18 D_{19}, 18 D_{38}	**Tet**, 3 C_2, C_3, C_6, C_{19}, C_{38}, 6 D_2, 2 D_{19}, 2 D_{38}	2 C_2, C_6, 5 D_2, 2 D_{19}, 2 D_{38}	3 C_2, C_{19}, 6 D_2, 2 D_{19}
R73.65	C_2, 3 C_3, 2 C_5, C_6, 10 C_{15}, 10 C_{25}, 50 C_{75}, D_3, 2 D_5, 4 D_{15}, 10 D_{25}, 20 D_{75}	C_2, 3 C_3, C_5, C_6, 4 C_{15}, C_{25}, 4 C_{75}, D_3, D_5, 2 D_{15}, D_{25}, 2 D_{75}	C_2, C_6, D_3, D_5, 2 D_{15}, D_{25}, 2 D_{75}	C_2, C_3, C_5, C_{25}, D_3, D_5, D_{25}
R73.66	C_2, C_3, C_6, 36 C_{73}, 36 C_{219}, 36 D_{73}	C_2, C_3, C_6, C_{73}, D_{73}	C_2, C_6, D_{73}	C_2, C_{73}, D_{73}
R73.67	3 **Tet**, 3 **Oct**, 3 C_2, 2 C_3, 3 C_4, C_6, C_8, 10 D_2, 2 D_3, 3 D_4, D_6	3 **Tet**, 3 **Oct**, 3 C_2, 2 C_3, 3 C_4, C_6, 10 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 3 **Oct**, 2 C_2, 2 C_4, 9 D_2, 2 D_3, 3 D_4, D_6	3 **Tet**, 2 **Oct**, 3 C_2, 2 C_3, C_4, C_6, 10 D_2, 2 D_3, 2 D_4, D_6
R73.68	3 **Tet**, 3 **Oct**, 3 C_2, 2 C_3, 3 C_4, C_6, C_8, 10 D_2, 2 D_3, 3 D_4, D_6	3 **Tet**, 3 **Oct**, 3 C_2, 2 C_3, 3 C_4, C_6, 10 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 3 **Oct**, 2 C_2, 2 C_4, 9 D_2, 2 D_3, 3 D_4, D_6	3 **Tet**, 2 **Oct**, 3 C_2, 2 C_3, C_4, C_6, 10 D_2, 2 D_3, 2 D_4, D_6
R73.69	7 C_2, 2 C_3, 3 C_4, 12 C_6, 4 C_8, 5 C_{12}, 30 D_2, 6 D_3, 22 D_6	7 C_2, 2 C_3, 3 C_4, 12 C_6, 2 C_8, 5 C_{12}, 30 D_2, 6 D_3, 22 D_6	2 C_2, 2 C_4, 2 C_6, 2 C_8, 19 D_2, 3 D_3, 16 D_6	7 C_2, 2 C_3, C_4, 10 C_6, 5 C_{12}, 30 D_2, 6 D_3, 19 D_6
R73.70	5 C_2, 2 C_3, 6 C_4, 6 C_6, 6 C_8, 7 C_{12}, 13 D_2, 6 D_3, 3 D_4, 12 D_6, 7 D_{12}	5 C_2, 2 C_3, 6 C_4, 6 C_6, 4 C_8, 7 C_{12}, 13 D_2, 6 D_3, 3 D_4, 12 D_6, 7 D_{12}	3 C_2, 4 C_4, 4 C_6, 4 C_8, 3 C_{12}, 11 D_2, 3 D_3, 2 D_4, 9 D_6, 5 D_{12}	5 C_2, 2 C_3, 2 C_4, 2 C_6, 4 C_{12}, 13 D_2, 6 D_3, 3 D_4, 6 D_6, 7 D_{12}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R73.71	4 C_2, 2 C_3, 4 C_4, 6 C_6, 4 C_8, 6 C_{12}, 9 D_2, 3 D_3, D_4, 9 D_6, 5 D_{12}	4 C_2, 2 C_3, 4 C_4, 6 C_6, 2 C_8, 6 C_{12}, 9 D_2, 3 D_3, D_4, 9 D_6, 5 D_{12}	3 C_2, 2 C_4, 4 C_6, 2 C_8, 9 D_2, 3 D_3, D_4, 9 D_6, 5 D_{12}	4 C_2, 2 C_3, 2 C_4, 2 C_6, 6 C_{12}, 9 D_2, 3 D_3, D_4, 3 D_6, 5 D_{12}
R73.72	5 C_2, 2 C_3, 5 C_4, 9 C_6, 4 C_8, 3 C_{12}, 15 D_2, 3 D_3, 6 D_4, 9 D_6, 5 D_{12}	5 C_2, 2 C_3, 5 C_4, 9 C_6, 2 C_8, 3 C_{12}, 15 D_2, 3 D_3, 6 D_4, 9 D_6, 5 D_{12}	3 C_2, 4 C_4, 4 C_6, 2 C_8, 13 D_2, 3 D_3, 5 D_4, 9 D_6, 5 D_{12}	5 C_2, 2 C_3, C_4, 5 C_6, 3 C_{12}, 15 D_2, 3 D_3, 2 D_4, 3 D_6, 5 D_{12}
R73.73	3 C_2, 2 C_3, 4 C_4, 5 C_6, 2 C_8, 10 C_{12}, 8 D_2, 3 D_3, D_4, 9 D_6, 5 D_{12}	3 C_2, 2 C_3, 4 C_4, 5 C_6, 10 C_{12}, 8 D_2, 3 D_3, D_4, 9 D_6, 5 D_{12}	2 C_2, 3 C_4, 2 C_6, 5 C_{12}, 8 D_2, 3 D_3, D_4, 9 D_6, 5 D_{12}	3 C_2, 2 C_3, C_4, 3 C_6, 5 C_{12}, 8 D_2, 3 D_3, 6 D_6
R73.74	2 C_2, 5 C_3, 2 C_4, 5 C_6, 2 C_8, 3 C_{12}, 2 C_{24}, 2 D_2, 7 D_3, 5 D_6	2 C_2, 5 C_3, 2 C_4, 5 C_6, 2 C_{12}, 2 D_2, 7 D_3, 5 D_6	2 C_2, 2 C_4, 5 C_6, 2 C_{12}, 2 D_2, 7 D_3, 5 D_6	2 C_2, 5 C_3, 2 D_2, 7 D_3
R73.75	2 C_2, 3 C_3, 2 C_4, 4 C_6, 2 C_8, 5 C_{12}, 4 C_{24}, 2 D_2, 3 D_3, 2 D_6	2 C_2, 3 C_3, 2 C_4, 4 C_6, 4 C_{12}, 2 D_2, 3 D_3, 2 D_6	2 C_2, 2 C_4, 4 C_6, 4 C_{12}, 2 D_2, 3 D_3, 2 D_6	2 C_2, 2 C_3, 2 D_2, 3 D_3
R73.76	3 C_2, 3 C_3, 2 C_4, 5 C_6, 4 C_8, 6 C_{12}, 8 C_{24}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 3 C_3, 2 C_4, 5 C_6, 2 C_8, 5 C_{12}, 2 C_{24}, 3 D_2, 4 D_3, 2 D_6	2 C_2, 2 C_4, 4 C_6, 2 C_8, 5 C_{12}, 2 C_{24}, 3 D_2, 2 D_3, 2 D_6	3 C_2, 2 C_3, 3 D_2, 4 D_3
R73.77	3 C_2, 5 C_3, 2 C_4, 5 C_6, 4 C_8, 3 C_{12}, 2 C_{24}, 3 D_2, 10 D_3, 5 D_6	3 C_2, 5 C_3, 2 C_4, 5 C_6, 2 C_8, 2 C_{12}, 3 D_2, 10 D_3, 5 D_6	2 C_2, 2 C_4, 5 C_6, 2 C_8, 2 C_{12}, 3 D_2, 5 D_3, 5 D_6	3 C_2, 5 C_3, 3 D_2, 9 D_3
R73.78	4 C_2, C_3, 4 C_4, 2 C_5, 3 C_6, 6 C_{10}, C_{12}, 2 C_{20}, 6 D_2, D_3, 4 D_4, 2 D_5, D_6, 2 D_{10}	4 C_2, C_3, 4 C_4, 3 C_6, C_{12}, 6 D_2, D_3, 4 D_4, D_6	3 C_2, 2 C_6, 6 D_2, D_3, 4 D_4, D_6	4 C_2, C_3, 4 C_4, C_6, C_{12}, 6 D_2, D_3, 4 D_4, D_6
R73.79	5 C_2, 3 C_3, 2 C_4, 7 C_6, 3 C_{12}, 13 D_2, 8 D_3, 11 D_6	5 C_2, 3 C_3, 2 C_4, 7 C_6, C_{12}, 13 D_2, 8 D_3, 11 D_6	3 C_2, 2 C_4, 4 C_6, 11 D_2, 4 D_3, 9 D_6	5 C_2, 3 C_3, C_6, 13 D_2, 7 D_3, 2 D_6
R73.80	5 C_2, 5 C_3, 2 C_4, 9 C_6, 3 C_{12}, 13 D_2, 10 D_3, 12 D_6	5 C_2, 5 C_3, 2 C_4, 9 C_6, C_{12}, 13 D_2, 10 D_3, 12 D_6	3 C_2, 2 C_4, 6 C_6, 11 D_2, 5 D_3, 10 D_6	5 C_2, 5 C_3, C_6, 13 D_2, 9 D_3, 2 D_6
R73.81	5 C_2, 3 C_3, 2 C_4, 7 C_6, 3 C_{12}, 13 D_2, 8 D_3, 11 D_6	5 C_2, 3 C_3, 2 C_4, 7 C_6, C_{12}, 13 D_2, 8 D_3, 11 D_6	3 C_2, 2 C_4, 4 C_6, 11 D_2, 4 D_3, 9 D_6	5 C_2, 3 C_3, C_6, 13 D_2, 7 D_3, 2 D_6
R73.82	5 C_2, 5 C_3, 2 C_4, 13 C_6, 7 C_{12}, 13 D_2, 6 D_3, 7 D_6	5 C_2, 5 C_3, 2 C_4, 13 C_6, 5 C_{12}, 13 D_2, 6 D_3, 7 D_6	3 C_2, 2 C_4, 8 C_6, 4 C_{12}, 11 D_2, 3 D_3, 6 D_6	5 C_2, 3 C_3, 2 C_6, 13 D_2, 6 D_3, 2 D_6
R73.83	5 C_2, 5 C_3, 2 C_4, 15 C_6, 4 C_{12}, 13 D_2, 7 D_3, 10 D_6	5 C_2, 5 C_3, 2 C_4, 15 C_6, 2 C_{12}, 13 D_2, 7 D_3, 10 D_6	3 C_2, 2 C_4, C_6, 11 D_2, 7 D_3, 10 D_6	5 C_2, 5 C_3, 10 C_6, 13 D_2, 7 D_3, 10 D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R73.84	5 C_2, 3 C_3, 2 C_4, 10 C_6, 4 C_{12}, 13 D_2, 7 D_3, 10 D_6	5 C_2, 3 C_3, 2 C_4, 10 C_6, 2 C_{12}, 13 D_2, 7 D_3, 10 D_6	3 C_2, 2 C_4, C_6, 11 D_2, 7 D_3, 10 D_6	5 C_2, 2 C_3, 5 C_6, 13 D_2, 7 D_3, 10 D_6
R73.85	5 C_2, 4 C_3, 2 C_4, 14 C_6, 11 C_{12}, 13 D_2, 4 D_3, 8 D_6	5 C_2, 4 C_3, 2 C_4, 14 C_6, 9 C_{12}, 13 D_2, 4 D_3, 8 D_6	3 C_2, 2 C_4, 9 C_6, 9 C_{12}, 11 D_2, 2 D_3, 6 D_6	5 C_2, 2 C_3, 2 C_6, 13 D_2, 4 D_3, 4 D_6
R73.86	5 C_2, 7 C_3, 2 C_4, 23 C_6, 16 C_{12}, 13 D_2, 6 D_3, 12 D_6	5 C_2, 7 C_3, 2 C_4, 23 C_6, 14 C_{12}, 13 D_2, 6 D_3, 12 D_6	3 C_2, 2 C_4, 15 C_6, 14 C_{12}, 11 D_2, 3 D_3, 9 D_6	5 C_2, 5 C_3, 6 C_6, 13 D_2, 6 D_3, 6 D_6
R73.87	5 C_2, 4 C_3, 2 C_4, 14 C_6, 4 C_{12}, 13 D_2, 6 D_3, 12 D_6	5 C_2, 4 C_3, 2 C_4, 14 C_6, 2 C_{12}, 13 D_2, 6 D_3, 12 D_6	3 C_2, 2 C_4, 9 C_6, 2 C_{12}, 11 D_2, 3 D_3, 9 D_6	5 C_2, 4 C_3, 3 C_6, 13 D_2, 6 D_3, 2 D_6
R73.88	3 **Tet**, 3 C_2, 5 C_3, 2 C_4, 3 C_6, 2 C_{12}, 6 D_2, 4 D_3, 4 D_6	3 **Tet**, 3 C_2, 5 C_3, 2 C_4, 3 C_6, 6 D_2, 4 D_3, 4 D_6	2 C_2, C_4, C_6, 5 D_2, 4 D_3, 4 D_6	3 **Tet**, 3 C_2, 5 C_3, 2 C_6, 6 D_2, 4 D_3, 4 D_6
R73.89	**Tet**, 11 C_2, C_3, 6 C_4, 5 C_6, 4 C_8, 4 C_{12}, 4 C_{24}, 89 D_2, 13 D_4	**Tet**, 11 C_2, C_3, 6 C_4, 5 C_6, 3 C_8, 2 C_{12}, 89 D_2, 13 D_4	3 C_2, 5 C_4, 2 C_6, 2 C_{12}, 54 D_2, 12 D_4	11 C_2, C_4, 89 D_2, 2 D_4
R73.90	7 C_2, C_3, 8 C_4, 3 C_6, 3 C_8, 6 C_{12}, 4 C_{24}, 30 D_2, 13 D_4	7 C_2, C_3, 8 C_4, 3 C_6, 2 C_8, 4 C_{12}, 30 D_2, 13 D_4	3 C_2, 6 C_4, 2 C_6, 4 C_{12}, 25 D_2, 13 D_4	7 C_2, 2 C_4, 30 D_2, D_4
R73.91	6 C_2, C_3, 9 C_4, 3 C_6, 2 C_8, 8 C_{12}, 2 C_{24}, 18 D_2, 12 D_4	6 C_2, C_3, 9 C_4, 3 C_6, C_8, 6 C_{12}, 18 D_2, 12 D_4	3 C_2, 7 C_4, 2 C_6, 4 C_{12}, 18 D_2, 12 D_4	6 C_2, 18 D_2
R73.92	**Tet**, 7 C_2, C_3, 10 C_4, 3 C_6, 2 C_8, 8 C_{12}, 2 C_{24}, 34 D_2, 9 D_4	**Tet**, 7 C_2, C_3, 10 C_4, 3 C_6, C_8, 6 C_{12}, 34 D_2, 9 D_4	3 C_2, 8 C_4, 2 C_6, 4 C_{12}, 27 D_2, 9 D_4	7 C_2, 34 D_2
R73.93	4 C_2, C_3, 9 C_4, 3 C_6, 3 C_8, 6 C_{12}, 4 C_{24}, 9 D_2, 5 D_4	4 C_2, C_3, 9 C_4, 3 C_6, 2 C_8, 4 C_{12}, 9 D_2, 5 D_4	2 C_2, 4 C_4, C_6, 2 C_8, 2 C_{12}, 9 D_2, 5 D_4	4 C_2, 5 C_4, 9 D_2, 3 D_4
R73.94	4 C_2, C_3, 8 C_4, 3 C_6, 3 C_8, 6 C_{12}, 4 C_{24}, 9 D_2, 5 D_4	4 C_2, C_3, 8 C_4, 3 C_6, 2 C_8, 4 C_{12}, 9 D_2, 5 D_4	3 C_2, 4 C_4, 2 C_6, C_8, 2 C_{12}, 9 D_2, 5 D_4	4 C_2, 4 C_4, 9 D_2, 3 D_4
R73.95	5 C_2, C_3, 7 C_4, 3 C_6, 6 C_8, 6 C_{12}, 4 C_{24}, 15 D_2, 10 D_4, 6 D_8	5 C_2, C_3, 7 C_4, 3 C_6, 5 C_8, 4 C_{12}, 15 D_2, 10 D_4, 5 D_8	3 C_2, 5 C_4, 2 C_6, 2 C_8, 4 C_{12}, 13 D_2, 8 D_4, 5 D_8	5 C_2, 2 C_4, C_8, 15 D_2, 4 D_4, D_8
R73.96	**Tet**, 3 C_2, C_3, 3 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 9 D_2, 2 D_4, 2 D_8	**Tet**, 3 C_2, C_3, 3 C_4, C_6, 3 C_8, C_{12}, C_{24}, 9 D_2, 2 D_4, 2 D_8	2 C_2, 2 C_4, C_6, 2 C_8, 8 D_2, 2 D_4, 2 D_8	3 C_2, 9 D_2
R73.97	**Tet**, 3 C_2, C_3, 3 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 9 D_2, 2 D_4, 2 D_8	**Tet**, 3 C_2, C_3, 3 C_4, C_6, 3 C_8, 9 D_2, 2 D_4, 2 D_8	2 C_2, 2 C_4, C_6, 2 C_8, 8 D_2, 2 D_4, 2 D_8	3 C_2, 9 D_2
R73.98	9 C_2, C_3, 6 C_4, 9 C_6, 2 C_8, 9 C_{12}, 4 C_{24}, 54 D_2, 11 D_4	9 C_2, C_3, 6 C_4, 9 C_6, C_8, 7 C_{12}, C_{24}, 54 D_2, 11 D_4	3 C_2, 3 C_4, C_6, C_8, 37 D_2, 8 D_4	9 C_2, 3 C_4, 54 D_2, 11 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R73.99	5 C_2, C_3, 5 C_4, 5 C_6, 3 C_8, 6 C_{12}, 5 C_{24}, 14 D_2, 7 D_4, D_8	5 C_2, C_3, 5 C_4, 5 C_6, 2 C_8, 4 C_{12}, C_{24}, 14 D_2, 7 D_4, D_8	3 C_2, 2 C_4, C_6, 12 D_2, 6 D_4, D_8	5 C_2, 3 C_4, C_8, 14 D_2, 6 D_4, D_8
R73.100	4 C_2, C_3, 5 C_4, 4 C_6, 3 C_8, 7 C_{12}, 5 C_{24}, 8 D_2, 4 D_4, D_8	4 C_2, C_3, 5 C_4, 4 C_6, 2 C_8, 5 C_{12}, 2 C_{24}, 8 D_2, 4 D_4, D_8	3 C_2, 2 C_4, C_6, C_8, 8 D_2, 4 D_4, D_8	4 C_2, 3 C_4, C_8, 8 D_2, 4 D_4, D_8
R73.101	4 C_2, C_3, 4 C_4, 4 C_6, 3 C_8, 5 C_{12}, 4 C_{24}, 10 D_2, 5 D_4, 3 D_8	4 C_2, C_3, 4 C_4, 4 C_6, 2 C_8, 3 C_{12}, 2 C_{24}, 10 D_2, 5 D_4, 3 D_8	3 C_2, 3 C_4, C_6, 2 C_8, 10 D_2, 5 D_4, 3 D_8	4 C_2, C_4, 10 D_2, 2 D_4
R73.102	3 C_2, 3 C_3, 2 C_4, 2 C_5, 5 C_6, 2 C_{10}, 7 C_{12}, 10 C_{15}, 2 C_{20}, 10 C_{30}, 16 C_{60}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 8 D_{15}, 4 D_{30}	3 C_2, 3 C_3, 2 C_4, C_5, 5 C_6, C_{10}, 5 C_{12}, 4 C_{15}, 4 C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 4 D_{15}, 2 D_{30}	2 C_2, 2 C_4, 4 C_6, C_{10}, 3 C_{12}, 3 C_{30}, 3 D_2, D_3, D_5, D_6, D_{10}, 2 D_{15}, 2 D_{30}	3 C_2, C_3, C_5, 3 D_2, 2 D_3, D_5
R73.103	3 C_2, 3 C_3, 2 C_4, 2 C_5, 3 C_6, 2 C_{10}, 2 C_{12}, 10 C_{15}, 2 C_{20}, 10 C_{30}, 4 C_{60}, 3 D_2, 6 D_3, 4 D_5, 3 D_6, 2 D_{10}, 20 D_{15}, 10 D_{30}	3 C_2, 3 C_3, 2 C_4, C_5, 3 C_6, C_{10}, 4 C_{15}, 4 C_{30}, 3 D_2, 6 D_3, 2 D_5, 3 D_6, D_{10}, 8 D_{15}, 4 D_{30}	2 C_2, 2 C_4, 3 C_6, C_{10}, 3 C_{30}, 3 D_2, 3 D_3, D_5, 3 D_6, D_{10}, 4 D_{15}, 4 D_{30}	3 C_2, 3 C_3, C_5, C_{15}, 3 D_2, 4 D_3, D_5, D_{15}
R73.104	3 C_2, 3 C_3, 2 C_4, 2 C_5, 5 C_6, 2 C_{10}, 7 C_{12}, 6 C_{15}, 2 C_{20}, 6 C_{30}, 4 C_{60}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 4 D_{15}, 2 D_{30}	3 C_2, 3 C_3, 2 C_4, C_5, 5 C_6, C_{10}, 5 C_{12}, 2 C_{15}, 2 C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	2 C_2, 2 C_4, 4 C_6, C_{10}, 5 C_{12}, 2 C_{30}, 3 D_2, D_3, D_5, D_6, D_{10}, D_{15}, D_{30}	3 C_2, C_3, C_5, 3 D_2, 2 D_3, D_5
R73.105	2 **Tet**, 2 **Ico**, 3 C_2, 3 C_3, 2 C_5, 5 C_6, 2 C_{10}, 2 C_{15}, 2 C_{30}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	2 **Tet**, **Ico**, 3 C_2, 3 C_3, C_5, 5 C_6, C_{10}, 7 D_2, 2 D_3, 2 D_5, D_6, D_{10}	2 C_2, 3 C_6, C_{10}, 6 D_2, D_3, D_5, D_6, D_{10}	2 **Tet**, 3 C_2, 2 C_3, C_5, 7 D_2, 2 D_3, D_5
R73.106	2 **Tet**, 3 C_2, 3 C_3, 2 C_5, 2 C_6, 6 C_{10}, 10 C_{15}, 6 C_{30}, 6 D_2, 2 D_3, 2 D_6	2 **Tet**, 3 C_2, 3 C_3, 2 C_6, 6 D_2, 2 D_3, 2 D_6	2 C_2, C_6, 5 D_2, 2 D_3, 2 D_6	3 C_2, C_3, C_6, 6 D_2, 2 D_3, 2 D_6
R73.107	3 C_2, 2 C_3, 2 C_4, 2 C_5, 2 C_6, 6 C_{10}, 4 C_{15}, 8 C_{20}, 4 C_{30}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 2 C_3, 2 C_4, C_5, 2 C_6, 3 C_{10}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 3 D_2, 4 D_3, 2 D_6	2 C_2, 2 C_4, C_{10}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 2 C_3, C_5, 2 C_6, 3 D_2, 4 D_3, 2 D_6
R73.108	C_2, 3 C_3, C_4, C_6, 5 C_9, 2 C_{12}, 3 C_{18}, 6 C_{36}, 2 D_3	C_2, 3 C_3, C_4, C_6, 2 C_9, 2 D_3	C_2, C_4, C_6, 2 D_3	C_2, 3 C_3, 2 D_3
R73.109	C_2, 5 C_3, C_4, C_6, 9 C_9, 2 C_{12}, 3 C_{18}, 6 C_{36}, 2 D_3	C_2, 5 C_3, C_4, C_6, 7 C_9, C_{18}, 2 D_3	C_2, C_4, C_6, C_{18}, 2 D_3	C_2, 5 C_3, C_9, 2 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R73.110	**Tet**, 3 C_2, C_3, C_6, 6 C_{13}, 18 C_{26}, 12 C_{39}, 12 C_{78}, 6 D_2	**Tet**, 3 C_2, C_3, C_6, 6 D_2	2 C_2, C_6, 5 D_2	3 C_2, 6 D_2
R73.111	5 C_2, 5 C_4, 2 C_5, 4 C_8, 10 C_{10}, 10 C_{20}, 16 C_{40}, 15 D_2, 6 D_4	5 C_2, 5 C_4, C_5, 2 C_8, 5 C_{10}, 3 C_{20}, 15 D_2, 6 D_4	3 C_2, 2 C_4, C_{10}, 13 D_2, 5 D_4	5 C_2, 3 C_4, C_5, 15 D_2, 4 D_4
R73.112	5 C_2, 6 C_4, 2 C_5, 6 C_8, 10 C_{10}, 20 C_{20}, 24 C_{40}, 13 D_2, 3 D_4	5 C_2, 6 C_4, C_5, 4 C_8, 5 C_{10}, 8 C_{20}, 4 C_{40}, 13 D_2, 3 D_4	3 C_2, 3 C_4, 3 C_8, C_{10}, 11 D_2, 2 D_4	5 C_2, 2 C_4, C_5, 13 D_2, 3 D_4
R73.113	7 C_2, 3 C_4, 2 C_5, 4 C_8, 14 C_{10}, 12 C_{20}, 16 C_{40}, 30 D_2	7 C_2, 3 C_4, C_5, 2 C_8, 7 C_{10}, 4 C_{20}, 2 C_{40}, 30 D_2	2 C_2, 2 C_4, 2 C_8, C_{10}, 19 D_2	7 C_2, C_4, C_5, C_{10}, 30 D_2
R73.114	3 C_2, 4 C_4, 2 C_5, 2 C_8, 6 C_{10}, 10 C_{20}, 8 C_{40}, 8 D_2, D_4	3 C_2, 4 C_4, C_5, 3 C_{10}, 3 C_{20}, 8 D_2, D_4	2 C_2, 3 C_4, C_{10}, 8 D_2, D_4	3 C_2, C_4, C_5, C_{10}, 8 D_2
R73.115	4 C_2, 4 C_4, 2 C_5, 4 C_8, 8 C_{10}, 12 C_{20}, 16 C_{40}, 9 D_2, D_4	4 C_2, 4 C_4, C_5, 2 C_8, 4 C_{10}, 4 C_{20}, 2 C_{40}, 9 D_2, D_4	3 C_2, 2 C_4, 2 C_8, C_{10}, 9 D_2, D_4	4 C_2, 2 C_4, C_5, 9 D_2, D_4
R73.116	C_2, 3 C_3, C_6, 8 C_{17}, 8 C_{34}, 40 C_{51}, 16 C_{102}, D_3	C_2, 3 C_3, C_6, D_3	C_2, C_6, D_3	C_2, C_3, D_3
R73.117	5 C_2, 2 C_4, 9 C_{19}, 45 C_{38}, 36 C_{76}, 13 D_2	5 C_2, 2 C_4, C_{19}, 5 C_{38}, 2 C_{76}, 13 D_2	3 C_2, 2 C_4, C_{38}, 11 D_2	5 C_2, C_{19}, 13 D_2
R73.118	C_2, C_3, C_6, 3 C_7, 3 C_{14}, 6 C_{21}, 6 C_{42}, 21 C_{49}, 21 C_{98}, 42 C_{147}, 42 C_{294}	C_2, C_3, C_6	C_2, C_6	C_2
R73.119	3 C_2, 2 C_4, 18 C_{37}, 54 C_{74}, 72 C_{148}, 3 D_2	3 C_2, 2 C_4, C_{37}, 3 C_{74}, 2 C_{148}, 3 D_2	2 C_2, 2 C_4, C_{74}, 3 D_2	3 C_2, C_{37}, C_{74}, 3 D_2
R73.120	C_2, C_4, 36 C_{73}, 36 C_{146}, 72 C_{292}	C_2, C_4, C_{73}, C_{146}	C_2, C_4, C_{146}	C_2, C_{73}
Genus 74				
R74.1	3 C_2, C_3, C_4, 2 C_5, 2 C_6, 4 C_{10}, 4 C_{15}, 10 C_{25}, 8 C_{30}, 20 C_{50}, 20 C_{75}, 40 C_{150}, 4 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 4 D_{15}, 10 D_{25}, 4 D_{30}, 10 D_{50}, 20 D_{75}, 20 D_{150}	3 C_2, C_3, C_4, C_5, 2 C_6, 2 C_{10}, C_{15}, C_{25}, 2 C_{30}, 2 C_{50}, C_{75}, 2 C_{150}, 4 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{15}, D_{25}, D_{30}, D_{50}, D_{75}, D_{150}	3 C_2, C_4, C_6, C_{10}, C_{30}, C_{50}, C_{150}, 4 D_2, D_3, D_4, D_5, D_6, D_{10}, D_{15}, D_{25}, D_{30}, D_{50}, D_{75}, D_{150}	3 C_2, C_3, C_5, C_{15}, C_{25}, C_{75}, 4 D_2, D_3, D_5, D_{15}, D_{25}, D_{75}
R74.2	2 C_2, 2 C_4, C_8, 18 C_{37}, 18 C_{74}, 36 C_{148}, 36 C_{296}, 2 D_2, D_4, 18 D_{37}, 18 D_{74}, 36 D_{148}	2 C_2, 2 C_4, C_{37}, C_{74}, C_{148}, 2 D_2, D_4, D_{37}, D_{74}, D_{148}	2 C_2, 2 C_4, C_{74}, C_{148}, 2 D_2, D_4, D_{37}, D_{74}, D_{148}	2 C_2, C_{37}, 2 D_2, D_{37}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R74.3	3 C_2, C_3, C_4, 2 C_6, 9 C_{19}, 9 C_{38}, 9 C_{57}, 18 C_{76}, 9 C_{114}, 4 D_2, D_3, D_4, D_6, 18 D_{19}, 18 D_{38}, 9 D_{57}, 18 D_{76}, 9 D_{114}	3 C_2, C_3, C_4, 2 C_6, C_{19}, C_{38}, C_{57}, C_{76}, C_{114}, 4 D_2, D_3, D_4, D_6, 2 D_{19}, 2 D_{38}, D_{57}, D_{76}, D_{114}	3 C_2, C_4, C_6, 4 D_2, D_3, D_4, D_6, 2 D_{19}, 2 D_{38}, D_{57}, D_{76}, D_{114}	3 C_2, C_3, C_{19}, C_{38}, 4 D_2, D_3, 2 D_{19}, 2 D_{38}
R74.4	3 C_2, C_3, 3 C_6, 18 C_{37}, 18 C_{74}, 18 C_{111}, 18 C_{222}, 3 D_2, 36 D_{37}, 18 D_{74}	3 C_2, C_3, 3 C_6, C_{37}, C_{74}, 3 D_2, 2 D_{37}, D_{74}	3 C_2, C_6, 3 D_2, 2 D_{37}, D_{74}	3 C_2, C_{37}, C_{74}, 3 D_2, 2 D_{37}, D_{74}
R74.5	2 C_2, C_3, C_4, C_6, C_8, 3 C_9, C_{12}, 3 C_{18}, 9 C_{27}, 3 C_{36}, 9 C_{54}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 9 D_{27}, 3 D_{36}, 9 D_{54}	2 C_2, C_3, C_4, C_6, C_9, C_{12}, C_{18}, C_{27}, C_{36}, C_{54}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{27}, D_{36}, D_{54}	2 C_2, C_4, C_6, C_{12}, C_{18}, C_{36}, C_{54}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{27}, D_{36}, D_{54}	2 C_2, C_3, C_9, 2 D_2, D_3, D_9
R74.6	2 C_2, 2 C_4, 2 C_5, C_8, 2 C_{10}, 4 C_{20}, 10 C_{25}, 10 C_{50}, 20 C_{100}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 2 D_{20}, 10 D_{25}, 10 D_{50}, 10 D_{100}	2 C_2, 2 C_4, C_5, C_{10}, C_{20}, C_{25}, C_{50}, C_{100}, 2 D_2, D_4, D_5, D_{10}, D_{20}, D_{25}, D_{50}, D_{100}	2 C_2, 2 C_4, C_{10}, C_{50}, 2 D_2, D_4, D_5, D_{10}, D_{20}, D_{25}, D_{50}, D_{100}	2 C_2, C_5, C_{25}, 2 D_2, D_5, D_{25}
R74.7	C_2, 2 C_5, 2 C_{10}, 18 C_{37}, 36 C_{185}, 18 D_{37}	C_2, C_5, C_{10}, C_{37}, D_{37}	C_2, C_{10}, D_{37}	C_2, C_{37}, D_{37}
R74.8	2 C_2, 2 C_4, 2 C_8, 5 C_{11}, 2 C_{16}, 5 C_{22}, 10 C_{44}, 10 C_{88}, 2 D_2, D_4, 2 D_8, 5 D_{11}, 5 D_{22}, 5 D_{44}, 10 D_{88}	2 C_2, 2 C_4, C_8, C_{11}, C_{22}, C_{44}, C_{88}, 2 D_2, D_4, D_8, D_{11}, D_{22}, D_{44}, D_{88}	2 C_2, 2 C_4, C_8, C_{22}, 2 D_2, D_4, D_8, D_{11}, D_{22}, D_{44}, D_{88}	2 C_2, C_{11}, 2 D_2, D_{11}
R74.9	2 C_2, C_3, C_4, C_6, 3 C_7, C_8, 6 C_{14}, 3 C_{21}, 3 C_{28}, 3 C_{42}, 6 C_{56}, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, C_4, C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, C_6, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, 2 D_2, D_3
R74.10	3 C_2, C_3, C_4, 3 C_6, 3 C_7, 2 C_8, C_{12}, 6 C_{14}, 3 C_{21}, 2 C_{24}, 3 C_{28}, 9 C_{42}, 3 C_{84}, 4 D_2, 2 D_4, 3 D_7, 2 D_8, 3 D_{14}, 3 D_{28}	3 C_2, C_3, C_4, 3 C_6, C_7, C_8, 2 C_{14}, C_{28}, 4 D_2, 2 D_4, D_7, D_8, D_{14}, D_{28}	3 C_2, C_6, C_{14}, 4 D_2, 2 D_4, D_7, D_8, D_{14}, D_{28}	3 C_2, C_4, C_7, 4 D_2, 2 D_4, D_7
R74.11	3 C_2, C_3, C_4, 2 C_6, 6 C_{13}, 18 C_{26}, 6 C_{39}, 6 C_{52}, 18 C_{78}, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, C_4, 2 C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_4, C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, 4 D_2, D_3
R74.12	2 C_2, 2 C_4, C_8, 9 C_{19}, 18 C_{38}, 18 C_{76}, 18 C_{152}, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 D_2
R74.13	C_2, 74 C_{149}, 74 C_{298}	C_2	C_2	C_2
R74.14	3 C_2, C_3, 2 C_5, 3 C_6, 6 C_{10}, 4 C_{15}, 10 C_{25}, 12 C_{30}, 30 C_{50}, 20 C_{75}, 60 C_{150}, 3 D_2	3 C_2, C_3, C_5, 3 C_6, 3 C_{10}, C_{15}, C_{25}, 3 C_{30}, 3 C_{50}, C_{75}, 3 C_{150}, 3 D_2	3 C_2, C_6, C_{10}, C_{30}, C_{50}, C_{150}, 3 D_2	3 C_2, C_3, C_5, C_{15}, C_{25}, C_{75}, 3 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R74.15	C_2, C_4, 2 C_8, 18 C_{37}, 18 C_{74}, 36 C_{148}, 72 C_{296}	C_2, C_4, C_{37}, C_{74}, C_{148}	C_2, C_4, C_{74}, C_{148}	C_2, C_{37}
Genus 75				
R75.1	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, 6 C_{13}, 18 C_{26}, 12 C_{39}, 12 C_{78}, 16 D_2, 2 D_3, 4 D_4, D_6, 12 D_{13}, 24 D_{26}, 24 D_{39}, 12 D_{78}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, C_{13}, 3 C_{26}, C_{39}, C_{78}, 16 D_2, 2 D_3, 4 D_4, D_6, 2 D_{13}, 4 D_{26}, 2 D_{39}, D_{78}	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, C_6, C_{26}, 16 D_2, D_3, 4 D_4, D_6, D_{13}, 4 D_{26}, D_{39}, D_{78}	**Tet**, 5 C_2, C_3, C_{13}, C_{26}, 16 D_2, D_3, 2 D_{13}, D_{26}
R75.2	5 C_2, 3 C_4, 2 C_8, 9 C_{19}, 27 C_{38}, 36 C_{76}, 36 C_{152}, 13 D_2, 3 D_4, 18 D_{19}, 36 D_{38}, 54 D_{76}	5 C_2, 3 C_4, C_8, C_{19}, 3 C_{38}, 3 C_{76}, C_{152}, 13 D_2, 3 D_4, 2 D_{19}, 4 D_{38}, 5 D_{76}	3 C_2, 2 C_4, C_{38}, 13 D_2, 3 D_4, D_{19}, 3 D_{38}, 3 D_{76}	5 C_2, C_4, C_{19}, C_{38}, C_{76}, 13 D_2, D_4, 2 D_{19}, 2 D_{38}, D_{76}
R75.3	3 C_2, 5 C_4, C_8, 9 C_{19}, 18 C_{38}, 18 C_{76}, 18 C_{152}, 4 D_2, 2 D_4, 9 D_{19}, 9 D_{38}, 9 D_{76}	3 C_2, 5 C_4, C_{19}, 2 C_{38}, C_{76}, 4 D_2, 2 D_4, D_{19}, D_{38}, D_{76}	3 C_2, 4 C_4, C_{38}, 4 D_2, 2 D_4, D_{19}, D_{38}, D_{76}	3 C_2, C_{19}, C_{38}, 4 D_2, D_{19}, D_{38}
R75.4	3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 4 C_{15}, 2 C_{20}, 10 C_{25}, 4 C_{30}, 10 C_{50}, 4 C_{60}, 20 C_{75}, 10 C_{100}, 20 C_{150}, 20 C_{300}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 8 D_{15}, 20 D_{25}, 4 D_{30}, 10 D_{50}, 40 D_{75}, 20 D_{150}	3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{15}, C_{25}, C_{30}, C_{50}, C_{75}, C_{150}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, 2 D_{25}, D_{30}, D_{50}, 2 D_{75}, D_{150}	2 C_2, 2 C_4, C_6, C_{10}, C_{30}, C_{50}, C_{150}, 3 D_2, D_3, D_5, D_6, D_{10}, D_{15}, D_{25}, D_{30}, D_{50}, D_{75}, D_{150}	3 C_2, C_3, C_5, C_{15}, C_{25}, C_{75}, 3 D_2, D_3, D_5, D_{15}, D_{25}, D_{75}
R75.5	3 C_2, C_3, 3 C_4, 2 C_5, 2 C_6, 2 C_8, 2 C_{10}, 2 C_{15}, 4 C_{20}, 2 C_{30}, 2 C_{40}, 4 D_2, D_3, 2 D_4, 4 D_5, D_6, 4 D_{10}, 4 D_{15}, 4 D_{20}, 2 D_{30}	3 C_2, C_3, 3 C_4, C_5, 2 C_6, C_8, C_{10}, C_{15}, C_{20}, C_{30}, 4 D_2, D_3, 2 D_4, 2 D_5, D_6, 2 D_{10}, 2 D_{15}, D_{20}, D_{30}	3 C_2, 3 C_4, 2 C_6, C_8, 4 D_2, D_3, 2 D_4, 2 D_5, D_6, 2 D_{10}, 2 D_{15}, D_{20}, D_{30}	3 C_2, C_3, C_5, C_{10}, 4 D_2, D_3, 2 D_5, 2 D_{10}
R75.6	5 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 2 C_8, 4 C_{10}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 2 C_{40}, 13 D_2, 2 D_3, 3 D_4, 6 D_5, 4 D_6, 8 D_{10}, 2 D_{15}, 2 D_{20}, 2 D_{30}	5 C_2, C_3, 2 C_4, C_5, 3 C_6, C_8, 2 C_{10}, C_{15}, C_{30}, 13 D_2, 2 D_3, 3 D_4, 3 D_5, 4 D_6, 4 D_{10}, D_{15}, D_{30}	3 C_2, 2 C_4, 2 C_6, C_8, 13 D_2, D_3, 3 D_4, 2 D_5, 4 D_6, 4 D_{10}, D_{15}, D_{30}	5 C_2, C_3, C_5, C_{10}, 13 D_2, 2 D_3, 3 D_5, 2 D_{10}
R75.7	**Tet**, **Oct**, 2 C_2, C_3, 3 C_4, 2 C_5, C_8, 2 C_{10}, 4 C_{15}, 4 C_{20}, 3 D_2, D_3, 2 D_4, 2 D_5, 2 D_{10}, 4 D_{15}, 2 D_{20}	**Tet**, **Oct**, 2 C_2, C_3, 3 C_4, C_5, C_{10}, C_{15}, 2 C_{20}, 3 D_2, D_3, 2 D_4, D_5, D_{10}, D_{15}, D_{20}	**Tet**, **Oct**, 2 C_2, 2 C_4, C_{10}, C_{20}, 3 D_2, D_3, 2 D_4, D_5, D_{10}, D_{15}, D_{20}	**Tet**, 2 C_2, C_3, C_5, 3 D_2, D_3, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R75.8	5 C_2, 3 C_4, 2 C_8, 6 C_{13}, 18 C_{26}, 24 C_{52}, 13 D_2, 3 D_4, 12 D_{13}, 24 D_{26}, 18 D_{52}	5 C_2, 3 C_4, C_8, C_{13}, 3 C_{26}, 3 C_{52}, 13 D_2, 3 D_4, 2 D_{13}, 4 D_{26}, 3 D_{52}	3 C_2, 2 C_4, C_{26}, C_{52}, 13 D_2, 3 D_4, D_{13}, 4 D_{26}, 3 D_{52}	5 C_2, C_4, C_{13}, C_{26}, 13 D_2, D_4, 2 D_{13}, D_{26}
R75.9	3 C_2, 5 C_4, C_8, 6 C_{13}, 12 C_{26}, 42 C_{52}, 4 D_2, 2 D_4, 6 D_{13}, 6 D_{26}, 12 D_{52}	3 C_2, 5 C_4, C_{13}, 2 C_{26}, 6 C_{52}, 4 D_2, 2 D_4, D_{13}, D_{26}, 2 D_{52}	3 C_2, 3 C_4, C_{26}, 2 C_{52}, 4 D_2, 2 D_4, D_{13}, D_{26}, 2 D_{52}	3 C_2, C_{13}, 4 D_2, D_{13}
R75.10	2 C_2, 2 C_4, 2 C_5, 2 C_8, 2 C_{10}, 2 C_{20}, 10 C_{25}, 4 C_{40}, 10 C_{50}, 10 C_{100}, 20 C_{200}, 2 D_2, 2 D_5, 2 D_{10}, 10 D_{25}, 10 D_{50}	2 C_2, 2 C_4, C_5, C_{10}, C_{25}, C_{50}, 2 D_2, D_5, D_{10}, D_{25}, D_{50}	2 C_2, C_4, C_{10}, C_{50}, 2 D_2, D_5, D_{10}, D_{25}, D_{50}	2 C_2, C_5, C_{25}, 2 D_2, D_5, D_{25}
R75.11	3 C_2, 2 C_4, 2 C_5, 4 C_8, 2 C_{10}, 2 C_{20}, 10 C_{25}, 4 C_{40}, 10 C_{50}, 10 C_{100}, 20 C_{200}, 3 D_2, 4 D_5, 2 D_{10}, 20 D_{25}, 10 D_{50}	3 C_2, 2 C_4, C_5, 2 C_8, C_{10}, C_{25}, C_{50}, 3 D_2, 2 D_5, D_{10}, 2 D_{25}, D_{50}	2 C_2, C_4, C_{10}, C_{50}, 3 D_2, D_5, D_{10}, D_{25}, D_{50}	3 C_2, C_5, C_{25}, 3 D_2, D_5, D_{25}
R75.12	5 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 4 C_{12}, 8 C_{16}, 4 C_{24}, 8 C_{32}, 8 C_{48}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_8, 3 D_{12}, 12 D_{16}, 6 D_{24}, 12 D_{48}	5 C_2, C_3, 3 C_4, 3 C_6, 3 C_8, 3 C_{12}, 3 C_{16}, 3 C_{24}, C_{32}, 3 C_{48}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 4 D_8, 3 D_{12}, 5 D_{16}, 4 D_{24}, 5 D_{48}	3 C_2, 2 C_4, C_6, C_{12}, 13 D_2, D_3, 2 D_4, 4 D_6, 3 D_8, 2 D_{12}, 3 D_{16}, 3 D_{24}, 3 D_{48}	5 C_2, C_3, C_4, C_6, C_8, C_{16}, 13 D_2, 2 D_3, 2 D_4, D_6, 2 D_8, D_{16}
R75.13	3 C_2, C_3, 4 C_4, 2 C_6, 3 C_8, 4 C_{12}, 4 C_{16}, 3 C_{24}, 4 C_{32}, 6 C_{48}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{16}, 2 D_{24}, 4 D_{48}	3 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, 3 C_{12}, C_{16}, 2 C_{24}, 2 C_{48}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, 2 D_{48}	3 C_2, 3 C_4, C_6, C_{12}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, 2 D_{48}	3 C_2, C_3, C_4, C_8, 4 D_2, D_3, D_4, D_8
R75.14	C_2, 2 C_5, 3 C_7, 3 C_{14}, 10 C_{25}, 6 C_{35}, 30 C_{175}, 2 D_5, 10 D_{25}	C_2, C_5, C_{25}, D_5, D_{25}	C_2, D_5, D_{25}	C_2, C_5, C_{25}, D_5, D_{25}
R75.15	2 C_2, C_3, 2 C_4, C_6, 3 C_7, 2 C_{12}, 6 C_{14}, 6 C_{21}, 9 C_{28}, 6 C_{42}, 12 C_{84}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, C_6, C_{12}, 2 D_2, D_4	2 C_2, C_4, C_6, 2 D_2, D_4	2 C_2, 2 D_2
R75.16	C_2, C_3, 2 C_5, 5 C_{11}, 4 C_{15}, 5 C_{22}, 5 C_{33}, 10 C_{55}, 20 C_{165}, D_3, 2 D_5, 4 D_{15}	C_2, C_3, C_5, C_{15}, D_3, D_5, D_{15}	C_2, D_3, D_5, D_{15}	C_2, C_3, C_5, C_{15}, D_3, D_5, D_{15}
R75.17	3 C_2, C_3, 2 C_4, C_6, 3 C_7, 4 C_8, C_{12}, 3 C_{14}, 3 C_{21}, 2 C_{24}, 3 C_{28}, 3 C_{42}, 6 C_{56}, 3 C_{84}, 3 D_2, 2 D_3, D_6, 6 D_7, 3 D_{14}, 6 D_{21}, 3 D_{42}	3 C_2, C_3, 2 C_4, C_6, C_7, 2 C_8, C_{14}, C_{21}, C_{42}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 2 D_{21}, D_{42}	2 C_2, C_4, C_6, C_{14}, 3 D_2, D_3, D_6, D_7, D_{14}, D_{21}, D_{42}	3 C_2, C_3, C_7, 3 D_2, D_3, D_7

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R75.18	2 C_2, C_3, 2 C_4, C_6, 3 C_7, 2 C_8, C_{12}, 3 C_{14}, 3 C_{21}, 2 C_{24}, 3 C_{28}, 3 C_{42}, 6 C_{56}, 3 C_{84}, 2 D_2, D_3, D_6, 3 D_7, 3 D_{14}, 3 D_{21}, 3 D_{42}	2 C_2, C_3, 2 C_4, C_6, C_7, C_{14}, C_{21}, C_{42}, 2 D_2, D_3, D_6, D_7, D_{14}, D_{21}, D_{42}	2 C_2, C_4, C_6, C_{14}, 2 D_2, D_3, D_6, D_7, D_{14}, D_{21}, D_{42}	2 C_2, C_3, C_7, 2 D_2, D_3, D_7
R75.19	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, 3 C_7, 15 C_{14}, 3 C_{21}, 6 C_{28}, 3 C_{42}, 16 D_2, 2 D_3, 4 D_4, D_6	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, 16 D_2, 2 D_3, 4 D_4, D_6	**Tet**, **Oct**, 3 C_2, C_4, C_6, 16 D_2, D_3, 4 D_4, D_6	**Tet**, 5 C_2, C_3, C_4, 16 D_2, D_3, 2 D_4
R75.20	2 C_2, 2 C_4, 2 C_5, 3 C_8, 2 C_{10}, 6 C_{16}, 2 C_{20}, 8 C_{32}, 4 C_{40}, 8 C_{80}, 16 C_{160}, 2 D_2, 2 D_5, 2 D_{10}	2 C_2, 2 C_4, C_5, C_8, C_{10}, 2 D_2, D_5, D_{10}	2 C_2, C_4, C_{10}, 2 D_2, D_5, D_{10}	2 C_2, C_5, 2 D_2, D_5
R75.21	3 C_2, 2 C_4, 2 C_5, 4 C_8, 2 C_{10}, 8 C_{16}, 2 C_{20}, 16 C_{32}, 4 C_{40}, 8 C_{80}, 16 C_{160}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, 2 C_4, C_5, 2 C_8, C_{10}, 3 D_2, 2 D_5, D_{10}	2 C_2, C_4, C_{10}, 3 D_2, D_5, D_{10}	3 C_2, C_5, 3 D_2, D_5
R75.22	4 C_2, 2 C_4, 2 C_5, 4 C_8, 8 C_{10}, 2 C_{16}, 4 C_{20}, 10 C_{40}, 8 C_{80}, 9 D_2, 3 D_4, 4 D_8	4 C_2, 2 C_4, 2 C_8, 9 D_2, 3 D_4, 3 D_8	2 C_2, 2 C_4, 2 C_8, 9 D_2, 3 D_4, 3 D_8	4 C_2, 9 D_2
R75.23	3 C_2, 3 C_4, 2 C_5, 4 C_8, 6 C_{10}, 4 C_{16}, 8 C_{20}, 12 C_{40}, 16 C_{80}, 4 D_2, 2 D_4, 2 D_8	3 C_2, 3 C_4, 2 C_8, 4 D_2, 2 D_4, 2 D_8	2 C_2, 3 C_4, 2 C_8, 4 D_2, 2 D_4, 2 D_8	3 C_2, 4 D_2
R75.24	3 C_2, C_3, 2 C_4, C_6, C_{12}, 6 C_{13}, 18 C_{26}, 6 C_{39}, 24 C_{52}, 6 C_{78}, 12 C_{156}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 3 D_2, 2 D_3, D_6	2 C_2, 2 C_4, C_6, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, D_3
R75.25	C_2, 2 C_5, 15 C_{31}, 15 C_{62}, 30 C_{155}, 2 D_5	C_2, C_5, D_5	C_2, D_5	C_2, C_5, D_5
R75.26	**Tet**, 3 C_2, C_3, C_6, 6 C_{13}, 18 C_{26}, 12 C_{39}, 12 C_{78}, 6 D_2	**Tet**, 3 C_2, C_3, C_6, C_{13}, 3 C_{26}, C_{39}, C_{78}, 6 D_2	**Tet**, 2 C_2, C_6, C_{26}, 6 D_2	**Tet**, 3 C_2, C_3, C_{13}, C_{26}, 6 D_2
R75.27	C_2, 75 C_{151}, 75 C_{302}	C_2	C_2	C_2
R75.28	2 C_2, 2 C_4, 2 C_8, 9 C_{19}, 18 C_{38}, 27 C_{76}, 36 C_{152}, 2 D_2	2 C_2, 2 C_4, C_{19}, 2 C_{38}, C_{76}, 2 D_2	2 C_2, C_4, C_{38}, 2 D_2	2 C_2, C_{19}, C_{38}, 2 D_2
R75.29	3 C_2, 2 C_4, 4 C_8, 9 C_{19}, 27 C_{38}, 36 C_{76}, 72 C_{152}, 3 D_2	3 C_2, 2 C_4, 2 C_8, C_{19}, 3 C_{38}, 3 C_{76}, 2 C_{152}, 3 D_2	2 C_2, C_4, C_{38}, 3 D_2	3 C_2, C_4, C_{19}, C_{38}, C_{76}, 3 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R75.30	C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, 2 C_{12}, 4 C_{15}, 4 C_{20}, 10 C_{25}, 4 C_{30}, 10 C_{50}, 8 C_{60}, 20 C_{75}, 20 C_{100}, 20 C_{150}, 40 C_{300}	C_2, C_3, C_4, C_5, C_6, C_{10}, C_{15}, C_{25}, C_{30}, C_{50}, C_{75}, C_{150}	C_2, C_4, C_6, C_{10}, C_{30}, C_{50}, C_{150}	C_2, C_3, C_5, C_{15}, C_{25}, C_{75}
Genus 76				
R76.1	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 4 C_5, 2 C_6, 4 C_{10}, C_{12}, 6 C_{15}, 3 D_2, D_3, D_4, 4 D_5, 4 D_{10}, 6 D_{15}	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 4 C_5, 2 C_6, 4 C_{10}, 6 C_{15}, 3 D_2, D_3, D_4, 4 D_5, 4 D_{10}, 6 D_{15}	2 **Tet**, **Oct**, 2 C_2, C_4, 2 C_6, 4 C_{10}, 3 D_2, D_3, D_4, 4 D_5, 4 D_{10}, 6 D_{15}	2 C_2, C_3, 4 C_5, 6 C_{15}, 3 D_2, D_3, 4 D_5, 6 D_{15}
R76.2	**Tet**, C_2, C_3, 9 C_5, 2 C_{10}, 4 C_{15}, D_2, 5 D_5, 2 D_{10}	**Tet**, C_2, C_3, 8 C_5, 2 C_{10}, C_{15}, D_2, 5 D_5, 2 D_{10}	**Tet**, C_2, 2 C_{10}, D_2, 5 D_5, 2 D_{10}	C_2, 7 C_5, D_2, 5 D_5
R76.3	2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_8, 4 C_{10}, 2 C_{16}, 2 D_2, D_4, 2 D_5, 2 D_8, 2 D_{10}	2 C_2, C_3, C_4, 2 C_5, C_6, C_8, 4 C_{10}, 2 D_2, D_4, 2 D_5, D_8, 2 D_{10}	2 C_2, C_4, C_6, C_8, 4 C_{10}, 2 D_2, D_4, 2 D_5, D_8, 2 D_{10}	2 C_2, C_3, 2 C_5, 2 D_2, 2 D_5
R76.4	3 C_2, C_4, 17 C_5, 12 C_{10}, 4 D_2, D_4, 15 D_5, 6 D_{10}	3 C_2, C_4, 16 C_5, 11 C_{10}, 4 D_2, D_4, 15 D_5, 6 D_{10}	3 C_2, C_4, 11 C_{10}, 4 D_2, D_4, 15 D_5, 6 D_{10}	3 C_2, 15 C_5, 4 D_2, 15 D_5
R76.5	3 C_2, C_4, 7 C_5, 6 C_{10}, 4 C_{20}, 4 D_2, D_4, 13 D_5, 8 D_{10}, 4 D_{20}	3 C_2, C_4, 6 C_5, 5 C_{10}, 4 C_{20}, 4 D_2, D_4, 11 D_5, 7 D_{10}, 4 D_{20}	3 C_2, 4 C_{10}, 4 D_2, D_4, 11 D_5, 7 D_{10}, 4 D_{20}	3 C_2, C_4, 6 C_5, 4 D_2, D_4, 11 D_5
R76.6	3 C_2, C_4, 3 C_7, 5 C_{11}, 6 C_{14}, 10 C_{22}, 30 C_{77}, 60 C_{154}, 4 D_2, D_4, 3 D_7, 5 D_{11}, 3 D_{14}, 5 D_{22}, 30 D_{77}, 30 D_{154}	3 C_2, C_4, C_7, C_{11}, 2 C_{14}, 2 C_{22}, C_{77}, 2 C_{154}, 4 D_2, D_4, D_7, D_{11}, D_{14}, D_{22}, D_{77}, D_{154}	3 C_2, C_4, C_{14}, C_{22}, C_{154}, 4 D_2, D_4, D_7, D_{11}, D_{14}, D_{22}, D_{77}, D_{154}	3 C_2, C_7, C_{11}, C_{77}, 4 D_2, D_7, D_{11}, D_{77}
R76.7	2 C_2, 2 C_4, 2 C_8, 2 C_{16}, 9 C_{19}, 9 C_{38}, 18 C_{76}, 36 C_{152}, 36 C_{304}, 2 D_2, D_4, 2 D_8, 9 D_{19}, 9 D_{38}, 18 D_{76}, 36 D_{152}	2 C_2, 2 C_4, C_8, C_{19}, C_{38}, C_{76}, C_{152}, 2 D_2, D_4, D_8, D_{19}, D_{38}, D_{76}, D_{152}	2 C_2, 2 C_4, C_8, C_{38}, C_{76}, C_{152}, 2 D_2, D_4, D_8, D_{19}, D_{38}, D_{76}, D_{152}	2 C_2, C_{19}, 2 D_2, D_{19}
R76.8	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, 5 C_5, C_6, 4 C_{10}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 3 D_2, 2 D_3, D_4, D_5, D_6	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, 3 C_5, C_6, 2 C_{10}, C_{15}, C_{30}, 3 D_2, 2 D_3, D_4, D_5, D_6	**Tet**, **Oct**, **Ico**, 2 C_2, C_6, C_{10}, C_{30}, 3 D_2, 2 D_3, D_4, D_5, D_6	2 C_2, C_3, C_4, C_5, 3 D_2, 2 D_3, D_4, D_5
R76.9	3 C_2, 3 C_3, 4 C_5, 5 C_6, 4 C_{10}, 4 C_{15}, 3 D_2, 2 D_3, 8 D_5, D_6, 4 D_{10}, 4 D_{15}	3 C_2, 3 C_3, 4 C_5, 5 C_6, 4 C_{10}, 4 C_{15}, 3 D_2, 2 D_3, 8 D_5, D_6, 4 D_{10}, 4 D_{15}	3 C_2, 5 C_6, 4 C_{10}, 3 D_2, 2 D_3, 8 D_5, D_6, 4 D_{10}, 4 D_{15}	3 C_2, C_3, 4 C_5, 4 C_{15}, 3 D_2, 2 D_3, 8 D_5, 4 D_{15}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R76.10	3 C_2, 3 C_3, 4 C_5, 5 C_6, 4 C_{10}, 6 C_{15}, 6 C_{30}, 3 D_2, 2 D_3, 8 D_5, D_6, 4 D_{10}, 12 D_{15}, 6 D_{30}	3 C_2, 3 C_3, 4 C_5, 5 C_6, 4 C_{10}, 6 C_{15}, 6 C_{30}, 3 D_2, 2 D_3, 8 D_5, D_6, 4 D_{10}, 12 D_{15}, 6 D_{30}	3 C_2, 4 C_6, 4 C_{10}, 6 C_{30}, 3 D_2, 2 D_3, 8 D_5, D_6, 4 D_{10}, 12 D_{15}, 6 D_{30}	3 C_2, C_3, 4 C_5, 6 C_{15}, 3 D_2, 2 D_3, 8 D_5, 12 D_{15}
R76.11	3 C_2, C_3, C_4, 4 C_5, 3 C_6, 4 C_{10}, C_{12}, 6 C_{20}, 4 D_2, D_4, 8 D_5, 8 D_{10}, 6 D_{20}	3 C_2, C_3, C_4, 4 C_5, 3 C_6, 4 C_{10}, 6 C_{20}, 4 D_2, D_4, 8 D_5, 8 D_{10}, 6 D_{20}	3 C_2, 2 C_6, 4 C_{10}, 4 D_2, D_4, 8 D_5, 8 D_{10}, 6 D_{20}	3 C_2, C_4, 4 C_5, 4 D_2, D_4, 8 D_5
R76.12	3 C_2, C_3, C_4, 4 C_5, 3 C_6, 8 C_{10}, C_{12}, 4 D_2, D_4, 4 D_5, 4 D_{10}	3 C_2, C_3, C_4, 4 C_5, 3 C_6, 8 C_{10}, 4 D_2, D_4, 4 D_5, 4 D_{10}	3 C_2, C_4, 3 C_6, 8 C_{10}, 4 D_2, D_4, 4 D_5, 4 D_{10}	3 C_2, 4 C_5, 4 D_2, 4 D_5
R76.13	3 C_2, 2 C_3, C_4, 2 C_6, 3 C_7, 3 C_{14}, 6 C_{21}, 6 C_{28}, 4 D_2, 4 D_3, D_4, 2 D_6, 6 D_7, 6 D_{14}, 6 D_{21}, 6 D_{28}	3 C_2, 2 C_3, C_4, 2 C_6, C_7, C_{14}, 2 C_{21}, C_{28}, 4 D_2, 4 D_3, D_4, 2 D_6, 2 D_7, 2 D_{14}, 2 D_{21}, D_{28}	3 C_2, C_6, 4 D_2, 4 D_3, D_4, 2 D_6, 2 D_7, 2 D_{14}, 2 D_{21}, D_{28}	3 C_2, 2 C_3, C_4, C_7, 4 D_2, 4 D_3, D_4, 2 D_7
R76.14	3 C_2, 3 C_3, 5 C_6, 6 C_{13}, 6 C_{26}, 18 C_{39}, 6 C_{78}, 3 D_2, 2 D_3, D_6, 12 D_{13}, 6 D_{26}, 6 D_{39}	3 C_2, 3 C_3, 5 C_6, C_{13}, C_{26}, 2 C_{39}, 3 D_2, 2 D_3, D_6, 2 D_{13}, D_{26}, D_{39}	3 C_2, 4 C_6, 3 D_2, 2 D_3, D_6, 2 D_{13}, D_{26}, D_{39}	3 C_2, C_3, C_{13}, 3 D_2, 2 D_3, 2 D_{13}
R76.15	3 C_2, 3 C_3, 5 C_6, 6 C_{13}, 6 C_{26}, 30 C_{39}, 30 C_{78}, 3 D_2, 2 D_3, D_6, 12 D_{13}, 6 D_{26}, 24 D_{39}, 12 D_{78}	3 C_2, 3 C_3, 5 C_6, C_{13}, C_{26}, 4 C_{39}, 4 C_{78}, 3 D_2, 2 D_3, D_6, 2 D_{13}, D_{26}, 4 D_{39}, 2 D_{78}	3 C_2, 4 C_6, 3 D_2, 2 D_3, D_6, 2 D_{13}, D_{26}, 4 D_{39}, 2 D_{78}	3 C_2, C_3, C_{13}, C_{26}, 3 D_2, 2 D_3, 2 D_{13}, D_{26}
R76.16	3 C_2, 3 C_3, 2 C_6, 6 C_{13}, 6 C_{26}, 30 C_{39}, 12 C_{78}, 3 D_2, 5 D_3, 2 D_6, 12 D_{13}, 6 D_{26}, 42 D_{39}, 12 D_{78}	3 C_2, 3 C_3, 2 C_6, C_{13}, C_{26}, 4 C_{39}, C_{78}, 3 D_2, 5 D_3, 2 D_6, 2 D_{13}, D_{26}, 5 D_{39}, D_{78}	3 C_2, 3 D_2, 5 D_3, 2 D_6, 2 D_{13}, D_{26}, 5 D_{39}, D_{78}	3 C_2, 3 C_3, C_{13}, C_{39}, 3 D_2, 5 D_3, 2 D_{13}, 2 D_{39}
R76.17	3 C_2, C_3, C_4, 3 C_6, C_{12}, 9 C_{19}, 9 C_{38}, 9 C_{57}, 18 C_{76}, 9 C_{114}, 18 C_{228}, 4 D_2, D_4, 18 D_{19}, 18 D_{38}, 18 D_{76}	3 C_2, C_3, C_4, 3 C_6, C_{19}, C_{38}, C_{76}, 4 D_2, D_4, 2 D_{19}, 2 D_{38}, D_{76}	3 C_2, C_6, 4 D_2, D_4, 2 D_{19}, 2 D_{38}, D_{76}	3 C_2, C_4, C_{19}, C_{38}, C_{76}, 4 D_2, D_4, 2 D_{19}, 2 D_{38}, D_{76}
R76.18	C_2, C_3, 4 C_5, C_6, 3 C_9, 4 C_{15}, 3 C_{18}, 4 D_5	C_2, C_3, 4 C_5, C_6, 4 C_{15}, 4 D_5	C_2, C_6, 4 D_5	C_2, 4 C_5, 4 D_5
R76.19	2 C_2, 3 C_3, C_4, 4 C_6, C_8, 6 C_9, 3 C_{12}, 6 C_{18}, 2 C_{24}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}	2 C_2, 3 C_3, C_4, 4 C_6, 4 C_9, 2 C_{12}, 4 C_{18}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}	2 C_2, C_4, 3 C_6, 2 C_{12}, 4 C_{18}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}	2 C_2, 2 C_3, 2 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R76.20	3 C_2, 26 C_5, 18 C_{10}, 3 D_2, 12 D_5, 4 D_{10}	3 C_2, 24 C_5, 16 C_{10}, 3 D_2, 12 D_5, 4 D_{10}	3 C_2, 16 C_{10}, 3 D_2, 12 D_5, 4 D_{10}	3 C_2, 22 C_5, 3 D_2, 12 D_5
R76.21	3 C_2, 10 C_5, 14 C_{10}, 3 D_2, 8 D_5, 4 D_{10}	3 C_2, 8 C_5, 10 C_{10}, 3 D_2, 8 D_5, 4 D_{10}	3 C_2, 9 C_{10}, 3 D_2, 8 D_5, 4 D_{10}	3 C_2, 6 C_5, 3 D_2, 8 D_5
R76.22	3 C_2, 10 C_5, 6 C_{10}, 3 D_2, 16 D_5, 6 D_{10}	3 C_2, 8 C_5, 4 C_{10}, 3 D_2, 12 D_5, 4 D_{10}	3 C_2, 2 C_{10}, 3 D_2, 12 D_5, 4 D_{10}	3 C_2, 8 C_5, 3 D_2, 12 D_5
R76.23	3 C_2, C_4, 8 C_5, 2 C_8, 12 C_{10}, 14 C_{20}, 28 C_{40}, 4 D_2, 2 D_4, 4 D_5, 2 D_8, 4 D_{10}, 8 D_{20}, 8 D_{40}	3 C_2, C_4, 6 C_5, C_8, 8 C_{10}, 10 C_{20}, 10 C_{40}, 4 D_2, 2 D_4, 4 D_5, D_8, 4 D_{10}, 8 D_{20}, 4 D_{40}	3 C_2, 7 C_{10}, 4 D_2, 2 D_4, 4 D_5, D_8, 4 D_{10}, 8 D_{20}, 4 D_{40}	3 C_2, C_4, 4 C_5, C_8, 4 D_2, 2 D_4, 4 D_5, D_8
R76.24	3 C_2, C_4, 8 C_5, 2 C_8, 10 C_{10}, 14 C_{20}, 8 C_{40}, 4 D_2, 2 D_4, 10 D_5, 2 D_8, 10 D_{10}, 18 D_{20}, 8 D_{40}	3 C_2, C_4, 6 C_5, C_8, 7 C_{10}, 10 C_{20}, C_{40}, 4 D_2, 2 D_4, 7 D_5, D_8, 7 D_{10}, 11 D_{20}, D_{40}	3 C_2, 5 C_{10}, 4 D_2, 2 D_4, 7 D_5, D_8, 7 D_{10}, 11 D_{20}, D_{40}	3 C_2, C_4, 6 C_5, C_{10}, C_{20}, 4 D_2, 2 D_4, 7 D_5, 2 D_{10}, 2 D_{20}
R76.25	3 C_2, C_4, 8 C_5, 2 C_8, 22 C_{10}, 8 C_{20}, 4 C_{40}, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, 2 D_{20}	3 C_2, C_4, 6 C_5, C_8, 16 C_{10}, 5 C_{20}, 4 D_2, 2 D_4, 2 D_5, D_8, 2 D_{10}, 2 D_{20}	3 C_2, 14 C_{10}, 4 D_2, 2 D_4, 2 D_5, D_8, 2 D_{10}, 2 D_{20}	3 C_2, C_4, 4 C_5, 4 D_2, 2 D_4, 2 D_5
R76.26	3 C_2, 2 C_5, 6 C_{10}, 9 C_{19}, 9 C_{38}, 18 C_{95}, 18 C_{190}, 3 D_2, 18 D_{19}, 9 D_{38}	3 C_2, C_5, 3 C_{10}, C_{19}, C_{38}, 3 D_2, 2 D_{19}, D_{38}	3 C_2, C_{10}, 3 D_2, 2 D_{19}, D_{38}	3 C_2, C_{19}, C_{38}, 3 D_2, 2 D_{19}, D_{38}
R76.27	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_5, 2 C_6, 4 C_{10}, C_{12}, 10 C_{15}, 2 C_{20}, 8 C_{30}, 4 C_{60}, 3 D_2, D_3, D_4	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, C_5, 2 C_6, 2 C_{10}, 3 C_{15}, 2 C_{30}, 3 D_2, D_3, D_4	2 **Tet**, **Oct**, 2 C_2, C_6, C_{10}, C_{30}, 3 D_2, D_3, D_4	2 C_2, C_3, C_4, 3 D_2, D_3, D_4
R76.28	C_2, C_3, C_6, 3 C_9, 3 C_{18}, 9 C_{19}, 9 C_{57}, 27 C_{171}, 9 D_{19}	C_2, C_3, C_6, C_{19}, D_{19}	C_2, C_6, D_{19}	C_2, C_{19}, D_{19}
R76.29	3 C_2, 2 C_3, C_4, 2 C_5, 2 C_6, 6 C_{10}, 4 C_{15}, 2 C_{20}, 4 C_{30}, 4 D_2, 4 D_3, D_4, 2 D_6	3 C_2, 2 C_3, C_4, C_5, 2 C_6, 3 C_{10}, C_{15}, C_{30}, 4 D_2, 4 D_3, D_4, 2 D_6	3 C_2, C_6, C_{10}, C_{30}, 4 D_2, 4 D_3, D_4, 2 D_6	3 C_2, 2 C_3, C_4, 4 D_2, 4 D_3, D_4
R76.30	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_7, C_8, 2 C_{12}, 3 C_{14}, 3 C_{21}, 2 C_{24}, 6 C_{28}, 3 C_{42}, 9 C_{84}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 3 D_{28}	2 C_2, C_3, 2 C_4, 2 C_6, C_7, C_{14}, C_{28}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, 2 C_4, C_6, C_{14}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, C_7, 2 D_2, D_7
R76.31	3 C_2, 3 C_3, 5 C_6, 6 C_9, 12 C_{18}, 18 C_{27}, 36 C_{54}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, 5 C_6, 4 C_9, 6 C_{18}, 2 C_{27}, 4 C_{54}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_6, C_{18}, C_{54}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, C_9, 3 D_2, 2 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R76.32	3 C_2, C_3, C_4, 3 C_6, C_{12}, 6 C_{13}, 18 C_{26}, 12 C_{39}, 6 C_{52}, 36 C_{78}, 12 C_{156}, 4 D_2, D_4	3 C_2, C_3, C_4, 3 C_6, 4 D_2, D_4	3 C_2, C_6, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R76.33	C_2, C_3, C_6, 3 C_9, 8 C_{17}, 3 C_{18}, 8 C_{34}, 16 C_{51}, 16 C_{102}, 48 C_{153}, 48 C_{306}	C_2, C_3, C_6	C_2, C_6	C_2
R76.34	3 C_2, 3 C_7, 5 C_{11}, 9 C_{14}, 15 C_{22}, 30 C_{77}, 90 C_{154}, 3 D_2	3 C_2, C_7, C_{11}, 3 C_{14}, 3 C_{22}, C_{77}, 3 C_{154}, 3 D_2	3 C_2, C_{14}, C_{22}, C_{154}, 3 D_2	3 C_2, C_7, C_{11}, C_{77}, 3 D_2
R76.35	C_2, C_4, 2 C_8, 4 C_{16}, 9 C_{19}, 9 C_{38}, 18 C_{76}, 36 C_{152}, 72 C_{304}	C_2, C_4, C_8, C_{19}, C_{38}, C_{76}, C_{152}	C_2, C_4, C_8, C_{38}, C_{76}, C_{152}	C_2, C_{19}
Genus 77				
R77.1	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_6, 3 C_7, 15 C_{14}, 6 C_{21}, 12 C_{42}, 26 D_2, D_3, 5 D_4, D_6, 3 D_7, 9 D_{14}, 6 D_{21}, 6 D_{42}	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_6, C_7, 5 C_{14}, C_{21}, 2 C_{42}, 26 D_2, D_3, 5 D_4, D_6, D_7, 3 D_{14}, D_{21}, D_{42}	**Oct**, 3 C_2, C_4, C_6, C_{14}, 21 D_2, D_3, 5 D_4, D_6, D_7, 3 D_{14}, D_{21}, D_{42}	**Tet**, **Oct**, 6 C_2, C_3, 2 C_4, C_7, 26 D_2, D_3, 4 D_4, D_7
R77.2	6 C_2, 6 C_4, 2 C_5, 4 C_8, 10 C_{10}, 4 C_{16}, 12 C_{20}, 16 C_{40}, 16 C_{80}, 19 D_2, 4 D_4, 2 D_5, 2 D_8, 6 D_{10}, 8 D_{20}, 8 D_{40}	6 C_2, 6 C_4, C_5, 3 C_8, 5 C_{10}, C_{16}, 5 C_{20}, 3 C_{40}, C_{80}, 19 D_2, 4 D_4, D_5, 2 D_8, 3 D_{10}, 3 D_{20}, 2 D_{40}	3 C_2, 4 C_4, C_{10}, 17 D_2, 4 D_4, D_5, 2 D_8, 3 D_{10}, 3 D_{20}, 2 D_{40}	6 C_2, 2 C_4, C_5, C_{10}, C_{20}, 19 D_2, 3 D_4, D_5, D_{10}, D_{20}
R77.3	4 C_2, 6 C_4, 2 C_5, 2 C_8, 6 C_{10}, 2 C_{16}, 8 C_{20}, 8 C_{40}, 8 C_{80}, 12 D_2, 4 D_4, 2 D_5, 2 D_8, 6 D_{10}, 8 D_{20}, 8 D_{40}	4 C_2, 6 C_4, C_5, C_8, 3 C_{10}, 3 C_{20}, C_{40}, 12 D_2, 4 D_4, D_5, 2 D_8, 3 D_{10}, 3 D_{20}, 2 D_{40}	3 C_2, 4 C_4, C_{10}, 12 D_2, 4 D_4, D_5, 2 D_8, 3 D_{10}, 3 D_{20}, 2 D_{40}	4 C_2, 2 C_4, C_5, C_{10}, C_{20}, 12 D_2, 3 D_4, D_5, D_{10}, D_{20}
R77.4	5 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, 6 C_{13}, 18 C_{26}, 12 C_{39}, 12 C_{52}, 36 C_{78}, 24 C_{156}, 13 D_2, 2 D_3, 4 D_6, 12 D_{13}, 24 D_{26}, 24 D_{39}, 48 D_{78}	5 C_2, C_3, 2 C_4, 3 C_6, C_{12}, C_{13}, 3 C_{26}, C_{39}, C_{52}, 3 C_{78}, C_{156}, 13 D_2, 2 D_3, 4 D_6, 2 D_{13}, 4 D_{26}, 2 D_{39}, 4 D_{78}	3 C_2, 2 C_4, C_6, C_{26}, C_{78}, 11 D_2, D_3, 3 D_6, D_{13}, 3 D_{26}, D_{39}, 3 D_{78}	5 C_2, C_3, C_6, C_{13}, C_{26}, C_{39}, C_{78}, 13 D_2, 2 D_3, D_6, 2 D_{13}, D_{26}, 2 D_{39}, D_{78}
R77.5	3 C_2, 2 C_4, 3 C_7, 5 C_{11}, 3 C_{14}, 5 C_{22}, 3 C_{28}, 5 C_{44}, 30 C_{77}, 30 C_{154}, 30 C_{308}, 3 D_2, 6 D_7, 10 D_{11}, 3 D_{14}, 5 D_{22}, 60 D_{77}, 30 D_{154}	3 C_2, 2 C_4, C_7, C_{11}, C_{14}, C_{22}, C_{77}, C_{154}, 3 D_2, 2 D_7, 2 D_{11}, D_{14}, D_{22}, 2 D_{77}, D_{154}	2 C_2, 2 C_4, C_{14}, C_{22}, C_{154}, 3 D_2, D_7, D_{11}, D_{14}, D_{22}, D_{77}, D_{154}	3 C_2, C_7, C_{11}, C_{77}, 3 D_2, D_7, D_{11}, D_{77}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R77.6	**Tet**, 7 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 6 C_{10}, C_{12}, 2 C_{15}, 8 C_{20}, 2 C_{30}, 4 C_{60}, 34 D_2, 5 D_4, 8 D_5, 24 D_{10}, 20 D_{20}	**Tet**, 7 C_2, C_3, 2 C_4, C_5, 3 C_6, 3 C_{10}, 3 C_{20}, 34 D_2, 5 D_4, 4 D_5, 12 D_{10}, 8 D_{20}	3 C_2, C_4, 2 C_6, 27 D_2, 5 D_4, 2 D_5, 8 D_{10}, 6 D_{20}	7 C_2, C_4, C_5, C_{10}, C_{20}, 34 D_2, 2 D_4, 4 D_5, 4 D_{10}, 2 D_{20}
R77.7	5 C_2, C_3, 4 C_4, 2 C_5, 3 C_6, 4 C_{10}, 4 C_{12}, 2 C_{15}, 4 C_{20}, 2 C_{30}, 4 C_{60}, 13 D_2, 3 D_4, 6 D_5, 8 D_{10}, 2 D_{20}	5 C_2, C_3, 4 C_4, C_5, 3 C_6, 2 C_{10}, 3 C_{12}, C_{20}, 13 D_2, 3 D_4, 3 D_5, 4 D_{10}, D_{20}	3 C_2, 3 C_4, 2 C_6, 2 C_{12}, 13 D_2, 3 D_4, 2 D_5, 4 D_{10}, D_{20}	5 C_2, C_5, C_{10}, 13 D_2, 3 D_5, 2 D_{10}
R77.8	C_2, C_3, C_6, 3 C_7, 5 C_{11}, 3 C_{21}, 5 C_{33}, 30 C_{77}, 30 C_{231}, 3 D_7, 5 D_{11}, 30 D_{77}	C_2, C_3, C_6, C_7, C_{11}, C_{77}, D_7, D_{11}, D_{77}	C_2, C_6, D_7, D_{11}, D_{77}	C_2, C_7, C_{11}, C_{77}, D_7, D_{11}, D_{77}
R77.9	4 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, 3 C_9, 2 C_{12}, 3 C_{18}, 12 D_2, D_3, 3 D_4, 3 D_6, 3 D_9, D_{12}, 3 D_{18}	4 C_2, C_3, 3 C_4, 3 C_6, C_8, C_9, 2 C_{12}, C_{18}, 12 D_2, D_3, 3 D_4, 3 D_6, D_9, D_{12}, D_{18}	2 C_2, 2 C_4, C_6, C_8, 2 C_{12}, 11 D_2, D_3, 3 D_4, 3 D_6, D_9, D_{12}, D_{18}	4 C_2, C_3, C_4, 12 D_2, D_3, 2 D_4
R77.10	6 C_2, 5 C_4, 3 C_7, 2 C_8, 15 C_{14}, 21 C_{28}, 19 D_2, 3 D_4, 3 D_7, 9 D_{14}, 6 D_{28}	6 C_2, 5 C_4, C_7, C_8, 5 C_{14}, 6 C_{28}, 19 D_2, 3 D_4, D_7, 3 D_{14}, 2 D_{28}	3 C_2, 4 C_4, C_8, C_{14}, 3 C_{28}, 17 D_2, 3 D_4, D_7, 3 D_{14}, 2 D_{28}	6 C_2, C_4, C_7, 19 D_2, 2 D_4, D_7
R77.11	6 C_2, 3 C_4, 3 C_7, C_8, 12 C_{14}, 9 C_{28}, 27 D_2, 3 D_4, 6 D_7, 21 D_{14}	6 C_2, 3 C_4, C_7, 4 C_{14}, 2 C_{28}, 27 D_2, 3 D_4, 2 D_7, 7 D_{14}	3 C_2, 2 C_4, C_{14}, C_{28}, 21 D_2, 3 D_4, D_7, 5 D_{14}	6 C_2, C_4, C_7, 27 D_2, 2 D_4, 2 D_7
R77.12	4 C_2, 2 C_4, 2 C_8, 6 C_{13}, 12 C_{26}, 18 C_{52}, 12 C_{104}, 10 D_2, 2 D_4, 12 D_{13}, 24 D_{26}, 18 D_{52}	4 C_2, 2 C_4, C_{13}, 2 C_{26}, 2 C_{52}, 10 D_2, 2 D_4, 2 D_{13}, 4 D_{26}, 2 D_{52}	2 C_2, 2 C_4, C_{26}, C_{52}, 8 D_2, 2 D_4, D_{13}, 3 D_{26}, 2 D_{52}	4 C_2, C_{13}, 10 D_2, 2 D_{13}
R77.13	5 C_2, 3 C_4, 4 C_8, 6 C_{13}, 18 C_{26}, 12 C_{52}, 24 C_{104}, 13 D_2, 12 D_{13}, 24 D_{26}	5 C_2, 3 C_4, 2 C_8, C_{13}, 3 C_{26}, C_{52}, 13 D_2, 2 D_{13}, 4 D_{26}	2 C_2, 3 C_4, 2 C_8, C_{26}, 11 D_2, D_{13}, 3 D_{26}	5 C_2, C_{13}, 13 D_2, 2 D_{13}
R77.14	5 C_2, C_3, 4 C_4, 2 C_5, 3 C_6, 6 C_{10}, 2 C_{12}, 4 C_{20}, 13 D_2, 2 D_3, 4 D_4, 4 D_5, 4 D_6, 8 D_{10}	5 C_2, C_3, 4 C_4, C_5, 3 C_6, 3 C_{10}, C_{12}, 2 C_{20}, 13 D_2, 2 D_3, 4 D_4, 2 D_5, 4 D_6, 4 D_{10}	3 C_2, 3 C_4, 2 C_6, 2 C_{10}, C_{12}, C_{20}, 13 D_2, D_3, 4 D_4, D_5, 4 D_6, 4 D_{10}	5 C_2, C_3, C_5, 13 D_2, 2 D_3, 2 D_5
R77.15	**Tet**, 2 **Ico**, 7 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 6 C_{10}, C_{12}, 2 C_{20}, 39 D_2, 4 D_3, 6 D_4, 8 D_5, 7 D_6, 14 D_{10}, D_{12}, 2 D_{20}	**Tet**, **Ico**, 7 C_2, C_3, 2 C_4, C_5, 3 C_6, 3 C_{10}, C_{20}, 39 D_2, 4 D_3, 6 D_4, 4 D_5, 7 D_6, 7 D_{10}, D_{20}	3 C_2, C_4, 2 C_6, 2 C_{10}, 29 D_2, D_3, 6 D_4, D_5, 7 D_6, 7 D_{10}, D_{20}	**Tet**, **Ico**, 7 C_2, C_3, C_4, C_5, 39 D_2, 4 D_3, 2 D_4, 4 D_5
R77.16	3 C_2, C_3, 3 C_4, C_5, 3 C_6, 2 C_8, 3 C_{10}, C_{12}, 4 D_2, D_3, 2 D_4, D_6	3 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, 4 D_2, D_3, 2 D_4, D_6	3 C_2, 3 C_4, 3 C_6, 2 C_8, 4 D_2, D_3, 2 D_4, D_6	3 C_2, C_3, 4 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R77.17	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 3 C_4, C_5, 3 C_6, 3 C_{10}, C_{12}, 29 D_2, 4 D_3, 6 D_4, 4 D_5, 7 D_6, 6 D_{10}, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 3 C_6, 29 D_2, 4 D_3, 6 D_4, 7 D_6	**Oct**, 3 C_2, C_4, 3 C_6, 19 D_2, D_3, 6 D_4, 7 D_6	**Tet**, **Oct**, 6 C_2, C_3, 2 C_4, 29 D_2, 4 D_3, 4 D_4
R77.18	4 C_2, C_3, 4 C_4, C_6, 3 C_8, 3 C_{12}, 6 C_{16}, 2 C_{24}, 4 C_{48}, 10 D_2, 7 D_4, 6 D_8, 6 D_{16}	4 C_2, C_3, 4 C_4, C_6, 2 C_8, C_{12}, 2 C_{16}, 10 D_2, 7 D_4, 4 D_8, 2 D_{16}	2 C_2, 4 C_4, C_6, 2 C_8, C_{12}, 2 C_{16}, 8 D_2, 7 D_4, 4 D_8, 2 D_{16}	4 C_2, 10 D_2
R77.19	**Tet**, 5 C_2, C_3, 4 C_4, 2 C_6, 4 C_8, 2 C_{12}, 4 C_{16}, 2 C_{24}, 4 C_{48}, 20 D_2, 4 D_4, 8 D_8	**Tet**, 5 C_2, C_3, 4 C_4, 2 C_6, 3 C_8, C_{16}, 20 D_2, 4 D_4, 6 D_8	2 C_2, 4 C_4, C_6, 3 C_8, C_{16}, 17 D_2, 4 D_4, 6 D_8	5 C_2, 20 D_2
R77.20	6 C_2, C_3, 6 C_4, 6 C_6, 4 C_8, 8 C_{12}, 4 C_{16}, 6 C_{24}, 8 C_{48}, 19 D_2, 4 D_4, 2 D_8	6 C_2, C_3, 6 C_4, 6 C_6, 3 C_8, 6 C_{12}, C_{16}, 19 D_2, 4 D_4, 2 D_8	3 C_2, 4 C_4, C_6, 17 D_2, 4 D_4, 2 D_8	6 C_2, 2 C_4, 19 D_2, 3 D_4
R77.21	4 C_2, C_3, 6 C_4, 4 C_6, 2 C_8, 8 C_{12}, 2 C_{16}, 3 C_{24}, 4 C_{48}, 12 D_2, 4 D_4, 2 D_8	4 C_2, C_3, 6 C_4, 4 C_6, C_8, 6 C_{12}, 12 D_2, 4 D_4, 2 D_8	3 C_2, 4 C_4, C_6, 12 D_2, 4 D_4, 2 D_8	4 C_2, 2 C_4, 12 D_2, 3 D_4
R77.22	5 C_2, C_3, 5 C_4, 3 C_6, 8 C_8, 8 C_{12}, 4 C_{16}, 12 C_{24}, 15 D_2, 2 D_3, 7 D_4, 6 D_6, 8 D_8, 10 D_{12}, 12 D_{24}	5 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, 7 C_{12}, C_{16}, 8 C_{24}, 15 D_2, 2 D_3, 7 D_4, 6 D_6, 7 D_8, 9 D_{12}, 11 D_{24}	3 C_2, 2 C_4, C_6, 2 C_8, C_{12}, 4 C_{24}, 13 D_2, D_3, 6 D_4, 4 D_6, 7 D_8, 8 D_{12}, 11 D_{24}	5 C_2, C_3, 3 C_4, C_6, C_8, C_{12}, 15 D_2, 2 D_3, 4 D_4, 2 D_6, D_8, D_{12}
R77.23	4 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, 6 C_{12}, 4 C_{16}, 10 C_{24}, 9 D_2, D_3, 2 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	4 C_2, C_3, 5 C_4, 3 C_6, 4 C_8, 5 C_{12}, 6 C_{24}, 9 D_2, D_3, 2 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	3 C_2, 3 C_4, C_6, 3 C_8, C_{12}, 4 C_{24}, 9 D_2, D_3, 2 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	4 C_2, C_3, 2 C_4, C_6, 9 D_2, D_3, D_4, D_6
R77.24	3 C_2, C_3, 5 C_4, 2 C_6, 9 C_8, 7 C_{12}, 2 C_{16}, 14 C_{24}, 4 D_2, D_3, 2 D_4, D_6, D_8, 2 D_{12}, 2 D_{24}	3 C_2, C_3, 5 C_4, 2 C_6, 7 C_8, 6 C_{12}, 10 C_{24}, 4 D_2, D_3, 2 D_4, D_6, D_8, 2 D_{12}, 2 D_{24}	3 C_2, 3 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 4 D_2, D_3, 2 D_4, D_6, D_8, 2 D_{12}, 2 D_{24}	3 C_2, C_3, 4 D_2, D_3
R77.25	3 C_2, C_3, 5 C_4, 2 C_6, 15 C_8, 7 C_{12}, 2 C_{16}, 26 C_{24}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, 2 D_{12}, 4 D_{24}	3 C_2, C_3, 5 C_4, 2 C_6, 13 C_8, 6 C_{12}, 20 C_{24}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, 2 D_{12}, 4 D_{24}	3 C_2, 3 C_4, C_6, 7 C_8, 2 C_{12}, 6 C_{24}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, 2 D_{12}, 4 D_{24}	3 C_2, C_3, 4 D_2, D_3
R77.26	4 C_2, C_3, 4 C_4, 3 C_6, 4 C_8, 3 C_{12}, 2 C_{16}, 7 C_{24}, 12 D_2, D_3, 3 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	4 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 2 C_{12}, 2 C_{24}, 12 D_2, D_3, 3 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	2 C_2, 3 C_4, C_6, 2 C_8, C_{12}, 10 D_2, D_3, 3 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	4 C_2, C_3, C_4, 12 D_2, D_3, D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R77.27	5 C_2, C_3, 4 C_4, 4 C_6, 6 C_8, 4 C_{12}, 4 C_{16}, 10 C_{24}, 15 D_2, D_3, 3 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	5 C_2, C_3, 4 C_4, 4 C_6, 4 C_8, 3 C_{12}, C_{16}, 6 C_{24}, 15 D_2, D_3, 3 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	2 C_2, 3 C_4, C_6, 4 C_8, 2 C_{12}, C_{16}, C_{24}, 11 D_2, D_3, 3 D_4, 3 D_6, 2 D_8, 2 D_{12}, 4 D_{24}	5 C_2, C_3, C_4, 15 D_2, D_3, D_4
R77.28	5 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, 5 C_{12}, 4 C_{16}, 10 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_8, 3 D_{12}, 6 D_{24}	5 C_2, C_3, 5 C_4, 3 C_6, 4 C_8, 4 C_{12}, C_{16}, 6 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_8, 3 D_{12}, 6 D_{24}	3 C_2, 2 C_4, C_6, 3 C_8, C_{12}, 4 C_{24}, 13 D_2, D_3, 3 D_4, 4 D_6, 3 D_8, 3 D_{12}, 6 D_{24}	5 C_2, C_3, 3 C_4, C_6, 13 D_2, 2 D_3, D_4, D_6
R77.29	5 C_2, C_3, 6 C_4, 3 C_6, 8 C_8, 5 C_{12}, 8 C_{16}, 10 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_8, 3 D_{12}, 6 D_{24}	5 C_2, C_3, 6 C_4, 3 C_6, 6 C_8, 4 C_{12}, 3 C_{16}, 5 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_8, 3 D_{12}, 6 D_{24}	3 C_2, 3 C_4, C_6, 4 C_8, C_{12}, 4 C_{24}, 13 D_2, D_3, 3 D_4, 4 D_6, 6 D_8, 3 D_{12}, 6 D_{24}	5 C_2, C_3, 2 C_4, C_6, 13 D_2, 2 D_3, D_4, D_6
R77.30	3 C_2, 2 C_4, 4 C_8, 5 C_{11}, 8 C_{16}, 5 C_{22}, 5 C_{44}, 10 C_{88}, 20 C_{176}, 3 D_2, 10 D_{11}, 5 D_{22}	3 C_2, 2 C_4, 2 C_8, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	2 C_2, C_4, C_{22}, 3 D_2, D_{11}, D_{22}	3 C_2, C_{11}, 3 D_2, D_{11}
R77.31	2 C_2, 2 C_4, 3 C_8, 5 C_{11}, 4 C_{16}, 5 C_{22}, 5 C_{44}, 10 C_{88}, 20 C_{176}, 2 D_2, 5 D_{11}, 5 D_{22}	2 C_2, 2 C_4, 2 C_8, C_{11}, C_{22}, 2 D_2, D_{11}, D_{22}	2 C_2, C_4, C_{22}, 2 D_2, D_{11}, D_{22}	2 C_2, C_{11}, 2 D_2, D_{11}
R77.32	3 C_2, C_3, 2 C_5, 3 C_6, 3 C_9, 2 C_{10}, 2 C_{15}, 3 C_{18}, 2 C_{30}, 6 C_{45}, 6 D_2, 4 D_5, 4 D_{10}	3 C_2, C_3, C_5, 3 C_6, C_{10}, 6 D_2, 2 D_5, 2 D_{10}	2 C_2, C_6, 5 D_2, 2 D_5, 2 D_{10}	3 C_2, C_5, 6 D_2, 2 D_5
R77.33	3 C_2, C_3, 2 C_4, 2 C_5, C_6, 3 C_9, 2 C_{10}, C_{12}, 2 C_{15}, 3 C_{18}, 2 C_{20}, 2 C_{30}, 3 C_{36}, 6 C_{45}, 6 C_{90}, 3 D_2, 2 D_3, 4 D_5, D_6, 6 D_9, 2 D_{10}, 4 D_{15}, 3 D_{18}, 2 D_{30}, 12 D_{45}, 6 D_{90}	3 C_2, C_3, 2 C_4, C_5, C_6, C_9, C_{10}, C_{15}, C_{18}, C_{30}, C_{45}, C_{90}, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_9, D_{10}, 2 D_{15}, D_{18}, D_{30}, 2 D_{45}, D_{90}	2 C_2, 2 C_4, C_6, C_{10}, C_{18}, 3 D_2, D_3, D_5, D_6, D_9, D_{10}, D_{15}, D_{18}, D_{30}, D_{45}, D_{90}	3 C_2, C_3, C_5, C_9, 3 D_2, D_3, D_5, D_9
R77.34	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_7, 4 C_8, 4 C_{12}, 3 C_{14}, 3 C_{21}, 8 C_{24}, 3 C_{28}, 3 C_{42}, 6 C_{56}, 6 C_{84}, 12 C_{168}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, C_3, 2 C_4, 3 C_6, C_7, 2 C_8, 2 C_{12}, C_{14}, 3 D_2, 2 D_7, D_{14}	2 C_2, C_4, C_6, C_{14}, 3 D_2, D_7, D_{14}	3 C_2, C_7, 3 D_2, D_7
R77.35	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_7, 2 C_8, 3 C_{12}, 3 C_{14}, 3 C_{21}, 4 C_{24}, 3 C_{28}, 3 C_{42}, 6 C_{56}, 6 C_{84}, 12 C_{168}, 2 D_2, 3 D_7, 3 D_{14}	2 C_2, C_3, 2 C_4, 2 C_6, C_7, 2 C_{12}, C_{14}, 2 D_2, D_7, D_{14}	2 C_2, C_4, C_6, C_{14}, 2 D_2, D_7, D_{14}	2 C_2, C_7, 2 D_2, D_7

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R77.36	5 C_2, C_3, 2 C_4, 3 C_6, 3 C_7, 2 C_{12}, 15 C_{14}, 3 C_{21}, 12 C_{28}, 9 C_{42}, 12 C_{84}, 13 D_2, 2 D_3, 4 D_6	5 C_2, C_3, 2 C_4, 3 C_6, C_{12}, 13 D_2, 2 D_3, 4 D_6	3 C_2, 2 C_4, C_6, 11 D_2, D_3, 3 D_6	5 C_2, C_3, C_6, 13 D_2, 2 D_3, D_6
R77.37	C_2, C_3, 2 C_5, C_6, 2 C_{10}, 5 C_{11}, 4 C_{15}, 4 C_{30}, 5 C_{33}, 10 C_{55}, 20 C_{165}, 5 D_{11}	C_2, C_3, C_6, C_{11}, D_{11}	C_2, C_6, D_{11}	C_2, C_{11}, D_{11}
R77.38	**Tet**, 7 C_2, C_3, 3 C_6, 3 C_7, 21 C_{14}, 6 C_{21}, 18 C_{42}, 31 D_2	**Tet**, 7 C_2, C_3, 3 C_6, C_7, 7 C_{14}, C_{21}, 3 C_{42}, 31 D_2	3 C_2, 2 C_6, C_{14}, 23 D_2	**Tet**, 7 C_2, C_3, C_7, 31 D_2
R77.39	C_2, 3 C_7, 11 C_{23}, 11 C_{46}, 33 C_{161}, 3 D_7	C_2, C_7, D_7	C_2, D_7	C_2, C_7, D_7
R77.40	5 C_2, 3 C_4, 2 C_5, 6 C_8, 10 C_{10}, 8 C_{16}, 12 C_{20}, 24 C_{40}, 32 C_{80}, 13 D_2	5 C_2, 3 C_4, C_5, 4 C_8, 5 C_{10}, 2 C_{16}, 5 C_{20}, 4 C_{40}, 2 C_{80}, 13 D_2	2 C_2, 2 C_4, C_{10}, 11 D_2	5 C_2, C_4, C_5, C_{10}, C_{20}, 13 D_2
R77.41	3 C_2, 3 C_4, 2 C_5, 4 C_8, 6 C_{10}, 6 C_{16}, 8 C_{20}, 16 C_{40}, 24 C_{80}, 4 D_2, 2 D_4	3 C_2, 3 C_4, C_5, 2 C_8, 3 C_{10}, 2 C_{20}, 4 D_2, 2 D_4	2 C_2, 2 C_4, C_{10}, 4 D_2, 2 D_4	3 C_2, C_5, C_{10}, 4 D_2
R77.42	3 C_2, 3 C_4, 2 C_5, 3 C_8, 6 C_{10}, 4 C_{16}, 8 C_{20}, 12 C_{40}, 16 C_{80}, 6 D_2	3 C_2, 3 C_4, C_5, C_8, 3 C_{10}, 3 C_{20}, C_{40}, 6 D_2	2 C_2, 2 C_4, C_{10}, 6 D_2	3 C_2, C_4, C_5, C_{10}, C_{20}, 6 D_2
R77.43	C_2, 2 C_5, 2 C_{10}, 15 C_{31}, 15 C_{62}, 60 C_{155}, 60 C_{310}	C_2	C_2	C_2
R77.44	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_{12}, 6 C_{13}, 18 C_{26}, 12 C_{39}, 24 C_{52}, 36 C_{78}, 48 C_{156}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, C_{13}, 3 C_{26}, C_{39}, 2 C_{52}, 3 C_{78}, 2 C_{156}, 3 D_2	2 C_2, 2 C_4, C_6, C_{26}, C_{78}, 3 D_2	3 C_2, C_3, C_6, C_{13}, C_{26}, C_{39}, C_{78}, 3 D_2
R77.45	C_2, C_4, 3 C_7, 5 C_{11}, 3 C_{14}, 5 C_{22}, 6 C_{28}, 10 C_{44}, 30 C_{77}, 30 C_{154}, 60 C_{308}	C_2, C_4, C_7, C_{11}, C_{14}, C_{22}, C_{77}, C_{154}	C_2, C_4, C_{14}, C_{22}, C_{154}	C_2, C_7, C_{11}, C_{77}
Genus 78				
R78.1	**Tet**, **Oct**, 2 C_2, C_3, C_4, 7 C_7, 18 C_{14}, 3 C_{28}, 3 D_2, D_3, D_4, 3 D_7, 3 D_{14}	**Tet**, **Oct**, 2 C_2, C_3, C_4, 5 C_7, 12 C_{14}, 3 D_2, D_3, D_4, 3 D_7, 3 D_{14}	**Tet**, **Oct**, 2 C_2, C_4, 11 C_{14}, 3 D_2, D_3, D_4, 3 D_7, 3 D_{14}	**Tet**, 2 C_2, C_3, 4 C_7, 3 D_2, D_3, 3 D_7
R78.2	2 C_2, C_3, C_4, C_6, 3 C_9, 3 C_{18}, 9 C_{27}, 9 C_{54}, 27 C_{81}, 3 D_2, D_3, D_4, D_6, 3 D_9, 3 D_{18}, 9 D_{27}, 9 D_{54}, 27 D_{81}	2 C_2, C_3, C_4, C_6, C_9, C_{18}, C_{27}, C_{54}, C_{81}, 3 D_2, D_3, D_4, D_6, D_9, D_{18}, D_{27}, D_{54}, D_{81}	2 C_2, C_4, C_6, C_{18}, C_{54}, 3 D_2, D_3, D_4, D_6, D_9, D_{18}, D_{27}, D_{54}, D_{81}	2 C_2, C_3, C_9, C_{27}, 3 D_2, D_3, D_9, D_{27}
R78.3	3 C_2, C_4, 39 C_{79}, 78 C_{158}, 4 D_2, D_4, 39 D_{79}, 39 D_{158}	3 C_2, C_4, C_{79}, 2 C_{158}, 4 D_2, D_4, D_{79}, D_{158}	3 C_2, C_4, C_{158}, 4 D_2, D_4, D_{79}, D_{158}	3 C_2, C_{79}, 4 D_2, D_{79}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R78.4	2 C_2, C_3, 2 C_4, C_6, C_8, 2 C_{12}, 6 C_{13}, 2 C_{24}, 6 C_{26}, 12 C_{39}, 12 C_{52}, 12 C_{78}, 12 C_{104}, 24 C_{156}, 24 C_{312}, 2 D_2, D_3, D_4, D_6, 2 D_{12}, 6 D_{13}, 6 D_{26}, 12 D_{39}, 12 D_{52}, 12 D_{78}, 24 D_{156}	2 C_2, C_3, 2 C_4, C_6, C_{12}, C_{13}, C_{26}, C_{39}, C_{52}, C_{78}, C_{156}, 2 D_2, D_3, D_4, D_6, D_{12}, D_{13}, D_{26}, D_{39}, D_{52}, D_{78}, D_{156}	2 C_2, 2 C_4, C_6, C_{12}, C_{26}, C_{52}, C_{78}, C_{156}, 2 D_2, D_3, D_4, D_6, D_{12}, D_{13}, D_{26}, D_{39}, D_{52}, D_{78}, D_{156}	2 C_2, C_3, C_{13}, C_{39}, 2 D_2, D_3, D_{13}, D_{39}
R78.5	3 C_2, C_3, C_6, 7 C_7, 6 C_{14}, 3 D_2, 2 D_3, D_6, 13 D_7, 6 D_{14}	3 C_2, C_3, C_6, 5 C_7, 4 C_{14}, 3 D_2, 2 D_3, D_6, 9 D_7, 4 D_{14}	3 C_2, 3 C_{14}, 3 D_2, 2 D_3, D_6, 9 D_7, 4 D_{14}	3 C_2, C_3, C_6, 5 C_7, 3 D_2, 2 D_3, D_6, 9 D_7
R78.6	3 C_2, C_3, C_6, 7 C_7, 13 C_{14}, 3 D_2, 2 D_3, D_6, 6 D_7, 3 D_{14}	3 C_2, C_3, C_6, 5 C_7, 7 C_{14}, 3 D_2, 2 D_3, D_6, 6 D_7, 3 D_{14}	3 C_2, C_6, 6 C_{14}, 3 D_2, 2 D_3, D_6, 6 D_7, 3 D_{14}	3 C_2, C_3, 4 C_7, 3 D_2, 2 D_3, 6 D_7
R78.7	3 C_2, C_3, C_4, 2 C_5, 2 C_6, 2 C_8, 2 C_{10}, C_{12}, 2 C_{15}, 4 C_{16}, 4 C_{20}, 2 C_{24}, 2 C_{30}, 8 C_{40}, 4 C_{60}, 16 C_{80}, 8 C_{120}, 4 D_2, D_3, 2 D_4, 4 D_5, D_6, 4 D_8, 4 D_{10}, D_{12}, 2 D_{15}, 4 D_{16}, 8 D_{20}, 2 D_{24}, 2 D_{30}, 16 D_{40}, 4 D_{60}, 16 D_{80}, 8 D_{120}	3 C_2, C_3, C_4, C_5, 2 C_6, C_8, C_{10}, C_{12}, C_{15}, C_{16}, C_{20}, C_{24}, C_{30}, C_{40}, C_{60}, C_{80}, C_{120}, 4 D_2, D_3, 2 D_4, 2 D_5, D_6, 2 D_8, 2 D_{10}, D_{12}, D_{15}, D_{16}, 2 D_{20}, D_{24}, D_{30}, 2 D_{40}, D_{60}, D_{80}, D_{120}	3 C_2, C_6, 4 D_2, D_3, 2 D_4, 2 D_5, D_6, 2 D_8, 2 D_{10}, D_{12}, D_{15}, D_{16}, 2 D_{20}, D_{24}, D_{30}, 2 D_{40}, D_{60}, D_{80}, D_{120}	3 C_2, C_3, C_4, C_5, C_8, C_{10}, C_{20}, C_{40}, 4 D_2, D_3, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, 2 D_{20}, 2 D_{40}
R78.8	3 C_2, C_3, C_4, 2 C_6, 2 C_8, 3 C_9, C_{12}, 6 C_{18}, 9 C_{27}, 3 C_{36}, 18 C_{54}, 9 C_{108}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, 3 D_9, D_{12}, 3 D_{18}, 9 D_{27}, 3 D_{36}, 9 D_{54}, 9 D_{108}	3 C_2, C_3, C_4, 2 C_6, C_8, C_9, C_{12}, 2 C_{18}, C_{27}, C_{36}, 2 C_{54}, C_{108}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_9, D_{12}, D_{18}, D_{27}, D_{36}, D_{54}, D_{108}	3 C_2, C_6, C_{18}, C_{54}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_9, D_{12}, D_{18}, D_{27}, D_{36}, D_{54}, D_{108}	3 C_2, C_3, C_4, C_9, C_{27}, 4 D_2, D_3, 2 D_4, D_9, D_{27}
R78.9	2 C_2, C_3, C_4, C_6, C_8, 3 C_9, C_{12}, 3 C_{18}, 9 C_{27}, 3 C_{36}, 9 C_{54}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 9 D_{27}, 3 D_{36}, 9 D_{54}	2 C_2, C_3, C_4, C_6, C_9, C_{12}, C_{18}, C_{27}, C_{36}, C_{54}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{27}, D_{36}, D_{54}	2 C_2, C_4, C_6, C_{12}, C_{18}, C_{36}, C_{54}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{27}, D_{36}, D_{54}	2 C_2, C_3, C_9, 2 D_2, D_3, D_9
R78.10	C_2, C_3, 2 C_5, 2 C_{10}, 6 C_{13}, 2 C_{15}, 12 C_{39}, 12 C_{65}, 24 C_{195}, D_3, 6 D_{13}, 12 D_{39}	C_2, C_3, C_{13}, C_{39}, D_3, D_{13}, D_{39}	C_2, D_3, D_{13}, D_{39}	C_2, C_3, C_{13}, C_{39}, D_3, D_{13}, D_{39}
R78.11	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 2 C_{12}, 4 C_{16}, 2 C_{24}, 8 C_{32}, 4 C_{48}, 8 C_{64}, 8 C_{96}, 2 D_2, D_3, D_4, D_6, 2 D_8, D_{12}, 4 D_{16}, 2 D_{24}, 8 D_{32}, 4 D_{48}, 8 D_{96}	2 C_2, C_3, 2 C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{32}, C_{48}, C_{96}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{32}, D_{48}, D_{96}	2 C_2, 2 C_4, C_6, C_8, C_{16}, C_{32}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{32}, D_{48}, D_{96}	2 C_2, C_3, 2 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R78.12	3 C_2, C_4, 15 C_7, 18 C_{14}, 6 C_{28}, 4 D_2, D_4, 18 D_7, 18 D_{14}, 6 D_{28}	3 C_2, C_4, 11 C_7, 12 C_{14}, C_{28}, 4 D_2, D_4, 12 D_7, 12 D_{14}, D_{28}	3 C_2, C_4, 10 C_{14}, 4 D_2, D_4, 12 D_7, 12 D_{14}, D_{28}	3 C_2, 11 C_7, C_{14}, 4 D_2, 12 D_7, 2 D_{14}
R78.13	3 C_2, C_4, 15 C_7, 42 C_{14}, 3 C_{28}, 4 D_2, D_4, 3 D_7, 3 D_{14}	3 C_2, C_4, 11 C_7, 30 C_{14}, 4 D_2, D_4, 3 D_7, 3 D_{14}	3 C_2, C_4, 28 C_{14}, 4 D_2, D_4, 3 D_7, 3 D_{14}	3 C_2, 9 C_7, 4 D_2, 3 D_7
R78.14	3 C_2, C_4, 15 C_7, 21 C_{14}, 27 C_{28}, 4 D_2, D_4, 6 D_7, 6 D_{14}, 6 D_{28}	3 C_2, C_4, 11 C_7, 13 C_{14}, 20 C_{28}, 4 D_2, D_4, 6 D_7, 6 D_{14}, 6 D_{28}	3 C_2, 12 C_{14}, 4 D_2, D_4, 6 D_7, 6 D_{14}, 6 D_{28}	3 C_2, C_4, 9 C_7, 4 D_2, D_4, 6 D_7
R78.15	3 C_2, 3 C_7, 6 C_{13}, 9 C_{14}, 6 C_{26}, 18 C_{91}, 18 C_{182}, 3 D_2, 12 D_{13}, 6 D_{26}	3 C_2, C_7, C_{13}, 3 C_{14}, C_{26}, 3 D_2, 2 D_{13}, D_{26}	3 C_2, C_{14}, 3 D_2, 2 D_{13}, D_{26}	3 C_2, C_{13}, C_{26}, 3 D_2, 2 D_{13}, D_{26}
R78.16	2 C_2, C_3, C_4, 2 C_5, C_6, 3 C_9, 4 C_{10}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 6 C_{45}, 3 D_2, D_3, D_4, D_6, 3 D_9	2 C_2, C_3, C_4, C_5, C_6, C_9, 2 C_{10}, 3 D_2, D_3, D_4, D_6, D_9	2 C_2, C_4, C_6, C_{10}, 3 D_2, D_3, D_4, D_6, D_9	2 C_2, C_3, 3 D_2, D_3
R78.17	2 C_2, C_3, 2 C_4, C_6, 3 C_7, C_8, 2 C_{12}, 6 C_{14}, 3 C_{21}, 2 C_{24}, 6 C_{28}, 3 C_{42}, 6 C_{56}, 6 C_{84}, 12 C_{168}, 2 D_2, D_3, D_4, D_6, 2 D_{12}	2 C_2, C_3, 2 C_4, C_6, C_7, C_{12}, 2 C_{14}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_4, C_6, C_{12}, C_{14}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, C_3, 2 D_2, D_3
R78.18	2 C_2, C_3, C_4, C_6, 3 C_7, C_8, 6 C_{14}, 3 C_{21}, 3 C_{28}, 3 C_{42}, 6 C_{56}, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, C_4, C_6, C_7, 2 C_{14}, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, C_6, C_{14}, 2 D_2, D_3, D_4, D_6	2 C_2, C_3, 2 D_2, D_3
R78.19	3 C_2, C_3, C_4, 2 C_6, 3 C_7, 2 C_8, C_{12}, 9 C_{14}, 3 C_{21}, 3 C_{28}, 9 C_{42}, 6 C_{56}, 3 C_{84}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}	3 C_2, C_3, C_4, 2 C_6, C_7, C_8, C_{12}, 3 C_{14}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}	3 C_2, C_6, C_{14}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}	3 C_2, C_3, C_4, 4 D_2, D_3, 2 D_4
R78.20	C_2, C_3, C_6, 3 C_9, 3 C_{18}, 9 C_{27}, 9 C_{54}, 27 C_{81}, D_2	C_2, C_3, C_6, C_9, C_{18}, C_{27}, C_{54}, C_{81}, D_2	C_2, C_6, C_{18}, C_{54}, D_2	C_2, C_3, C_9, C_{27}, D_2
R78.21	C_2, C_3, 26 C_{53}, 26 C_{106}, 26 C_{159}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R78.22	C_2, 78 C_{157}, 78 C_{314}	C_2	C_2	C_2
R78.23	3 C_2, 39 C_{79}, 117 C_{158}, 3 D_2	3 C_2, C_{79}, 3 C_{158}, 3 D_2	3 C_2, C_{158}, 3 D_2	3 C_2, C_{79}, 3 D_2
R78.24	C_2, C_3, C_4, C_6, 2 C_8, 2 C_{12}, 6 C_{13}, 4 C_{24}, 6 C_{26}, 12 C_{39}, 12 C_{52}, 12 C_{78}, 24 C_{104}, 24 C_{156}, 48 C_{312}	C_2, C_3, C_4, C_6, C_{12}, C_{13}, C_{26}, C_{39}, C_{52}, C_{78}, C_{156}	C_2, C_4, C_6, C_{12}, C_{26}, C_{52}, C_{78}, C_{156}	C_2, C_3, C_{13}, C_{39}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 79				
R79.1	2 **Tet**, 4 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 7 C_6, C_{10}, C_{15}, C_{30}, 16 D_2, 8 D_3, 4 D_4, 2 D_5, 11 D_6, D_{10}	2 **Tet**, 4 **Oct**, 5 C_2, 3 C_3, 2 C_4, 7 C_6, 16 D_2, 8 D_3, 4 D_4, 11 D_6	2 **Tet**, 4 **Oct**, 3 C_2, 2 C_4, 4 C_6, 16 D_2, 4 D_3, 4 D_4, 11 D_6	2 **Tet**, 5 C_2, 3 C_3, 2 C_6, 16 D_2, 8 D_3, 3 D_6
R79.2	5 C_2, 3 C_4, 2 C_5, 4 C_8, 6 C_{10}, 8 C_{16}, 8 C_{20}, 8 C_{32}, 16 C_{40}, 32 C_{80}, 32 C_{160}, 13 D_2, 3 D_4, 4 D_5, 6 D_8, 8 D_{10}, 12 D_{16}, 12 D_{20}, 24 D_{40}, 48 D_{80}	5 C_2, 3 C_4, C_5, 3 C_8, 3 C_{10}, 3 C_{16}, 3 C_{20}, C_{32}, 3 C_{40}, 3 C_{80}, C_{160}, 13 D_2, 3 D_4, 2 D_5, 4 D_8, 4 D_{10}, 5 D_{16}, 4 D_{20}, 4 D_{40}, 5 D_{80}	3 C_2, 2 C_4, C_{10}, 13 D_2, 2 D_4, D_5, 3 D_8, 3 D_{10}, 3 D_{16}, 3 D_{20}, 3 D_{40}, 3 D_{80}	5 C_2, C_4, C_5, C_8, C_{10}, C_{16}, C_{20}, C_{40}, C_{80}, 13 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, D_{16}, 2 D_{20}, 2 D_{40}, D_{80}
R79.3	3 C_2, 4 C_4, 2 C_5, 3 C_8, 4 C_{10}, 4 C_{16}, 6 C_{20}, 4 C_{32}, 12 C_{40}, 16 C_{80}, 16 C_{160}, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, 2 D_{16}, 4 D_{20}, 8 D_{40}, 8 D_{80}	3 C_2, 4 C_4, C_5, 2 C_8, 2 C_{10}, C_{16}, 2 C_{20}, 2 C_{40}, C_{80}, 4 D_2, 2 D_4, D_5, D_8, D_{10}, D_{16}, D_{20}, D_{40}, D_{80}	3 C_2, 3 C_4, C_{10}, 4 D_2, 2 D_4, D_5, D_8, D_{10}, D_{16}, D_{20}, D_{40}, D_{80}	3 C_2, C_4, C_5, C_8, C_{10}, C_{20}, C_{40}, 4 D_2, D_4, D_5, D_8, D_{10}, D_{20}, D_{40}
R79.4	3 C_2, 2 C_4, 39 C_{79}, 39 C_{158}, 39 C_{316}, 3 D_2, 78 D_{79}, 39 D_{158}	3 C_2, 2 C_4, C_{79}, C_{158}, 3 D_2, 2 D_{79}, D_{158}	2 C_2, 2 C_4, C_{158}, 3 D_2, D_{79}, D_{158}	3 C_2, C_{79}, 3 D_2, D_{79}
R79.5	C_2, 3 C_3, C_6, 6 C_9, 18 C_{27}, 54 C_{81}, D_3, 3 D_9, 9 D_{27}, 27 D_{81}	C_2, 3 C_3, C_6, 4 C_9, 4 C_{27}, 4 C_{81}, D_3, D_9, D_{27}, 3 D_{81}	C_2, C_6, D_3, D_9, D_{27}, 3 D_{81}	C_2, 2 C_3, C_9, C_{27}, D_3, D_9, D_{27}
R79.6	C_2, C_3, C_6, 39 C_{79}, 39 C_{237}, 39 D_{79}	C_2, C_3, C_6, C_{79}, D_{79}	C_2, C_6, D_{79}	C_2, C_{79}, D_{79}
R79.7	2 C_2, C_3, 2 C_4, C_6, C_7, 3 C_8, C_{12}, C_{14}, 2 C_{28}, 2 D_2, 2 D_3, D_4, D_6, 2 D_8	2 C_2, C_3, 2 C_4, C_6, 2 C_8, C_{12}, 2 D_2, 2 D_3, D_4, D_6, 2 D_8	2 C_2, 2 C_4, C_6, 2 C_8, C_{12}, 2 D_2, 2 D_3, D_4, D_6, 2 D_8	2 C_2, C_3, 2 D_2, 2 D_3
R79.8	3 C_2, C_3, 3 C_4, C_5, 2 C_6, 3 C_8, C_{10}, 3 C_{12}, C_{20}, 4 D_2, 2 D_3, 3 D_4, D_5, 2 D_6, 2 D_8, D_{10}, 2 D_{12}	3 C_2, C_3, 3 C_4, 2 C_6, 2 C_8, 3 C_{12}, 4 D_2, 2 D_3, 3 D_4, 2 D_6, D_8, 2 D_{12}	2 C_2, 3 C_4, 2 C_6, 2 C_8, 3 C_{12}, 4 D_2, D_3, 3 D_4, 2 D_6, D_8, 2 D_{12}	3 C_2, C_3, 4 D_2, 2 D_3
R79.9	4 C_2, C_3, 2 C_4, C_5, 3 C_6, 2 C_8, C_{10}, C_{12}, C_{20}, 9 D_2, 3 D_3, 4 D_4, D_5, 5 D_6, 2 D_8, D_{10}, D_{12}	4 C_2, C_3, 2 C_4, 3 C_6, C_8, C_{12}, 9 D_2, 3 D_3, 4 D_4, 5 D_6, D_8, D_{12}	2 C_2, 2 C_4, 2 C_6, C_8, C_{12}, 9 D_2, D_3, 4 D_4, 5 D_6, D_8, D_{12}	4 C_2, C_3, C_6, 9 D_2, 3 D_3, D_6
R79.10	2 C_2, 3 C_3, 2 C_4, 4 C_6, 6 C_9, 5 C_{12}, 6 C_{18}, 6 C_{36}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 3 C_3, 2 C_4, 4 C_6, 2 C_9, 4 C_{12}, 2 C_{18}, C_{36}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_4, 3 C_6, 2 C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_3, 2 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R79.11	2 C_2, 3 C_3, 2 C_4, 3 C_6, 6 C_9, 3 C_{12}, 6 C_{18}, 3 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 3 C_3, 2 C_4, 3 C_6, 4 C_9, 2 C_{12}, 4 C_{18}, 3 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 2 C_4, 3 C_6, 2 C_{12}, 4 C_{18}, 3 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 2 C_3, 2 D_2, D_3
R79.12	5 C_2, 3 C_3, 2 C_4, 11 C_6, 6 C_9, 2 C_{12}, 6 C_{18}, 16 D_2, 2 D_3, 4 D_4, 4 D_6, 6 D_9, 3 D_{18}	5 C_2, 3 C_3, 2 C_4, 11 C_6, 4 C_9, C_{12}, 4 C_{18}, 16 D_2, 2 D_3, 4 D_4, 4 D_6, 6 D_9, 3 D_{18}	3 C_2, 2 C_4, 5 C_6, 16 D_2, D_3, 4 D_4, 4 D_6, 3 D_9, 3 D_{18}	5 C_2, 2 C_3, 2 C_6, 16 D_2, 2 D_3, D_6
R79.13	5 C_2, 3 C_3, 2 C_4, 6 C_6, 6 C_9, C_{12}, 3 C_{18}, 16 D_2, 6 D_3, 4 D_4, 10 D_6, 9 D_9, D_{12}, 3 D_{18}	5 C_2, 3 C_3, 2 C_4, 6 C_6, 4 C_9, C_{18}, 16 D_2, 6 D_3, 4 D_4, 10 D_6, 5 D_9, D_{18}	3 C_2, 2 C_4, 2 C_6, 16 D_2, 4 D_3, 4 D_4, 9 D_6, 4 D_9, D_{18}	5 C_2, 3 C_3, 16 D_2, 6 D_3
R79.14	3 C_2, C_3, 4 C_4, 3 C_6, 3 C_8, 5 C_{12}, 4 C_{16}, 3 C_{24}, 4 C_{32}, 6 C_{48}, 8 C_{96}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}	3 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 3 C_{12}, C_{16}, 4 D_2, 2 D_4, D_8, D_{16}	3 C_2, 3 C_4, C_6, 4 D_2, 2 D_4, D_8, D_{16}	3 C_2, C_4, C_8, 4 D_2, D_4, D_8
R79.15	5 C_2, C_3, 3 C_4, 5 C_6, 4 C_8, 4 C_{12}, 8 C_{16}, 4 C_{24}, 8 C_{32}, 8 C_{48}, 16 C_{96}, 13 D_2, 3 D_4, 6 D_8, 12 D_{16}	5 C_2, C_3, 3 C_4, 5 C_6, 3 C_8, 2 C_{12}, 3 C_{16}, C_{32}, 13 D_2, 3 D_4, 4 D_8, 5 D_{16}	3 C_2, 2 C_4, C_6, 13 D_2, 2 D_4, 3 D_8, 3 D_{16}	5 C_2, C_4, C_8, C_{16}, 13 D_2, 2 D_4, 2 D_8, D_{16}
R79.16	2 **Tet**, 2 **Ico**, 3 C_2, 3 C_3, 2 C_5, 5 C_6, 2 C_{10}, 2 C_{15}, 2 C_{30}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	2 **Tet**, 3 C_2, 3 C_3, 5 C_6, 7 D_2, 2 D_3, D_6	2 **Tet**, 2 C_2, 3 C_6, 7 D_2, D_3, D_6	2 **Tet**, 3 C_2, 3 C_3, C_6, 7 D_2, 2 D_3
R79.17	2 C_2, C_3, 2 C_4, C_6, 3 C_7, 2 C_{12}, 6 C_{14}, 6 C_{21}, 9 C_{28}, 6 C_{42}, 12 C_{84}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, C_6, C_{12}, 2 D_2, D_4	2 C_2, 2 C_4, C_6, C_{12}, 2 D_2, D_4	2 C_2, 2 D_2
R79.18	C_2, C_3, C_6, 26 C_{53}, 26 C_{106}, 52 C_{159}, 52 C_{318}	C_2, C_3, C_6	C_2, C_6	C_2
R79.19	2 C_2, 2 C_4, 2 C_5, 3 C_8, 4 C_{10}, 6 C_{16}, 6 C_{20}, 8 C_{32}, 12 C_{40}, 24 C_{80}, 32 C_{160}, 2 D_2	2 C_2, 2 C_4, C_5, 2 C_8, 2 C_{10}, C_{16}, 2 C_{20}, 2 C_{40}, C_{80}, 2 D_2	2 C_2, C_4, C_{10}, 2 D_2	2 C_2, C_4, C_5, C_8, C_{10}, C_{20}, C_{40}, 2 D_2
R79.20	3 C_2, 2 C_4, 2 C_5, 4 C_8, 6 C_{10}, 8 C_{16}, 8 C_{20}, 16 C_{32}, 16 C_{40}, 32 C_{80}, 64 C_{160}, 3 D_2	3 C_2, 2 C_4, C_5, 3 C_8, 3 C_{10}, 3 C_{16}, 3 C_{20}, 2 C_{32}, 3 C_{40}, 3 C_{80}, 2 C_{160}, 3 D_2	2 C_2, C_4, C_{10}, 3 D_2	3 C_2, C_4, C_5, C_8, C_{10}, C_{16}, C_{20}, C_{40}, C_{80}, 3 D_2
R79.21	C_2, C_4, 39 C_{79}, 39 C_{158}, 78 C_{316}	C_2, C_4, C_{79}, C_{158}	C_2, C_4, C_{158}	C_2, C_{79}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 80				
R80.1	3 C_2, C_3, C_4, 2 C_6, 3 C_9, 6 C_{18}, 9 C_{27}, 18 C_{54}, 27 C_{81}, 54 C_{162}, 4 D_2, D_3, D_4, D_6, 3 D_9, 3 D_{18}, 9 D_{27}, 9 D_{54}, 27 D_{81}, 27 D_{162}	3 C_2, C_3, C_4, 2 C_6, C_9, 2 C_{18}, C_{27}, 2 C_{54}, C_{81}, 2 C_{162}, 4 D_2, D_3, D_4, D_6, D_9, D_{18}, D_{27}, D_{54}, D_{81}, D_{162}	3 C_2, C_4, C_6, C_{18}, C_{54}, C_{162}, 4 D_2, D_3, D_4, D_6, D_9, D_{18}, D_{27}, D_{54}, D_{81}, D_{162}	3 C_2, C_3, C_9, C_{27}, C_{81}, 4 D_2, D_3, D_9, D_{27}, D_{81}
R80.2	2 C_2, 2 C_4, 2 C_5, 2 C_8, 2 C_{10}, 4 C_{16}, 4 C_{20}, 8 C_{32}, 8 C_{40}, 8 C_{64}, 16 C_{80}, 32 C_{160}, 32 C_{320}, 2 D_2, D_4, 2 D_5, 2 D_8, 2 D_{10}, 4 D_{16}, 4 D_{20}, 8 D_{32}, 8 D_{40}, 16 D_{80}, 32 D_{160}	2 C_2, 2 C_4, C_5, C_8, C_{10}, C_{16}, C_{20}, C_{32}, C_{40}, C_{80}, C_{160}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{16}, D_{20}, D_{32}, D_{40}, D_{80}, D_{160}	2 C_2, 2 C_4, C_8, C_{10}, C_{16}, C_{20}, C_{32}, C_{40}, C_{80}, C_{160}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{16}, D_{20}, D_{32}, D_{40}, D_{80}, D_{160}	2 C_2, C_5, 2 D_2, D_5
R80.3	3 C_2, C_3, C_6, 20 C_{41}, 20 C_{82}, 20 C_{123}, 3 D_2, 2 D_3, D_6, 40 D_{41}, 20 D_{82}, 20 D_{123}	3 C_2, C_3, C_6, C_{41}, C_{82}, C_{123}, 3 D_2, 2 D_3, D_6, 2 D_{41}, D_{82}, D_{123}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_{41}, D_{82}, D_{123}	3 C_2, C_3, C_{41}, 3 D_2, 2 D_3, 2 D_{41}
R80.4	3 C_2, C_3, C_4, 2 C_5, 3 C_6, 2 C_8, 2 C_{10}, C_{12}, 2 C_{15}, 4 C_{16}, 4 C_{20}, 2 C_{24}, 2 C_{30}, 8 C_{40}, 4 C_{48}, 4 C_{60}, 16 C_{80}, 8 C_{120}, 16 C_{240}, 4 D_2, 2 D_4, 4 D_5, 4 D_8, 4 D_{10}, 4 D_{16}, 8 D_{20}, 16 D_{40}, 16 D_{80}	3 C_2, C_3, C_4, C_5, 3 C_6, C_8, C_{10}, C_{16}, C_{20}, C_{40}, C_{80}, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, D_{16}, 2 D_{20}, 2 D_{40}, D_{80}	3 C_2, C_6, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, D_{16}, 2 D_{20}, 2 D_{40}, D_{80}	3 C_2, C_4, C_5, C_8, C_{10}, C_{16}, C_{20}, C_{40}, C_{80}, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, D_{16}, 2 D_{20}, 2 D_{40}, D_{80}
R80.5	2 C_2, C_3, 2 C_4, C_6, C_8, 3 C_9, 2 C_{12}, 3 C_{18}, 9 C_{27}, 6 C_{36}, 9 C_{54}, 18 C_{108}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 9 D_{27}, 3 D_{36}, 9 D_{54}, 9 D_{108}	2 C_2, C_3, 2 C_4, C_6, C_9, C_{12}, C_{18}, C_{27}, C_{36}, C_{54}, C_{108}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{27}, D_{36}, D_{54}, D_{108}	2 C_2, 2 C_4, C_6, C_{18}, C_{54}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{27}, D_{36}, D_{54}, D_{108}	2 C_2, C_3, C_9, C_{27}, 2 D_2, D_3, D_9, D_{27}
R80.6	3 C_2, C_3, 2 C_5, C_6, 3 C_7, 2 C_{10}, 3 C_{14}, 2 C_{15}, 6 C_{21}, 6 C_{35}, 6 C_{42}, 12 C_{105}, 3 D_2, 2 D_3, 4 D_5, D_6, 6 D_7, 2 D_{10}, 3 D_{14}, 2 D_{15}, 12 D_{21}, 6 D_{35}, 6 D_{42}, 12 D_{105}	3 C_2, C_3, C_5, C_6, C_7, C_{10}, C_{14}, C_{15}, C_{21}, C_{35}, C_{42}, C_{105}, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_7, D_{10}, D_{14}, D_{15}, 2 D_{21}, D_{35}, D_{42}, D_{105}	3 C_2, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_7, D_{10}, D_{14}, D_{15}, 2 D_{21}, D_{35}, D_{42}, D_{105}	3 C_2, C_3, C_5, C_7, C_{21}, 3 D_2, 2 D_3, 2 D_5, 2 D_7, 2 D_{21}
R80.7	3 C_2, C_3, C_4, C_6, 2 C_{12}, 8 C_{17}, 16 C_{34}, 8 C_{51}, 8 C_{102}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}, 8 D_{17}, 8 D_{34}, 8 D_{51}, 8 D_{102}	3 C_2, C_3, C_4, C_6, C_{12}, C_{17}, 2 C_{34}, C_{51}, C_{102}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}, D_{17}, D_{34}, D_{51}, D_{102}	3 C_2, C_4, C_{34}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}, D_{17}, D_{34}, D_{51}, D_{102}	3 C_2, C_3, C_6, C_{17}, 4 D_2, 2 D_3, 2 D_6, D_{17}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R80.8	2 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 2 C_{12}, 4 C_{16}, 2 C_{24}, 8 C_{32}, 4 C_{48}, 8 C_{64}, 8 C_{96}, 16 C_{192}, 2 D_2, D_4, 2 D_8, 4 D_{16}, 8 D_{32}	2 C_2, C_3, 2 C_4, 2 C_6, C_8, C_{16}, C_{32}, 2 D_2, D_4, D_8, D_{16}, D_{32}	2 C_2, 2 C_4, C_6, C_8, C_{16}, C_{32}, 2 D_2, D_4, D_8, D_{16}, D_{32}	2 C_2, 2 D_2
R80.9	3 C_2, C_3, C_6, 3 C_9, 5 C_{11}, 3 C_{18}, 5 C_{22}, 5 C_{33}, 15 C_{99}, 3 D_2, 2 D_3, D_6, 6 D_9, 10 D_{11}, 3 D_{18}, 5 D_{22}, 5 D_{33}, 15 D_{99}	3 C_2, C_3, C_6, C_9, C_{11}, C_{18}, C_{22}, C_{33}, C_{99}, 3 D_2, 2 D_3, D_6, 2 D_9, 2 D_{11}, D_{18}, D_{22}, D_{33}, D_{99}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_9, 2 D_{11}, D_{18}, D_{22}, D_{33}, D_{99}	3 C_2, C_3, C_9, C_{11}, 3 D_2, 2 D_3, 2 D_9, 2 D_{11}
R80.10	3 C_2, C_3, C_4, 2 C_5, 3 C_6, 3 C_9, 2 C_{10}, C_{12}, 2 C_{15}, 9 C_{18}, 4 C_{20}, 2 C_{30}, 3 C_{36}, 6 C_{45}, 4 C_{60}, 6 C_{90}, 12 C_{180}, 4 D_2, D_4, 4 D_5, 4 D_{10}, 4 D_{20}	3 C_2, C_3, C_4, C_5, 3 C_6, C_9, C_{10}, 3 C_{18}, C_{20}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}	3 C_2, C_6, C_{18}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}	3 C_2, C_4, C_5, C_{10}, C_{20}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}
R80.11	3 C_2, C_3, C_4, 2 C_5, 2 C_6, 3 C_9, 6 C_{10}, 2 C_{15}, 6 C_{18}, 2 C_{20}, 6 C_{30}, 6 C_{45}, 18 C_{90}, 4 D_2, D_3, D_4, D_6, 3 D_9, 3 D_{18}	3 C_2, C_3, C_4, 2 C_6, C_9, 2 C_{18}, 4 D_2, D_3, D_4, D_6, D_9, D_{18}	3 C_2, C_4, C_6, C_{18}, 4 D_2, D_3, D_4, D_6, D_9, D_{18}	3 C_2, C_3, C_9, 4 D_2, D_3, D_9
R80.12	3 C_2, C_4, 2 C_8, 5 C_{11}, 4 C_{16}, 15 C_{22}, 5 C_{44}, 10 C_{88}, 20 C_{176}, 4 D_2, 2 D_4, 4 D_8, 4 D_{16}	3 C_2, C_4, C_8, C_{16}, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, C_4, C_8, C_{16}, 4 D_2, 2 D_4, 2 D_8, D_{16}
R80.13	3 C_2, 2 C_5, 2 C_{10}, 8 C_{17}, 24 C_{34}, 16 C_{85}, 16 C_{170}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}	3 C_2, 3 D_2, 2 D_5, D_{10}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}
R80.14	3 C_2, C_3, C_4, 3 C_6, 3 C_7, 2 C_8, C_{12}, 9 C_{14}, 6 C_{21}, 2 C_{24}, 3 C_{28}, 18 C_{42}, 6 C_{56}, 6 C_{84}, 12 C_{168}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_3, C_4, 3 C_6, C_8, 4 D_2, 2 D_4, D_8	3 C_2, C_6, 4 D_2, 2 D_4, D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8
R80.15	2 C_2, C_3, 2 C_4, C_6, 3 C_7, C_8, 2 C_{12}, 6 C_{14}, 3 C_{21}, 6 C_{28}, 3 C_{42}, 6 C_{56}, 9 C_{84}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, C_3, 2 C_4, C_6, C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_4, C_6, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, C_3, 2 D_2, D_3
R80.16	C_2, C_3, 2 C_5, C_6, 5 C_{11}, 2 C_{15}, 5 C_{22}, 10 C_{33}, 10 C_{55}, 10 C_{66}, 20 C_{165}, 2 D_5	C_2, C_3, C_5, C_6, D_5	C_2, C_6, D_5	C_2, C_5, D_5
R80.17	3 C_2, C_4, 20 C_{41}, 60 C_{82}, 20 C_{164}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R80.18	C_2, 3 C_7, 3 C_{14}, 11 C_{23}, 11 C_{46}, 66 C_{161}, 66 C_{322}	C_2	C_2	C_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R80.19	3 C_2, C_3, 3 C_6, 3 C_9, 9 C_{18}, 9 C_{27}, 27 C_{54}, 27 C_{81}, 81 C_{162}, 3 D_2	3 C_2, C_3, 3 C_6, C_9, 3 C_{18}, C_{27}, 3 C_{54}, C_{81}, 3 C_{162}, 3 D_2	3 C_2, C_6, C_{18}, C_{54}, C_{162}, 3 D_2	3 C_2, C_3, C_9, C_{27}, C_{81}, 3 D_2
R80.20	C_2, C_4, 2 C_5, 2 C_8, 2 C_{10}, 4 C_{16}, 4 C_{20}, 8 C_{32}, 8 C_{40}, 16 C_{64}, 16 C_{80}, 32 C_{160}, 64 C_{320}	C_2, C_4, C_5, C_8, C_{10}, C_{16}, C_{20}, C_{32}, C_{40}, C_{80}, C_{160}	C_2, C_4, C_8, C_{10}, C_{16}, C_{20}, C_{32}, C_{40}, C_{80}, C_{160}	C_2, C_5
Genus 81				
R81.1	**Tet**, **Oct**, 4 C_2, C_3, 7 C_4, C_6, 7 C_8, 2 C_{12}, 4 C_{16}, 12 D_2, D_3, 7 D_4, D_6, 4 D_8, 2 D_{12}	**Tet**, **Oct**, 4 C_2, C_3, 7 C_4, C_6, 6 C_8, 2 C_{12}, C_{16}, 12 D_2, D_3, 7 D_4, D_6, 4 D_8, 2 D_{12}	**Oct**, 2 C_2, 2 C_4, 5 C_8, C_{16}, 11 D_2, D_3, 7 D_4, D_6, 4 D_8, 2 D_{12}	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_8, 12 D_2, D_3, 6 D_4
R81.2	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, 3 C_6, 4 C_8, 2 C_{16}, 23 D_2, 2 D_3, 6 D_4, 4 D_6, 2 D_8	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, 3 C_6, 3 C_8, 23 D_2, 2 D_3, 6 D_4, 4 D_6, 2 D_8	2 **Oct**, 2 C_2, 3 C_4, C_6, 3 C_8, 15 D_2, 2 D_3, 6 D_4, 4 D_6, 2 D_8	**Tet**, 2 **Oct**, 5 C_2, C_3, C_4, 23 D_2, 2 D_3, 3 D_4
R81.3	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 6 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{16}, 43 D_2, D_3, 10 D_4, D_6, 2 D_8, 2 D_{12}	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 6 C_4, C_6, 3 C_8, 2 C_{12}, C_{16}, 43 D_2, D_3, 10 D_4, D_6, 2 D_8, 2 D_{12}	3 **Oct**, 2 C_2, 3 C_4, C_6, 3 C_8, 2 C_{12}, C_{16}, 20 D_2, D_3, 10 D_4, D_6, 2 D_8, 2 D_{12}	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 3 C_4, 43 D_2, D_3, 8 D_4
R81.4	**Tet**, **Oct**, 4 C_2, C_3, 7 C_4, C_6, 5 C_8, 2 C_{12}, 4 C_{16}, 12 D_2, D_3, 7 D_4, D_6, 2 D_8, 2 D_{12}	**Tet**, **Oct**, 4 C_2, C_3, 7 C_4, C_6, 4 C_8, 2 C_{12}, C_{16}, 12 D_2, D_3, 7 D_4, D_6, 2 D_8, 2 D_{12}	**Oct**, 2 C_2, 2 C_4, 11 D_2, D_3, 7 D_4, D_6, 2 D_8, 2 D_{12}	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_8, 12 D_2, D_3, 6 D_4
R81.5	**Tet**, 2 **Ico**, 3 C_2, C_3, 2 C_5, 3 C_6, 2 C_{10}, C_{11}, C_{22}, 6 D_2, 2 D_3, 4 D_5, 4 D_6, 2 D_{10}	**Tet**, 2 **Ico**, 3 C_2, C_3, 2 C_5, 3 C_6, 2 C_{10}, 6 D_2, 2 D_3, 4 D_5, 4 D_6, 2 D_{10}	2 C_2, 2 C_6, 2 C_{10}, 5 D_2, D_3, 2 D_5, 3 D_6, 2 D_{10}	**Tet**, 2 **Ico**, 3 C_2, C_3, 2 C_5, 6 D_2, 2 D_3, 4 D_5
R81.6	7 **Tet**, 7 **Oct**, 8 C_2, C_3, 7 C_4, 3 C_9, 147 D_2, D_3, 28 D_4, 3 D_9	7 **Tet**, 7 **Oct**, 8 C_2, C_3, 7 C_4, C_9, 147 D_2, D_3, 28 D_4, D_9	**Tet**, 7 **Oct**, 2 C_2, C_4, 63 D_2, D_3, 28 D_4, D_9	7 **Tet**, 8 C_2, C_3, 6 C_4, C_9, 147 D_2, D_3, 24 D_4, D_9
R81.7	**Tet**, **Ico**, 11 C_2, C_3, 4 C_4, C_5, 5 C_6, 5 C_{10}, 2 C_{12}, 89 D_2, 6 D_3, 6 D_5, 18 D_6, 18 D_{10}	**Tet**, **Ico**, 11 C_2, C_3, 4 C_4, C_5, 5 C_6, 5 C_{10}, C_{12}, 89 D_2, 6 D_3, 6 D_5, 18 D_6, 18 D_{10}	3 C_2, 2 C_4, C_6, C_{10}, 56 D_2, 2 D_3, 2 D_5, 12 D_6, 12 D_{10}	**Tet**, **Ico**, 11 C_2, C_3, 2 C_4, C_5, 4 C_{10}, 89 D_2, 6 D_3, 6 D_5, 15 D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.8	3 C_2, C_3, 5 C_4, C_5, C_6, 2 C_8, C_{10}, 3 C_{12}, 2 C_{20}, C_{24}, 6 D_2, 2 D_3, 4 D_4, 2 D_5, 2 D_6, 2 D_{10}, 2 D_{12}, 2 D_{20}	3 C_2, C_3, 5 C_4, C_5, C_6, 2 C_8, C_{10}, 2 C_{12}, 2 C_{20}, C_{24}, 6 D_2, 2 D_3, 4 D_4, 2 D_5, 2 D_6, 2 D_{10}, 2 D_{12}, 2 D_{20}	3 C_2, 5 C_4, C_6, 2 C_8, C_{10}, 2 C_{12}, 2 C_{20}, C_{24}, 6 D_2, 2 D_3, 4 D_4, 2 D_5, 2 D_6, 2 D_{10}, 2 D_{12}, 2 D_{20}	3 C_2, C_3, C_5, 6 D_2, 2 D_3, 2 D_5
R81.9	5 C_2, 3 C_4, 5 C_5, 15 C_{10}, 6 C_{20}, 13 D_2, 2 D_4, 12 D_5, 22 D_{10}, 2 D_{20}	5 C_2, 3 C_4, 4 C_5, 12 C_{10}, 3 C_{20}, 13 D_2, 2 D_4, 10 D_5, 18 D_{10}, 2 D_{20}	3 C_2, 2 C_4, 7 C_{10}, 11 D_2, 2 D_4, 6 D_5, 14 D_{10}, 2 D_{20}	5 C_2, C_4, 4 C_5, 4 C_{10}, 2 C_{20}, 13 D_2, 2 D_4, 10 D_5, 9 D_{10}, 2 D_{20}
R81.10	2 **Tet**, **Oct**, 5 C_2, C_3, 9 C_4, C_6, 4 C_8, 2 C_{12}, 2 C_{24}, 26 D_2, D_3, 12 D_4, D_6, 4 D_8, 2 D_{12}	2 **Tet**, **Oct**, 5 C_2, C_3, 9 C_4, C_6, 3 C_8, C_{12}, 26 D_2, D_3, 12 D_4, D_6, 4 D_8, D_{12}	**Tet**, **Oct**, 3 C_2, 6 C_4, C_6, 3 C_8, 23 D_2, D_3, 12 D_4, D_6, 4 D_8, D_{12}	2 **Tet**, 5 C_2, C_3, 3 C_4, 26 D_2, D_3, 3 D_4
R81.11	3 **Tet**, 3 **Oct**, 8 C_2, C_3, 11 C_4, C_6, 2 C_8, 2 C_{12}, 2 C_{24}, 72 D_2, D_3, 15 D_4, D_6, 2 D_{12}	3 **Tet**, 3 **Oct**, 8 C_2, C_3, 11 C_4, C_6, C_8, C_{12}, 72 D_2, D_3, 15 D_4, D_6, D_{12}	3 **Oct**, 3 C_2, 6 C_4, C_6, C_8, 44 D_2, D_3, 15 D_4, D_6, D_{12}	3 **Tet**, 8 C_2, C_3, 5 C_4, 72 D_2, D_3, 13 D_4
R81.12	3 **Tet**, 6 **Oct**, 9 C_2, C_3, 10 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 86 D_2, 2 D_3, 30 D_4, 2 D_6, 4 D_8, 4 D_{12}, 4 D_{24}	3 **Tet**, 6 **Oct**, 9 C_2, C_3, 10 C_4, C_6, 3 C_8, C_{12}, C_{24}, 86 D_2, 2 D_3, 30 D_4, 2 D_6, 3 D_8, 2 D_{12}, D_{24}	**Tet**, 5 **Oct**, 3 C_2, 5 C_4, C_6, 2 C_8, 52 D_2, D_3, 25 D_4, 2 D_6, 3 D_8, D_{12}, D_{24}	3 **Tet**, 9 C_2, C_3, 5 C_4, 86 D_2, D_3, 18 D_4
R81.13	2 **Tet**, 4 **Oct**, 6 C_2, C_3, 8 C_4, C_6, 5 C_8, 2 C_{12}, 4 C_{24}, 40 D_2, 2 D_3, 21 D_4, 2 D_6, 8 D_8, 4 D_{12}, 4 D_{24}	2 **Tet**, 4 **Oct**, 6 C_2, C_3, 8 C_4, C_6, 4 C_8, C_{12}, C_{24}, 40 D_2, 2 D_3, 21 D_4, 2 D_6, 7 D_8, 2 D_{12}, D_{24}	**Tet**, 3 **Oct**, 3 C_2, 5 C_4, C_6, 3 C_8, 33 D_2, D_3, 18 D_4, 2 D_6, 7 D_8, D_{12}, D_{24}	2 **Tet**, 6 C_2, C_3, 3 C_4, 40 D_2, D_3, 6 D_4
R81.14	**Tet**, **Oct**, 6 C_2, C_3, 9 C_4, C_6, 8 C_8, C_{12}, 2 C_{24}, 30 D_2, D_3, 11 D_4, D_6, 4 D_8	**Tet**, **Oct**, 6 C_2, C_3, 9 C_4, C_6, 7 C_8, 30 D_2, D_3, 11 D_4, D_6, 4 D_8	**Oct**, 3 C_2, 6 C_4, C_6, 6 C_8, 23 D_2, D_3, 11 D_4, D_6, 4 D_8	**Tet**, 6 C_2, C_3, 2 C_4, 30 D_2, D_3, 3 D_4
R81.15	2 **Tet**, 4 **Oct**, 6 C_2, C_3, 10 C_4, C_6, 6 C_8, C_{12}, 2 C_{24}, 31 D_2, 2 D_3, 14 D_4, D_6	2 **Tet**, 4 **Oct**, 6 C_2, C_3, 10 C_4, C_6, 5 C_8, 31 D_2, 2 D_3, 14 D_4, D_6	2 **Oct**, 3 C_2, 5 C_4, C_6, 3 C_8, 23 D_2, D_3, 12 D_4, D_6	2 **Tet**, 6 C_2, C_3, 4 C_4, 31 D_2, D_3, 8 D_4
R81.16	**Tet**, **Oct**, 6 C_2, C_3, 9 C_4, C_6, 8 C_8, C_{12}, 2 C_{24}, 30 D_2, D_3, 11 D_4, D_6, 4 D_8	**Tet**, **Oct**, 6 C_2, C_3, 9 C_4, C_6, 7 C_8, 30 D_2, D_3, 11 D_4, D_6, 4 D_8	**Oct**, 3 C_2, 6 C_4, C_6, 5 C_8, 23 D_2, D_3, 11 D_4, D_6, 4 D_8	**Tet**, 6 C_2, C_3, 2 C_4, 30 D_2, D_3, 3 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.17	2 **Tet**, 3 **Oct**, 5 C_2, C_3, 10 C_4, C_6, 4 C_8, C_{12}, 2 C_{24}, 27 D_2, D_3, 12 D_4, D_6	2 **Tet**, 3 **Oct**, 5 C_2, C_3, 10 C_4, C_6, 3 C_8, 27 D_2, D_3, 12 D_4, D_6	3 **Oct**, 3 C_2, 5 C_4, C_6, 2 C_8, 23 D_2, D_3, 12 D_4, D_6	2 **Tet**, 5 C_2, C_3, 4 C_4, 27 D_2, D_3, 6 D_4
R81.18	7 C_2, C_3, 11 C_4, 3 C_6, 7 C_8, 8 C_{12}, 4 C_{24}, 31 D_2, 2 D_3, 17 D_4, 6 D_6, 4 D_8, 10 D_{12}	7 C_2, C_3, 11 C_4, 3 C_6, 6 C_8, 7 C_{12}, C_{24}, 31 D_2, 2 D_3, 17 D_4, 6 D_6, 4 D_8, 9 D_{12}	3 C_2, 4 C_4, C_6, 2 C_8, 2 C_{12}, 25 D_2, D_3, 13 D_4, 4 D_6, 3 D_8, 7 D_{12}	7 C_2, C_3, 7 C_4, 3 C_8, 31 D_2, 2 D_3, 14 D_4, 4 D_8
R81.19	6 C_2, C_3, 12 C_4, 3 C_6, 10 C_8, 8 C_{12}, 8 C_{24}, 19 D_2, D_3, 10 D_4, 3 D_6, 4 D_8, 4 D_{12}	6 C_2, C_3, 12 C_4, 3 C_6, 9 C_8, 7 C_{12}, 3 C_{24}, 19 D_2, D_3, 10 D_4, 3 D_6, 4 D_8, 4 D_{12}	3 C_2, 4 C_4, C_6, 5 C_8, C_{12}, 3 C_{24}, 17 D_2, D_3, 9 D_4, 3 D_6, 4 D_8, 4 D_{12}	6 C_2, C_3, 8 C_4, 4 C_8, 19 D_2, D_3, 9 D_4, 4 D_8
R81.20	**Tet**, **Oct**, 12 C_2, C_3, 11 C_4, 5 C_6, 4 C_8, 4 C_{12}, 4 C_{24}, 103 D_2, D_3, 14 D_4, 3 D_6, 2 D_{12}	**Tet**, **Oct**, 12 C_2, C_3, 11 C_4, 5 C_6, 3 C_8, 3 C_{12}, C_{24}, 103 D_2, D_3, 14 D_4, 3 D_6, 2 D_{12}	**Oct**, 3 C_2, 6 C_4, C_6, 3 C_8, 3 C_{12}, C_{24}, 56 D_2, D_3, 14 D_4, 3 D_6, 2 D_{12}	**Tet**, **Oct**, 12 C_2, C_3, 5 C_4, 103 D_2, D_3, 12 D_4
R81.21	5 C_2, C_3, 14 C_4, 3 C_6, 8 C_8, 5 C_{12}, 4 C_{24}, 15 D_2, D_3, 8 D_4, 3 D_6, 4 D_8, 3 D_{12}	5 C_2, C_3, 14 C_4, 3 C_6, 7 C_8, 4 C_{12}, 15 D_2, D_3, 8 D_4, 3 D_6, 4 D_8, 3 D_{12}	3 C_2, 6 C_4, C_6, C_8, C_{12}, 15 D_2, D_3, 8 D_4, 3 D_6, 4 D_8, 3 D_{12}	5 C_2, C_3, 6 C_4, 5 C_8, 15 D_2, D_3, 6 D_4, 4 D_8
R81.22	5 C_2, C_3, 10 C_4, 3 C_6, 7 C_8, 5 C_{12}, 4 C_{24}, 15 D_2, D_3, 7 D_4, 3 D_6, 2 D_8, 2 D_{12}	5 C_2, C_3, 10 C_4, 3 C_6, 6 C_8, 4 C_{12}, C_{24}, 15 D_2, D_3, 7 D_4, 3 D_6, 2 D_8, 2 D_{12}	3 C_2, 4 C_4, C_6, 2 C_8, C_{12}, C_{24}, 15 D_2, D_3, 7 D_4, 3 D_6, 2 D_8, 2 D_{12}	5 C_2, C_3, 6 C_4, 4 C_8, 15 D_2, D_3, 6 D_4, 2 D_8
R81.23	8 C_2, C_3, 8 C_4, 5 C_6, 7 C_8, 3 C_{12}, 4 C_{24}, 41 D_2, D_3, 11 D_4, 6 D_6, 6 D_8	8 C_2, C_3, 8 C_4, 5 C_6, 6 C_8, 2 C_{12}, C_{24}, 41 D_2, D_3, 11 D_4, 6 D_6, 6 D_8	3 C_2, 7 C_4, C_6, 6 C_8, 2 C_{12}, C_{24}, 30 D_2, D_3, 11 D_4, 6 D_6, 6 D_8	8 C_2, C_3, C_4, 41 D_2, D_3, 3 D_4
R81.24	6 C_2, C_3, 7 C_4, 2 C_6, 6 C_8, 3 C_{12}, 2 C_{24}, 26 D_2, D_3, 14 D_4, 3 D_6, 7 D_8, 2 D_{12}	6 C_2, C_3, 7 C_4, 2 C_6, 5 C_8, 2 C_{12}, 26 D_2, D_3, 14 D_4, 3 D_6, 7 D_8, 2 D_{12}	3 C_2, 6 C_4, C_6, 5 C_8, 2 C_{12}, 22 D_2, D_3, 14 D_4, 3 D_6, 7 D_8, 2 D_{12}	6 C_2, C_3, C_4, 26 D_2, D_3, 2 D_4
R81.25	**Tet**, 2 **Oct**, 11 C_2, C_3, 8 C_4, 4 C_6, 2 C_8, C_{12}, 2 C_{24}, 106 D_2, 2 D_3, 25 D_4, 7 D_6	**Tet**, 2 **Oct**, 11 C_2, C_3, 8 C_4, 4 C_6, C_8, 106 D_2, 2 D_3, 25 D_4, 7 D_6	**Oct**, 3 C_2, 3 C_4, C_6, C_8, 62 D_2, D_3, 18 D_4, 5 D_6	**Tet**, 2 **Oct**, 11 C_2, C_3, 5 C_4, 106 D_2, 2 D_3, 20 D_4
R81.26	9 C_2, C_3, 7 C_4, 7 C_6, 5 C_8, 8 C_{12}, 4 C_{24}, 47 D_2, 2 D_3, 15 D_4, 7 D_6, 12 D_8, 19 D_{12}	9 C_2, C_3, 7 C_4, 7 C_6, 4 C_8, 7 C_{12}, C_{24}, 47 D_2, 2 D_3, 15 D_4, 7 D_6, 12 D_8, 19 D_{12}	3 C_2, 3 C_4, C_6, C_8, 32 D_2, D_3, 10 D_4, 5 D_6, 9 D_8, 13 D_{12}	9 C_2, C_3, 4 C_4, C_6, 3 C_8, 47 D_2, 2 D_3, 15 D_4, D_6, 12 D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.27	10 C_2, C_3, 7 C_4, 9 C_6, 2 C_8, 4 C_{12}, 4 C_{24}, 78 D_2, D_3, 11 D_4, 5 D_6, 2 D_{12}	10 C_2, C_3, 7 C_4, 9 C_6, C_8, 3 C_{12}, C_{24}, 78 D_2, D_3, 11 D_4, 5 D_6, 2 D_{12}	3 C_2, 2 C_4, C_6, C_8, 43 D_2, D_3, 11 D_4, 5 D_6, 2 D_{12}	10 C_2, C_3, 5 C_4, 78 D_2, D_3, 11 D_4
R81.28	8 C_2, C_3, 8 C_4, 7 C_6, 6 C_8, 8 C_{12}, 8 C_{24}, 36 D_2, D_3, 8 D_4, 3 D_6, 4 D_8, 5 D_{12}	8 C_2, C_3, 8 C_4, 7 C_6, 5 C_8, 7 C_{12}, 3 C_{24}, 36 D_2, D_3, 8 D_4, 3 D_6, 4 D_8, 5 D_{12}	3 C_2, 4 C_4, C_6, 3 C_8, 27 D_2, D_3, 7 D_4, 3 D_6, 4 D_8, 5 D_{12}	8 C_2, C_3, 4 C_4, 2 C_8, 36 D_2, D_3, 8 D_4, 4 D_8
R81.29	4 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, 4 C_{12}, 5 C_{24}, 12 D_2, D_3, 8 D_4, 3 D_6, 9 D_8, 6 D_{12}, 6 D_{24}	4 C_2, C_3, 5 C_4, 3 C_6, 5 C_8, 3 C_{12}, 3 C_{24}, 12 D_2, D_3, 8 D_4, 3 D_6, 9 D_8, 6 D_{12}, 6 D_{24}	3 C_2, 3 C_4, C_6, 2 C_8, 12 D_2, D_3, 8 D_4, 3 D_6, 9 D_8, 6 D_{12}, 6 D_{24}	4 C_2, C_3, 2 C_4, C_6, 3 C_8, 12 D_2, D_3, 6 D_4, D_6, 6 D_8
R81.30	5 C_2, 5 C_4, 5 C_{11}, 20 C_{22}, 15 C_{44}, 16 D_2, 6 D_4, 5 D_{11}, 15 D_{22}, 10 D_{44}	5 C_2, 5 C_4, C_{11}, 4 C_{22}, 2 C_{44}, 16 D_2, 6 D_4, D_{11}, 3 D_{22}, 2 D_{44}	3 C_2, 2 C_4, C_{22}, 14 D_2, 6 D_4, D_{11}, 3 D_{22}, 2 D_{44}	5 C_2, 3 C_4, C_{11}, 16 D_2, 6 D_4, D_{11}
R81.31	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_6, 3 C_7, 2 C_{12}, 9 C_{14}, 6 C_{21}, 12 C_{28}, 6 C_{42}, 12 C_{84}, 18 D_2, 2 D_3, 6 D_4, 2 D_6, 6 D_7, 2 D_{12}, 18 D_{14}, 12 D_{21}, 12 D_{28}, 12 D_{42}, 12 D_{84}	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_6, C_7, C_{12}, 3 C_{14}, C_{21}, 3 C_{28}, C_{42}, C_{84}, 18 D_2, 2 D_3, 6 D_4, 2 D_6, 2 D_7, D_{12}, 6 D_{14}, 2 D_{21}, 3 D_{28}, 2 D_{42}, D_{84}	**Tet**, 2 **Oct**, 3 C_2, 3 C_4, C_6, C_{14}, 16 D_2, D_3, 6 D_4, 2 D_6, D_7, D_{12}, 4 D_{14}, D_{21}, 3 D_{28}, D_{42}, D_{84}	**Tet**, 5 C_2, C_3, C_4, C_7, C_{14}, C_{28}, 18 D_2, D_3, D_4, 2 D_7, 2 D_{14}, D_{28}
R81.32	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, C_6, 3 C_7, C_{12}, 9 C_{14}, 6 C_{21}, 6 C_{28}, 6 C_{42}, 6 C_{84}, 16 D_2, 2 D_3, 4 D_4, D_6, 6 D_7, 12 D_{14}, 12 D_{21}, 6 D_{42}	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, C_6, C_7, 3 C_{14}, C_{21}, C_{28}, C_{42}, 16 D_2, 2 D_3, 4 D_4, D_6, 2 D_7, 4 D_{14}, 2 D_{21}, D_{42}	**Oct**, 3 C_2, 3 C_4, C_6, C_{14}, 13 D_2, D_3, 3 D_4, D_6, D_7, 3 D_{14}, D_{21}, D_{42}	**Tet**, 5 C_2, C_3, 2 C_4, C_7, C_{14}, 16 D_2, D_3, 4 D_4, 2 D_7, D_{14}
R81.33	5 C_2, C_3, 3 C_4, 4 C_6, 3 C_7, 2 C_{12}, 12 C_{14}, 6 C_{21}, 6 C_{28}, 24 C_{42}, 12 C_{84}, 13 D_2, D_3, 2 D_4, 2 D_6, 3 D_7, 6 D_{14}, 6 D_{21}, 12 D_{42}	5 C_2, C_3, 3 C_4, 4 C_6, C_7, C_{12}, 4 C_{14}, C_{21}, C_{28}, 4 C_{42}, C_{84}, 13 D_2, D_3, 2 D_4, 2 D_6, D_7, 2 D_{14}, D_{21}, 2 D_{42}	3 C_2, 2 C_4, C_6, C_{14}, C_{42}, 11 D_2, D_3, 2 D_4, 2 D_6, D_7, 2 D_{14}, D_{21}, 2 D_{42}	5 C_2, C_3, C_4, C_7, C_{21}, 13 D_2, D_3, 2 D_4, D_7, D_{21}
R81.34	5 C_2, 2 C_4, 20 C_{41}, 60 C_{82}, 40 C_{164}, 13 D_2, 40 D_{41}, 80 D_{82}	5 C_2, 2 C_4, C_{41}, 3 C_{82}, C_{164}, 13 D_2, 2 D_{41}, 4 D_{82}	3 C_2, 2 C_4, C_{82}, 11 D_2, D_{41}, 3 D_{82}	5 C_2, C_{41}, C_{82}, 13 D_2, 2 D_{41}, D_{82}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.35	3 C_2, C_3, 2 C_4, C_6, 3 C_9, C_{12}, 3 C_{18}, 9 C_{27}, 3 C_{36}, 9 C_{54}, 27 C_{81}, 9 C_{108}, 27 C_{162}, 27 C_{324}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}, 18 D_{27}, 9 D_{54}, 54 D_{81}, 27 D_{162}	3 C_2, C_3, 2 C_4, C_6, C_9, C_{18}, C_{27}, C_{54}, C_{81}, C_{162}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}, 2 D_{27}, D_{54}, 2 D_{81}, D_{162}	2 C_2, 2 C_4, C_6, C_{18}, C_{54}, C_{162}, 3 D_2, D_3, D_6, D_9, D_{18}, D_{27}, D_{54}, D_{81}, D_{162}	3 C_2, C_3, C_9, C_{27}, C_{81}, 3 D_2, D_3, D_9, D_{27}, D_{81}
R81.36	2 C_2, C_3, C_4, 5 C_5, 2 C_6, C_8, 5 C_{10}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 4 D_{15}, 2 D_{20}, 2 D_{30}	2 C_2, C_3, C_4, 4 C_5, 2 C_6, C_8, 4 C_{10}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 4 D_{15}, 2 D_{20}, 2 D_{30}	C_2, C_6, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 4 D_{15}, 2 D_{20}, 2 D_{30}	2 C_2, C_3, C_4, 3 C_5, C_8, 3 C_{10}, 2 C_{20}, 2 D_2, D_3, D_4, 2 D_5, 2 D_{10}, 2 D_{20}
R81.37	7 C_2, 8 C_5, 8 C_{10}, 63 D_2, 8 D_5, 36 D_{10}	7 C_2, 6 C_5, 7 C_{10}, 63 D_2, 8 D_5, 36 D_{10}	2 C_2, C_{10}, 31 D_2, 4 D_5, 22 D_{10}	7 C_2, 4 C_5, 6 C_{10}, 63 D_2, 8 D_5, 36 D_{10}
R81.38	4 C_2, 7 C_4, 2 C_5, 6 C_{10}, 8 C_{20}, 9 D_2, 2 D_4	4 C_2, 7 C_4, C_5, 3 C_{10}, 3 C_{20}, 9 D_2, 2 D_4	2 C_2, 2 C_4, C_{10}, 2 C_{20}, 9 D_2, 2 D_4	4 C_2, 4 C_4, 9 D_2, 2 D_4
R81.39	**Tet**, 2 **Ico**, 3 C_2, C_3, 8 C_5, C_6, 12 C_{10}, 2 C_{15}, 2 C_{30}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, 2 **Ico**, 3 C_2, C_3, 6 C_5, C_6, 8 C_{10}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	2 C_2, C_6, 6 C_{10}, 6 D_2, D_3, 2 D_5, D_6, 2 D_{10}	**Tet**, 3 C_2, C_3, 4 C_5, 7 D_2, D_3, 4 D_5
R81.40	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, 5 C_5, C_6, 4 C_{10}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 3 D_2, 2 D_3, D_4, D_5, D_6	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, 3 C_5, C_6, 2 C_{10}, C_{20}, 3 D_2, 2 D_3, D_4, D_5, D_6	**Oct**, C_2, C_6, C_{10}, 2 D_2, D_3, D_4, D_6	**Tet**, 2 C_2, C_3, C_4, C_5, 3 D_2, D_3, D_4, D_5
R81.41	4 **Tet**, 6 **Oct**, 8 C_2, C_3, 12 C_4, C_6, 2 C_8, 62 D_2, 2 D_3, 23 D_4, D_6	4 **Tet**, 6 **Oct**, 8 C_2, C_3, 12 C_4, C_6, C_8, 62 D_2, 2 D_3, 23 D_4, D_6	**Tet**, 4 **Oct**, 3 C_2, 6 C_4, C_6, C_8, 39 D_2, D_3, 17 D_4, D_6	4 **Tet**, 8 C_2, C_3, 6 C_4, 62 D_2, D_3, 15 D_4
R81.42	**Tet**, **Oct**, 10 C_2, C_3, 8 C_4, 5 C_6, 4 C_8, 69 D_2, D_3, 12 D_4, 3 D_6	**Tet**, **Oct**, 10 C_2, C_3, 8 C_4, 5 C_6, 3 C_8, 69 D_2, D_3, 12 D_4, 3 D_6	**Oct**, 3 C_2, 4 C_4, C_6, 3 C_8, 46 D_2, D_3, 12 D_4, 3 D_6	**Tet**, **Oct**, 10 C_2, C_3, 4 C_4, 69 D_2, D_3, 10 D_4
R81.43	**Tet**, **Oct**, 5 C_2, C_3, 8 C_4, 2 C_6, 5 C_8, C_{12}, 18 D_2, D_3, 8 D_4, D_6, 3 D_8, D_{12}	**Tet**, **Oct**, 5 C_2, C_3, 8 C_4, 2 C_6, 4 C_8, C_{12}, 18 D_2, D_3, 8 D_4, D_6, 3 D_8, D_{12}	**Tet**, **Oct**, 3 C_2, 3 C_4, C_6, C_8, 18 D_2, D_3, 8 D_4, D_6, 3 D_8, D_{12}	**Tet**, 5 C_2, C_3, 5 C_4, 3 C_8, 18 D_2, D_3, 5 D_4, 3 D_8
R81.44	**Tet**, **Oct**, 6 C_2, C_3, 10 C_4, 2 C_6, 9 C_8, C_{12}, 28 D_2, D_3, 27 D_4, D_6, 12 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 10 C_4, 2 C_6, 8 C_8, C_{12}, 28 D_2, D_3, 27 D_4, D_6, 11 D_8, D_{12}	**Oct**, 3 C_2, 2 C_4, C_6, 2 C_8, 21 D_2, D_3, 19 D_4, D_6, 11 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 8 C_4, 5 C_8, 28 D_2, D_3, 22 D_4, 8 D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.45	**Tet**, **Oct**, 12 C_2, C_3, 9 C_4, 5 C_6, 4 C_8, 103 D_2, D_3, 12 D_4, 3 D_6	**Tet**, **Oct**, 12 C_2, C_3, 9 C_4, 5 C_6, 3 C_8, 103 D_2, D_3, 12 D_4, 3 D_6	**Oct**, 3 C_2, 6 C_4, C_6, 3 C_8, 54 D_2, D_3, 12 D_4, 3 D_6	**Tet**, **Oct**, 12 C_2, C_3, 3 C_4, 103 D_2, D_3, 10 D_4
R81.46	**Tet**, **Oct**, 6 C_2, C_3, 9 C_4, 2 C_6, 5 C_8, C_{12}, 26 D_2, D_3, 10 D_4, D_6, 3 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 9 C_4, 2 C_6, 4 C_8, C_{12}, 26 D_2, D_3, 10 D_4, D_6, 3 D_8, D_{12}	**Tet**, **Oct**, 3 C_2, 3 C_4, C_6, C_8, 22 D_2, D_3, 8 D_4, D_6, 3 D_8, D_{12}	**Tet**, 6 C_2, C_3, 6 C_4, 3 C_8, 26 D_2, D_3, 7 D_4, 3 D_8
R81.47	**Tet**, **Oct**, 6 C_2, C_3, 11 C_4, 2 C_6, 7 C_8, C_{12}, 26 D_2, D_3, 11 D_4, D_6, 6 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 11 C_4, 2 C_6, 6 C_8, C_{12}, 26 D_2, D_3, 11 D_4, D_6, 6 D_8, D_{12}	**Oct**, 3 C_2, 2 C_4, C_6, C_8, 21 D_2, D_3, 9 D_4, D_6, 6 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 9 C_4, 5 C_8, 26 D_2, D_3, 10 D_4, 6 D_8
R81.48	4 **Tet**, 4 **Oct**, 5 C_2, C_3, 5 C_4, C_6, 5 C_8, 19 D_2, 2 D_3, 14 D_4, D_6, 8 D_8	4 **Tet**, 4 **Oct**, 5 C_2, C_3, 5 C_4, C_6, 4 C_8, 19 D_2, 2 D_3, 14 D_4, D_6, 7 D_8	**Tet**, 4 **Oct**, 3 C_2, 4 C_4, C_6, 4 C_8, 16 D_2, D_3, 14 D_4, D_6, 7 D_8	4 **Tet**, 5 C_2, C_3, C_4, 19 D_2, D_3, 2 D_4
R81.49	**Tet**, 2 **Oct**, 9 C_2, C_3, 7 C_4, 5 C_6, 3 C_8, 64 D_2, 2 D_3, 15 D_4, 4 D_6	**Tet**, 2 **Oct**, 9 C_2, C_3, 7 C_4, 5 C_6, 2 C_8, 64 D_2, 2 D_3, 15 D_4, 4 D_6	**Oct**, 3 C_2, C_4, 2 C_6, C_8, 42 D_2, D_3, 10 D_4, 3 D_6	**Tet**, 2 **Oct**, 9 C_2, C_3, 6 C_4, C_8, 64 D_2, 2 D_3, 15 D_4
R81.50	**Tet**, **Oct**, 8 C_2, C_3, 6 C_4, 5 C_6, 2 C_8, 54 D_2, D_3, 11 D_4, 3 D_6	**Tet**, **Oct**, 8 C_2, C_3, 6 C_4, 5 C_6, C_8, 54 D_2, D_3, 11 D_4, 3 D_6	**Oct**, 3 C_2, C_4, 2 C_6, 38 D_2, D_3, 11 D_4, 3 D_6	**Tet**, **Oct**, 8 C_2, C_3, 5 C_4, C_8, 54 D_2, D_3, 11 D_4
R81.51	**Tet**, **Oct**, 8 C_2, C_3, 6 C_4, 5 C_6, 3 C_8, 54 D_2, D_3, 11 D_4, 3 D_6	**Tet**, **Oct**, 8 C_2, C_3, 6 C_4, 5 C_6, 2 C_8, 54 D_2, D_3, 11 D_4, 3 D_6	**Oct**, 3 C_2, 2 C_4, 2 C_6, C_8, 40 D_2, D_3, 11 D_4, 3 D_6	**Tet**, **Oct**, 8 C_2, C_3, 4 C_4, C_8, 54 D_2, D_3, 9 D_4
R81.52	**Tet**, **Oct**, 10 C_2, C_3, 8 C_4, 5 C_6, 4 C_8, 69 D_2, D_3, 13 D_4, 3 D_6	**Tet**, **Oct**, 10 C_2, C_3, 8 C_4, 5 C_6, 3 C_8, 69 D_2, D_3, 13 D_4, 3 D_6	**Oct**, 3 C_2, 4 C_4, 2 C_6, 3 C_8, 41 D_2, D_3, 13 D_4, 3 D_6	**Tet**, **Oct**, 10 C_2, C_3, 4 C_4, 69 D_2, D_3, 10 D_4
R81.53	2 **Tet**, 6 **Oct**, 11 C_2, C_3, 9 C_4, 5 C_6, C_8, 110 D_2, 2 D_3, 31 D_4, 4 D_6	2 **Tet**, 6 **Oct**, 11 C_2, C_3, 9 C_4, 5 C_6, 110 D_2, 2 D_3, 31 D_4, 4 D_6	3 **Oct**, 3 C_2, 2 C_4, 2 C_6, 66 D_2, D_3, 21 D_4, 3 D_6	2 **Tet**, 6 **Oct**, 11 C_2, C_3, 7 C_4, 110 D_2, 2 D_3, 24 D_4
R81.54	3 **Tet**, 3 **Oct**, 9 C_2, C_3, 8 C_4, 2 C_6, 6 C_8, C_{12}, 78 D_2, D_3, 21 D_4, D_6, 4 D_8, D_{12}	3 **Tet**, 3 **Oct**, 9 C_2, C_3, 8 C_4, 2 C_6, 5 C_8, C_{12}, 78 D_2, D_3, 21 D_4, D_6, 4 D_8, D_{12}	3 **Oct**, 3 C_2, 4 C_4, 2 C_6, 5 C_8, C_{12}, 29 D_2, D_3, 21 D_4, D_6, 4 D_8, D_{12}	3 **Tet**, 3 **Oct**, 9 C_2, C_3, 4 C_4, 78 D_2, D_3, 16 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.55	2 **Tet**, **Oct**, 6 C_2, C_3, 6 C_4, 2 C_6, 5 C_8, C_{12}, 29 D_2, D_3, 16 D_4, D_6, 7 D_8, D_{12}	2 **Tet**, **Oct**, 6 C_2, C_3, 6 C_4, 2 C_6, 4 C_8, C_{12}, 29 D_2, D_3, 16 D_4, D_6, 7 D_8, D_{12}	**Oct**, 3 C_2, 4 C_4, 2 C_6, 4 C_8, C_{12}, 21 D_2, D_3, 16 D_4, D_6, 7 D_8, D_{12}	2 **Tet**, **Oct**, 6 C_2, C_3, 2 C_4, 29 D_2, D_3, 4 D_4
R81.56	**Tet**, 4 **Oct**, 12 C_2, C_3, 6 C_4, 7 C_6, 2 C_8, 122 D_2, 4 D_3, 27 D_4, 16 D_6	**Tet**, 4 **Oct**, 12 C_2, C_3, 6 C_4, 7 C_6, C_8, 122 D_2, 4 D_3, 27 D_4, 16 D_6	**Oct**, 3 C_2, C_4, 2 C_6, 64 D_2, D_3, 13 D_4, 9 D_6	**Tet**, 4 **Oct**, 12 C_2, C_3, 5 C_4, C_8, 122 D_2, 4 D_3, 25 D_4
R81.57	5 C_2, C_3, 6 C_4, 3 C_6, 6 C_8, C_{12}, 13 D_2, 3 D_3, 11 D_4, 5 D_6, 3 D_8, D_{12}	5 C_2, C_3, 6 C_4, 3 C_6, 5 C_8, C_{12}, 13 D_2, 3 D_3, 11 D_4, 5 D_6, 3 D_8, D_{12}	3 C_2, 2 C_4, 2 C_6, 11 D_2, D_3, 9 D_4, 3 D_6, 3 D_8, D_{12}	5 C_2, C_3, 4 C_4, 5 C_8, 13 D_2, 3 D_3, 9 D_4, 3 D_8
R81.58	**Tet**, **Oct**, 5 C_2, C_3, 6 C_4, 3 C_6, 5 C_8, C_{12}, 15 D_2, D_3, 10 D_4, D_6, 2 D_8	**Tet**, **Oct**, 5 C_2, C_3, 6 C_4, 3 C_6, 4 C_8, C_{12}, 15 D_2, D_3, 10 D_4, D_6, 2 D_8	**Oct**, 3 C_2, C_4, 2 C_6, 10 D_2, D_3, 9 D_4, D_6, 2 D_8	**Tet**, **Oct**, 5 C_2, C_3, 5 C_4, 4 C_8, 15 D_2, D_3, 9 D_4, 2 D_8
R81.59	4 C_2, C_3, 7 C_4, 3 C_6, 8 C_8, C_{12}, 6 D_2, D_3, 6 D_4, D_6, 2 D_8	4 C_2, C_3, 7 C_4, 3 C_6, 7 C_8, C_{12}, 6 D_2, D_3, 6 D_4, D_6, 2 D_8	3 C_2, 2 C_4, 2 C_6, C_8, 6 D_2, D_3, 6 D_4, D_6, 2 D_8	4 C_2, C_3, 5 C_4, 6 C_8, 6 D_2, D_3, 6 D_4, 2 D_8
R81.60	**Tet**, **Oct**, 6 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, C_{12}, 22 D_2, 4 D_3, 15 D_4, 7 D_6, 11 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 5 C_4, 3 C_6, 5 C_8, C_{12}, 22 D_2, 4 D_3, 15 D_4, 7 D_6, 9 D_8, D_{12}	**Oct**, 3 C_2, C_4, 2 C_6, C_8, 15 D_2, D_3, 12 D_4, 5 D_6, 6 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 4 C_4, 4 C_8, 22 D_2, 4 D_3, 12 D_4, 7 D_8
R81.61	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 5 C_4, C_6, 2 C_8, 39 D_2, D_3, 11 D_4, D_6	3 **Tet**, 3 **Oct**, 6 C_2, C_3, 5 C_4, C_6, C_8, 39 D_2, D_3, 11 D_4, D_6	3 **Oct**, 3 C_2, C_4, C_6, C_8, 28 D_2, D_3, 11 D_4, D_6	3 **Tet**, 6 C_2, C_3, 4 C_4, 39 D_2, D_3, 11 D_4
R81.62	**Tet**, 2 **Ico**, C_2, C_3, 2 C_5, C_6, C_{11}, D_2, D_3, 2 D_5, D_6	**Tet**, 2 **Ico**, C_2, C_3, 2 C_5, C_6, D_2, D_3, 2 D_5, D_6	**Tet**, 2 **Ico**, C_2, C_6, D_2, D_3, 2 D_5, D_6	**Tet**, C_2, C_3, 2 C_5, D_2, D_3, 2 D_5
R81.63	6 C_2, 16 C_4, 21 C_8, 8 C_{16}, 19 D_2, 7 D_4, 4 D_8	6 C_2, 16 C_4, 19 C_8, 5 C_{16}, 19 D_2, 7 D_4, 4 D_8	3 C_2, 5 C_4, 15 C_8, 5 C_{16}, 17 D_2, 7 D_4, 4 D_8	6 C_2, 10 C_4, C_8, 19 D_2, 6 D_4
R81.64	6 C_2, 12 C_4, 13 C_8, 8 C_{16}, 19 D_2, 7 D_4, 4 D_8	6 C_2, 12 C_4, 11 C_8, 3 C_{16}, 19 D_2, 7 D_4, 4 D_8	3 C_2, 4 C_4, 10 C_8, 3 C_{16}, 17 D_2, 7 D_4, 4 D_8	6 C_2, 8 C_4, C_8, 19 D_2, 6 D_4
R81.65	15 C_2, 11 C_4, 12 C_8, 8 C_{16}, 161 D_2, 20 D_4, 20 D_8	15 C_2, 11 C_4, 10 C_8, 3 C_{16}, 161 D_2, 20 D_4, 20 D_8	3 C_2, 7 C_4, 7 C_8, 78 D_2, 19 D_4, 20 D_8	15 C_2, 4 C_4, 161 D_2, 2 D_4
R81.66	6 C_2, 10 C_4, 9 C_8, 4 C_{16}, 19 D_2, 7 D_4, 2 D_8	6 C_2, 10 C_4, 7 C_8, C_{16}, 19 D_2, 7 D_4, 2 D_8	3 C_2, 4 C_4, 5 C_8, 17 D_2, 7 D_4, 2 D_8	6 C_2, 6 C_4, C_8, 19 D_2, 6 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.67	6 C_2, 13 C_4, 9 C_8, 4 C_{16}, 19 D_2, 7 D_4, 2 D_8	6 C_2, 13 C_4, 7 C_8, C_{16}, 19 D_2, 7 D_4, 2 D_8	3 C_2, 5 C_4, 17 D_2, 7 D_4, 2 D_8	6 C_2, 8 C_4, C_8, 19 D_2, 6 D_4
R81.68	7 C_2, 9 C_4, 10 C_8, 4 C_{16}, 31 D_2, 14 D_4, 12 D_8	7 C_2, 9 C_4, 8 C_8, C_{16}, 31 D_2, 14 D_4, 12 D_8	3 C_2, 6 C_4, 7 C_8, 26 D_2, 13 D_4, 12 D_8	7 C_2, 3 C_4, 31 D_2, 5 D_4
R81.69	6 C_2, 10 C_4, 10 C_8, 8 C_{16}, 19 D_2, 8 D_4, 2 D_8	6 C_2, 10 C_4, 8 C_8, 3 C_{16}, 19 D_2, 8 D_4, 2 D_8	3 C_2, 8 C_4, 8 C_8, 3 C_{16}, 16 D_2, 8 D_4, 2 D_8	6 C_2, 2 C_4, 19 D_2, 2 D_4
R81.70	8 C_2, 10 C_4, 8 C_8, 4 C_{16}, 44 D_2, 6 D_4, 2 D_8	8 C_2, 10 C_4, 6 C_8, C_{16}, 44 D_2, 6 D_4, 2 D_8	3 C_2, 6 C_4, 6 C_8, C_{16}, 31 D_2, 6 D_4, 2 D_8	8 C_2, 4 C_4, 44 D_2
R81.71	6 C_2, 10 C_4, 9 C_8, 4 C_{16}, 19 D_2, 7 D_4, 2 D_8	6 C_2, 10 C_4, 7 C_8, C_{16}, 19 D_2, 7 D_4, 2 D_8	3 C_2, 4 C_4, 5 C_8, 17 D_2, 7 D_4, 2 D_8	6 C_2, 6 C_4, C_8, 19 D_2, 6 D_4
R81.72	6 C_2, 11 C_4, 9 C_8, 4 C_{16}, 19 D_2, 7 D_4, 2 D_8	6 C_2, 11 C_4, 7 C_8, C_{16}, 19 D_2, 7 D_4, 2 D_8	3 C_2, 4 C_4, 3 C_8, 17 D_2, 7 D_4, 2 D_8	6 C_2, 7 C_4, C_8, 19 D_2, 6 D_4
R81.73	6 C_2, 10 C_4, 11 C_8, 4 C_{16}, 19 D_2, 7 D_4, 4 D_8	6 C_2, 10 C_4, 9 C_8, 2 C_{16}, 19 D_2, 7 D_4, 4 D_8	3 C_2, 4 C_4, 8 C_8, 2 C_{16}, 17 D_2, 7 D_4, 4 D_8	6 C_2, 6 C_4, C_8, 19 D_2, 6 D_4
R81.74	6 C_2, 12 C_4, 15 C_8, 4 C_{16}, 19 D_2, 7 D_4, 4 D_8	6 C_2, 12 C_4, 13 C_8, C_{16}, 19 D_2, 7 D_4, 4 D_8	3 C_2, 4 C_4, 12 C_8, C_{16}, 17 D_2, 7 D_4, 4 D_8	6 C_2, 8 C_4, C_8, 19 D_2, 6 D_4
R81.75	8 C_2, 7 C_4, 11 C_8, 4 C_{16}, 44 D_2, 16 D_4, 20 D_8	8 C_2, 7 C_4, 9 C_8, C_{16}, 44 D_2, 16 D_4, 20 D_8	2 C_2, 4 C_4, 6 C_8, C_{16}, 22 D_2, 11 D_4, 16 D_8	8 C_2, 3 C_4, 3 C_8, 44 D_2, 12 D_4, 8 D_8
R81.76	10 C_2, 8 C_4, 8 C_8, 4 C_{16}, 82 D_2, 10 D_4, 2 D_8	10 C_2, 8 C_4, 6 C_8, C_{16}, 82 D_2, 10 D_4, 2 D_8	2 C_2, 5 C_4, 6 C_8, C_{16}, 26 D_2, 10 D_4, 2 D_8	10 C_2, 3 C_4, 82 D_2, 8 D_4
R81.77	6 C_2, 9 C_4, 10 C_8, 8 C_{16}, 19 D_2, 8 D_4, 2 D_8	6 C_2, 9 C_4, 8 C_8, 3 C_{16}, 19 D_2, 8 D_4, 2 D_8	3 C_2, 5 C_4, 6 C_8, 3 C_{16}, 15 D_2, 8 D_4, 2 D_8	6 C_2, 4 C_4, 2 C_8, 19 D_2, 4 D_4
R81.78	8 C_2, 9 C_4, 8 C_8, 4 C_{16}, 44 D_2, 6 D_4, 2 D_8	8 C_2, 9 C_4, 6 C_8, C_{16}, 44 D_2, 6 D_4, 2 D_8	3 C_2, 5 C_4, 6 C_8, C_{16}, 29 D_2, 6 D_4, 2 D_8	8 C_2, 4 C_4, 44 D_2, 4 D_4
R81.79	7 C_2, 8 C_4, 10 C_8, 4 C_{16}, 31 D_2, 14 D_4, 12 D_8	7 C_2, 8 C_4, 8 C_8, C_{16}, 31 D_2, 14 D_4, 12 D_8	3 C_2, 4 C_4, 5 C_8, 25 D_2, 12 D_4, 12 D_8	7 C_2, 4 C_4, 2 C_8, 31 D_2, 7 D_4
R81.80	7 C_2, 8 C_4, 10 C_8, 8 C_{16}, 32 D_2, 10 D_4, 4 D_8	7 C_2, 8 C_4, 8 C_8, 3 C_{16}, 32 D_2, 10 D_4, 4 D_8	2 C_2, 4 C_4, 6 C_8, 3 C_{16}, 14 D_2, 8 D_4, 4 D_8	7 C_2, 4 C_4, 2 C_8, 32 D_2, 8 D_4, 2 D_8
R81.81	9 C_2, 11 C_4, 10 C_8, 4 C_{16}, 47 D_2, 14 D_4, 3 D_8	9 C_2, 11 C_4, 8 C_8, 47 D_2, 14 D_4, 3 D_8	3 C_2, 10 C_4, 7 C_8, 35 D_2, 14 D_4, 3 D_8	9 C_2, C_4, 47 D_2, D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.82	8 C_2, 12 C_4, 9 C_8, 4 C_{16}, 40 D_2, 14 D_4, 3 D_8	8 C_2, 12 C_4, 7 C_8, C_{16}, 40 D_2, 14 D_4, 3 D_8	3 C_2, 9 C_4, 5 C_8, 31 D_2, 14 D_4, 3 D_8	8 C_2, 3 C_4, 40 D_2, D_4
R81.83	11 C_2, 8 C_4, 12 C_8, 4 C_{16}, 100 D_2, 20 D_4, 20 D_8	11 C_2, 8 C_4, 10 C_8, 100 D_2, 20 D_4, 20 D_8	3 C_2, 6 C_4, 9 C_8, 57 D_2, 19 D_4, 20 D_8	11 C_2, 2 C_4, 100 D_2, 2 D_4
R81.84	8 C_2, 12 C_4, 9 C_8, 4 C_{16}, 40 D_2, 14 D_4, 6 D_8	8 C_2, 12 C_4, 7 C_8, 40 D_2, 14 D_4, 6 D_8	3 C_2, 9 C_4, 6 C_8, 31 D_2, 14 D_4, 6 D_8	8 C_2, 2 C_4, 40 D_2
R81.85	10 C_2, 12 C_4, 16 C_8, 4 C_{16}, 65 D_2, 14 D_4, 6 D_8	10 C_2, 12 C_4, 14 C_8, C_{16}, 65 D_2, 14 D_4, 6 D_8	3 C_2, 11 C_4, 12 C_8, 44 D_2, 14 D_4, 6 D_8	10 C_2, 65 D_2
R81.86	9 C_2, 14 C_4, 12 C_8, 4 C_{16}, 54 D_2, 14 D_4, 3 D_8	9 C_2, 14 C_4, 10 C_8, 54 D_2, 14 D_4, 3 D_8	3 C_2, 9 C_4, 9 C_8, 37 D_2, 14 D_4, 3 D_8	9 C_2, 4 C_4, 54 D_2
R81.87	9 C_2, 10 C_4, 12 C_8, 8 C_{16}, 54 D_2, 14 D_4, 3 D_8	9 C_2, 10 C_4, 10 C_8, 3 C_{16}, 54 D_2, 14 D_4, 3 D_8	3 C_2, 8 C_4, 7 C_8, 37 D_2, 14 D_4, 3 D_8	9 C_2, C_4, 54 D_2
R81.88	5 C_2, 9 C_4, 10 C_8, 4 C_{16}, 15 D_2, 6 D_4, 3 D_8	5 C_2, 9 C_4, 8 C_8, C_{16}, 15 D_2, 6 D_4, 3 D_8	3 C_2, 6 C_4, 7 C_8, 13 D_2, 6 D_4, 3 D_8	5 C_2, 2 C_4, 15 D_2, 2 D_4
R81.89	5 C_2, 9 C_4, 10 C_8, 4 C_{16}, 15 D_2, 6 D_4, 3 D_8	5 C_2, 9 C_4, 8 C_8, C_{16}, 15 D_2, 6 D_4, 3 D_8	3 C_2, 5 C_4, 5 C_8, 13 D_2, 6 D_4, 3 D_8	5 C_2, 3 C_4, 2 C_8, 15 D_2, 2 D_4
R81.90	7 C_2, 6 C_4, 8 C_8, 4 C_{16}, 40 D_2, 10 D_4, 4 D_8	7 C_2, 6 C_4, 6 C_8, C_{16}, 40 D_2, 10 D_4, 4 D_8	2 C_2, 5 C_4, 6 C_8, C_{16}, 19 D_2, 10 D_4, 4 D_8	7 C_2, C_4, 40 D_2, 3 D_4
R81.91	5 C_2, 9 C_4, 10 C_8, 4 C_{16}, 15 D_2, 6 D_4, 2 D_8	5 C_2, 9 C_4, 8 C_8, 15 D_2, 6 D_4, 2 D_8	3 C_2, 6 C_4, 8 C_8, 13 D_2, 6 D_4, 2 D_8	5 C_2, 3 C_4, 15 D_2, 2 D_4
R81.92	6 C_2, 6 C_4, 8 C_8, 4 C_{16}, 27 D_2, 6 D_4, 2 D_8	6 C_2, 6 C_4, 6 C_8, C_{16}, 27 D_2, 6 D_4, 2 D_8	3 C_2, 4 C_4, 6 C_8, C_{16}, 21 D_2, 6 D_4, 2 D_8	6 C_2, 2 C_4, 27 D_2, 3 D_4
R81.93	7 C_2, 7 C_4, 10 C_8, 4 C_{16}, 32 D_2, 9 D_4, 6 D_8	7 C_2, 7 C_4, 8 C_8, 32 D_2, 9 D_4, 6 D_8	2 C_2, 4 C_4, 6 C_8, 14 D_2, 6 D_4, 6 D_8	7 C_2, 3 C_4, 2 C_8, 32 D_2, 7 D_4, 4 D_8
R81.94	6 C_2, 6 C_4, 8 C_8, 4 C_{16}, 27 D_2, 6 D_4, 2 D_8	6 C_2, 6 C_4, 6 C_8, C_{16}, 27 D_2, 6 D_4, 2 D_8	3 C_2, 5 C_4, 6 C_8, C_{16}, 21 D_2, 6 D_4, 2 D_8	6 C_2, C_4, 27 D_2
R81.95	5 C_2, 9 C_4, 10 C_8, 4 C_{16}, 15 D_2, 6 D_4, 2 D_8	5 C_2, 9 C_4, 8 C_8, 15 D_2, 6 D_4, 2 D_8	3 C_2, 6 C_4, 6 C_8, 13 D_2, 6 D_4, 2 D_8	5 C_2, 3 C_4, 2 C_8, 15 D_2, 2 D_4
R81.96	7 C_2, 7 C_4, 11 C_8, 4 C_{16}, 32 D_2, 9 D_4, 9 D_8	7 C_2, 7 C_4, 9 C_8, C_{16}, 32 D_2, 9 D_4, 9 D_8	2 C_2, 5 C_4, 6 C_8, C_{16}, 14 D_2, 6 D_4, 9 D_8	7 C_2, 2 C_4, 3 C_8, 32 D_2, 7 D_4, 6 D_8
R81.97	6 C_2, 10 C_4, 6 C_8, 2 C_{16}, 30 D_2, 27 D_4, 6 D_8	6 C_2, 10 C_4, 4 C_8, 30 D_2, 27 D_4, 6 D_8	2 C_2, 4 C_4, C_8, 18 D_2, 19 D_4, 3 D_8	6 C_2, 6 C_4, 3 C_8, 30 D_2, 22 D_4, 6 D_8
R81.98	6 C_2, 9 C_4, 6 C_8, 2 C_{16}, 27 D_2, 16 D_4, 6 D_8	6 C_2, 9 C_4, 4 C_8, 27 D_2, 16 D_4, 6 D_8	2 C_2, 5 C_4, C_8, 19 D_2, 10 D_4, 3 D_8	6 C_2, 4 C_4, 3 C_8, 27 D_2, 14 D_4, 6 D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.99	6 C_2, 7 C_4, 6 C_8, 2 C_{16}, 33 D_2, 6 D_4, 2 D_8	6 C_2, 7 C_4, 4 C_8, 33 D_2, 6 D_4, 2 D_8	2 C_2, 6 C_4, 4 C_8, 17 D_2, 6 D_4, 2 D_8	6 C_2, C_4, 33 D_2, 3 D_4
R81.100	6 C_2, 9 C_4, 4 C_8, 2 C_{16}, 37 D_2, 6 D_4, 2 D_8	6 C_2, 9 C_4, 2 C_8, 37 D_2, 6 D_4, 2 D_8	2 C_2, 6 C_4, 2 C_8, 21 D_2, 6 D_4, 2 D_8	6 C_2, 3 C_4, 37 D_2, 4 D_4
R81.101	5 C_2, 8 C_4, 6 C_8, 4 C_{16}, 19 D_2, 6 D_4	5 C_2, 8 C_4, 4 C_8, 19 D_2, 6 D_4	2 C_2, 4 C_4, 2 C_8, 16 D_2, 6 D_4	5 C_2, 4 C_4, 2 C_8, 19 D_2, 6 D_4
R81.102	7 C_2, 10 C_4, 7 C_8, 4 C_{16}, 37 D_2, 9 D_4	7 C_2, 10 C_4, 5 C_8, C_{16}, 37 D_2, 9 D_4	2 C_2, 4 C_4, 3 C_8, C_{16}, 25 D_2, 6 D_4	7 C_2, 6 C_4, 2 C_8, 37 D_2, 9 D_4
R81.103	7 C_2, 9 C_4, 8 C_8, 4 C_{16}, 37 D_2, 9 D_4	7 C_2, 9 C_4, 6 C_8, 37 D_2, 9 D_4	3 C_2, 3 C_4, 4 C_8, 28 D_2, 6 D_4	7 C_2, 6 C_4, 2 C_8, 37 D_2, 9 D_4
R81.104	7 C_2, 9 C_4, 10 C_8, 4 C_{16}, 37 D_2, 9 D_4	7 C_2, 9 C_4, 8 C_8, C_{16}, 37 D_2, 9 D_4	3 C_2, 4 C_4, 6 C_8, C_{16}, 30 D_2, 7 D_4	7 C_2, 5 C_4, 2 C_8, 37 D_2, 6 D_4
R81.105	11 C_2, 9 C_4, 7 C_8, 4 C_{16}, 100 D_2, 27 D_4	11 C_2, 9 C_4, 5 C_8, C_{16}, 100 D_2, 27 D_4	3 C_2, 3 C_4, 3 C_8, C_{16}, 54 D_2, 9 D_4	11 C_2, 6 C_4, 2 C_8, 100 D_2, 24 D_4
R81.106	7 C_2, 11 C_4, 7 C_8, 4 C_{16}, 37 D_2, 9 D_4	7 C_2, 11 C_4, 5 C_8, C_{16}, 37 D_2, 9 D_4	3 C_2, 5 C_4, 3 C_8, C_{16}, 30 D_2, 7 D_4	7 C_2, 6 C_4, 2 C_8, 37 D_2, 6 D_4
R81.107	7 C_2, 8 C_4, 5 C_8, 4 C_{16}, 33 D_2, 14 D_4	7 C_2, 8 C_4, 3 C_8, 33 D_2, 14 D_4	3 C_2, 4 C_4, 2 C_8, 26 D_2, 9 D_4	7 C_2, 4 C_4, C_8, 33 D_2, 8 D_4
R81.108	5 C_2, 10 C_4, 5 C_8, 4 C_{16}, 15 D_2, 4 D_4	5 C_2, 10 C_4, 3 C_8, 15 D_2, 4 D_4	3 C_2, 6 C_4, 2 C_8, 15 D_2, 4 D_4	5 C_2, 4 C_4, C_8, 15 D_2, D_4
R81.109	5 C_2, 14 C_4, 7 C_8, 2 C_{16}, 16 D_2, 12 D_4	5 C_2, 14 C_4, 5 C_8, 16 D_2, 12 D_4	3 C_2, 6 C_4, 2 C_8, 14 D_2, 10 D_4	5 C_2, 6 C_4, 2 C_8, 16 D_2, 8 D_4
R81.110	6 C_2, 10 C_4, 6 C_8, 2 C_{16}, 30 D_2, 14 D_4	6 C_2, 10 C_4, 4 C_8, 30 D_2, 14 D_4	3 C_2, 5 C_4, 3 C_8, 20 D_2, 10 D_4	6 C_2, 5 C_4, C_8, 30 D_2, 10 D_4
R81.111	6 C_2, 13 C_4, 7 C_8, 2 C_{16}, 27 D_2, 11 D_4	6 C_2, 13 C_4, 5 C_8, 27 D_2, 11 D_4	3 C_2, 6 C_4, 2 C_8, 21 D_2, 7 D_4	6 C_2, 5 C_4, 2 C_8, 27 D_2, 9 D_4
R81.112	6 C_2, 10 C_4, 6 C_8, 2 C_{16}, 28 D_2, 15 D_4	6 C_2, 10 C_4, 4 C_8, 28 D_2, 15 D_4	3 C_2, 5 C_4, 3 C_8, 22 D_2, 11 D_4	6 C_2, 5 C_4, C_8, 28 D_2, 10 D_4
R81.113	4 C_2, 5 C_4, 8 C_8, 6 C_{16}, 10 D_2, 6 D_4, 6 D_8	4 C_2, 5 C_4, 6 C_8, 3 C_{16}, 10 D_2, 6 D_4, 6 D_8	3 C_2, 4 C_4, 5 C_8, 2 C_{16}, 10 D_2, 5 D_4, 6 D_8	4 C_2, C_4, 10 D_2, D_4
R81.114	3 C_2, 6 C_4, 11 C_8, 6 C_{16}, 4 D_2, 3 D_4, 2 D_8	3 C_2, 6 C_4, 9 C_8, 3 C_{16}, 4 D_2, 3 D_4, 2 D_8	3 C_2, 5 C_4, 6 C_8, 2 C_{16}, 4 D_2, 3 D_4, 2 D_8	3 C_2, C_4, C_8, 4 D_2
R81.115	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, 4 C_8, C_{10}, C_{12}, C_{20}, 2 C_{24}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, 2 C_8, C_{10}, C_{20}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 2 C_2, 2 C_4, C_6, 2 C_8, C_{10}, C_{20}, 6 D_2, D_3, D_5, D_6, D_{10}	**Tet**, 3 C_2, C_3, C_5, 6 D_2, D_3, 2 D_5
R81.116	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, 4 C_8, C_{10}, C_{12}, C_{20}, 2 C_{24}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, 2 C_8, C_{10}, C_{20}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	2 C_2, 2 C_4, C_6, 2 C_8, C_{10}, C_{20}, 5 D_2, D_3, D_5, D_6, D_{10}	**Tet**, 3 C_2, C_3, C_5, 6 D_2, D_3, 2 D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.117	5 C_2, 5 C_4, 3 C_7, 4 C_8, 9 C_{14}, 24 C_{28}, 12 C_{56}, 15 D_2, 6 D_4, 6 D_7, 18 D_{14}, 30 D_{28}	5 C_2, 5 C_4, C_7, 2 C_8, 3 C_{14}, 7 C_{28}, C_{56}, 15 D_2, 6 D_4, 2 D_7, 6 D_{14}, 9 D_{28}	3 C_2, 2 C_4, C_{14}, C_{28}, 13 D_2, 5 D_4, D_7, 4 D_{14}, 7 D_{28}	5 C_2, 3 C_4, C_7, C_{14}, C_{28}, 15 D_2, 4 D_4, 2 D_7, 2 D_{14}, D_{28}
R81.118	5 C_2, 6 C_4, 3 C_7, 6 C_8, 9 C_{14}, 24 C_{28}, 24 C_{56}, 13 D_2, 3 D_4, 6 D_7, 12 D_{14}, 18 D_{28}	5 C_2, 6 C_4, C_7, 4 C_8, 3 C_{14}, 7 C_{28}, 3 C_{56}, 13 D_2, 3 D_4, 2 D_7, 4 D_{14}, 6 D_{28}	3 C_2, 3 C_4, 3 C_8, C_{14}, C_{28}, 11 D_2, 2 D_4, D_7, 3 D_{14}, 4 D_{28}	5 C_2, 2 C_4, C_7, C_{14}, 13 D_2, 3 D_4, 2 D_7, D_{14}
R81.119	7 C_2, 3 C_4, 3 C_7, 4 C_8, 15 C_{14}, 9 C_{28}, 12 C_{56}, 30 D_2, 6 D_7, 21 D_{14}	7 C_2, 3 C_4, C_7, 2 C_8, 5 C_{14}, 2 C_{28}, C_{56}, 30 D_2, 2 D_7, 7 D_{14}	2 C_2, 2 C_4, 2 C_8, C_{14}, 2 C_{28}, C_{56}, 19 D_2, D_7, 5 D_{14}	7 C_2, C_4, C_7, 30 D_2, 2 D_7
R81.120	3 C_2, 4 C_4, 3 C_7, 2 C_8, 6 C_{14}, 9 C_{28}, 6 C_{56}, 8 D_2, D_4, 3 D_7, 9 D_{14}, 6 D_{28}	3 C_2, 4 C_4, C_7, 2 C_{14}, 2 C_{28}, 8 D_2, D_4, D_7, 3 D_{14}, 2 D_{28}	2 C_2, 3 C_4, C_{14}, 2 C_{28}, 8 D_2, D_4, D_7, 3 D_{14}, 2 D_{28}	3 C_2, C_4, C_7, 8 D_2, D_7
R81.121	4 C_2, 4 C_4, 3 C_7, 4 C_8, 9 C_{14}, 15 C_{28}, 12 C_{56}, 9 D_2, D_4, 3 D_7, 9 D_{14}, 6 D_{28}	4 C_2, 4 C_4, C_7, 2 C_8, 3 C_{14}, 4 C_{28}, C_{56}, 9 D_2, D_4, D_7, 3 D_{14}, 2 D_{28}	3 C_2, 2 C_4, 2 C_8, C_{14}, C_{28}, 9 D_2, D_4, D_7, 3 D_{14}, 2 D_{28}	4 C_2, 2 C_4, C_7, C_{14}, 9 D_2, D_4, D_7, D_{14}
R81.122	5 C_2, 6 C_4, 3 C_7, 6 C_8, 9 C_{14}, 15 C_{28}, 12 C_{56}, 13 D_2, 3 D_4, 6 D_7, 12 D_{14}, 9 D_{28}	5 C_2, 6 C_4, C_7, 4 C_8, 3 C_{14}, 4 C_{28}, 13 D_2, 3 D_4, 2 D_7, 4 D_{14}, 3 D_{28}	3 C_2, 3 C_4, 3 C_8, C_{14}, C_{28}, 11 D_2, 2 D_4, D_7, 3 D_{14}, 2 D_{28}	5 C_2, 2 C_4, C_7, C_{14}, 13 D_2, 3 D_4, 2 D_7, D_{14}
R81.123	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 3 C_9, C_{12}, 3 C_{18}, 2 C_{24}, 9 C_{27}, 3 C_{36}, 9 C_{54}, 6 C_{72}, 9 C_{108}, 18 C_{216}, 2 D_2, D_3, D_6, 3 D_9, 3 D_{18}, 9 D_{27}, 9 D_{54}	2 C_2, C_3, 2 C_4, C_6, C_9, C_{18}, C_{27}, C_{54}, 2 D_2, D_3, D_6, D_9, D_{18}, D_{27}, D_{54}	2 C_2, C_4, C_6, C_{18}, C_{54}, 2 D_2, D_3, D_6, D_9, D_{18}, D_{27}, D_{54}	2 C_2, C_3, C_9, C_{27}, 2 D_2, D_3, D_9, D_{27}
R81.124	3 C_2, C_3, 2 C_4, C_6, 4 C_8, 3 C_9, C_{12}, 3 C_{18}, 2 C_{24}, 9 C_{27}, 3 C_{36}, 9 C_{54}, 6 C_{72}, 9 C_{108}, 18 C_{216}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}, 18 D_{27}, 9 D_{54}	3 C_2, C_3, 2 C_4, C_6, 2 C_8, C_9, C_{18}, C_{27}, C_{54}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}, 2 D_{27}, D_{54}	2 C_2, C_4, C_6, C_{18}, C_{54}, 3 D_2, D_3, D_6, D_9, D_{18}, D_{27}, D_{54}	3 C_2, C_3, C_9, C_{27}, 3 D_2, D_3, D_9, D_{27}
R81.125	7 **Tet**, 7 C_2, C_3, 3 C_9, 133 D_2	7 **Tet**, 7 C_2, C_3, C_9, 133 D_2	**Tet**, C_2, 49 D_2	7 **Tet**, 7 C_2, C_3, C_9, 133 D_2
R81.126	7 C_2, C_3, 2 C_5, 3 C_6, 2 C_{10}, 2 C_{15}, 63 D_2, 4 D_3, 18 D_6	7 C_2, C_3, C_5, 3 C_6, C_{10}, 63 D_2, 4 D_3, 18 D_6	2 C_2, C_{10}, 31 D_2, 2 D_3, 11 D_6	7 C_2, C_3, 63 D_2, 4 D_3
R81.127	2 C_2, C_3, 4 C_4, C_5, C_6, 2 C_8, C_{10}, 3 C_{12}, C_{20}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, 4 C_4, C_5, C_6, 2 C_8, C_{10}, C_{12}, C_{20}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, 4 C_4, C_6, 2 C_8, C_{10}, C_{12}, C_{20}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.128	**Tet**, **Ico**, 7 C_2, C_3, 4 C_4, C_5, 3 C_6, 3 C_{10}, 2 C_{12}, 31 D_2, 4 D_3, 4 D_5, 6 D_6, 6 D_{10}	**Tet**, **Ico**, 7 C_2, C_3, 4 C_4, C_5, 3 C_6, 3 C_{10}, 31 D_2, 4 D_3, 4 D_5, 6 D_6, 6 D_{10}	2 C_2, 2 C_4, C_6, C_{10}, 20 D_2, D_3, D_5, 4 D_6, 4 D_{10}	**Tet**, **Ico**, 7 C_2, C_3, 2 C_4, C_5, 2 C_{10}, 31 D_2, 4 D_3, 4 D_5, 4 D_{10}
R81.129	C_2, C_3, 3 C_7, 3 C_9, 3 C_{14}, 3 C_{21}, 9 C_{27}, 9 C_{63}, 27 C_{189}, D_3, 3 D_9, 9 D_{27}	C_2, C_3, C_9, C_{27}, D_3, D_9, D_{27}	C_2, D_3, D_9, D_{27}	C_2, C_3, C_9, C_{27}, D_3, D_9, D_{27}
R81.130	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, C_6, 8 C_8, C_{12}, 16 C_{16}, 2 C_{24}, 4 C_{48}, 16 D_2, 2 D_3, 4 D_4, D_6	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, C_6, 6 C_8, 6 C_{16}, 16 D_2, 2 D_3, 4 D_4, D_6	**Oct**, 2 C_2, 2 C_4, C_6, 2 C_8, 11 D_2, D_3, 2 D_4, D_6	**Tet**, 5 C_2, C_3, 3 C_4, 16 D_2, D_3, 4 D_4
R81.131	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 6 C_8, C_{12}, 8 C_{16}, 2 C_{24}, 4 C_{48}, 12 D_2, D_3, 2 D_4, D_6	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 4 C_8, 2 C_{16}, 12 D_2, D_3, 2 D_4, D_6	**Oct**, 2 C_2, 2 C_4, C_6, C_8, 9 D_2, D_3, 2 D_4, D_6	**Tet**, 4 C_2, C_3, 2 C_4, 12 D_2, D_3, 2 D_4
R81.132	3 C_2, C_3, 5 C_4, C_6, 7 C_8, C_{12}, 12 C_{16}, 2 C_{24}, 4 C_{48}, 4 D_2, D_3, 3 D_4, D_6, 2 D_8	3 C_2, C_3, 5 C_4, C_6, 5 C_8, 3 C_{16}, 4 D_2, D_3, 3 D_4, D_6, 2 D_8	2 C_2, 2 C_4, C_6, 3 C_8, 4 D_2, D_3, 3 D_4, D_6, 2 D_8	3 C_2, C_3, 2 C_4, 4 D_2, D_3
R81.133	3 C_2, C_3, 4 C_4, C_6, 6 C_8, C_{12}, 8 C_{16}, 2 C_{24}, 4 C_{48}, 4 D_2, D_3, 3 D_4, D_6, D_8	3 C_2, C_3, 4 C_4, C_6, 4 C_8, 2 C_{16}, 4 D_2, D_3, 3 D_4, D_6, D_8	2 C_2, 2 C_4, C_6, 2 C_8, 4 D_2, D_3, 3 D_4, D_6, D_8	3 C_2, C_3, C_4, 4 D_2, D_3
R81.134	5 C_2, C_3, 6 C_4, 3 C_6, 8 C_8, 8 C_{12}, 12 C_{16}, 8 C_{24}, 16 C_{48}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_{12}	5 C_2, C_3, 6 C_4, 3 C_6, 6 C_8, 7 C_{12}, 4 C_{16}, 3 C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_{12}	2 C_2, 3 C_4, C_6, 6 C_8, 4 C_{16}, 11 D_2, D_3, 2 D_4, 3 D_6, 4 D_{12}	5 C_2, C_3, 3 C_4, 13 D_2, 2 D_3, 3 D_4
R81.135	4 C_2, C_3, 5 C_4, 3 C_6, 5 C_8, 6 C_{12}, 8 C_{16}, 6 C_{24}, 8 C_{48}, 9 D_2, D_3, D_4, 3 D_6, 2 D_{12}	4 C_2, C_3, 5 C_4, 3 C_6, 3 C_8, 5 C_{12}, C_{16}, C_{24}, 9 D_2, D_3, D_4, 3 D_6, 2 D_{12}	2 C_2, 3 C_4, C_6, 3 C_8, C_{16}, 9 D_2, D_3, D_4, 3 D_6, 2 D_{12}	4 C_2, C_3, 2 C_4, 9 D_2, D_3, D_4
R81.136	4 C_2, C_3, 4 C_4, 2 C_6, 6 C_8, 7 C_{12}, 4 C_{16}, 10 C_{24}, 4 C_{48}, 10 D_2, 2 D_3, 8 D_4, 4 D_6, 6 D_8, 14 D_{12}, 10 D_{24}	4 C_2, C_3, 4 C_4, 2 C_6, 4 C_8, 6 C_{12}, 5 C_{24}, 10 D_2, 2 D_3, 8 D_4, 4 D_6, 4 D_8, 12 D_{12}, 5 D_{24}	2 C_2, 2 C_4, C_6, 4 C_8, C_{12}, 2 C_{24}, 8 D_2, D_3, 6 D_4, 3 D_6, 4 D_8, 7 D_{12}, 5 D_{24}	4 C_2, C_3, 2 C_4, 10 D_2, 2 D_3, 4 D_4
R81.137	3 C_2, C_3, 5 C_4, 2 C_6, 4 C_8, 7 C_{12}, 4 C_{16}, 6 C_{24}, 4 C_{48}, 6 D_2, D_3, 4 D_4, 2 D_6, 7 D_{12}	3 C_2, C_3, 5 C_4, 2 C_6, 2 C_8, 6 C_{12}, 2 C_{24}, 6 D_2, D_3, 4 D_4, 2 D_6, 6 D_{12}	2 C_2, 3 C_4, C_6, 2 C_8, C_{12}, C_{24}, 6 D_2, D_3, 4 D_4, 2 D_6, 6 D_{12}	3 C_2, C_3, 2 C_4, 6 D_2, D_3, 2 D_4
R81.138	5 C_2, C_3, 4 C_4, 3 C_6, 3 C_8, 3 C_{12}, 4 C_{16}, 3 C_{24}, 4 C_{48}, 23 D_2, 2 D_3, 7 D_6	5 C_2, C_3, 4 C_4, 3 C_6, C_8, 2 C_{12}, 23 D_2, 2 D_3, 7 D_6	2 C_2, 3 C_4, C_6, C_8, 2 C_{12}, 17 D_2, D_3, 5 D_6	5 C_2, C_3, 23 D_2, 2 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.139	5 C_2, C_3, 4 C_4, 4 C_6, 5 C_8, 4 C_{12}, 8 C_{16}, 6 C_{24}, 8 C_{48}, 15 D_2, D_3, 2 D_4, 3 D_6, 2 D_{12}	5 C_2, C_3, 4 C_4, 4 C_6, 3 C_8, 3 C_{12}, 2 C_{16}, 15 D_2, D_3, 2 D_4, 3 D_6, 2 D_{12}	2 C_2, 3 C_4, C_6, C_8, 3 C_{12}, 11 D_2, D_3, 2 D_4, 3 D_6, 2 D_{12}	5 C_2, C_3, 15 D_2, D_3
R81.140	4 C_2, C_3, 4 C_4, 3 C_6, 4 C_8, 3 C_{12}, 4 C_{16}, 3 C_{24}, 4 C_{48}, 12 D_2, D_3, 2 D_4, 3 D_6, 2 D_{12}	4 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 2 C_{12}, 12 D_2, D_3, 2 D_4, 3 D_6, 2 D_{12}	2 C_2, 3 C_4, C_6, 2 C_8, 2 C_{12}, 10 D_2, D_3, 2 D_4, 3 D_6, 2 D_{12}	4 C_2, C_3, 12 D_2, D_3
R81.141	7 C_2, C_3, 4 C_4, 5 C_6, 6 C_8, 3 C_{12}, 8 C_{16}, 6 C_{24}, 8 C_{48}, 30 D_2, 2 D_3, 7 D_6	7 C_2, C_3, 4 C_4, 5 C_6, 4 C_8, 2 C_{12}, 2 C_{16}, 30 D_2, 2 D_3, 7 D_6	2 C_2, 3 C_4, C_6, 2 C_8, 2 C_{12}, 19 D_2, D_3, 5 D_6	7 C_2, C_3, 30 D_2, 2 D_3
R81.142	4 C_2, C_3, 5 C_4, 3 C_6, 5 C_8, 5 C_{12}, 8 C_{16}, 6 C_{24}, 8 C_{48}, 9 D_2, D_3, D_4, 3 D_6, 2 D_{12}	4 C_2, C_3, 5 C_4, 3 C_6, 3 C_8, 4 C_{12}, C_{16}, C_{24}, 9 D_2, D_3, D_4, 3 D_6, 2 D_{12}	2 C_2, 3 C_4, C_6, 3 C_8, C_{16}, 9 D_2, D_3, D_4, 3 D_6, 2 D_{12}	4 C_2, C_3, 2 C_4, 9 D_2, D_3, D_4
R81.143	5 C_2, C_3, 6 C_4, 3 C_6, 8 C_8, 5 C_{12}, 12 C_{16}, 6 C_{24}, 8 C_{48}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_{12}	5 C_2, C_3, 6 C_4, 3 C_6, 6 C_8, 4 C_{12}, 4 C_{16}, C_{24}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_{12}	2 C_2, 3 C_4, C_6, 6 C_8, 4 C_{16}, 11 D_2, D_3, 2 D_4, 3 D_6, 2 D_{12}	5 C_2, C_3, 3 C_4, 13 D_2, 2 D_3, 3 D_4
R81.144	5 C_2, 2 C_4, 8 C_5, 28 C_{10}, 28 C_{20}, 13 D_2, 4 D_5, 8 D_{10}	5 C_2, 2 C_4, 6 C_5, 20 C_{10}, 18 C_{20}, 13 D_2, 4 D_5, 8 D_{10}	3 C_2, 2 C_4, 12 C_{10}, 15 C_{20}, 11 D_2, 2 D_5, 6 D_{10}	5 C_2, 4 C_5, 4 C_{10}, 13 D_2, 4 D_5, 4 D_{10}
R81.145	5 C_2, 2 C_4, 8 C_5, 24 C_{10}, 8 C_{20}, 13 D_2, 16 D_5, 32 D_{10}	5 C_2, 2 C_4, 6 C_5, 18 C_{10}, 2 C_{20}, 13 D_2, 12 D_5, 24 D_{10}	3 C_2, 2 C_4, 10 C_{10}, 11 D_2, 6 D_5, 18 D_{10}	5 C_2, 6 C_5, 6 C_{10}, 13 D_2, 12 D_5, 10 D_{10}
R81.146	3 C_2, C_3, 2 C_4, 2 C_5, C_6, 3 C_9, 6 C_{10}, C_{12}, 2 C_{15}, 3 C_{18}, 8 C_{20}, 2 C_{30}, 3 C_{36}, 6 C_{45}, 4 C_{60}, 6 C_{90}, 12 C_{180}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, C_3, 2 C_4, C_5, C_6, C_9, 3 C_{10}, C_{18}, 2 C_{20}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	2 C_2, 2 C_4, C_6, C_{10}, C_{18}, 3 D_2, D_3, D_6, D_9, D_{18}	3 C_2, C_3, C_9, 3 D_2, D_3, D_9
R81.147	6 C_2, C_3, 6 C_4, 2 C_6, 4 C_8, 4 C_{12}, 4 C_{24}, 23 D_2, 13 D_4	6 C_2, C_3, 6 C_4, 2 C_6, 2 C_8, 2 C_{12}, 23 D_2, 13 D_4	2 C_2, 6 C_4, C_6, 2 C_8, 2 C_{12}, 18 D_2, 13 D_4	6 C_2, C_3, 23 D_2
R81.148	**Tet**, 9 C_2, C_3, 4 C_4, 4 C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 70 D_2, 10 D_4	**Tet**, 9 C_2, C_3, 4 C_4, 4 C_6, 2 C_8, 70 D_2, 10 D_4	2 C_2, 4 C_4, C_6, 2 C_8, 34 D_2, 10 D_4	**Tet**, 9 C_2, C_3, 70 D_2
R81.149	**Tet**, 11 C_2, C_3, 6 C_4, 5 C_6, 8 C_8, 6 C_{12}, 8 C_{24}, 89 D_2	**Tet**, 11 C_2, C_3, 6 C_4, 5 C_6, 6 C_8, 4 C_{12}, 2 C_{24}, 89 D_2	2 C_2, 6 C_4, C_6, 6 C_8, 4 C_{12}, 2 C_{24}, 42 D_2	**Tet**, 11 C_2, C_3, 89 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.150	8 C_2, C_3, 6 C_4, 5 C_6, 6 C_8, 6 C_{12}, 8 C_{24}, 41 D_2, 7 D_4	8 C_2, C_3, 6 C_4, 5 C_6, 4 C_8, 4 C_{12}, 2 C_{24}, 41 D_2, 7 D_4	2 C_2, 6 C_4, C_6, 4 C_8, 4 C_{12}, 2 C_{24}, 28 D_2, 7 D_4	8 C_2, C_3, 41 D_2
R81.151	4 C_2, C_3, 9 C_4, 3 C_6, 6 C_8, 8 C_{12}, 8 C_{24}, 9 D_2, 2 D_4	4 C_2, C_3, 9 C_4, 3 C_6, 4 C_8, 6 C_{12}, 9 D_2, 2 D_4	2 C_2, 2 C_4, C_6, 2 C_8, 2 C_{12}, 9 D_2, 2 D_4	4 C_2, C_3, 6 C_4, 9 D_2, 2 D_4
R81.152	5 C_2, C_3, 9 C_4, 3 C_6, 8 C_8, 8 C_{12}, 8 C_{24}, 13 D_2, 3 D_4	5 C_2, C_3, 9 C_4, 3 C_6, 6 C_8, 7 C_{12}, 2 C_{24}, 13 D_2, 3 D_4	2 C_2, 2 C_4, C_6, 4 C_8, 2 C_{12}, 11 D_2, 2 D_4	5 C_2, C_3, 7 C_4, 13 D_2, 3 D_4
R81.153	4 C_2, C_3, 8 C_4, 3 C_6, 6 C_8, 8 C_{12}, 8 C_{24}, 9 D_2, 2 D_4	4 C_2, C_3, 8 C_4, 3 C_6, 4 C_8, 6 C_{12}, 2 C_{24}, 9 D_2, 2 D_4	2 C_2, 3 C_4, C_6, 4 C_8, 2 C_{12}, 2 C_{24}, 9 D_2, 2 D_4	4 C_2, C_3, 5 C_4, 9 D_2, 2 D_4
R81.154	5 C_2, C_3, 10 C_4, 3 C_6, 12 C_8, 12 C_{12}, 16 C_{24}, 13 D_2, 3 D_4	5 C_2, C_3, 10 C_4, 3 C_6, 10 C_8, 10 C_{12}, 6 C_{24}, 13 D_2, 3 D_4	2 C_2, 3 C_4, C_6, 10 C_8, 2 C_{12}, 6 C_{24}, 11 D_2, 2 D_4	5 C_2, C_3, 7 C_4, 13 D_2, 3 D_4
R81.155	**Tet**, 5 C_2, C_3, 4 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 24 D_2, 6 D_4	**Tet**, 5 C_2, C_3, 4 C_4, C_6, 3 C_8, 24 D_2, 6 D_4	2 C_2, 3 C_4, C_6, 2 C_8, 17 D_2, 6 D_4	**Tet**, 5 C_2, C_3, 24 D_2
R81.156	2 **Tet**, 4 C_2, C_3, 4 C_4, C_6, 3 C_8, 2 C_{12}, 4 C_{24}, 14 D_2, 6 D_4	2 **Tet**, 4 C_2, C_3, 4 C_4, C_6, 2 C_8, 14 D_2, 6 D_4	2 C_2, 3 C_4, C_6, C_8, 10 D_2, 6 D_4	2 **Tet**, 4 C_2, C_3, 14 D_2
R81.157	2 **Tet**, 4 C_2, C_3, 4 C_4, C_6, 3 C_8, 2 C_{12}, 4 C_{24}, 14 D_2, 6 D_4	2 **Tet**, 4 C_2, C_3, 4 C_4, C_6, C_8, 14 D_2, 6 D_4	2 C_2, 3 C_4, C_6, C_8, 10 D_2, 6 D_4	2 **Tet**, 4 C_2, C_3, 14 D_2
R81.158	**Tet**, 5 C_2, C_3, 4 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 24 D_2, 6 D_4	**Tet**, 5 C_2, C_3, 4 C_4, C_6, 2 C_8, 24 D_2, 6 D_4	2 C_2, 3 C_4, C_6, 2 C_8, 17 D_2, 6 D_4	**Tet**, 5 C_2, C_3, 24 D_2
R81.159	2 **Tet**, 4 C_2, C_3, 4 C_4, C_6, 3 C_8, 2 C_{12}, 4 C_{24}, 14 D_2, 6 D_4	2 **Tet**, 4 C_2, C_3, 4 C_4, C_6, C_8, C_{12}, 14 D_2, 6 D_4	**Tet**, 2 C_2, 3 C_4, C_6, C_8, 11 D_2, 6 D_4	2 **Tet**, 4 C_2, C_3, C_4, 14 D_2
R81.160	3 **Tet**, 7 C_2, C_3, 4 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 58 D_2	3 **Tet**, 7 C_2, C_3, 4 C_4, C_6, 2 C_8, C_{12}, 58 D_2	2 C_2, 3 C_4, C_6, 2 C_8, 30 D_2	3 **Tet**, 7 C_2, C_3, C_4, 58 D_2
R81.161	3 **Tet**, 7 C_2, C_3, 4 C_4, C_6, 4 C_8, 2 C_{12}, 4 C_{24}, 58 D_2	3 **Tet**, 7 C_2, C_3, 4 C_4, C_6, 3 C_8, C_{12}, C_{24}, 58 D_2	**Tet**, 2 C_2, 3 C_4, C_6, 2 C_8, 32 D_2	3 **Tet**, 7 C_2, C_3, C_4, 58 D_2
R81.162	2 **Tet**, 4 C_2, C_3, 4 C_4, C_6, 3 C_8, 2 C_{12}, 4 C_{24}, 14 D_2, 6 D_4	2 **Tet**, 4 C_2, C_3, 4 C_4, C_6, 2 C_8, C_{12}, C_{24}, 14 D_2, 6 D_4	**Tet**, 2 C_2, 3 C_4, C_6, C_8, 11 D_2, 6 D_4	2 **Tet**, 4 C_2, C_3, C_4, 14 D_2
R81.163	9 C_2, C_3, 7 C_4, 9 C_6, 8 C_8, 12 C_{12}, 16 C_{24}, 45 D_2, 3 D_4	9 C_2, C_3, 7 C_4, 9 C_6, 6 C_8, 10 C_{12}, 6 C_{24}, 45 D_2, 3 D_4	3 C_2, 4 C_4, C_6, 6 C_8, 33 D_2, 2 D_4	9 C_2, C_3, 3 C_4, 45 D_2, 3 D_4
R81.164	7 C_2, C_3, 5 C_4, 7 C_6, 4 C_8, 7 C_{12}, 8 C_{24}, 37 D_2, 3 D_4	7 C_2, C_3, 5 C_4, 7 C_6, 2 C_8, 5 C_{12}, C_{24}, 37 D_2, 3 D_4	3 C_2, 4 C_4, C_6, 2 C_8, 30 D_2, 3 D_4	7 C_2, C_3, C_4, 37 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.165	7 C_2, C_3, 6 C_4, 7 C_6, 4 C_8, 10 C_{12}, 8 C_{24}, 37 D_2, 3 D_4	7 C_2, C_3, 6 C_4, 7 C_6, 2 C_8, 8 C_{12}, 2 C_{24}, 37 D_2, 3 D_4	2 C_2, 2 C_4, C_6, 2 C_8, 24 D_2, 2 D_4	7 C_2, C_3, 4 C_4, C_6, 37 D_2, 3 D_4
R81.166	11 C_2, C_3, 3 C_4, 11 C_6, 4 C_8, 6 C_{12}, 8 C_{24}, 100 D_2	11 C_2, C_3, 3 C_4, 11 C_6, 2 C_8, 4 C_{12}, 2 C_{24}, 100 D_2	3 C_2, 2 C_4, C_6, 2 C_8, 52 D_2	11 C_2, C_3, C_4, 100 D_2
R81.167	4 C_2, C_3, 4 C_4, 4 C_6, 4 C_8, 5 C_{12}, 7 C_{24}, 10 D_2, 4 D_4	4 C_2, C_3, 4 C_4, 4 C_6, 2 C_8, 3 C_{12}, 2 C_{24}, 10 D_2, 4 D_4	3 C_2, 4 C_4, C_6, 2 C_8, 10 D_2, 4 D_4	4 C_2, C_3, 10 D_2
R81.168	3 C_2, C_3, 6 C_4, 3 C_6, 4 C_8, 6 C_{12}, 7 C_{24}, 4 D_2, 3 D_4	3 C_2, C_3, 6 C_4, 3 C_6, 2 C_8, 4 C_{12}, C_{24}, 4 D_2, 3 D_4	3 C_2, 5 C_4, C_6, C_8, 4 D_2, 3 D_4	3 C_2, C_3, C_4, 4 D_2
R81.169	3 C_2, C_3, 5 C_4, 3 C_6, 4 C_8, 5 C_{12}, 7 C_{24}, 6 D_2, 4 D_4	3 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 3 C_{12}, 3 C_{24}, 6 D_2, 4 D_4	2 C_2, 3 C_4, C_6, 2 C_8, 6 D_2, 4 D_4	3 C_2, C_3, 2 C_4, C_6, 6 D_2, 2 D_4
R81.170	C_2, 8 C_5, 3 C_7, 2 C_{10}, 3 C_{14}, 42 C_{35}, 12 C_{70}, 2 D_5	C_2, 6 C_5, C_{10}, 2 D_5	C_2, C_{10}, 2 D_5	C_2, 4 C_5, 2 D_5
R81.171	C_2, C_3, 3 C_9, 9 C_{19}, 9 C_{38}, 9 C_{57}, 27 C_{171}, D_3, 3 D_9	C_2, C_3, C_9, D_3, D_9	C_2, D_3, D_9	C_2, C_3, C_9, D_3, D_9
R81.172	5 C_2, 3 C_4, 5 C_{11}, 25 C_{22}, 25 C_{44}, 13 D_2, 2 D_4	5 C_2, 3 C_4, C_{11}, 5 C_{22}, 3 C_{44}, 13 D_2, 2 D_4	3 C_2, 2 C_4, C_{22}, 11 D_2, 2 D_4	5 C_2, C_4, C_{11}, 13 D_2, 2 D_4
R81.173	2 C_2, C_3, 2 C_4, C_6, 3 C_7, 2 C_8, C_{12}, 6 C_{14}, 3 C_{21}, 2 C_{24}, 9 C_{28}, 3 C_{42}, 12 C_{56}, 6 C_{84}, 12 C_{168}, 2 D_2, D_3, D_6	2 C_2, C_3, 2 C_4, C_6, 2 D_2, D_3, D_6	2 C_2, C_4, C_6, 2 D_2, D_3, D_6	2 C_2, C_3, 2 D_2, D_3
R81.174	3 C_2, C_3, 2 C_4, C_6, 3 C_7, 4 C_8, C_{12}, 9 C_{14}, 3 C_{21}, 2 C_{24}, 12 C_{28}, 3 C_{42}, 24 C_{56}, 6 C_{84}, 12 C_{168}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 2 C_8, 3 D_2, 2 D_3, D_6	2 C_2, C_4, C_6, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, D_3
R81.175	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 3 C_7, 2 C_{12}, 9 C_{14}, 6 C_{21}, 12 C_{28}, 6 C_{42}, 12 C_{84}, 6 D_2	**Tet**, 3 C_2, C_3, 2 C_4, C_6, C_7, 3 C_{14}, C_{21}, 2 C_{28}, C_{42}, 6 D_2	2 C_2, C_4, C_6, C_{14}, 5 D_2	**Tet**, 3 C_2, C_3, C_7, C_{14}, 6 D_2
R81.176	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 3 C_7, 2 C_{12}, 9 C_{14}, 6 C_{21}, 12 C_{28}, 6 C_{42}, 12 C_{84}, 6 D_2	**Tet**, 3 C_2, C_3, 2 C_4, C_6, C_7, C_{12}, 3 C_{14}, C_{21}, 3 C_{28}, C_{42}, C_{84}, 6 D_2	**Tet**, 2 C_2, C_4, C_6, C_{14}, 6 D_2	**Tet**, 3 C_2, C_3, C_4, C_7, C_{14}, C_{28}, 6 D_2
R81.177	5 C_2, C_3, 2 C_4, 5 C_6, 3 C_7, 4 C_{12}, 15 C_{14}, 6 C_{21}, 12 C_{28}, 30 C_{42}, 24 C_{84}, 13 D_2	5 C_2, C_3, 2 C_4, 5 C_6, C_7, 2 C_{12}, 5 C_{14}, C_{21}, 2 C_{28}, 5 C_{42}, 2 C_{84}, 13 D_2	3 C_2, 2 C_4, C_6, C_{14}, C_{42}, 11 D_2	5 C_2, C_3, C_7, C_{21}, 13 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R81.178	C_2, C_3, 2 C_5, 2 C_{10}, 5 C_{11}, 2 C_{15}, 5 C_{22}, 5 C_{33}, 20 C_{55}, 20 C_{110}, 20 C_{165}, D_3	C_2, C_3, C_5, C_{10}, D_3	C_2, C_{10}, D_3	C_2, C_3, D_3
R81.179	C_2, 81 C_{163}, 81 C_{326}	C_2	C_2	C_2
R81.180	3 C_2, 2 C_4, 20 C_{41}, 60 C_{82}, 80 C_{164}, 3 D_2	3 C_2, 2 C_4, C_{41}, 3 C_{82}, 2 C_{164}, 3 D_2	2 C_2, 2 C_4, C_{82}, 3 D_2	3 C_2, C_{41}, C_{82}, 3 D_2
R81.181	C_2, C_3, C_4, C_6, 3 C_9, 2 C_{12}, 3 C_{18}, 9 C_{27}, 6 C_{36}, 9 C_{54}, 27 C_{81}, 18 C_{108}, 27 C_{162}, 54 C_{324}	C_2, C_3, C_4, C_6, C_9, C_{18}, C_{27}, C_{54}, C_{81}, C_{162}	C_2, C_4, C_6, C_{18}, C_{54}, C_{162}	C_2, C_3, C_9, C_{27}, C_{81}
Genus 82				
R82.1	2 C_2, 7 C_3, C_4, 4 C_6, C_8, 2 D_2, 9 D_3, D_4, 4 D_6	2 C_2, 7 C_3, C_4, 4 C_6, 2 D_2, 9 D_3, D_4, 4 D_6	2 C_2, C_4, 4 C_6, 2 D_2, 9 D_3, D_4, 4 D_6	2 C_2, 6 C_3, 2 D_2, 9 D_3
R82.2	2 **Tet**, **Oct**, 2 C_2, 9 C_3, C_4, 6 C_6, 4 C_9, 5 C_{12}, 3 D_2, 6 D_3, D_4, 3 D_6, 2 D_9, 2 D_{12}	2 **Tet**, **Oct**, 2 C_2, 9 C_3, C_4, 6 C_6, 4 C_9, 4 C_{12}, 3 D_2, 6 D_3, D_4, 3 D_6, 2 D_9, 2 D_{12}	2 **Tet**, **Oct**, 2 C_2, 6 C_6, 3 D_2, 6 D_3, D_4, 3 D_6, 2 D_9, 2 D_{12}	2 C_2, 7 C_3, C_4, 4 C_9, 3 D_2, 6 D_3, D_4, 2 D_9
R82.3	**Tet**, 2 C_2, 4 C_3, C_4, 5 C_6, 9 C_9, C_{12}, 3 C_{18}, 3 D_2, 2 D_3, D_4, 2 D_6, 9 D_9, 3 D_{18}	**Tet**, 2 C_2, 4 C_3, C_4, 5 C_6, 9 C_9, 3 C_{18}, 3 D_2, 2 D_3, D_4, 2 D_6, 9 D_9, 3 D_{18}	**Tet**, 2 C_2, C_4, 5 C_6, 3 C_{18}, 3 D_2, 2 D_3, D_4, 2 D_6, 9 D_9, 3 D_{18}	2 C_2, 2 C_3, 9 C_9, 3 D_2, 2 D_3, 9 D_9
R82.4	C_2, 8 C_3, C_6, 12 C_9, 3 C_{18}, 2 D_3, 9 D_9	C_2, 8 C_3, C_6, 10 C_9, C_{18}, 2 D_3, 9 D_9	C_2, C_6, C_{18}, 2 D_3, 9 D_9	C_2, 6 C_3, 9 C_9, 2 D_3, 9 D_9
R82.5	C_2, 8 C_3, C_6, 12 C_9, 3 C_{18}, 3 D_3, 6 D_9	C_2, 8 C_3, C_6, 10 C_9, C_{18}, 3 D_3, 6 D_9	C_2, C_6, C_{18}, 3 D_3, 6 D_9	C_2, 6 C_3, 6 C_9, 3 D_3, 6 D_9
R82.6	C_2, 10 C_3, C_6, 6 C_9, 3 C_{18}, 5 D_3, 3 D_9	C_2, 10 C_3, C_6, 4 C_9, C_{18}, 5 D_3, 3 D_9	C_2, C_6, C_{18}, 5 D_3, 3 D_9	C_2, 8 C_3, 3 C_9, 5 D_3, 3 D_9
R82.7	C_2, 7 C_3, C_6, 9 C_9, 3 C_{18}, 2 D_3, 6 D_9	C_2, 7 C_3, C_6, 7 C_9, C_{18}, 2 D_3, 6 D_9	C_2, C_6, C_{18}, 2 D_3, 6 D_9	C_2, 5 C_3, 6 C_9, 2 D_3, 6 D_9
R82.8	2 C_2, 4 C_3, C_4, 5 C_6, C_8, 2 C_9, 2 C_{12}, 2 C_{18}, 2 C_{24}, 2 D_2, 4 D_3, D_4, 4 D_6, 2 D_9, 2 D_{12}, 2 D_{18}	2 C_2, 4 C_3, C_4, 5 C_6, 2 C_9, C_{12}, 2 C_{18}, 2 D_2, 4 D_3, D_4, 4 D_6, 2 D_9, D_{12}, 2 D_{18}	2 C_2, C_4, 5 C_6, C_{12}, 2 C_{18}, 2 D_2, 4 D_3, D_4, 4 D_6, 2 D_9, D_{12}, 2 D_{18}	2 C_2, 4 C_3, 2 C_9, 2 D_2, 4 D_3, 2 D_9
R82.9	2 C_2, 4 C_3, C_4, 5 C_6, C_8, 3 C_9, 4 C_{12}, 3 C_{18}, 2 C_{24}, 2 D_2, 2 D_3, D_4, 2 D_6, 3 D_9, 2 D_{12}, 3 D_{18}	2 C_2, 4 C_3, C_4, 5 C_6, 3 C_9, 3 C_{12}, 3 C_{18}, 2 D_2, 2 D_3, D_4, 2 D_6, 3 D_9, 2 D_{12}, 3 D_{18}	2 C_2, C_4, 5 C_6, 3 C_{12}, 3 C_{18}, 2 D_2, 2 D_3, D_4, 2 D_6, 3 D_9, 2 D_{12}, 3 D_{18}	2 C_2, 2 C_3, 3 C_9, 2 D_2, 2 D_3, 3 D_9

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R82.10	3 C_2, 6 C_3, C_4, 6 C_6, 3 C_9, 2 C_{12}, 3 C_{18}, 4 D_2, 12 D_3, D_4, 7 D_6, 6 D_9, 2 D_{12}, 3 D_{18}	3 C_2, 6 C_3, C_4, 6 C_6, 3 C_9, 2 C_{12}, 3 C_{18}, 4 D_2, 12 D_3, D_4, 7 D_6, 6 D_9, 2 D_{12}, 3 D_{18}	3 C_2, 5 C_6, 3 C_{18}, 4 D_2, 12 D_3, D_4, 7 D_6, 6 D_9, 2 D_{12}, 3 D_{18}	3 C_2, 6 C_3, C_4, 3 C_9, 4 D_2, 12 D_3, D_4, 6 D_9
R82.11	3 C_2, 9 C_3, C_4, 8 C_6, 4 D_2, 13 D_3, D_4, 6 D_6	3 C_2, 9 C_3, C_4, 8 C_6, 4 D_2, 13 D_3, D_4, 6 D_6	3 C_2, C_4, 8 C_6, 4 D_2, 13 D_3, D_4, 6 D_6	3 C_2, 8 C_3, 4 D_2, 13 D_3
R82.12	2 C_2, 6 C_3, 2 C_4, 3 C_6, C_8, 2 D_2, 9 D_3, D_4, 3 D_6	2 C_2, 6 C_3, 2 C_4, 3 C_6, 2 D_2, 9 D_3, D_4, 3 D_6	2 C_2, 2 C_4, 3 C_6, 2 D_2, 9 D_3, D_4, 3 D_6	2 C_2, 6 C_3, 2 D_2, 9 D_3
R82.13	C_2, 5 C_3, C_4, C_6, 12 C_9, 2 C_{12}, 2 D_3, 12 D_9	C_2, 5 C_3, C_4, C_6, 12 C_9, C_{12}, 2 D_3, 12 D_9	C_2, C_4, C_6, C_{12}, 2 D_3, 12 D_9	C_2, 4 C_3, 12 C_9, 2 D_3, 12 D_9
R82.14	C_2, 6 C_3, C_4, C_6, 3 C_9, 2 C_{12}, 5 D_3, 3 D_9	C_2, 6 C_3, C_4, C_6, 3 C_9, C_{12}, 5 D_3, 3 D_9	C_2, C_4, C_6, C_{12}, 5 D_3, 3 D_9	C_2, 5 C_3, 3 C_9, 5 D_3, 3 D_9
R82.15	C_2, 3 C_3, C_4, C_6, 6 C_9, 2 C_{12}, 2 D_3, 6 D_9	C_2, 3 C_3, C_4, C_6, 6 C_9, C_{12}, 2 D_3, 6 D_9	C_2, C_4, C_6, C_{12}, 2 D_3, 6 D_9	C_2, 2 C_3, 6 C_9, 2 D_3, 6 D_9
R82.16	C_2, 6 C_3, C_4, C_6, 3 C_9, 2 C_{12}, 5 D_3, 3 D_9	C_2, 6 C_3, C_4, C_6, 3 C_9, C_{12}, 5 D_3, 3 D_9	C_2, C_4, C_6, C_{12}, 5 D_3, 3 D_9	C_2, 5 C_3, 3 C_9, 5 D_3, 3 D_9
R82.17	3 C_2, C_4, 41 C_{83}, 82 C_{166}, 4 D_2, D_4, 41 D_{83}, 41 D_{166}	3 C_2, C_4, C_{83}, 2 C_{166}, 4 D_2, D_4, D_{83}, D_{166}	3 C_2, C_4, C_{166}, 4 D_2, D_4, D_{83}, D_{166}	3 C_2, C_{83}, 4 D_2, D_{83}
R82.18	2 C_2, 2 C_4, C_8, 20 C_{41}, 20 C_{82}, 40 C_{164}, 40 C_{328}, 2 D_2, D_4, 20 D_{41}, 20 D_{82}, 40 D_{164}	2 C_2, 2 C_4, C_{41}, C_{82}, C_{164}, 2 D_2, D_4, D_{41}, D_{82}, D_{164}	2 C_2, 2 C_4, C_{82}, C_{164}, 2 D_2, D_4, D_{41}, D_{82}, D_{164}	2 C_2, C_{41}, 2 D_2, D_{41}
R82.19	C_2, 8 C_3, 2 C_5, 2 C_{10}, 8 D_3	C_2, 8 C_3, 8 D_3	C_2, 8 D_3	C_2, 8 C_3, 8 D_3
R82.20	3 C_2, 9 C_3, 8 C_6, 6 C_9, 3 C_{18}, 3 D_2, 8 D_3, 3 D_6, 9 D_9, 3 D_{18}	3 C_2, 9 C_3, 8 C_6, 6 C_9, 3 C_{18}, 3 D_2, 8 D_3, 3 D_6, 9 D_9, 3 D_{18}	3 C_2, 8 C_6, 3 C_{18}, 3 D_2, 8 D_3, 3 D_6, 9 D_9, 3 D_{18}	3 C_2, 7 C_3, 6 C_9, 3 D_2, 8 D_3, 9 D_9
R82.21	3 C_2, 13 C_3, 10 C_6, 3 D_2, 11 D_3, 4 D_6	3 C_2, 13 C_3, 10 C_6, 3 D_2, 11 D_3, 4 D_6	3 C_2, 10 C_6, 3 D_2, 11 D_3, 4 D_6	3 C_2, 11 C_3, 3 D_2, 11 D_3
R82.22	3 C_2, 13 C_3, 9 C_6, 3 D_2, 13 D_3, 4 D_6	3 C_2, 13 C_3, 9 C_6, 3 D_2, 13 D_3, 4 D_6	3 C_2, 9 C_6, 3 D_2, 13 D_3, 4 D_6	3 C_2, 11 C_3, 3 D_2, 13 D_3
R82.23	3 C_2, 13 C_3, 15 C_6, 2 C_9, 3 D_2, 12 D_3, 6 D_6, D_9	3 C_2, 13 C_3, 15 C_6, 2 C_9, 3 D_2, 12 D_3, 6 D_6, D_9	3 C_2, 15 C_6, 3 D_2, 12 D_3, 6 D_6, D_9	3 C_2, 11 C_3, 2 C_9, 3 D_2, 12 D_3, D_9
R82.24	3 C_2, 10 C_3, 9 C_6, 3 C_9, 3 D_2, 19 D_3, 9 D_6, 3 D_9	3 C_2, 10 C_3, 9 C_6, 3 C_9, 3 D_2, 19 D_3, 9 D_6, 3 D_9	3 C_2, 7 C_6, 3 D_2, 19 D_3, 9 D_6, 3 D_9	3 C_2, 10 C_3, 3 C_9, 3 D_2, 19 D_3, 3 D_9

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R82.25	3 C_2, 4 C_3, 6 C_6, 9 C_9, 9 C_{18}, 3 D_2, 4 D_3, 2 D_6, 18 D_9, 9 D_{18}	3 C_2, 4 C_3, 6 C_6, 9 C_9, 9 C_{18}, 3 D_2, 4 D_3, 2 D_6, 18 D_9, 9 D_{18}	3 C_2, 5 C_6, 9 C_{18}, 3 D_2, 4 D_3, 2 D_6, 18 D_9, 9 D_{18}	3 C_2, 2 C_3, 9 C_9, 3 D_2, 4 D_3, 18 D_9
R82.26	3 C_2, 12 C_3, C_4, 15 C_6, C_{12}, 4 D_2, 6 D_3, D_4, 3 D_6	3 C_2, 12 C_3, C_4, 15 C_6, 4 D_2, 6 D_3, D_4, 3 D_6	3 C_2, C_4, 14 C_6, 4 D_2, 6 D_3, D_4, 3 D_6	3 C_2, 10 C_3, 4 D_2, 6 D_3
R82.27	3 C_2, 7 C_3, C_4, 7 C_6, 2 C_{12}, 4 D_2, 9 D_3, D_4, 6 D_6, 2 D_{12}	3 C_2, 7 C_3, C_4, 7 C_6, C_{12}, 4 D_2, 9 D_3, D_4, 6 D_6, D_{12}	3 C_2, C_4, 6 C_6, 4 D_2, 9 D_3, D_4, 6 D_6, D_{12}	3 C_2, 6 C_3, 4 D_2, 9 D_3
R82.28	3 C_2, 11 C_3, C_4, 7 C_6, 2 C_{12}, 4 D_2, 12 D_3, D_4, 6 D_6, 2 D_{12}	3 C_2, 11 C_3, C_4, 7 C_6, C_{12}, 4 D_2, 12 D_3, D_4, 6 D_6, D_{12}	3 C_2, C_4, 6 C_6, 4 D_2, 12 D_3, D_4, 6 D_6, D_{12}	3 C_2, 10 C_3, 4 D_2, 12 D_3
R82.29	3 C_2, 7 C_3, C_4, 7 C_6, 2 C_{12}, 4 D_2, 9 D_3, D_4, 6 D_6, 2 D_{12}	3 C_2, 7 C_3, C_4, 7 C_6, C_{12}, 4 D_2, 9 D_3, D_4, 6 D_6, D_{12}	3 C_2, C_4, 6 C_6, 4 D_2, 9 D_3, D_4, 6 D_6, D_{12}	3 C_2, 6 C_3, 4 D_2, 9 D_3
R82.30	3 C_2, 7 C_3, C_4, 9 C_6, 5 C_{12}, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 7 C_3, C_4, 9 C_6, 4 C_{12}, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 9 C_6, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 5 C_3, C_4, 4 D_2, 6 D_3, D_4
R82.31	3 C_2, 7 C_3, C_4, 9 C_6, 5 C_{12}, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 7 C_3, C_4, 9 C_6, 4 C_{12}, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 8 C_6, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 5 C_3, C_4, 4 D_2, 6 D_3, D_4
R82.32	3 C_2, 11 C_3, C_4, 9 C_6, 5 C_{12}, 4 D_2, 8 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 11 C_3, C_4, 9 C_6, 4 C_{12}, 4 D_2, 8 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 9 C_6, 4 D_2, 8 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 9 C_3, C_4, 4 D_2, 8 D_3, D_4
R82.33	3 C_2, 7 C_3, C_4, 9 C_6, 5 C_{12}, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 7 C_3, C_4, 9 C_6, 4 C_{12}, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 9 C_6, 4 D_2, 6 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 5 C_3, C_4, 4 D_2, 6 D_3, D_4
R82.34	3 C_2, 8 C_3, C_4, 6 C_6, 8 C_{12}, 4 D_2, 14 D_3, D_4, 10 D_6, 8 D_{12}	3 C_2, 8 C_3, C_4, 6 C_6, 7 C_{12}, 4 D_2, 14 D_3, D_4, 10 D_6, 7 D_{12}	3 C_2, 4 C_6, 4 D_2, 14 D_3, D_4, 10 D_6, 7 D_{12}	3 C_2, 8 C_3, C_4, 4 D_2, 14 D_3, D_4
R82.35	3 C_2, 4 C_3, C_4, 10 C_6, 3 C_9, C_{12}, 6 C_{18}, 4 D_2, 2 D_3, D_4, 2 D_6, 3 D_9, 3 D_{18}	3 C_2, 4 C_3, C_4, 10 C_6, 3 C_9, 6 C_{18}, 4 D_2, 2 D_3, D_4, 2 D_6, 3 D_9, 3 D_{18}	3 C_2, C_4, 10 C_6, 6 C_{18}, 4 D_2, 2 D_3, D_4, 2 D_6, 3 D_9, 3 D_{18}	3 C_2, 2 C_3, 3 C_9, 4 D_2, 2 D_3, 3 D_9
R82.36	3 C_2, 9 C_3, C_4, 15 C_6, 5 C_{12}, 4 D_2, 7 D_3, D_4, 6 D_6, 2 D_{12}	3 C_2, 9 C_3, C_4, 15 C_6, 4 C_{12}, 4 D_2, 7 D_3, D_4, 6 D_6, 2 D_{12}	3 C_2, C_4, 15 C_6, 4 C_{12}, 4 D_2, 7 D_3, D_4, 6 D_6, 2 D_{12}	3 C_2, 7 C_3, 4 D_2, 7 D_3

	Mapping	Immersion		Embedding
	necessary and sufficient	necessary	sufficient	necessary
R82.37	3 C_2, 9 C_3, C_4, 14 C_6, 6 C_{12}, 4 D_2, 8 D_3, D_4, 7 D_6, 3 D_{12}	3 C_2, 9 C_3, C_4, 14 C_6, 5 C_{12}, 4 D_2, 8 D_3, D_4, 7 D_6, 3 D_{12}	3 C_2, C_4, 13 C_6, 5 C_{12}, 4 D_2, 8 D_3, D_4, 7 D_6, 3 D_{12}	3 C_2, 7 C_3, 4 D_2, 8 D_3
R82.38	3 C_2, 9 C_3, C_4, 17 C_6, 5 C_{12}, 4 D_2, 5 D_3, D_4, 5 D_6, 2 D_{12}	3 C_2, 9 C_3, C_4, 17 C_6, 4 C_{12}, 4 D_2, 5 D_3, D_4, 5 D_6, 2 D_{12}	3 C_2, C_4, 16 C_6, 4 C_{12}, 4 D_2, 5 D_3, D_4, 5 D_6, 2 D_{12}	3 C_2, 7 C_3, 4 D_2, 5 D_3
R82.39	3 C_2, 4 C_3, C_4, 6 C_6, 3 C_9, 6 C_{12}, 3 C_{18}, 6 C_{36}, 4 D_2, 4 D_3, D_4, 4 D_6, 6 D_9, 3 D_{12}, 6 D_{18}, 6 D_{36}	3 C_2, 4 C_3, C_4, 6 C_6, 3 C_9, 5 C_{12}, 3 C_{18}, 6 C_{36}, 4 D_2, 4 D_3, D_4, 4 D_6, 6 D_9, 3 D_{12}, 6 D_{18}, 6 D_{36}	3 C_2, 5 C_6, 3 C_{18}, 4 D_2, 4 D_3, D_4, 4 D_6, 6 D_9, 3 D_{12}, 6 D_{18}, 6 D_{36}	3 C_2, 2 C_3, C_4, 3 C_9, 4 D_2, 4 D_3, D_4, 6 D_9
R82.40	3 C_2, 6 C_3, C_4, 11 C_6, C_9, 2 C_{12}, C_{18}, 4 D_2, 7 D_3, D_4, 7 D_6, D_9, 2 D_{12}, D_{18}	3 C_2, 6 C_3, C_4, 11 C_6, C_9, C_{12}, C_{18}, 4 D_2, 7 D_3, D_4, 7 D_6, D_9, D_{12}, D_{18}	3 C_2, C_4, 10 C_6, C_{12}, C_{18}, 4 D_2, 7 D_3, D_4, 7 D_6, D_9, D_{12}, D_{18}	3 C_2, 6 C_3, C_9, 4 D_2, 7 D_3, D_9
R82.41	3 C_2, 6 C_3, C_4, 8 C_6, C_9, 8 C_{12}, C_{18}, 4 D_2, 10 D_3, D_4, 10 D_6, D_9, 8 D_{12}, D_{18}	3 C_2, 6 C_3, C_4, 8 C_6, C_9, 7 C_{12}, C_{18}, 4 D_2, 10 D_3, D_4, 10 D_6, D_9, 7 D_{12}, D_{18}	3 C_2, C_4, 7 C_6, 7 C_{12}, C_{18}, 4 D_2, 10 D_3, D_4, 10 D_6, D_9, 7 D_{12}, D_{18}	3 C_2, 6 C_3, C_9, 4 D_2, 10 D_3, D_9
R82.42	3 C_2, 4 C_3, 2 C_5, 6 C_6, 2 C_{10}, 8 C_{15}, 2 C_{30}, 3 D_2, 4 D_3, 4 D_5, 2 D_6, 2 D_{10}, 4 D_{15}	3 C_2, 4 C_3, C_5, 6 C_6, C_{10}, 3 C_{15}, 3 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 2 D_{15}	3 C_2, 5 C_6, 3 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 2 D_{15}	3 C_2, 2 C_3, C_5, 3 D_2, 4 D_3, 2 D_5
R82.43	3 C_2, 4 C_3, 2 C_5, 6 C_6, 2 C_{10}, 12 C_{15}, 12 C_{30}, 3 D_2, 4 D_3, 4 D_5, 2 D_6, 2 D_{10}, 12 D_{15}, 6 D_{30}	3 C_2, 4 C_3, C_5, 6 C_6, C_{10}, 5 C_{15}, 5 C_{30}, 3 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 6 D_{15}, 3 D_{30}	3 C_2, 5 C_6, 3 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 6 D_{15}, 3 D_{30}	3 C_2, 2 C_3, C_5, C_{10}, 3 D_2, 4 D_3, 2 D_5, D_{10}
R82.44	3 C_2, 4 C_3, 2 C_5, 3 C_6, 2 C_{10}, 12 C_{15}, 4 C_{30}, 3 D_2, 7 D_3, 4 D_5, 3 D_6, 2 D_{10}, 16 D_{15}, 4 D_{30}	3 C_2, 4 C_3, C_5, 3 C_6, C_{10}, 5 C_{15}, C_{30}, 3 D_2, 7 D_3, 2 D_5, 3 D_6, D_{10}, 6 D_{15}, D_{30}	3 C_2, C_6, 3 D_2, 7 D_3, 2 D_5, 3 D_6, D_{10}, 6 D_{15}, D_{30}	3 C_2, 4 C_3, C_5, 3 D_2, 7 D_3, 2 D_5
R82.45	3 C_2, 7 C_3, 2 C_5, 7 C_6, 2 C_{10}, 22 C_{15}, 10 C_{30}, 3 D_2, 5 D_3, 4 D_5, 2 D_6, 2 D_{10}, 14 D_{15}, 4 D_{30}	3 C_2, 7 C_3, C_5, 7 C_6, C_{10}, 10 C_{15}, 4 C_{30}, 3 D_2, 5 D_3, 2 D_5, 2 D_6, D_{10}, 7 D_{15}, 2 D_{30}	3 C_2, 7 C_6, 3 D_2, 5 D_3, 2 D_5, 2 D_6, D_{10}, 7 D_{15}, 2 D_{30}	3 C_2, 5 C_3, C_5, 3 D_2, 5 D_3, 2 D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R82.46	3 C_2, 3 C_3, C_4, 8 C_6, 3 C_7, C_{12}, 3 C_{14}, 9 C_{21}, 6 C_{28}, 9 C_{42}, 6 C_{84}, 4 D_2, D_3, D_4, D_6, 6 D_7, 6 D_{14}, 3 D_{21}, 6 D_{28}, 3 D_{42}	3 C_2, 3 C_3, C_4, 8 C_6, C_7, C_{14}, 2 C_{21}, C_{28}, 2 C_{42}, 4 D_2, D_3, D_4, D_6, 2 D_7, 2 D_{14}, D_{21}, D_{28}, D_{42}	3 C_2, C_4, 6 C_6, 4 D_2, D_3, D_4, D_6, 2 D_7, 2 D_{14}, D_{21}, D_{28}, D_{42}	3 C_2, C_3, C_7, C_{14}, 4 D_2, D_3, 2 D_7, 2 D_{14}
R82.47	3 C_2, 3 C_3, C_4, 4 C_6, 3 C_7, 2 C_{12}, 3 C_{14}, 15 C_{21}, 6 C_{28}, 15 C_{42}, 12 C_{84}, 4 D_2, 4 D_3, D_4, 4 D_6, 6 D_7, 2 D_{12}, 6 D_{14}, 21 D_{21}, 6 D_{28}, 21 D_{42}, 12 D_{84}	3 C_2, 3 C_3, C_4, 4 C_6, C_7, C_{12}, C_{14}, 4 C_{21}, C_{28}, 4 C_{42}, C_{84}, 4 D_2, 4 D_3, D_4, 4 D_6, 2 D_7, D_{12}, 2 D_{14}, 5 D_{21}, D_{28}, 5 D_{42}, D_{84}	3 C_2, C_4, 2 C_6, 4 D_2, 4 D_3, D_4, 4 D_6, 2 D_7, D_{12}, 2 D_{14}, 5 D_{21}, D_{28}, 5 D_{42}, D_{84}	3 C_2, 3 C_3, C_6, C_7, C_{14}, C_{21}, C_{42}, 4 D_2, 4 D_3, 2 D_6, 2 D_7, 2 D_{14}, 2 D_{21}, 2 D_{42}
R82.48	3 C_2, 3 C_3, C_4, 5 C_6, 3 C_7, 5 C_{12}, 3 C_{14}, 15 C_{21}, 6 C_{28}, 15 C_{42}, 30 C_{84}, 4 D_2, 2 D_3, D_4, 2 D_6, 6 D_7, 2 D_{12}, 6 D_{14}, 12 D_{21}, 6 D_{28}, 12 D_{42}, 12 D_{84}	3 C_2, 3 C_3, C_4, 5 C_6, C_7, 4 C_{12}, C_{14}, 4 C_{21}, C_{28}, 4 C_{42}, 4 C_{84}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_7, 2 D_{12}, 2 D_{14}, 4 D_{21}, D_{28}, 4 D_{42}, 2 D_{84}	3 C_2, 4 C_6, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_7, 2 D_{12}, 2 D_{14}, 4 D_{21}, D_{28}, 4 D_{42}, 2 D_{84}	3 C_2, C_3, C_4, C_7, C_{14}, C_{28}, 4 D_2, 2 D_3, D_4, 2 D_7, 2 D_{14}, D_{28}
R82.49	3 C_2, C_3, 3 C_6, 20 C_{41}, 20 C_{82}, 20 C_{123}, 20 C_{246}, 3 D_2, 40 D_{41}, 20 D_{82}	3 C_2, C_3, 3 C_6, C_{41}, C_{82}, 3 D_2, 2 D_{41}, D_{82}	3 C_2, C_6, 3 D_2, 2 D_{41}, D_{82}	3 C_2, C_{41}, C_{82}, 3 D_2, 2 D_{41}, D_{82}
R82.50	C_2, 9 C_3, C_4, 2 C_8, 9 D_3	C_2, 9 C_3, C_4, 9 D_3	C_2, C_4, 9 D_3	C_2, 9 C_3, 9 D_3
R82.51	C_2, 7 C_3, C_6, 21 C_9, 3 C_{18}, 3 D_3, 3 D_9	C_2, 7 C_3, C_6, 17 C_9, C_{18}, 3 D_3, 3 D_9	C_2, C_6, C_{18}, 3 D_3, 3 D_9	C_2, 5 C_3, 6 C_9, 3 D_3, 3 D_9
R82.52	C_2, 8 C_3, 4 C_6, 12 C_9, 9 C_{18}, 2 D_3	C_2, 8 C_3, 4 C_6, 8 C_9, 7 C_{18}, 2 D_3	C_2, 4 C_6, 7 C_{18}, 2 D_3	C_2, 6 C_3, 2 D_3
R82.53	C_2, 5 C_3, C_6, 12 C_9, 3 C_{18}, 2 D_3, 3 D_9	C_2, 5 C_3, C_6, 8 C_9, C_{18}, 2 D_3, 3 D_9	C_2, C_6, C_{18}, 2 D_3, 3 D_9	C_2, 4 C_3, 6 C_9, 2 D_3, 3 D_9
R82.54	C_2, 11 C_3, C_6, 6 C_9, 3 C_{18}, 5 D_3	C_2, 11 C_3, C_6, 2 C_9, C_{18}, 5 D_3	C_2, C_6, C_{18}, 5 D_3	C_2, 9 C_3, 5 D_3
R82.55	C_2, 5 C_3, C_6, 12 C_9, 3 C_{18}, 2 D_3, 3 D_9	C_2, 5 C_3, C_6, 8 C_9, C_{18}, 2 D_3, 3 D_9	C_2, C_6, C_{18}, 2 D_3, 3 D_9	C_2, 3 C_3, 6 C_9, 2 D_3, 3 D_9
R82.56	C_2, 5 C_3, C_6, 12 C_9, 3 C_{18}, 3 D_3, 3 D_9	C_2, 5 C_3, C_6, 8 C_9, C_{18}, 3 D_3, 3 D_9	C_2, C_6, C_{18}, 3 D_3, 3 D_9	C_2, 3 C_3, 3 C_9, 3 D_3, 3 D_9
R82.57	C_2, 5 C_3, C_6, 12 C_9, 3 C_{18}, 3 D_3, 3 D_9	C_2, 5 C_3, C_6, 8 C_9, C_{18}, 3 D_3, 3 D_9	C_2, C_6, C_{18}, 3 D_3, 3 D_9	C_2, 4 C_3, 3 D_3
R82.58	C_2, 7 C_3, C_6, 6 C_9, 3 C_{18}, 5 D_3	C_2, 7 C_3, C_6, 2 C_9, C_{18}, 5 D_3	C_2, C_6, C_{18}, 5 D_3	C_2, 6 C_3, 5 D_3
R82.59	C_2, 7 C_3, C_6, 6 C_9, 3 C_{18}, 5 D_3	C_2, 7 C_3, C_6, 3 C_9, C_{18}, 5 D_3	C_2, C_6, C_{18}, 5 D_3	C_2, 5 C_3, 5 D_3
R82.60	C_2, 4 C_3, C_6, 9 C_9, 3 C_{18}, 2 D_3, 3 D_9	C_2, 4 C_3, C_6, 5 C_9, C_{18}, 2 D_3, 3 D_9	C_2, C_6, C_{18}, 2 D_3, 3 D_9	C_2, 3 C_3, 2 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R82.61	C_2, 4 C_3, C_6, 9 C_9, 3 C_{18}, 2 D_3, 3 D_9	C_2, 4 C_3, C_6, 5 C_9, C_{18}, 2 D_3, 3 D_9	C_2, C_6, C_{18}, 2 D_3, 3 D_9	C_2, 2 C_3, 3 C_9, 2 D_3, 3 D_9
R82.62	C_2, 4 C_3, C_6, 9 C_9, 3 C_{18}, 2 D_3, 3 D_9	C_2, 4 C_3, C_6, 5 C_9, C_{18}, 2 D_3, 3 D_9	C_2, C_6, C_{18}, 2 D_3, 3 D_9	C_2, 3 C_3, 3 C_9, 2 D_3, 3 D_9
R82.63	2 C_2, 3 C_3, C_4, 4 C_6, C_8, 6 C_9, C_{12}, 9 C_{18}, 2 C_{24}, 3 C_{36}, 6 C_{72}, 2 D_2, D_3, D_4, D_6	2 C_2, 3 C_3, C_4, 4 C_6, 2 C_9, 3 C_{18}, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, 3 C_6, C_{18}, 2 D_2, D_3, D_4, D_6	2 C_2, 2 C_3, 2 D_2, D_3
R82.64	C_2, 2 C_5, 2 C_{10}, 20 C_{41}, 40 C_{205}, 20 D_{41}	C_2, C_{41}, D_{41}	C_2, D_{41}	C_2, C_{41}, D_{41}
R82.65	2 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, 4 C_{12}, 2 C_{24}, 2 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	2 C_2, 3 C_3, 2 C_4, 4 C_6, 2 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_4, 4 C_6, 2 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, D_{12}	2 C_2, 3 C_3, 2 D_2, 2 D_3
R82.66	2 C_2, 5 C_3, 2 C_4, 6 C_6, C_8, 4 C_{12}, 2 C_{24}, 2 D_2, 3 D_3, D_4, 3 D_6, 2 D_{12}	2 C_2, 5 C_3, 2 C_4, 6 C_6, 2 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, D_{12}	2 C_2, 2 C_4, 6 C_6, 2 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, D_{12}	2 C_2, 5 C_3, 2 D_2, 3 D_3
R82.67	2 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, 4 C_{12}, 2 C_{24}, 2 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	2 C_2, 3 C_3, 2 C_4, 4 C_6, 2 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_4, 4 C_6, 2 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, D_{12}	2 C_2, 3 C_3, 2 D_2, 2 D_3
R82.68	2 C_2, 5 C_3, 2 C_4, 9 C_6, C_8, 6 C_{12}, 2 C_{24}, 2 D_2, D_3, D_4, D_6	2 C_2, 5 C_3, 2 C_4, 9 C_6, 4 C_{12}, 2 D_2, D_3, D_4, D_6	2 C_2, 2 C_4, 9 C_6, 4 C_{12}, 2 D_2, D_3, D_4, D_6	2 C_2, 3 C_3, 2 D_2, D_3
R82.69	2 C_2, 7 C_3, 2 C_4, 8 C_6, C_8, 15 C_{12}, 8 C_{24}, 2 D_2, 3 D_3, D_4, 3 D_6, 5 D_{12}	2 C_2, 7 C_3, 2 C_4, 8 C_6, 13 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, 5 D_{12}	2 C_2, 2 C_4, 8 C_6, 13 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, 5 D_{12}	2 C_2, 5 C_3, 2 D_2, 3 D_3
R82.70	2 C_2, 4 C_3, 2 C_4, 5 C_6, C_8, 7 C_{12}, 9 C_{24}, 2 D_2, 2 D_3, D_4, 2 D_6, 3 D_{12}	2 C_2, 4 C_3, 2 C_4, 5 C_6, 5 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, 3 D_{12}	2 C_2, 2 C_4, 5 C_6, 5 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, 3 D_{12}	2 C_2, 2 C_3, 2 D_2, 2 D_3
R82.71	2 C_2, 4 C_3, 2 C_4, 5 C_6, C_8, 7 C_{12}, 2 C_{24}, 2 D_2, 3 D_3, D_4, 3 D_6, 5 D_{12}	2 C_2, 4 C_3, 2 C_4, 5 C_6, 5 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, 4 D_{12}	2 C_2, 2 C_4, 5 C_6, 5 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, 4 D_{12}	2 C_2, 4 C_3, 2 D_2, 3 D_3
R82.72	2 C_2, 4 C_3, 2 C_4, 5 C_6, C_8, 9 C_{12}, 2 C_{24}, 2 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	2 C_2, 4 C_3, 2 C_4, 5 C_6, 7 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	2 C_2, 2 C_4, 5 C_6, 7 C_{12}, 2 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	2 C_2, 2 C_3, 2 D_2, 2 D_3
R82.73	C_2, 3 C_3, C_6, 3 C_7, 6 C_9, 3 C_{18}, 15 C_{21}, 27 C_{63}, D_3, 3 D_7, 6 D_{21}	C_2, 3 C_3, C_6, C_7, 2 C_9, C_{18}, 4 C_{21}, D_3, D_7, 2 D_{21}	C_2, C_6, C_{18}, D_3, D_7, 2 D_{21}	C_2, 2 C_3, C_7, D_3, D_7
R82.74	C_2, 4 C_3, C_6, 3 C_7, 3 C_{14}, 18 C_{21}, 6 C_{42}, 2 D_3	C_2, 4 C_3, C_6, 2 D_3	C_2, C_6, 2 D_3	C_2, 2 C_3, 2 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R82.75	3 C_2, 3 C_3, C_4, 2 C_5, 8 C_6, 6 C_{10}, C_{12}, 10 C_{15}, 2 C_{20}, 30 C_{30}, 4 C_{60}, 4 D_2, D_3, D_4, D_6	3 C_2, 3 C_3, C_4, 8 C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_4, 6 C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, 4 D_2, D_3
R82.76	3 C_2, 3 C_3, C_4, 2 C_5, 5 C_6, 6 C_{10}, 5 C_{12}, 10 C_{15}, 2 C_{20}, 18 C_{30}, 16 C_{60}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, 3 C_3, C_4, 5 C_6, 4 C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, 4 C_6, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, C_3, C_4, 4 D_2, 2 D_3, D_4
R82.77	3 C_2, 3 C_3, C_4, 2 C_5, 4 C_6, 6 C_{10}, 2 C_{12}, 6 C_{15}, 2 C_{20}, 10 C_{30}, 4 C_{60}, 4 D_2, 4 D_3, D_4, 4 D_6, 2 D_{12}	3 C_2, 3 C_3, C_4, 4 C_6, C_{12}, 4 D_2, 4 D_3, D_4, 4 D_6, D_{12}	3 C_2, C_4, 2 C_6, 4 D_2, 4 D_3, D_4, 4 D_6, D_{12}	3 C_2, 3 C_3, C_6, 4 D_2, 4 D_3, 2 D_6
R82.78	C_2, 3 C_3, C_6, 9 C_{19}, 9 C_{38}, 45 C_{57}, 18 C_{114}, D_3	C_2, 3 C_3, C_6, D_3	C_2, C_6, D_3	C_2, C_3, D_3
R82.79	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_7, C_8, 2 C_{12}, 6 C_{14}, 6 C_{21}, 2 C_{24}, 6 C_{28}, 12 C_{42}, 6 C_{56}, 12 C_{84}, 12 C_{168}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, 2 C_6, 2 D_2, D_4	2 C_2, 2 C_4, C_6, 2 D_2, D_4	2 C_2, 2 D_2
R82.80	C_2, C_3, 2 C_5, C_6, 2 C_{10}, 5 C_{11}, 4 C_{15}, 5 C_{22}, 4 C_{30}, 10 C_{33}, 20 C_{55}, 10 C_{66}, 20 C_{110}, 40 C_{165}, 40 C_{330}	C_2, C_3, C_6	C_2, C_6	C_2
R82.81	3 C_2, 41 C_{83}, 123 C_{166}, 3 D_2	3 C_2, C_{83}, 3 C_{166}, 3 D_2	3 C_2, C_{166}, 3 D_2	3 C_2, C_{83}, 3 D_2
R82.82	C_2, C_4, 2 C_8, 20 C_{41}, 20 C_{82}, 40 C_{164}, 80 C_{328}	C_2, C_4, C_{41}, C_{82}, C_{164}	C_2, C_4, C_{82}, C_{164}	C_2, C_{41}
Genus 83				
R83.1	5 C_2, C_3, 3 C_4, 3 C_6, 3 C_7, 2 C_8, 4 C_{12}, 9 C_{14}, 6 C_{21}, 4 C_{24}, 12 C_{28}, 18 C_{42}, 12 C_{56}, 24 C_{84}, 24 C_{168}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_7, 6 D_{12}, 12 D_{14}, 12 D_{21}, 18 D_{28}, 24 D_{42}, 36 D_{84}	5 C_2, C_3, 3 C_4, 3 C_6, C_7, C_8, 3 C_{12}, 3 C_{14}, C_{21}, C_{24}, 3 C_{28}, 3 C_{42}, C_{56}, 3 C_{84}, C_{168}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 2 D_7, 5 D_{12}, 4 D_{14}, 2 D_{21}, 5 D_{28}, 4 D_{42}, 5 D_{84}	3 C_2, 2 C_4, C_6, C_{14}, C_{42}, 13 D_2, D_3, 3 D_4, 3 D_6, D_7, 3 D_{12}, 3 D_{14}, D_{21}, 3 D_{28}, 3 D_{42}, 3 D_{84}	5 C_2, C_3, C_4, C_6, C_7, C_{12}, C_{14}, C_{21}, C_{28}, C_{42}, C_{84}, 13 D_2, 2 D_3, D_4, 2 D_6, 2 D_7, D_{12}, 2 D_{14}, 2 D_{21}, D_{28}, 2 D_{42}, D_{84}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R83.2	3 C_2, C_3, 5 C_4, 2 C_6, 3 C_7, C_8, 2 C_{12}, 6 C_{14}, 6 C_{21}, 2 C_{24}, 6 C_{28}, 12 C_{42}, 6 C_{56}, 12 C_{84}, 12 C_{168}, 4 D_2, D_3, 2 D_4, D_6, 3 D_7, D_{12}, 3 D_{14}, 6 D_{21}, 3 D_{28}, 6 D_{42}, 6 D_{84}	3 C_2, C_3, 5 C_4, 2 C_6, C_7, C_{12}, 2 C_{14}, C_{21}, C_{28}, 2 C_{42}, C_{84}, 4 D_2, D_3, 2 D_4, D_6, D_7, D_{12}, D_{14}, D_{21}, D_{28}, D_{42}, D_{84}	3 C_2, 4 C_4, C_6, C_{14}, C_{42}, 4 D_2, D_3, 2 D_4, D_6, D_7, D_{12}, D_{14}, D_{21}, D_{28}, D_{42}, D_{84}	3 C_2, C_3, C_6, C_7, C_{14}, C_{21}, C_{42}, 4 D_2, D_3, D_6, D_7, D_{14}, D_{21}, D_{42}
R83.3	3 C_2, 2 C_4, 41 C_{83}, 41 C_{166}, 41 C_{332}, 3 D_2, 82 D_{83}, 41 D_{166}	3 C_2, 2 C_4, C_{83}, C_{166}, 3 D_2, 2 D_{83}, D_{166}	2 C_2, 2 C_4, C_{166}, 3 D_2, D_{83}, D_{166}	3 C_2, C_{83}, 3 D_2, D_{83}
R83.4	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, 5 C_{11}, 10 C_{22}, 5 C_{33}, 5 C_{44}, 16 D_2, 2 D_3, 4 D_4, D_6, 15 D_{11}, 25 D_{22}, 5 D_{33}, 5 D_{44}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, C_{11}, 2 C_{22}, C_{33}, 16 D_2, 2 D_3, 4 D_4, D_6, 3 D_{11}, 5 D_{22}, D_{33}	**Tet**, **Oct**, 3 C_2, C_4, C_6, 16 D_2, D_3, 4 D_4, D_6, 2 D_{11}, 4 D_{22}, D_{33}	**Tet**, 5 C_2, C_3, C_4, C_{11}, 16 D_2, D_3, 2 D_4, 3 D_{11}
R83.5	C_2, C_3, C_6, 41 C_{83}, 41 C_{249}, 41 D_{83}	C_2, C_3, C_6, C_{83}, D_{83}	C_2, C_6, D_{83}	C_2, C_{83}, D_{83}
R83.6	3 C_2, C_3, 3 C_4, 2 C_5, 2 C_6, 2 C_8, 4 C_{10}, 4 C_{15}, 4 C_{20}, 8 C_{30}, 4 D_2, D_3, 2 D_4, 2 D_5, D_6, 2 D_{10}, 4 D_{15}, 2 D_{20}, 4 D_{30}	3 C_2, C_3, 3 C_4, C_5, 2 C_6, C_8, 2 C_{10}, C_{15}, 2 C_{20}, 2 C_{30}, 4 D_2, D_3, 2 D_4, D_5, D_6, D_{10}, D_{15}, D_{20}, D_{30}	3 C_2, 3 C_4, 2 C_6, C_8, C_{10}, 2 C_{20}, C_{30}, 4 D_2, D_3, 2 D_4, D_5, D_6, D_{10}, D_{15}, D_{20}, D_{30}	3 C_2, C_3, C_5, 4 D_2, D_3, D_5
R83.7	5 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 2 C_8, 6 C_{10}, 4 C_{15}, 4 C_{20}, 12 C_{30}, 13 D_2, 2 D_3, 3 D_4, 4 D_5, 4 D_6, 8 D_{10}, 8 D_{15}, 8 D_{20}, 16 D_{30}	5 C_2, C_3, 2 C_4, C_5, 3 C_6, C_8, 3 C_{10}, C_{15}, 2 C_{20}, 3 C_{30}, 13 D_2, 2 D_3, 3 D_4, 2 D_5, 4 D_6, 4 D_{10}, 2 D_{15}, 4 D_{20}, 4 D_{30}	3 C_2, 2 C_4, 2 C_6, C_8, C_{10}, 2 C_{20}, C_{30}, 13 D_2, D_3, 3 D_4, D_5, 4 D_6, 4 D_{10}, D_{15}, 4 D_{20}, 4 D_{30}	5 C_2, C_3, C_5, C_{10}, 13 D_2, 2 D_3, 2 D_5, D_{10}
R83.8	4 C_2, 2 C_4, 3 C_7, 4 C_8, 6 C_{14}, 2 C_{16}, 9 C_{28}, 18 C_{56}, 12 C_{112}, 9 D_2, 3 D_4, 6 D_7, 4 D_8, 9 D_{14}, 15 D_{28}, 24 D_{56}	4 C_2, 2 C_4, C_7, 2 C_8, 2 C_{14}, 2 C_{28}, 2 C_{56}, 9 D_2, 3 D_4, 2 D_7, 3 D_8, 3 D_{14}, 3 D_{28}, 3 D_{56}	2 C_2, 2 C_4, 2 C_8, C_{14}, C_{28}, 2 C_{56}, 9 D_2, 3 D_4, D_7, 3 D_8, 3 D_{14}, 3 D_{28}, 3 D_{56}	4 C_2, C_7, 9 D_2, 2 D_7
R83.9	3 C_2, 3 C_4, 3 C_7, 4 C_8, 6 C_{14}, 4 C_{16}, 9 C_{28}, 18 C_{56}, 24 C_{112}, 4 D_2, 2 D_4, 3 D_7, 2 D_8, 3 D_{14}, 6 D_{28}, 12 D_{56}	3 C_2, 3 C_4, C_7, 2 C_8, 2 C_{14}, 2 C_{28}, 2 C_{56}, 4 D_2, 2 D_4, D_7, 2 D_8, D_{14}, D_{28}, 2 D_{56}	2 C_2, 3 C_4, 2 C_8, C_{14}, C_{28}, 2 C_{56}, 4 D_2, 2 D_4, D_7, 2 D_8, D_{14}, D_{28}, 2 D_{56}	3 C_2, C_7, 4 D_2, D_7
R83.10	3 C_2, C_3, 2 C_4, C_6, C_{12}, 8 C_{17}, 8 C_{34}, 8 C_{51}, 8 C_{68}, 8 C_{102}, 3 D_2, 2 D_3, D_6, 16 D_{17}, 8 D_{34}, 16 D_{51}, 8 D_{102}	3 C_2, C_3, 2 C_4, C_6, C_{17}, C_{34}, C_{51}, C_{102}, 3 D_2, 2 D_3, D_6, 2 D_{17}, D_{34}, 2 D_{51}, D_{102}	2 C_2, 2 C_4, C_6, C_{34}, 3 D_2, D_3, D_6, D_{17}, D_{34}, D_{51}, D_{102}	3 C_2, C_3, C_{17}, 3 D_2, D_3, D_{17}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R83.11	4 C_2, C_3, 2 C_4, 2 C_6, 4 C_8, 3 C_{12}, 6 C_{16}, 6 C_{24}, 4 C_{32}, 8 C_{48}, 9 D_2, 2 D_3, 3 D_4, 3 D_6, 5 D_8, 4 D_{12}, 8 D_{16}, 6 D_{24}, 12 D_{48}	4 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 2 C_{12}, 2 C_{16}, 3 C_{24}, 3 C_{48}, 9 D_2, 2 D_3, 3 D_4, 3 D_6, 3 D_8, 3 D_{12}, 3 D_{16}, 4 D_{24}, 5 D_{48}	2 C_2, 2 C_4, C_6, 2 C_8, C_{12}, 2 C_{16}, 9 D_2, D_3, 3 D_4, 3 D_6, 3 D_8, 2 D_{12}, 3 D_{16}, 3 D_{24}, 3 D_{48}	4 C_2, C_3, 9 D_2, 2 D_3
R83.12	3 C_2, C_3, 3 C_4, 2 C_6, 4 C_8, 2 C_{12}, 6 C_{16}, 5 C_{24}, 8 C_{32}, 6 C_{48}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 4 D_{16}, 2 D_{24}, 4 D_{48}	3 C_2, C_3, 3 C_4, 2 C_6, 2 C_8, C_{12}, 2 C_{16}, 2 C_{24}, 2 C_{48}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, 2 D_{16}, D_{24}, 2 D_{48}	2 C_2, 3 C_4, C_6, 2 C_8, 2 C_{16}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, 2 D_{16}, D_{24}, 2 D_{48}	3 C_2, C_3, 4 D_2, D_3
R83.13	5 C_2, 3 C_4, 2 C_8, 5 C_{11}, 25 C_{22}, 20 C_{44}, 20 C_{88}, 13 D_2, 3 D_4	5 C_2, 3 C_4, C_8, 13 D_2, 3 D_4	3 C_2, 2 C_4, 13 D_2, 3 D_4	5 C_2, C_4, 13 D_2, D_4
R83.14	3 C_2, 5 C_4, C_8, 5 C_{11}, 15 C_{22}, 40 C_{44}, 10 C_{88}, 4 D_2, 2 D_4	3 C_2, 5 C_4, 4 D_2, 2 D_4	3 C_2, 3 C_4, 4 D_2, 2 D_4	3 C_2, 4 D_2
R83.15	C_2, 83 C_{167}, 83 C_{334}	C_2	C_2	C_2
R83.16	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_7, 2 C_8, 3 C_{12}, 6 C_{14}, 6 C_{21}, 4 C_{24}, 9 C_{28}, 12 C_{42}, 12 C_{56}, 18 C_{84}, 24 C_{168}, 2 D_2	2 C_2, C_3, 2 C_4, 2 C_6, C_7, C_{12}, 2 C_{14}, C_{21}, C_{28}, 2 C_{42}, C_{84}, 2 D_2	2 C_2, C_4, C_6, C_{14}, C_{42}, 2 D_2	2 C_2, C_3, C_6, C_7, C_{14}, C_{21}, C_{42}, 2 D_2
R83.17	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_7, 4 C_8, 4 C_{12}, 9 C_{14}, 6 C_{21}, 8 C_{24}, 12 C_{28}, 18 C_{42}, 24 C_{56}, 24 C_{84}, 48 C_{168}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, C_7, 2 C_8, 3 C_{12}, 3 C_{14}, C_{21}, 2 C_{24}, 3 C_{28}, 3 C_{42}, 2 C_{56}, 3 C_{84}, 2 C_{168}, 3 D_2	2 C_2, C_4, C_6, C_{14}, C_{42}, 3 D_2	3 C_2, C_3, C_4, C_6, C_7, C_{12}, C_{14}, C_{21}, C_{28}, C_{42}, C_{84}, 3 D_2
R83.18	C_2, C_4, 41 C_{83}, 41 C_{166}, 82 C_{332}	C_2, C_4, C_{83}, C_{166}	C_2, C_4, C_{166}	C_2, C_{83}
Genus 84				
R84.1	**Tet**, **Oct**, 2 C_2, C_3, C_4, 14 C_{29}, 14 C_{58}, 28 C_{87}, 3 D_2, D_3, D_4, 14 D_{29}, 14 D_{58}, 28 D_{87}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_{29}, C_{58}, C_{87}, 3 D_2, D_3, D_4, D_{29}, D_{58}, D_{87}	**Tet**, **Oct**, 2 C_2, C_4, C_{58}, 3 D_2, D_3, D_4, D_{29}, D_{58}, D_{87}	**Tet**, 2 C_2, C_3, C_{29}, 3 D_2, D_3, D_{29}
R84.2	3 C_2, C_4, 2 C_5, 4 C_{10}, 8 C_{17}, 16 C_{34}, 32 C_{85}, 64 C_{170}, 4 D_2, D_4, 2 D_5, 2 D_{10}, 8 D_{17}, 8 D_{34}, 32 D_{85}, 32 D_{170}	3 C_2, C_4, C_5, 2 C_{10}, C_{17}, 2 C_{34}, C_{85}, 2 C_{170}, 4 D_2, D_4, D_5, D_{10}, D_{17}, D_{34}, D_{85}, D_{170}	3 C_2, C_4, C_{10}, C_{34}, C_{170}, 4 D_2, D_4, D_5, D_{10}, D_{17}, D_{34}, D_{85}, D_{170}	3 C_2, C_5, C_{17}, C_{85}, 4 D_2, D_5, D_{17}, D_{85}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R84.3	2 C_2, C_3, 2 C_4, C_6, 3 C_7, 2 C_8, 2 C_{12}, 3 C_{14}, 2 C_{16}, 6 C_{21}, 4 C_{24}, 6 C_{28}, 6 C_{42}, 4 C_{48}, 12 C_{56}, 12 C_{84}, 12 C_{112}, 24 C_{168}, 24 C_{336}, 2 D_2, D_3, D_4, D_6, 3 D_7, 2 D_8, 2 D_{12}, 3 D_{14}, 6 D_{21}, 4 D_{24}, 6 D_{28}, 6 D_{42}, 12 D_{56}, 12 D_{84}, 24 D_{168}	2 C_2, C_3, 2 C_4, C_6, C_7, C_8, C_{12}, C_{14}, C_{21}, C_{24}, C_{28}, C_{42}, C_{56}, C_{84}, C_{168}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{12}, D_{14}, D_{21}, D_{24}, D_{28}, D_{42}, D_{56}, D_{84}, D_{168}	2 C_2, 2 C_4, C_6, C_8, C_{12}, C_{14}, C_{24}, C_{28}, C_{42}, C_{56}, C_{84}, C_{168}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{12}, D_{14}, D_{21}, D_{24}, D_{28}, D_{42}, D_{56}, D_{84}, D_{168}	2 C_2, C_3, C_7, C_{21}, 2 D_2, D_3, D_7, D_{21}
R84.4	3 C_2, C_3, C_6, 21 C_{43}, 21 C_{86}, 21 C_{129}, 3 D_2, 2 D_3, D_6, 42 D_{43}, 21 D_{86}, 21 D_{129}	3 C_2, C_3, C_6, C_{43}, C_{86}, C_{129}, 3 D_2, 2 D_3, D_6, 2 D_{43}, D_{86}, D_{129}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_{43}, D_{86}, D_{129}	3 C_2, C_3, C_{43}, 3 D_2, 2 D_3, 2 D_{43}
R84.5	3 C_2, C_4, 2 C_8, 14 C_{29}, 28 C_{58}, 14 C_{116}, 4 D_2, 2 D_4, 2 D_8, 14 D_{29}, 14 D_{58}, 14 D_{116}	3 C_2, C_4, C_8, C_{29}, 2 C_{58}, C_{116}, 4 D_2, 2 D_4, D_8, D_{29}, D_{58}, D_{116}	3 C_2, C_{58}, 4 D_2, 2 D_4, D_8, D_{29}, D_{58}, D_{116}	3 C_2, C_4, C_{29}, 4 D_2, 2 D_4, D_{29}
R84.6	3 C_2, C_4, 2 C_5, 4 C_{10}, 5 C_{11}, 5 C_{22}, 10 C_{44}, 10 C_{55}, 10 C_{110}, 4 D_2, D_4, 2 D_5, 2 D_{10}, 10 D_{11}, 10 D_{22}, 10 D_{44}, 10 D_{55}, 10 D_{110}	3 C_2, C_4, C_5, 2 C_{10}, C_{11}, C_{22}, C_{44}, C_{55}, C_{110}, 4 D_2, D_4, D_5, D_{10}, 2 D_{11}, 2 D_{22}, D_{44}, D_{55}, D_{110}	3 C_2, C_4, C_{10}, 4 D_2, D_4, D_5, D_{10}, 2 D_{11}, 2 D_{22}, D_{44}, D_{55}, D_{110}	3 C_2, C_5, C_{11}, C_{22}, 4 D_2, D_5, 2 D_{11}, 2 D_{22}
R84.7	3 C_2, C_3, 2 C_5, C_6, 3 C_7, 6 C_{10}, 3 C_{14}, 2 C_{15}, 6 C_{21}, 2 C_{30}, 6 C_{35}, 6 C_{42}, 6 C_{70}, 12 C_{105}, 12 C_{210}, 3 D_2, 2 D_3, D_6, 6 D_7, 3 D_{14}, 12 D_{21}, 6 D_{42}	3 C_2, C_3, C_5, C_6, C_7, 3 C_{10}, C_{14}, C_{21}, C_{42}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 2 D_{21}, D_{42}	3 C_2, C_{10}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 2 D_{21}, D_{42}	3 C_2, C_3, C_6, C_7, C_{14}, C_{21}, C_{42}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 2 D_{21}, D_{42}
R84.8	3 C_2, C_3, C_4, 3 C_6, C_{12}, 8 C_{17}, 16 C_{34}, 8 C_{51}, 24 C_{102}, 4 D_2, D_4, 8 D_{17}, 8 D_{34}	3 C_2, C_3, C_4, 3 C_6, C_{17}, 2 C_{34}, 4 D_2, D_4, D_{17}, D_{34}	3 C_2, C_4, C_6, C_{34}, 4 D_2, D_4, D_{17}, D_{34}	3 C_2, C_{17}, 4 D_2, D_{17}
R84.9	3 C_2, C_3, 2 C_5, C_6, 3 C_7, 2 C_{10}, 3 C_{14}, 4 C_{15}, 3 C_{21}, 4 C_{30}, 6 C_{35}, 12 C_{105}, 3 D_2, 2 D_3, 4 D_5, D_6, 6 D_7, 2 D_{10}, 3 D_{14}, 8 D_{15}, 3 D_{21}, 4 D_{30}, 6 D_{35}, 12 D_{105}	3 C_2, C_3, C_5, C_6, C_7, C_{10}, C_{14}, C_{15}, C_{21}, C_{30}, C_{35}, C_{105}, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_7, D_{10}, D_{14}, 2 D_{15}, D_{21}, D_{30}, D_{35}, D_{105}	3 C_2, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_7, D_{10}, D_{14}, 2 D_{15}, D_{21}, D_{30}, D_{35}, D_{105}	3 C_2, C_3, C_5, C_7, C_{15}, 3 D_2, 2 D_3, 2 D_5, 2 D_7, 2 D_{15}
R84.10	3 C_2, C_4, 2 C_8, 6 C_{13}, 4 C_{16}, 12 C_{26}, 6 C_{52}, 12 C_{104}, 4 D_2, 2 D_4, 4 D_8, 6 D_{13}, 4 D_{16}, 6 D_{26}, 6 D_{52}, 12 D_{104}	3 C_2, C_4, C_8, C_{13}, C_{16}, 2 C_{26}, C_{52}, C_{104}, 4 D_2, 2 D_4, 2 D_8, D_{13}, D_{16}, D_{26}, D_{52}, D_{104}	3 C_2, C_{26}, 4 D_2, 2 D_4, 2 D_8, D_{13}, D_{16}, D_{26}, D_{52}, D_{104}	3 C_2, C_4, C_8, C_{13}, 4 D_2, 2 D_4, 2 D_8, D_{13}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R84.11	3 C_2, 3 C_7, 6 C_{13}, 3 C_{14}, 18 C_{26}, 18 C_{91}, 18 C_{182}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}	3 C_2, 3 D_2, 2 D_7, D_{14}	3 C_2, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}
R84.12	3 C_2, C_3, C_4, 2 C_5, 3 C_6, 3 C_9, 4 C_{10}, C_{12}, 2 C_{15}, 9 C_{18}, 6 C_{30}, 3 C_{36}, 6 C_{45}, 18 C_{90}, 4 D_2, D_4, 2 D_5, 2 D_{10}	3 C_2, C_3, C_4, C_5, 3 C_6, 2 C_{10}, 4 D_2, D_4, D_5, D_{10}	3 C_2, C_4, C_6, C_{10}, 4 D_2, D_4, D_5, D_{10}	3 C_2, C_5, 4 D_2, D_5
R84.13	2 C_2, 2 C_4, 2 C_8, 5 C_{11}, 2 C_{16}, 10 C_{22}, 10 C_{44}, 10 C_{88}, 20 C_{176}, 2 D_2, D_4, 2 D_8	2 C_2, 2 C_4, C_8, 2 D_2, D_4, D_8	2 C_2, 2 C_4, C_8, 2 D_2, D_4, D_8	2 C_2, 2 D_2
R84.14	C_2, 2 C_5, 3 C_7, 2 C_{10}, 10 C_{25}, 6 C_{35}, 10 C_{50}, 30 C_{175}, 3 D_7	C_2, C_5, C_7, C_{10}, D_7	C_2, C_{10}, D_7	C_2, C_7, D_7
R84.15	3 C_2, C_3, C_6, 14 C_{29}, 42 C_{58}, 14 C_{87}, 14 C_{174}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6	3 C_2, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6
R84.16	3 C_2, C_4, 21 C_{43}, 63 C_{86}, 21 C_{172}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R84.17	**Tet**, C_2, C_3, 14 C_{29}, 14 C_{58}, 28 C_{87}, D_2	**Tet**, C_2, C_3, C_{29}, C_{58}, C_{87}, D_2	**Tet**, C_2, C_{58}, D_2	**Tet**, C_2, C_3, C_{29}, D_2
R84.18	C_2, 6 C_{13}, 6 C_{26}, 78 C_{169}, 78 C_{338}	C_2	C_2	C_2
R84.19	3 C_2, 2 C_5, 6 C_{10}, 8 C_{17}, 24 C_{34}, 32 C_{85}, 96 C_{170}, 3 D_2	3 C_2, C_5, 3 C_{10}, C_{17}, 3 C_{34}, C_{85}, 3 C_{170}, 3 D_2	3 C_2, C_{10}, C_{34}, C_{170}, 3 D_2	3 C_2, C_5, C_{17}, C_{85}, 3 D_2
R84.20	C_2, C_3, C_4, C_6, 3 C_7, 2 C_8, 2 C_{12}, 3 C_{14}, 4 C_{16}, 6 C_{21}, 4 C_{24}, 6 C_{28}, 6 C_{42}, 8 C_{48}, 12 C_{56}, 12 C_{84}, 24 C_{112}, 24 C_{168}, 48 C_{336}	C_2, C_3, C_4, C_6, C_7, C_8, C_{12}, C_{14}, C_{21}, C_{24}, C_{28}, C_{42}, C_{56}, C_{84}, C_{168}	C_2, C_4, C_6, C_8, C_{12}, C_{14}, C_{24}, C_{28}, C_{42}, C_{56}, C_{84}, C_{168}	C_2, C_3, C_7, C_{21}
Genus 85				
R85.1	5 **Tet**, 4 **Oct**, 4 C_2, 3 C_3, 3 C_4, 3 C_6, C_7, 4 C_8, 2 C_{12}, C_{14}, 2 C_{21}, 16 D_2, 5 D_3, 9 D_4, 6 D_6, D_7, 8 D_8, 2 D_{12}, D_{14}, 2 D_{21}	5 **Tet**, 4 **Oct**, 4 C_2, 3 C_3, 3 C_4, 3 C_6, C_7, 3 C_8, 2 C_{12}, C_{14}, 2 C_{21}, 16 D_2, 5 D_3, 9 D_4, 6 D_6, D_7, 6 D_8, 2 D_{12}, D_{14}, 2 D_{21}	2 **Tet**, 4 **Oct**, 2 C_2, 2 C_4, 2 C_6, 3 C_8, C_{12}, 12 D_2, 4 D_3, 9 D_4, 5 D_6, D_7, 6 D_8, 2 D_{12}, D_{14}, 2 D_{21}	5 **Tet**, **Oct**, 4 C_2, 3 C_3, C_4, C_6, C_7, C_{12}, C_{14}, 2 C_{21}, 16 D_2, 5 D_3, 2 D_4, 3 D_6, D_7, D_{12}, D_{14}, 2 D_{21}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R85.2	5 **Tet**, 4 **Oct**, 4 C_2, 3 C_3, 3 C_4, 3 C_6, C_7, 4 C_8, 2 C_{12}, C_{14}, C_{21}, 16 D_2, 5 D_3, 8 D_4, 6 D_6, D_7, 6 D_8, 2 D_{12}, D_{14}, D_{21}	5 **Tet**, 4 **Oct**, 4 C_2, 3 C_3, 3 C_4, 3 C_6, C_7, 3 C_8, 2 C_{12}, C_{14}, C_{21}, 16 D_2, 5 D_3, 8 D_4, 6 D_6, D_7, 5 D_8, 2 D_{12}, D_{14}, D_{21}	2 **Tet**, 4 **Oct**, 2 C_2, 2 C_4, 2 C_6, 3 C_8, C_{12}, 12 D_2, 4 D_3, 8 D_4, 5 D_6, D_7, 5 D_8, 2 D_{12}, D_{14}, D_{21}	5 **Tet**, **Oct**, 4 C_2, 3 C_3, C_4, C_6, C_7, C_{12}, C_{14}, C_{21}, 16 D_2, 5 D_3, 2 D_4, 3 D_6, D_7, D_{12}, D_{14}, D_{21}
R85.3	5 **Tet**, 3 **Oct**, 2 **Ico**, 5 C_2, 3 C_3, 2 C_4, 2 C_5, 3 C_6, 4 C_{10}, C_{12}, 2 C_{15}, 2 C_{20}, 27 D_2, 6 D_3, 6 D_4, 6 D_5, 7 D_6, 10 D_{10}, D_{12}, 2 D_{15}, 2 D_{20}	5 **Tet**, 3 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 3 C_6, 2 C_{10}, C_{12}, C_{15}, 27 D_2, 6 D_3, 6 D_4, 3 D_5, 7 D_6, 5 D_{10}, D_{12}, D_{15}	2 **Tet**, 2 **Oct**, 2 C_2, C_4, C_6, C_{10}, 22 D_2, 3 D_3, 6 D_4, D_5, 7 D_6, 5 D_{10}, D_{12}, D_{15}	5 **Tet**, **Oct**, **Ico**, 5 C_2, 3 C_3, C_4, C_5, 2 C_6, 27 D_2, 6 D_3, 2 D_4, 3 D_5, 4 D_6
R85.4	2 **Tet**, **Oct**, 2 C_2, 3 C_3, 3 C_4, 2 C_6, 7 C_8, 4 C_{12}, 2 C_{16}, 12 C_{24}, 4 C_{48}, 3 D_2, D_3, 2 D_4, 2 D_8	2 **Tet**, **Oct**, 2 C_2, 3 C_3, 3 C_4, 2 C_6, 6 C_8, 3 C_{12}, 7 C_{24}, 3 D_2, D_3, 2 D_4, 2 D_8	2 **Tet**, **Oct**, 2 C_2, 2 C_4, C_6, 3 C_8, 3 D_2, D_3, 2 D_4, 2 D_8	**Tet**, 2 C_2, C_3, 3 D_2, D_3
R85.5	2 **Tet**, **Oct**, 3 C_2, 3 C_3, 3 C_4, 5 C_6, 2 C_8, 7 C_{12}, 2 C_{16}, 3 C_{24}, 4 C_{48}, 9 D_2, D_3, 3 D_4, D_6, 2 D_8, 2 D_{12}	2 **Tet**, **Oct**, 3 C_2, 3 C_3, 3 C_4, 5 C_6, C_8, 6 C_{12}, 9 D_2, D_3, 3 D_4, D_6, 2 D_8, 2 D_{12}	**Oct**, 2 C_2, 2 C_4, 3 C_6, C_8, 4 C_{12}, 8 D_2, D_3, 3 D_4, D_6, 2 D_8, 2 D_{12}	**Tet**, **Oct**, 3 C_2, C_3, C_4, 9 D_2, D_3, D_4
R85.6	2 **Tet**, 3 **Oct**, 5 C_2, 3 C_3, 2 C_4, 6 C_6, C_7, 4 C_8, C_{12}, C_{14}, C_{21}, 2 C_{24}, 16 D_2, 9 D_3, 6 D_4, 12 D_6, 2 D_7, 8 D_8, 2 D_{12}, D_{14}, D_{21}, 2 D_{24}	2 **Tet**, 3 **Oct**, 5 C_2, 3 C_3, 2 C_4, 6 C_6, C_7, 4 C_8, C_{12}, C_{14}, C_{21}, 2 C_{24}, 16 D_2, 9 D_3, 6 D_4, 12 D_6, 2 D_7, 8 D_8, 2 D_{12}, D_{14}, D_{21}, 2 D_{24}	2 **Tet**, 3 **Oct**, 3 C_2, 2 C_4, 5 C_6, 4 C_8, C_{12}, 2 C_{24}, 16 D_2, 5 D_3, 6 D_4, 12 D_6, 2 D_7, 8 D_8, 2 D_{12}, D_{14}, D_{21}, 2 D_{24}	2 **Tet**, 5 C_2, 3 C_3, C_6, C_7, C_{14}, C_{21}, 16 D_2, 8 D_3, 2 D_6, 2 D_7, D_{14}, D_{21}
R85.7	**Tet**, 3 **Oct**, 6 C_2, C_3, 4 C_4, 3 C_6, C_7, 4 C_8, C_{12}, 2 C_{14}, 26 D_2, 4 D_3, 11 D_4, 7 D_6, D_7, 6 D_8, D_{12}, D_{14}	**Tet**, 3 **Oct**, 6 C_2, C_3, 4 C_4, 3 C_6, C_7, 3 C_8, C_{12}, 2 C_{14}, 26 D_2, 4 D_3, 11 D_4, 7 D_6, D_7, 5 D_8, D_{12}, D_{14}	**Tet**, 3 **Oct**, 2 C_2, 3 C_4, C_6, 3 C_8, 17 D_2, 2 D_3, 11 D_4, 5 D_6, D_7, 5 D_8, D_{12}, D_{14}	**Tet**, 6 C_2, C_3, C_4, 2 C_6, C_7, C_{12}, 2 C_{14}, 26 D_2, 4 D_3, 2 D_4, 5 D_6, D_7, D_{12}, D_{14}
R85.8	**Tet**, 2 **Oct**, 5 C_2, C_3, 5 C_4, 3 C_6, C_7, 4 C_8, C_{12}, C_{14}, 2 C_{28}, 18 D_2, 4 D_3, 11 D_4, 7 D_6, 2 D_7, 8 D_8, D_{12}, 2 D_{14}, 2 D_{28}	**Tet**, 2 **Oct**, 5 C_2, C_3, 5 C_4, 3 C_6, C_7, 3 C_8, C_{12}, C_{14}, 2 C_{28}, 18 D_2, 4 D_3, 11 D_4, 7 D_6, 2 D_7, 6 D_8, D_{12}, 2 D_{14}, 2 D_{28}	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, C_6, 16 D_2, 3 D_3, 10 D_4, 6 D_6, D_7, 6 D_8, D_{12}, D_{14}, 2 D_{28}	**Tet**, **Oct**, 5 C_2, C_3, 3 C_4, 2 C_6, C_7, C_{12}, C_{14}, 2 C_{28}, 18 D_2, 4 D_3, 6 D_4, 5 D_6, 2 D_7, D_{12}, 2 D_{14}, 2 D_{28}

	Mapping	Immersion		Embedding
	necessary and sufficient	necessary	sufficient	necessary
R85.9	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, 3 C_6, C_7, 6 C_8, 2 C_{12}, C_{14}, C_{28}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, 3 C_6, C_7, 5 C_8, 2 C_{12}, C_{14}, C_{28}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, C_6, 4 C_8, 16 D_2, 3 D_3, 6 D_4, 6 D_6, D_7, 8 D_8, D_{14}	**Tet**, **Oct**, 5 C_2, C_3, 4 C_4, 2 C_6, C_7, 2 C_{12}, C_{14}, C_{28}, 16 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_7, D_{14}
R85.10	**Tet**, 2 **Oct**, 5 C_2, C_3, 5 C_4, 3 C_6, C_7, 4 C_8, C_{12}, C_{14}, C_{28}, 18 D_2, 4 D_3, 10 D_4, 7 D_6, 2 D_7, 8 D_8, D_{12}, 2 D_{14}, D_{28}	**Tet**, 2 **Oct**, 5 C_2, C_3, 5 C_4, 3 C_6, C_7, 3 C_8, C_{12}, C_{14}, C_{28}, 18 D_2, 4 D_3, 10 D_4, 7 D_6, 2 D_7, 6 D_8, D_{12}, 2 D_{14}, D_{28}	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, C_6, 16 D_2, 3 D_3, 9 D_4, 6 D_6, D_7, 6 D_8, D_{12}, D_{14}, D_{28}	**Tet**, **Oct**, 5 C_2, C_3, 3 C_4, 2 C_6, C_7, C_{12}, C_{14}, C_{28}, 18 D_2, 4 D_3, 6 D_4, 5 D_6, 2 D_7, D_{12}, 2 D_{14}, D_{28}
R85.11	**Tet**, 4 **Oct**, 6 C_2, C_3, 4 C_4, 3 C_6, C_7, 4 C_8, C_{12}, 2 C_{14}, 29 D_2, 4 D_3, 14 D_4, 7 D_6, D_7, 8 D_8, D_{12}, D_{14}	**Tet**, 4 **Oct**, 6 C_2, C_3, 4 C_4, 3 C_6, C_7, 3 C_8, C_{12}, 2 C_{14}, 29 D_2, 4 D_3, 14 D_4, 7 D_6, D_7, 6 D_8, D_{12}, D_{14}	**Tet**, 4 **Oct**, 2 C_2, 3 C_4, C_6, 3 C_8, 19 D_2, 2 D_3, 14 D_4, 5 D_6, D_7, 6 D_8, D_{12}, D_{14}	**Tet**, 6 C_2, C_3, C_4, 2 C_6, C_7, C_{12}, 2 C_{14}, 29 D_2, 4 D_3, 2 D_4, 5 D_6, D_7, D_{12}, D_{14}
R85.12	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, 3 C_6, C_7, 6 C_8, 2 C_{12}, C_{14}, C_{28}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, 3 C_6, C_7, 5 C_8, 2 C_{12}, C_{14}, C_{28}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, C_6, 4 C_8, 16 D_2, 3 D_3, 6 D_4, 6 D_6, D_7, 8 D_8, D_{14}	**Tet**, **Oct**, 5 C_2, C_3, 4 C_4, 2 C_6, C_7, 2 C_{12}, C_{14}, C_{28}, 16 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_7, D_{14}
R85.13	4 C_2, 3 C_4, 2 C_5, 6 C_{10}, 10 C_{25}, 21 D_2, 6 D_4, 2 D_5, 6 D_{10}, 10 D_{25}	4 C_2, 3 C_4, C_5, 3 C_{10}, C_{25}, 21 D_2, 6 D_4, D_5, 3 D_{10}, D_{25}	2 C_2, C_4, C_{10}, 17 D_2, 6 D_4, D_5, 3 D_{10}, D_{25}	4 C_2, 2 C_4, C_5, 21 D_2, 4 D_4, D_5
R85.14	5 C_2, 2 C_4, 9 C_7, 15 C_{14}, 3 C_{28}, 13 D_2, 24 D_7, 24 D_{14}	5 C_2, 2 C_4, 7 C_7, 13 C_{14}, 13 D_2, 20 D_7, 22 D_{14}	3 C_2, 2 C_4, 10 C_{14}, 11 D_2, 10 D_7, 19 D_{14}	5 C_2, 7 C_7, 3 C_{14}, 13 D_2, 19 D_7, 6 D_{14}
R85.15	5 C_2, 2 C_3, 2 C_4, 2 C_5, 4 C_6, 6 C_{10}, C_{12}, 4 C_{15}, 4 C_{20}, 4 C_{30}, 4 C_{60}, 13 D_2, 6 D_3, 4 D_5, 7 D_6, 8 D_{10}, 4 D_{15}, 2 D_{30}	5 C_2, 2 C_3, 2 C_4, C_5, 4 C_6, 3 C_{10}, C_{15}, C_{20}, C_{30}, 13 D_2, 6 D_3, 2 D_5, 7 D_6, 4 D_{10}, 2 D_{15}, D_{30}	3 C_2, 2 C_4, 3 C_6, C_{10}, 11 D_2, 3 D_3, D_5, 6 D_6, 3 D_{10}, D_{15}, D_{30}	5 C_2, 2 C_3, C_5, C_6, C_{10}, 13 D_2, 5 D_3, 2 D_5, 2 D_6, D_{10}
R85.16	6 C_2, 5 C_4, 2 C_8, 5 C_{11}, 25 C_{22}, 20 C_{44}, 20 C_{88}, 19 D_2, 3 D_4, 5 D_{11}, 15 D_{22}, 10 D_{44}	6 C_2, 5 C_4, C_8, C_{11}, 5 C_{22}, 3 C_{44}, C_{88}, 19 D_2, 3 D_4, D_{11}, 3 D_{22}, 2 D_{44}	3 C_2, 4 C_4, C_8, C_{22}, 17 D_2, 3 D_4, D_{11}, 3 D_{22}, 2 D_{44}	6 C_2, C_4, C_{11}, C_{22}, 19 D_2, 2 D_4, D_{11}, D_{22}
R85.17	6 C_2, 3 C_4, C_8, 5 C_{11}, 20 C_{22}, 5 C_{44}, 10 C_{88}, 27 D_2, 3 D_4, 10 D_{11}, 35 D_{22}	6 C_2, 3 C_4, C_{11}, 4 C_{22}, 27 D_2, 3 D_4, 2 D_{11}, 7 D_{22}	3 C_2, 2 C_4, C_{22}, 21 D_2, 3 D_4, D_{11}, 5 D_{22}	6 C_2, C_4, C_{11}, C_{22}, 27 D_2, 2 D_4, 2 D_{11}, D_{22}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R85.18	5 C_2, 2 C_4, 21 C_{43}, 63 C_{86}, 42 C_{172}, 13 D_2, 42 D_{43}, 84 D_{86}	5 C_2, 2 C_4, C_{43}, 3 C_{86}, C_{172}, 13 D_2, 2 D_{43}, 4 D_{86}	3 C_2, 2 C_4, C_{86}, 11 D_2, D_{43}, 3 D_{86}	5 C_2, C_{43}, C_{86}, 13 D_2, 2 D_{43}, D_{86}
R85.19	3 C_2, 2 C_4, 2 C_5, 2 C_{10}, 8 C_{17}, 2 C_{20}, 8 C_{34}, 8 C_{68}, 32 C_{85}, 32 C_{170}, 32 C_{340}, 3 D_2, 4 D_5, 2 D_{10}, 16 D_{17}, 8 D_{34}, 64 D_{85}, 32 D_{170}	3 C_2, 2 C_4, C_5, C_{10}, C_{17}, C_{34}, C_{85}, C_{170}, 3 D_2, 2 D_5, D_{10}, 2 D_{17}, D_{34}, 2 D_{85}, D_{170}	2 C_2, 2 C_4, C_{10}, C_{34}, C_{170}, 3 D_2, D_5, D_{10}, D_{17}, D_{34}, D_{85}, D_{170}	3 C_2, C_5, C_{17}, C_{85}, 3 D_2, D_5, D_{17}, D_{85}
R85.20	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 4 C_6, C_7, 2 C_8, C_{12}, C_{21}, 2 C_{24}, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 4 C_6, C_7, 2 C_8, C_{12}, C_{21}, 2 C_{24}, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	2 **Tet**, **Oct**, 2 C_2, C_4, 4 C_6, 2 C_8, C_{12}, 2 C_{24}, 3 D_2, 2 D_3, 2 D_4, D_6, D_7, 2 D_8	2 **Tet**, 2 C_2, 3 C_3, C_7, C_{21}, 3 D_2, 2 D_3, D_7
R85.21	2 **Tet**, 2 **Ico**, 7 C_2, 3 C_3, 2 C_5, 7 C_6, 6 C_{10}, 2 C_{15}, 2 C_{30}, 37 D_2, 10 D_3, 8 D_5, 17 D_6, 12 D_{10}, 4 D_{15}, 2 D_{30}	2 **Tet**, **Ico**, 7 C_2, 3 C_3, C_5, 7 C_6, 3 C_{10}, C_{15}, C_{30}, 37 D_2, 10 D_3, 4 D_5, 17 D_6, 6 D_{10}, 2 D_{15}, D_{30}	3 C_2, 4 C_6, 2 C_{10}, C_{30}, 27 D_2, 4 D_3, D_5, 14 D_6, 5 D_{10}, D_{15}, D_{30}	2 **Tet**, **Ico**, 7 C_2, 3 C_3, C_5, 3 C_6, 37 D_2, 9 D_3, 4 D_5, 10 D_6
R85.22	2 **Tet**, 3 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 6 C_6, C_{10}, C_{12}, C_{15}, 16 D_2, 9 D_3, 4 D_4, 2 D_5, 12 D_6, D_{10}, D_{12}, D_{15}	2 **Tet**, 3 **Oct**, 5 C_2, 3 C_3, 2 C_4, 6 C_6, C_{12}, 16 D_2, 9 D_3, 4 D_4, 12 D_6, D_{12}	3 **Oct**, 3 C_2, 5 C_6, 13 D_2, 5 D_3, 4 D_4, 11 D_6, D_{12}	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 2 C_4, C_6, C_{12}, 16 D_2, 8 D_3, 4 D_4, 3 D_6, D_{12}
R85.23	**Tet**, 3 C_2, 3 C_3, 3 C_4, 3 C_6, 3 C_8, 3 C_{12}, 2 C_{24}, 7 D_2, D_3, 5 D_4, D_6, 3 D_8, D_{12}	**Tet**, 3 C_2, 3 C_3, 3 C_4, 3 C_6, 2 C_8, 2 C_{12}, 7 D_2, D_3, 5 D_4, D_6, 2 D_8, D_{12}	2 C_2, 3 C_4, 3 C_6, 2 C_8, 2 C_{12}, 6 D_2, D_3, 5 D_4, D_6, 2 D_8, D_{12}	3 C_2, C_3, 7 D_2, D_3
R85.24	2 **Tet**, 5 C_2, 3 C_3, 2 C_4, 6 C_6, 2 C_8, C_{12}, 2 C_{24}, 20 D_2, 2 D_3, 4 D_4, 7 D_6	2 **Tet**, 5 C_2, 3 C_3, 2 C_4, 6 C_6, C_8, 20 D_2, 2 D_3, 4 D_4, 7 D_6	2 C_2, 2 C_4, 3 C_6, C_8, 17 D_2, D_3, 4 D_4, 7 D_6	5 C_2, C_3, 2 C_6, 20 D_2, 2 D_3, 5 D_6
R85.25	4 C_2, 3 C_3, 4 C_4, 8 C_6, 2 C_8, 6 C_{12}, 2 C_{24}, 8 D_2, D_3, 6 D_4, 2 D_6, D_8, 2 D_{12}	4 C_2, 3 C_3, 4 C_4, 8 C_6, C_8, 5 C_{12}, 8 D_2, D_3, 6 D_4, 2 D_6, D_8, 2 D_{12}	3 C_2, 3 C_4, 7 C_6, 3 C_{12}, 8 D_2, D_3, 6 D_4, 2 D_6, D_8, 2 D_{12}	4 C_2, C_3, C_4, C_6, 8 D_2, D_3, 2 D_4, D_6
R85.26	2 **Tet**, 7 C_2, 3 C_3, 2 C_4, 11 C_6, 4 C_8, 4 C_{12}, 2 C_{24}, 34 D_2, 2 D_3, 8 D_4, 6 D_6, 10 D_8, 5 D_{12}	2 **Tet**, 7 C_2, 3 C_3, 2 C_4, 11 C_6, 3 C_8, 3 C_{12}, 34 D_2, 2 D_3, 8 D_4, 6 D_6, 8 D_8, 5 D_{12}	3 C_2, C_4, 7 C_6, C_{12}, 27 D_2, D_3, 6 D_4, 6 D_6, 6 D_8, 4 D_{12}	7 C_2, C_3, C_4, 3 C_6, 34 D_2, 2 D_3, 4 D_4, 4 D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R85.27	2 **Tet**, **Oct**, 4 C_2, 3 C_3, 3 C_4, 6 C_6, 2 C_8, 4 C_{12}, 4 C_{24}, 12 D_2, D_3, 3 D_4, D_6	2 **Tet**, **Oct**, 4 C_2, 3 C_3, 3 C_4, 6 C_6, C_8, 3 C_{12}, C_{24}, 12 D_2, D_3, 3 D_4, D_6	**Oct**, 3 C_2, 2 C_4, 4 C_6, C_8, 11 D_2, D_3, 3 D_4, D_6	**Tet**, **Oct**, 4 C_2, C_3, C_4, 12 D_2, D_3, 2 D_4
R85.28	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 6 C_4, 7 C_6, 2 C_8, 8 C_{12}, 4 C_{24}, 16 D_2, 2 D_3, 7 D_4, D_6	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 6 C_4, 7 C_6, C_8, 7 C_{12}, C_{24}, 16 D_2, 2 D_3, 7 D_4, D_6	2 **Tet**, 2 **Oct**, 3 C_2, 5 C_4, 4 C_6, 16 D_2, D_3, 7 D_4, D_6	**Tet**, 5 C_2, C_3, 16 D_2, 2 D_3
R85.29	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 4 C_4, 7 C_6, 2 C_8, 4 C_{12}, 2 C_{24}, 17 D_2, 2 D_3, 12 D_4, D_6, 2 D_8	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 4 C_4, 7 C_6, C_8, 3 C_{12}, C_{24}, 17 D_2, 2 D_3, 12 D_4, D_6, D_8	2 **Tet**, 2 **Oct**, 3 C_2, 3 C_4, 4 C_6, C_8, 17 D_2, D_3, 11 D_4, D_6, D_8	**Tet**, 5 C_2, C_3, C_4, 17 D_2, 2 D_3, 3 D_4
R85.30	6 C_2, 3 C_3, 4 C_4, 18 C_6, 2 C_8, 4 C_{12}, 4 C_{24}, 19 D_2, D_3, 4 D_4, 3 D_6	6 C_2, 3 C_3, 4 C_4, 18 C_6, C_8, 3 C_{12}, 2 C_{24}, 19 D_2, D_3, 4 D_4, 3 D_6	3 C_2, 3 C_4, 7 C_6, C_8, 17 D_2, D_3, 4 D_4, 3 D_6	6 C_2, C_3, C_4, 3 C_6, 19 D_2, D_3, 2 D_4, 2 D_6
R85.31	2 **Tet**, **Oct**, 6 C_2, 3 C_3, 3 C_4, 11 C_6, 4 C_8, 5 C_{12}, 4 C_{24}, 26 D_2, D_3, 8 D_4, D_6, 6 D_8, D_{12}	2 **Tet**, **Oct**, 6 C_2, 3 C_3, 3 C_4, 11 C_6, 3 C_8, 4 C_{12}, 2 C_{24}, 26 D_2, D_3, 8 D_4, D_6, 5 D_8, D_{12}	**Oct**, 3 C_2, 2 C_4, 7 C_6, 3 C_8, 2 C_{12}, 19 D_2, D_3, 8 D_4, D_6, 5 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, C_4, 26 D_2, D_3, 2 D_4
R85.32	2 **Tet**, 7 C_2, 3 C_3, 2 C_4, 7 C_6, 4 C_8, 7 C_{12}, 14 C_{24}, 34 D_2, 4 D_3, 8 D_4, 12 D_6, 10 D_8, 16 D_{12}, 20 D_{24}	2 **Tet**, 7 C_2, 3 C_3, 2 C_4, 7 C_6, 3 C_8, 6 C_{12}, 8 C_{24}, 34 D_2, 4 D_3, 8 D_4, 12 D_6, 8 D_8, 16 D_{12}, 16 D_{24}	3 C_2, C_4, 4 C_6, 2 C_{12}, 27 D_2, 2 D_3, 6 D_4, 10 D_6, 6 D_8, 12 D_{12}, 12 D_{24}	7 C_2, C_3, C_4, 2 C_6, C_8, 34 D_2, 4 D_3, 4 D_4, 8 D_6, 2 D_8
R85.33	4 C_2, 3 C_3, 4 C_4, 5 C_6, 2 C_8, 7 C_{12}, 10 C_{24}, 8 D_2, 2 D_3, 6 D_4, 3 D_6, D_8, 5 D_{12}, 2 D_{24}	4 C_2, 3 C_3, 4 C_4, 5 C_6, C_8, 6 C_{12}, 2 C_{24}, 8 D_2, 2 D_3, 6 D_4, 3 D_6, D_8, 5 D_{12}, 2 D_{24}	3 C_2, 3 C_4, 4 C_6, 2 C_{12}, 8 D_2, 2 D_3, 6 D_4, 3 D_6, D_8, 5 D_{12}, 2 D_{24}	4 C_2, C_3, C_4, C_6, 8 D_2, 2 D_3, 2 D_4, D_6
R85.34	2 **Tet**, 3 **Oct**, 5 C_2, 3 C_3, 4 C_4, 3 C_6, 2 C_8, 4 C_{12}, 2 C_{24}, 17 D_2, 6 D_3, 12 D_4, 7 D_6, 2 D_8, 10 D_{12}, 2 D_{24}	2 **Tet**, 3 **Oct**, 5 C_2, 3 C_3, 4 C_4, 3 C_6, C_8, 3 C_{12}, 17 D_2, 6 D_3, 12 D_4, 7 D_6, D_8, 7 D_{12}	2 **Tet**, 3 **Oct**, 3 C_2, 3 C_4, C_6, C_8, 17 D_2, 4 D_3, 11 D_4, 5 D_6, D_8, 5 D_{12}	2 **Tet**, 5 C_2, 3 C_3, C_4, 17 D_2, 5 D_3, 3 D_4
R85.35	2 **Tet**, 3 **Oct**, 5 C_2, 3 C_3, 6 C_4, 3 C_6, 2 C_8, 3 C_{12}, C_{24}, 16 D_2, 6 D_3, 7 D_4, 6 D_6, 2 D_{12}	2 **Tet**, 3 **Oct**, 5 C_2, 3 C_3, 6 C_4, 3 C_6, C_8, 2 C_{12}, 16 D_2, 6 D_3, 7 D_4, 6 D_6, 2 D_{12}	2 **Tet**, 3 **Oct**, 3 C_2, 5 C_4, C_6, 16 D_2, 4 D_3, 7 D_4, 5 D_6, 2 D_{12}	2 **Tet**, 5 C_2, 3 C_3, 16 D_2, 5 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R85.36	2 **Tet**, 2 **Oct**, 6 C_2, 3 C_3, 3 C_4, 6 C_6, 4 C_8, 7 C_{12}, 8 C_{24}, 26 D_2, 5 D_3, 8 D_4, 11 D_6, 6 D_8, 15 D_{12}, 12 D_{24}	2 **Tet**, 2 **Oct**, 6 C_2, 3 C_3, 3 C_4, 6 C_6, 3 C_8, 6 C_{12}, 5 C_{24}, 26 D_2, 5 D_3, 8 D_4, 11 D_6, 5 D_8, 12 D_{12}, 9 D_{24}	2 **Oct**, 3 C_2, 2 C_4, 3 C_6, 3 C_8, 3 C_{12}, 19 D_2, 4 D_3, 8 D_4, 8 D_6, 5 D_8, 9 D_{12}, 9 D_{24}	2 **Tet**, 2 **Oct**, 6 C_2, 3 C_3, C_4, C_6, 26 D_2, 5 D_3, 2 D_4, 3 D_6
R85.37	6 C_2, 3 C_3, 4 C_4, 11 C_6, 2 C_8, 4 C_{12}, 2 C_{24}, 19 D_2, 6 D_3, 4 D_4, 14 D_6, 6 D_{12}	6 C_2, 3 C_3, 4 C_4, 11 C_6, C_8, 3 C_{12}, 19 D_2, 6 D_3, 4 D_4, 14 D_6, 5 D_{12}	3 C_2, 3 C_4, 3 C_6, C_8, 17 D_2, 5 D_3, 4 D_4, 13 D_6, 5 D_{12}	6 C_2, 3 C_3, C_4, 3 C_6, 19 D_2, 6 D_3, 2 D_4, 5 D_6
R85.38	**Tet**, 7 C_2, C_3, 3 C_6, 5 C_{11}, 15 C_{22}, 5 C_{33}, 5 C_{66}, 31 D_2, 20 D_{11}, 45 D_{22}	**Tet**, 7 C_2, C_3, 3 C_6, C_{11}, 3 C_{22}, 31 D_2, 4 D_{11}, 9 D_{22}	3 C_2, 2 C_6, 23 D_2, 2 D_{11}, 7 D_{22}	7 C_2, C_{11}, C_{22}, 31 D_2, 4 D_{11}, 2 D_{22}
R85.39	C_2, 3 C_3, C_6, 14 C_{29}, 70 C_{87}, D_3, 14 D_{29}, 28 D_{87}	C_2, 3 C_3, C_6, C_{29}, 4 C_{87}, D_3, D_{29}, 2 D_{87}	C_2, C_6, D_3, D_{29}, 2 D_{87}	C_2, C_3, C_{29}, D_3, D_{29}
R85.40	C_2, C_3, 2 C_5, C_6, 2 C_{15}, 8 C_{17}, 8 C_{51}, 32 C_{85}, 32 C_{255}, 2 D_5, 8 D_{17}, 32 D_{85}	C_2, C_3, C_5, C_6, C_{17}, C_{85}, D_5, D_{17}, D_{85}	C_2, C_6, D_5, D_{17}, D_{85}	C_2, C_5, C_{17}, C_{85}, D_5, D_{17}, D_{85}
R85.41	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 2 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 4 D_8, D_{14}	**Tet**, 2 **Oct**, 2 C_2, C_4, 13 D_2, 2 D_3, 4 D_4, 5 D_6, 4 D_8	**Tet**, **Oct**, 5 C_2, C_3, C_4, 3 C_6, C_7, C_{14}, 16 D_2, 4 D_3, 4 D_4, 6 D_6, 2 D_7, D_{14}
R85.42	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, 2 C_8, C_{12}, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, C_8, C_{12}, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, C_2, 2 C_4, C_8, 6 D_2, D_3, 3 D_4, D_6	**Tet**, 3 C_2, C_3, C_4, C_6, C_7, C_{12}, C_{14}, 6 D_2, 2 D_3, D_6
R85.43	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, 2 C_8, C_{12}, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, C_8, C_{12}, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 2 C_2, C_4, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, **Oct**, 3 C_2, C_3, 2 C_4, C_6, C_7, C_{12}, C_{14}, 6 D_2, 2 D_3, D_4, D_6
R85.44	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 8 D_8, D_{14}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, 3 C_6, C_7, 2 C_8, C_{14}, 16 D_2, 4 D_3, 6 D_4, 6 D_6, 2 D_7, 4 D_8, D_{14}	**Tet**, 2 **Oct**, 2 C_2, C_4, 13 D_2, 2 D_3, 4 D_4, 5 D_6, 4 D_8	**Tet**, **Oct**, 5 C_2, C_3, C_4, 3 C_6, C_7, C_{14}, 16 D_2, 4 D_3, 4 D_4, 6 D_6, 2 D_7, D_{14}
R85.45	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, 2 C_8, C_{12}, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, C_8, C_{12}, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, C_2, 2 C_4, C_8, 6 D_2, D_3, 3 D_4, D_6	**Tet**, 3 C_2, C_3, C_4, C_6, C_7, C_{12}, C_{14}, 6 D_2, 2 D_3, D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R85.46	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, 2 C_8, C_{12}, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, C_8, C_{12}, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 2 C_2, C_4, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, **Oct**, 3 C_2, C_3, 2 C_4, C_6, C_7, C_{12}, C_{14}, 6 D_2, 2 D_3, D_4, D_6
R85.47	6 C_2, 2 C_3, 5 C_4, 13 C_6, 2 C_8, 5 C_{12}, 19 D_2, D_3, 3 D_4, 3 D_6	6 C_2, 2 C_3, 5 C_4, 13 C_6, C_8, 4 C_{12}, 19 D_2, D_3, 3 D_4, 3 D_6	3 C_2, 4 C_4, 5 C_6, C_8, 17 D_2, D_3, 3 D_4, 3 D_6	6 C_2, 2 C_3, C_4, 4 C_6, C_{12}, 19 D_2, D_3, 2 D_4, 2 D_6
R85.48	6 C_2, 2 C_3, 3 C_4, 10 C_6, C_8, 3 C_{12}, 27 D_2, 4 D_3, 3 D_4, 13 D_6	6 C_2, 2 C_3, 3 C_4, 10 C_6, 2 C_{12}, 27 D_2, 4 D_3, 3 D_4, 13 D_6	3 C_2, 2 C_4, 5 C_6, 21 D_2, D_3, 3 D_4, 8 D_6	6 C_2, 2 C_3, C_4, 3 C_6, C_{12}, 27 D_2, 4 D_3, 2 D_4, 7 D_6
R85.49	5 C_2, C_3, 4 C_4, 2 C_5, 3 C_6, 6 C_{10}, 2 C_{12}, 4 C_{20}, 13 D_2, 2 D_3, 4 D_4, 4 D_5, 4 D_6, 8 D_{10}	5 C_2, C_3, 4 C_4, C_5, 3 C_6, 3 C_{10}, 2 C_{12}, C_{20}, 13 D_2, 2 D_3, 4 D_4, 2 D_5, 4 D_6, 4 D_{10}	3 C_2, 3 C_4, 2 C_6, 2 C_{10}, C_{12}, C_{20}, 13 D_2, D_3, 4 D_4, D_5, 4 D_6, 4 D_{10}	5 C_2, C_3, C_5, C_6, 13 D_2, 2 D_3, 2 D_5, D_6
R85.50	**Tet**, 2 **Ico**, 7 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 6 C_{10}, C_{12}, 2 C_{20}, 39 D_2, 4 D_3, 6 D_4, 8 D_5, 7 D_6, 14 D_{10}, D_{12}, 2 D_{20}	**Tet**, **Ico**, 7 C_2, C_3, 2 C_4, C_5, 3 C_6, 3 C_{10}, C_{12}, 39 D_2, 4 D_3, 6 D_4, 4 D_5, 7 D_6, 7 D_{10}, D_{12}	3 C_2, C_4, 2 C_6, 2 C_{10}, 29 D_2, D_3, 6 D_4, D_5, 7 D_6, 7 D_{10}, D_{12}	**Tet**, **Ico**, 7 C_2, C_3, C_4, C_5, C_6, 39 D_2, 4 D_3, 2 D_4, 4 D_5, 2 D_6
R85.51	4 C_2, C_3, 3 C_4, 2 C_5, 4 C_6, 3 C_{12}, 2 C_{15}, 21 D_2, 6 D_4, 2 D_5	4 C_2, C_3, 3 C_4, C_5, 4 C_6, 2 C_{12}, 21 D_2, 6 D_4, D_5	2 C_2, C_4, C_6, 17 D_2, 6 D_4, D_5	4 C_2, 2 C_4, C_5, 21 D_2, 4 D_4, D_5
R85.52	5 C_2, 3 C_3, 2 C_4, 9 C_6, 6 C_9, 4 C_{12}, 18 C_{18}, 6 C_{36}, 13 D_2, 6 D_3, 12 D_6, 12 D_9, 24 D_{18}	5 C_2, 3 C_3, 2 C_4, 9 C_6, 4 C_9, 2 C_{12}, 12 C_{18}, C_{36}, 13 D_2, 6 D_3, 12 D_6, 8 D_9, 16 D_{18}	3 C_2, 2 C_4, 4 C_6, 4 C_{18}, 11 D_2, 3 D_3, 9 D_6, 4 D_9, 12 D_{18}	5 C_2, 3 C_3, 3 C_6, C_9, C_{18}, 13 D_2, 6 D_3, 4 D_6, 2 D_9, D_{18}
R85.53	5 C_2, 3 C_3, 2 C_4, 11 C_6, 6 C_9, 10 C_{12}, 18 C_{18}, 18 C_{36}, 13 D_2, 2 D_3, 4 D_6, 6 D_9, 12 D_{18}	5 C_2, 3 C_3, 2 C_4, 11 C_6, 4 C_9, 8 C_{12}, 12 C_{18}, 5 C_{36}, 13 D_2, 2 D_3, 4 D_6, 6 D_9, 12 D_{18}	3 C_2, 2 C_4, 5 C_6, 6 C_{12}, 4 C_{18}, 11 D_2, D_3, 3 D_6, 3 D_9, 9 D_{18}	5 C_2, 2 C_3, 2 C_6, 13 D_2, 2 D_3, D_6
R85.54	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_{12}, 8 C_{17}, 8 C_{34}, 8 C_{51}, 8 C_{68}, 8 C_{102}, 16 C_{204}, 3 D_2, 16 D_{17}, 8 D_{34}	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, C_{17}, C_{34}, 3 D_2, 2 D_{17}, D_{34}	2 C_2, 2 C_4, C_6, C_{34}, 3 D_2, D_{17}, D_{34}	3 C_2, C_{17}, 3 D_2, D_{17}
R85.55	7 C_2, 3 C_3, 13 C_6, 6 C_9, 12 C_{18}, 31 D_2, 4 D_3, 9 D_6	7 C_2, 3 C_3, 13 C_6, 2 C_9, 4 C_{18}, 31 D_2, 4 D_3, 9 D_6	3 C_2, 3 C_6, 23 D_2, 2 D_3, 7 D_6	7 C_2, 3 C_3, 4 C_6, 31 D_2, 4 D_3, 7 D_6
R85.56	C_2, 5 C_{11}, 8 C_{17}, 5 C_{22}, 40 C_{187}, 8 D_{17}	C_2, C_{17}, D_{17}	C_2, D_{17}	C_2, C_{17}, D_{17}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R85.57	4 C_2, C_3, 5 C_4, 4 C_6, 6 C_8, 6 C_{12}, 4 C_{16}, 10 C_{24}, 8 C_{48}, 9 D_2, 2 D_4, 2 D_8	4 C_2, C_3, 5 C_4, 4 C_6, 4 C_8, 4 C_{12}, 3 C_{24}, 9 D_2, 2 D_4, 2 D_8	3 C_2, 3 C_4, C_6, 3 C_8, 9 D_2, 2 D_4, 2 D_8	4 C_2, 2 C_4, 9 D_2, D_4
R85.58	5 C_2, C_3, 5 C_4, 5 C_6, 8 C_8, 5 C_{12}, 4 C_{16}, 10 C_{24}, 8 C_{48}, 15 D_2, 7 D_4, 8 D_8	5 C_2, C_3, 5 C_4, 5 C_6, 6 C_8, 3 C_{12}, C_{16}, 2 C_{24}, 15 D_2, 7 D_4, 7 D_8	3 C_2, 2 C_4, C_6, 2 C_8, 13 D_2, 6 D_4, 7 D_8	5 C_2, 3 C_4, C_8, 15 D_2, 4 D_4, D_8
R85.59	3 C_2, C_3, 5 C_4, 3 C_6, 15 C_8, 8 C_{12}, 2 C_{16}, 28 C_{24}, 4 C_{48}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_3, 5 C_4, 3 C_6, 13 C_8, 6 C_{12}, 18 C_{24}, 4 D_2, 2 D_4, 2 D_8	3 C_2, 3 C_4, C_6, 7 C_8, 4 D_2, 2 D_4, 2 D_8	3 C_2, 4 D_2
R85.60	3 C_2, C_3, 5 C_4, 3 C_6, 9 C_8, 8 C_{12}, 2 C_{16}, 16 C_{24}, 4 C_{48}, 4 D_2, 2 D_4, D_8	3 C_2, C_3, 5 C_4, 3 C_6, 7 C_8, 6 C_{12}, 9 C_{24}, 4 D_2, 2 D_4, D_8	3 C_2, 3 C_4, C_6, 4 C_8, 4 D_2, 2 D_4, D_8	3 C_2, 4 D_2
R85.61	5 C_2, C_3, 4 C_4, 5 C_6, 6 C_8, 5 C_{12}, 4 C_{16}, 10 C_{24}, 8 C_{48}, 15 D_2, 3 D_4, 2 D_8	5 C_2, C_3, 4 C_4, 5 C_6, 4 C_8, 3 C_{12}, C_{16}, C_{24}, 15 D_2, 3 D_4, 2 D_8	2 C_2, 3 C_4, C_6, 4 C_8, C_{16}, 11 D_2, 3 D_4, 2 D_8	5 C_2, C_4, 15 D_2, D_4
R85.62	4 C_2, C_3, 4 C_4, 4 C_6, 4 C_8, 4 C_{12}, 2 C_{16}, 7 C_{24}, 4 C_{48}, 12 D_2, 3 D_4, 2 D_8	4 C_2, C_3, 4 C_4, 4 C_6, 2 C_8, 2 C_{12}, 12 D_2, 3 D_4, 2 D_8	2 C_2, 3 C_4, C_6, 2 C_8, 10 D_2, 3 D_4, 2 D_8	4 C_2, C_4, 12 D_2, D_4
R85.63	5 C_2, C_3, 6 C_4, 5 C_6, 8 C_8, 10 C_{12}, 8 C_{16}, 12 C_{24}, 16 C_{48}, 13 D_2, 3 D_4, 6 D_8	5 C_2, C_3, 6 C_4, 5 C_6, 6 C_8, 8 C_{12}, 3 C_{16}, 5 C_{24}, 13 D_2, 3 D_4, 6 D_8	3 C_2, 3 C_4, C_6, 4 C_8, 13 D_2, 3 D_4, 6 D_8	5 C_2, 2 C_4, 13 D_2, D_4
R85.64	5 C_2, C_3, 5 C_4, 5 C_6, 6 C_8, 8 C_{12}, 4 C_{16}, 10 C_{24}, 8 C_{48}, 13 D_2, 3 D_4, 3 D_8	5 C_2, C_3, 5 C_4, 5 C_6, 4 C_8, 6 C_{12}, C_{16}, 3 C_{24}, 13 D_2, 3 D_4, 3 D_8	3 C_2, 2 C_4, C_6, 3 C_8, 13 D_2, 3 D_4, 3 D_8	5 C_2, 3 C_4, 13 D_2, D_4
R85.65	3 C_2, 2 C_5, 6 C_{10}, 10 C_{25}, 15 D_2	3 C_2, C_5, 3 C_{10}, C_{25}, 15 D_2	C_2, C_{10}, 11 D_2	3 C_2, C_5, 15 D_2
R85.66	3 C_2, 2 C_4, 15 C_7, 21 C_{14}, 33 C_{28}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, 2 C_4, 11 C_7, 13 C_{14}, 19 C_{28}, 3 D_2, 6 D_7, 3 D_{14}	2 C_2, 2 C_4, 12 C_{14}, 17 C_{28}, 3 D_2, 3 D_7, 3 D_{14}	3 C_2, 9 C_7, 3 D_2, 6 D_7
R85.67	3 C_2, 2 C_4, 15 C_7, 15 C_{14}, 6 C_{28}, 3 D_2, 30 D_7, 15 D_{14}	3 C_2, 2 C_4, 11 C_7, 11 C_{14}, 3 D_2, 22 D_7, 11 D_{14}	2 C_2, 2 C_4, 11 C_{14}, 3 D_2, 11 D_7, 11 D_{14}	3 C_2, 11 C_7, 3 D_2, 20 D_7
R85.68	3 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 3 C_9, 2 C_{10}, 4 C_{12}, 2 C_{15}, 9 C_{18}, 2 C_{20}, 2 C_{30}, 12 C_{36}, 6 C_{45}, 4 C_{60}, 6 C_{90}, 12 C_{180}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_3, 2 C_4, C_5, 3 C_6, C_{10}, 2 C_{12}, 3 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_6, C_{10}, 3 D_2, D_5, D_{10}	3 C_2, C_5, 3 D_2, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R85.69	3 C_2, C_3, 2 C_5, 3 C_6, 3 C_9, 6 C_{10}, 4 C_{15}, 3 C_{18}, 12 C_{30}, 12 C_{45}, 12 C_{90}, 6 D_2	3 C_2, C_3, 3 C_6, 6 D_2	2 C_2, C_6, 5 D_2	3 C_2, 6 D_2
R85.70	3 C_2, 3 C_3, 2 C_4, 2 C_5, 5 C_6, 6 C_{10}, 7 C_{12}, 10 C_{15}, 8 C_{20}, 18 C_{30}, 28 C_{60}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, 2 C_4, C_5, 5 C_6, 3 C_{10}, 5 C_{12}, 3 C_{15}, 2 C_{20}, 5 C_{30}, 4 C_{60}, 3 D_2, 2 D_3, D_6	2 C_2, 2 C_4, 4 C_6, C_{10}, 3 C_{12}, C_{30}, 3 D_2, D_3, D_6	3 C_2, C_3, C_5, C_{10}, 3 D_2, 2 D_3
R85.71	3 C_2, 3 C_3, 2 C_4, 2 C_5, 3 C_6, 6 C_{10}, 2 C_{12}, 6 C_{15}, 8 C_{20}, 6 C_{30}, 8 C_{60}, 3 D_2, 6 D_3, 3 D_6	3 C_2, 3 C_3, 2 C_4, C_5, 3 C_6, 3 C_{10}, C_{15}, 2 C_{20}, C_{30}, 3 D_2, 6 D_3, 3 D_6	2 C_2, 2 C_4, 3 C_6, C_{10}, 3 D_2, 3 D_3, 3 D_6	3 C_2, 3 C_3, C_5, C_{10}, 3 D_2, 4 D_3
R85.72	4 C_2, 2 C_4, 2 C_8, 5 C_{11}, 20 C_{22}, 10 C_{44}, 20 C_{88}, 10 D_2, 2 D_4	4 C_2, 2 C_4, C_{11}, 4 C_{22}, 10 D_2, 2 D_4	2 C_2, 2 C_4, C_{22}, 8 D_2, 2 D_4	4 C_2, C_{11}, C_{22}, 10 D_2
R85.73	5 C_2, 3 C_4, 4 C_8, 5 C_{11}, 25 C_{22}, 30 C_{44}, 40 C_{88}, 13 D_2	5 C_2, 3 C_4, 2 C_8, C_{11}, 5 C_{22}, 4 C_{44}, 2 C_{88}, 13 D_2	2 C_2, 3 C_4, 2 C_8, C_{22}, 11 D_2	5 C_2, C_{11}, C_{22}, 13 D_2
R85.74	C_2, C_3, C_6, 3 C_9, 3 C_{18}, 9 C_{19}, 9 C_{38}, 18 C_{57}, 18 C_{114}, 54 C_{171}, 54 C_{342}	C_2, C_3, C_6	C_2, C_6	C_2
R85.75	3 C_2, 2 C_4, 21 C_{43}, 63 C_{86}, 84 C_{172}, 3 D_2	3 C_2, 2 C_4, C_{43}, 3 C_{86}, 2 C_{172}, 3 D_2	2 C_2, 2 C_4, C_{86}, 3 D_2	3 C_2, C_{43}, C_{86}, 3 D_2
R85.76	C_2, C_4, 2 C_5, 2 C_{10}, 8 C_{17}, 4 C_{20}, 8 C_{34}, 16 C_{68}, 32 C_{85}, 32 C_{170}, 64 C_{340}	C_2, C_4, C_5, C_{10}, C_{17}, C_{34}, C_{85}, C_{170}	C_2, C_4, C_{10}, C_{34}, C_{170}	C_2, C_5, C_{17}, C_{85}
Genus 86				
R86.1	2 C_2, C_3, C_4, 4 C_5, C_6, C_8, 6 C_{10}, 8 C_{20}, 4 C_{40}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 2 D_{20}	2 C_2, C_3, C_4, 3 C_5, C_6, 4 C_{10}, 5 C_{20}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 2 D_{20}	2 C_2, C_4, C_6, 4 C_{10}, 5 C_{20}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, 2 D_{20}	2 C_2, C_3, 2 C_5, 2 D_2, D_3, 2 D_5
R86.2	3 C_2, C_3, C_4, 2 C_6, 14 C_{29}, 28 C_{58}, 28 C_{87}, 56 C_{174}, 4 D_2, D_3, D_4, D_6, 14 D_{29}, 14 D_{58}, 28 D_{87}, 28 D_{174}	3 C_2, C_3, C_4, 2 C_6, C_{29}, 2 C_{58}, C_{87}, 2 C_{174}, 4 D_2, D_3, D_4, D_6, D_{29}, D_{58}, D_{87}, D_{174}	3 C_2, C_4, C_6, C_{58}, C_{174}, 4 D_2, D_3, D_4, D_6, D_{29}, D_{58}, D_{87}, D_{174}	3 C_2, C_3, C_{29}, C_{87}, 4 D_2, D_3, D_{29}, D_{87}
R86.3	2 C_2, 2 C_4, C_8, 21 C_{43}, 21 C_{86}, 42 C_{172}, 42 C_{344}, 2 D_2, D_4, 21 D_{43}, 21 D_{86}, 42 D_{172}	2 C_2, 2 C_4, C_{43}, C_{86}, C_{172}, 2 D_2, D_4, D_{43}, D_{86}, D_{172}	2 C_2, 2 C_4, C_{86}, C_{172}, 2 D_2, D_4, D_{43}, D_{86}, D_{172}	2 C_2, C_{43}, 2 D_2, D_{43}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R86.4	3 C_2, C_3, C_4, 4 C_5, 2 C_6, 10 C_{10}, 2 C_{20}, 4 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}	3 C_2, C_3, C_4, 3 C_5, 2 C_6, 7 C_{10}, 4 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}	3 C_2, C_4, 2 C_6, 7 C_{10}, 4 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}	3 C_2, C_3, 2 C_5, 4 D_2, D_3, 2 D_5
R86.5	3 C_2, C_3, C_4, 4 C_5, 2 C_6, 6 C_{10}, 4 C_{20}, 4 D_2, D_3, D_4, 6 D_5, D_6, 6 D_{10}, 4 D_{20}	3 C_2, C_3, C_4, 3 C_5, 2 C_6, 5 C_{10}, C_{20}, 4 D_2, D_3, D_4, 4 D_5, D_6, 4 D_{10}, D_{20}	3 C_2, C_4, C_6, 5 C_{10}, C_{20}, 4 D_2, D_3, D_4, 4 D_5, D_6, 4 D_{10}, D_{20}	3 C_2, C_3, 3 C_5, 4 D_2, D_3, 4 D_5
R86.6	3 C_2, C_3, C_4, 2 C_6, 2 C_8, 5 C_{11}, C_{12}, 5 C_{22}, 5 C_{33}, 10 C_{44}, 5 C_{66}, 20 C_{88}, 10 C_{132}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, 10 D_{11}, D_{12}, 10 D_{22}, 5 D_{33}, 20 D_{44}, 5 D_{66}, 20 D_{88}, 10 D_{132}	3 C_2, C_3, C_4, 2 C_6, C_8, C_{11}, C_{12}, C_{22}, C_{33}, C_{44}, C_{66}, C_{88}, C_{132}, 4 D_2, D_3, 2 D_4, D_6, D_8, 2 D_{11}, D_{12}, 2 D_{22}, D_{33}, 2 D_{44}, D_{66}, D_{88}, D_{132}	3 C_2, C_6, 4 D_2, D_3, 2 D_4, D_6, D_8, 2 D_{11}, D_{12}, 2 D_{22}, D_{33}, 2 D_{44}, D_{66}, D_{88}, D_{132}	3 C_2, C_3, C_4, C_{11}, C_{22}, C_{44}, 4 D_2, D_3, 2 D_4, 2 D_{11}, 2 D_{22}, 2 D_{44}
R86.7	3 C_2, C_3, 3 C_6, 21 C_{43}, 21 C_{86}, 21 C_{129}, 21 C_{258}, 3 D_2, 42 D_{43}, 21 D_{86}	3 C_2, C_3, 3 C_6, C_{43}, C_{86}, 3 D_2, 2 D_{43}, D_{86}	3 C_2, C_6, 3 D_2, 2 D_{43}, D_{86}	3 C_2, C_{43}, C_{86}, 3 D_2, 2 D_{43}, D_{86}
R86.8	2 C_2, 2 C_4, C_8, 14 C_{29}, 14 C_{58}, 28 C_{116}, 2 D_2, D_4, 14 D_{29}, 14 D_{58}, 14 D_{116}	2 C_2, 2 C_4, C_{29}, C_{58}, C_{116}, 2 D_2, D_4, D_{29}, D_{58}, D_{116}	2 C_2, 2 C_4, C_{58}, 2 D_2, D_4, D_{29}, D_{58}, D_{116}	2 C_2, C_{29}, 2 D_2, D_{29}
R86.9	C_2, C_3, 8 C_5, 3 C_9, 2 C_{10}, 14 C_{15}, 42 C_{45}, D_3, 2 D_5, 3 D_9, 4 D_{15}, 12 D_{45}	C_2, C_3, 6 C_5, C_9, C_{10}, 10 C_{15}, 10 C_{45}, D_3, 2 D_5, D_9, 4 D_{15}, 4 D_{45}	C_2, C_{10}, D_3, 2 D_5, D_9, 4 D_{15}, 4 D_{45}	C_2, C_3, 4 C_5, C_9, D_3, 2 D_5, D_9
R86.10	C_2, 2 C_5, 2 C_{10}, 21 C_{43}, 42 C_{215}, 21 D_{43}	C_2, C_5, C_{10}, C_{43}, D_{43}	C_2, C_{10}, D_{43}	C_2, C_{43}, D_{43}
R86.11	2 C_2, 2 C_4, 8 C_5, C_8, 8 C_{10}, 16 C_{20}, 4 C_{40}, 2 D_2, D_4, 8 D_5, 8 D_{10}, 14 D_{20}	2 C_2, 2 C_4, 6 C_5, 6 C_{10}, 10 C_{20}, 2 D_2, D_4, 6 D_5, 6 D_{10}, 10 D_{20}	2 C_2, 2 C_4, 6 C_{10}, 9 C_{20}, 2 D_2, D_4, 6 D_5, 6 D_{10}, 10 D_{20}	2 C_2, 6 C_5, 2 D_2, 6 D_5
R86.12	2 C_2, 2 C_4, 8 C_5, C_8, 10 C_{10}, 20 C_{20}, 4 C_{40}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 2 D_{20}	2 C_2, 2 C_4, 6 C_5, 7 C_{10}, 13 C_{20}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 2 D_{20}	2 C_2, 2 C_4, 7 C_{10}, 13 C_{20}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 2 D_{20}	2 C_2, 4 C_5, 2 D_2, 2 D_5
R86.13	2 C_2, 2 C_4, 8 C_5, C_8, 10 C_{10}, 16 C_{20}, 24 C_{40}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 4 D_{20}	2 C_2, 2 C_4, 6 C_5, 7 C_{10}, 10 C_{20}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 4 D_{20}	2 C_2, 2 C_4, 7 C_{10}, 9 C_{20}, 2 D_2, D_4, 2 D_5, 2 D_{10}, 4 D_{20}	2 C_2, 4 C_5, 2 D_2, 2 D_5
R86.14	C_2, 86 C_{173}, 86 C_{346}	C_2	C_2	C_2
R86.15	3 C_2, C_3, 3 C_6, 14 C_{29}, 42 C_{58}, 28 C_{87}, 84 C_{174}, 3 D_2	3 C_2, C_3, 3 C_6, C_{29}, 3 C_{58}, C_{87}, 3 C_{174}, 3 D_2	3 C_2, C_6, C_{58}, C_{174}, 3 D_2	3 C_2, C_3, C_{29}, C_{87}, 3 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R86.16	C_2, C_4, 2 C_8, 21 C_{43}, 21 C_{86}, 42 C_{172}, 84 C_{344}	C_2, C_4, C_{43}, C_{86}, C_{172}	C_2, C_4, C_{86}, C_{172}	C_2, C_{43}
Genus 87				
R87.1	5 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 3 C_9, 6 C_{10}, 4 C_{15}, 3 C_{18}, 12 C_{30}, 12 C_{45}, 12 C_{90}, 16 D_2, 2 D_3, 4 D_4, 4 D_5, 4 D_6, 6 D_9, 8 D_{10}, 8 D_{15}, 3 D_{18}, 16 D_{30}, 24 D_{45}, 12 D_{90}	5 C_2, C_3, 2 C_4, C_5, 3 C_6, C_9, 3 C_{10}, C_{15}, C_{18}, 3 C_{30}, C_{45}, C_{90}, 16 D_2, 2 D_3, 4 D_4, 2 D_5, 4 D_6, 2 D_9, 4 D_{10}, 2 D_{15}, D_{18}, 4 D_{30}, 2 D_{45}, D_{90}	3 C_2, 2 C_4, C_6, C_{10}, C_{30}, 16 D_2, D_3, 4 D_4, D_5, 4 D_6, D_9, 4 D_{10}, D_{15}, D_{18}, 4 D_{30}, D_{45}, D_{90}	5 C_2, C_3, C_5, C_6, C_{10}, C_{15}, C_{30}, 16 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}
R87.2	5 C_2, 3 C_4, 4 C_8, 5 C_{11}, 4 C_{16}, 15 C_{22}, 20 C_{44}, 40 C_{88}, 40 C_{176}, 13 D_2, 3 D_4, 6 D_8, 10 D_{11}, 20 D_{22}, 30 D_{44}, 60 D_{88}	5 C_2, 3 C_4, 3 C_8, C_{11}, C_{16}, 3 C_{22}, 3 C_{44}, 3 C_{88}, C_{176}, 13 D_2, 3 D_4, 5 D_8, 2 D_{11}, 4 D_{22}, 4 D_{44}, 5 D_{88}	3 C_2, 2 C_4, C_{22}, 13 D_2, 2 D_4, 3 D_8, D_{11}, 3 D_{22}, 3 D_{44}, 3 D_{88}	5 C_2, C_4, C_8, C_{11}, C_{22}, C_{44}, C_{88}, 13 D_2, 2 D_4, D_8, 2 D_{11}, 2 D_{22}, 2 D_{44}, D_{88}
R87.3	3 C_2, 4 C_4, 2 C_8, 5 C_{11}, 2 C_{16}, 10 C_{22}, 15 C_{44}, 20 C_{88}, 20 C_{176}, 4 D_2, 2 D_4, D_8, 5 D_{11}, 5 D_{22}, 10 D_{44}, 10 D_{88}	3 C_2, 4 C_4, C_8, C_{11}, 2 C_{22}, 2 C_{44}, C_{88}, 4 D_2, 2 D_4, D_8, D_{11}, D_{22}, D_{44}, D_{88}	3 C_2, 3 C_4, C_{22}, 4 D_2, 2 D_4, D_8, D_{11}, D_{22}, D_{44}, D_{88}	3 C_2, C_4, C_{11}, C_{22}, C_{44}, 4 D_2, D_4, D_{11}, D_{22}, D_{44}
R87.4	3 C_2, C_3, 2 C_4, C_6, C_{12}, 14 C_{29}, 14 C_{58}, 28 C_{87}, 14 C_{116}, 28 C_{174}, 28 C_{348}, 3 D_2, 2 D_3, D_6, 28 D_{29}, 14 D_{58}, 56 D_{87}, 28 D_{174}	3 C_2, C_3, 2 C_4, C_6, C_{29}, C_{58}, C_{87}, C_{174}, 3 D_2, 2 D_3, D_6, 2 D_{29}, D_{58}, 2 D_{87}, D_{174}	2 C_2, 2 C_4, C_6, C_{58}, C_{174}, 3 D_2, D_3, D_6, D_{29}, D_{58}, D_{87}, D_{174}	3 C_2, C_3, C_{29}, C_{87}, 3 D_2, D_3, D_{29}, D_{87}
R87.5	4 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_8, 4 C_{10}, 2 C_{12}, 4 C_{15}, 6 C_{20}, 4 C_{30}, 8 C_{60}, 12 D_2, 2 D_3, 4 D_4, 4 D_5, 2 D_6, 2 D_8, 8 D_{10}, 2 D_{12}, 8 D_{15}, 8 D_{20}, 8 D_{30}, 8 D_{60}	4 C_2, C_3, 2 C_4, C_5, C_6, C_8, 2 C_{10}, C_{12}, C_{15}, 2 C_{20}, C_{30}, C_{60}, 12 D_2, 2 D_3, 4 D_4, 2 D_5, 2 D_6, D_8, 4 D_{10}, D_{12}, 2 D_{15}, 3 D_{20}, 2 D_{30}, D_{60}	2 C_2, 2 C_4, C_6, C_8, C_{10}, C_{12}, 2 C_{20}, C_{30}, C_{60}, 12 D_2, D_3, 4 D_4, D_5, 2 D_6, D_8, 4 D_{10}, D_{12}, D_{15}, 3 D_{20}, 2 D_{30}, D_{60}	4 C_2, C_3, C_5, 12 D_2, D_3, 2 D_5
R87.6	3 C_2, C_3, 3 C_4, 2 C_5, C_6, 3 C_8, 4 C_{10}, C_{12}, 4 C_{15}, 4 C_{20}, 4 C_{30}, 4 C_{60}, 4 D_2, D_3, 3 D_4, 2 D_5, D_6, 2 D_8, 2 D_{10}, 4 D_{15}, 2 D_{20}, 4 D_{30}	3 C_2, C_3, 3 C_4, C_5, C_6, 2 C_8, 2 C_{10}, C_{15}, C_{20}, C_{30}, 4 D_2, D_3, 3 D_4, D_5, D_6, D_8, D_{10}, D_{15}, D_{20}, D_{30}	2 C_2, 3 C_4, C_6, 2 C_8, C_{10}, C_{20}, C_{30}, 4 D_2, D_3, 3 D_4, D_5, D_6, D_8, D_{10}, D_{15}, D_{20}, D_{30}	3 C_2, C_3, C_5, 4 D_2, D_3, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R87.7	5 C_2, C_3, 3 C_4, 2 C_5, 3 C_6, 2 C_8, 6 C_{10}, 4 C_{12}, 4 C_{15}, 8 C_{20}, 12 C_{30}, 16 C_{60}, 13 D_2, 2 D_3, 3 D_4, 4 D_5, 4 D_6, 8 D_{10}, 3 D_{12}, 8 D_{15}, 6 D_{20}, 16 D_{30}, 12 D_{60}	5 C_2, C_3, 3 C_4, C_5, 3 C_6, C_8, 3 C_{10}, 3 C_{12}, C_{15}, 3 C_{20}, 3 C_{30}, 3 C_{60}, 13 D_2, 2 D_3, 3 D_4, 2 D_5, 4 D_6, 4 D_{10}, 3 D_{12}, 2 D_{15}, 3 D_{20}, 4 D_{30}, 3 D_{60}	3 C_2, 2 C_4, C_6, C_{10}, C_{12}, C_{20}, C_{30}, C_{60}, 13 D_2, D_3, 3 D_4, D_5, 4 D_6, 4 D_{10}, 3 D_{12}, D_{15}, 3 D_{20}, 4 D_{30}, 3 D_{60}	5 C_2, C_3, C_4, C_5, C_6, C_{10}, C_{15}, C_{30}, 13 D_2, 2 D_3, D_4, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}
R87.8	3 C_2, C_3, 5 C_4, 2 C_5, 2 C_6, C_8, 4 C_{10}, 7 C_{12}, 4 C_{15}, 14 C_{20}, 8 C_{30}, 28 C_{60}, 4 D_2, D_3, 2 D_4, 2 D_5, D_6, 2 D_{10}, 2 D_{12}, 4 D_{15}, 4 D_{20}, 4 D_{30}, 8 D_{60}	3 C_2, C_3, 5 C_4, C_5, 2 C_6, 2 C_{10}, 6 C_{12}, C_{15}, 6 C_{20}, 2 C_{30}, 6 C_{60}, 4 D_2, D_3, 2 D_4, D_5, D_6, D_{10}, 2 D_{12}, D_{15}, 2 D_{20}, D_{30}, 2 D_{60}	3 C_2, 3 C_4, C_6, C_{10}, 2 C_{12}, 2 C_{20}, C_{30}, 2 C_{60}, 4 D_2, D_3, 2 D_4, D_5, D_6, D_{10}, 2 D_{12}, D_{15}, 2 D_{20}, D_{30}, 2 D_{60}	3 C_2, C_3, C_5, C_{15}, 4 D_2, D_3, D_5, D_{15}
R87.9	3 C_2, 2 C_4, 4 C_8, 14 C_{29}, 14 C_{58}, 14 C_{116}, 28 C_{232}, 3 D_2, 28 D_{29}, 14 D_{58}	3 C_2, 2 C_4, 2 C_8, C_{29}, C_{58}, 3 D_2, 2 D_{29}, D_{58}	2 C_2, C_4, C_{58}, 3 D_2, D_{29}, D_{58}	3 C_2, C_{29}, 3 D_2, D_{29}
R87.10	2 C_2, 2 C_4, 2 C_8, 14 C_{29}, 14 C_{58}, 14 C_{116}, 28 C_{232}, 2 D_2, 14 D_{29}, 14 D_{58}	2 C_2, 2 C_4, C_{29}, C_{58}, 2 D_2, D_{29}, D_{58}	2 C_2, C_4, C_{58}, 2 D_2, D_{29}, D_{58}	2 C_2, C_{29}, 2 D_2, D_{29}
R87.11	C_2, 3 C_7, 3 C_{14}, 14 C_{29}, 42 C_{203}, 14 D_{29}	C_2, C_{29}, D_{29}	C_2, D_{29}	C_2, C_{29}, D_{29}
R87.12	3 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 4 C_{12}, 6 C_{16}, 6 C_{24}, 8 C_{32}, 8 C_{48}, 16 C_{96}, 4 D_2, 2 D_4, 2 D_8, 4 D_{16}	3 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, 2 C_{12}, 2 C_{16}, 4 D_2, 2 D_4, D_8, 2 D_{16}	2 C_2, 3 C_4, C_6, 2 C_8, 2 C_{16}, 4 D_2, 2 D_4, D_8, 2 D_{16}	3 C_2, 4 D_2
R87.13	4 C_2, C_3, 2 C_4, 4 C_6, 4 C_8, 2 C_{12}, 6 C_{16}, 5 C_{24}, 4 C_{32}, 6 C_{48}, 8 C_{96}, 9 D_2, 3 D_4, 5 D_8, 8 D_{16}	4 C_2, C_3, 2 C_4, 4 C_6, 2 C_8, 2 C_{16}, 9 D_2, 3 D_4, 3 D_8, 3 D_{16}	2 C_2, 2 C_4, C_6, 2 C_8, 2 C_{16}, 9 D_2, 3 D_4, 3 D_8, 3 D_{16}	4 C_2, 9 D_2
R87.14	3 C_2, C_3, 2 C_5, 3 C_6, 3 C_9, 6 C_{10}, 4 C_{15}, 3 C_{18}, 12 C_{30}, 12 C_{45}, 12 C_{90}, 6 D_2	3 C_2, C_3, C_5, 3 C_6, C_9, 3 C_{10}, C_{15}, C_{18}, 3 C_{30}, C_{45}, C_{90}, 6 D_2	2 C_2, C_6, C_{10}, C_{30}, 6 D_2	3 C_2, C_3, C_5, C_6, C_{10}, C_{15}, C_{30}, 6 D_2
R87.15	C_2, C_3, 29 C_{59}, 29 C_{118}, 29 C_{177}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R87.16	C_2, 2 C_5, 3 C_7, 2 C_{10}, 3 C_{14}, 10 C_{25}, 12 C_{35}, 10 C_{50}, 12 C_{70}, 60 C_{175}, 60 C_{350}	C_2	C_2	C_2
R87.17	2 C_2, 2 C_4, 3 C_8, 5 C_{11}, 4 C_{16}, 10 C_{22}, 15 C_{44}, 30 C_{88}, 40 C_{176}, 2 D_2	2 C_2, 2 C_4, C_8, C_{11}, 2 C_{22}, 2 C_{44}, C_{88}, 2 D_2	2 C_2, C_4, C_{22}, 2 D_2	2 C_2, C_4, C_{11}, C_{22}, C_{44}, 2 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R87.18	3 C_2, 2 C_4, 4 C_8, 5 C_{11}, 8 C_{16}, 15 C_{22}, 20 C_{44}, 40 C_{88}, 80 C_{176}, 3 D_2	3 C_2, 2 C_4, 3 C_8, C_{11}, 2 C_{16}, 3 C_{22}, 3 C_{44}, 3 C_{88}, 2 C_{176}, 3 D_2	2 C_2, C_4, C_{22}, 3 D_2	3 C_2, C_4, C_8, C_{11}, C_{22}, C_{44}, C_{88}, 3 D_2
R87.19	C_2, C_3, C_4, C_6, 2 C_{12}, 14 C_{29}, 14 C_{58}, 28 C_{87}, 28 C_{116}, 28 C_{174}, 56 C_{348}	C_2, C_3, C_4, C_6, C_{29}, C_{58}, C_{87}, C_{174}	C_2, C_4, C_6, C_{58}, C_{174}	C_2, C_3, C_{29}, C_{87}
Genus 88				
R88.1	3 C_2, C_4, 44 C_{89}, 88 C_{178}, 4 D_2, D_4, 44 D_{89}, 44 D_{178}	3 C_2, C_4, C_{89}, 2 C_{178}, 4 D_2, D_4, D_{89}, D_{178}	3 C_2, C_4, C_{178}, 4 D_2, D_4, D_{89}, D_{178}	3 C_2, C_{89}, 4 D_2, D_{89}
R88.2	2 C_2, 2 C_4, 2 C_8, 5 C_{11}, 4 C_{16}, 5 C_{22}, 4 C_{32}, 10 C_{44}, 20 C_{88}, 40 C_{176}, 40 C_{352}, 2 D_2, D_4, 2 D_8, 5 D_{11}, 4 D_{16}, 5 D_{22}, 10 D_{44}, 20 D_{88}, 40 D_{176}	2 C_2, 2 C_4, C_8, C_{11}, C_{16}, C_{22}, C_{44}, C_{88}, C_{176}, 2 D_2, D_4, D_8, D_{11}, D_{16}, D_{22}, D_{44}, D_{88}, D_{176}	2 C_2, 2 C_4, C_8, C_{16}, C_{22}, C_{44}, C_{88}, C_{176}, 2 D_2, D_4, D_8, D_{11}, D_{16}, D_{22}, D_{44}, D_{88}, D_{176}	2 C_2, C_{11}, 2 D_2, D_{11}
R88.3	3 C_2, 2 C_3, C_4, 4 C_6, 2 C_8, 2 C_{12}, 4 C_{16}, 4 C_{24}, 8 C_{32}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 4 D_8, 2 D_{12}, 8 D_{16}, 4 D_{24}, 8 D_{32}	3 C_2, 2 C_3, C_4, 4 C_6, C_8, 2 C_{12}, C_{16}, 2 C_{24}, C_{32}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 2 D_{12}, 2 D_{16}, 2 D_{24}, D_{32}	3 C_2, 3 C_6, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 2 D_{12}, 2 D_{16}, 2 D_{24}, D_{32}	3 C_2, 2 C_3, C_4, C_8, 4 D_2, 2 D_3, 2 D_4, 2 D_8
R88.4	3 C_2, 3 C_3, 2 C_5, 5 C_6, 6 C_9, 2 C_{10}, 10 C_{15}, 6 C_{18}, 10 C_{30}, 24 C_{45}, 24 C_{90}, 3 D_2, 2 D_3, 4 D_5, D_6, 6 D_9, 2 D_{10}, 8 D_{15}, 3 D_{18}, 4 D_{30}, 24 D_{45}, 12 D_{90}	3 C_2, 3 C_3, C_5, 5 C_6, 4 C_9, C_{10}, 4 C_{15}, 4 C_{18}, 4 C_{30}, 4 C_{45}, 4 C_{90}, 3 D_2, 2 D_3, 2 D_5, D_6, 6 D_9, D_{10}, 2 D_{15}, 3 D_{18}, D_{30}, 6 D_{45}, 3 D_{90}	3 C_2, 3 C_6, 3 D_2, 2 D_3, 2 D_5, D_6, 6 D_9, D_{10}, 2 D_{15}, 3 D_{18}, D_{30}, 6 D_{45}, 3 D_{90}	3 C_2, 2 C_3, C_5, C_6, C_{10}, C_{15}, C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}
R88.5	3 C_2, 3 C_3, 2 C_5, 2 C_6, 6 C_9, 2 C_{10}, 10 C_{15}, 3 C_{18}, 4 C_{30}, 24 C_{45}, 12 C_{90}, 3 D_2, 5 D_3, 4 D_5, 2 D_6, 9 D_9, 2 D_{10}, 14 D_{15}, 3 D_{18}, 4 D_{30}, 36 D_{45}, 12 D_{90}	3 C_2, 3 C_3, C_5, 2 C_6, 4 C_9, C_{10}, 4 C_{15}, C_{18}, C_{30}, 4 C_{45}, C_{90}, 3 D_2, 5 D_3, 2 D_5, 2 D_6, 5 D_9, D_{10}, 5 D_{15}, D_{18}, D_{30}, 5 D_{45}, D_{90}	3 C_2, 3 D_2, 5 D_3, 2 D_5, 2 D_6, 5 D_9, D_{10}, 5 D_{15}, D_{18}, D_{30}, 5 D_{45}, D_{90}	3 C_2, 3 C_3, C_5, C_9, C_{15}, C_{45}, 3 D_2, 5 D_3, 2 D_5, 2 D_9, 2 D_{15}, 2 D_{45}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R88.6	3 C_2, C_3, C_4, 3 C_6, 2 C_8, 5 C_{11}, C_{12}, 5 C_{22}, 2 C_{24}, 5 C_{33}, 10 C_{44}, 5 C_{66}, 20 C_{88}, 10 C_{132}, 20 C_{264}, 4 D_2, 2 D_4, 2 D_8, 10 D_{11}, 10 D_{22}, 20 D_{44}, 20 D_{88}	3 C_2, C_3, C_4, 3 C_6, C_8, C_{11}, C_{22}, C_{44}, C_{88}, 4 D_2, 2 D_4, D_8, 2 D_{11}, 2 D_{22}, 2 D_{44}, D_{88}	3 C_2, C_6, 4 D_2, 2 D_4, D_8, 2 D_{11}, 2 D_{22}, 2 D_{44}, D_{88}	3 C_2, C_4, C_8, C_{11}, C_{22}, C_{44}, C_{88}, 4 D_2, 2 D_4, D_8, 2 D_{11}, 2 D_{22}, 2 D_{44}, D_{88}
R88.7	3 C_2, 2 C_5, 2 C_{10}, 11 C_{23}, 11 C_{46}, 22 C_{115}, 3 D_2, 4 D_5, 2 D_{10}, 22 D_{23}, 11 D_{46}, 22 D_{115}	3 C_2, C_5, C_{10}, C_{23}, C_{46}, C_{115}, 3 D_2, 2 D_5, D_{10}, 2 D_{23}, D_{46}, D_{115}	3 C_2, 3 D_2, 2 D_5, D_{10}, 2 D_{23}, D_{46}, D_{115}	3 C_2, C_5, C_{23}, 3 D_2, 2 D_5, 2 D_{23}
R88.8	3 C_2, C_4, 2 C_5, 6 C_{10}, 5 C_{11}, 2 C_{20}, 5 C_{22}, 10 C_{44}, 10 C_{55}, 10 C_{110}, 20 C_{220}, 4 D_2, D_4, 10 D_{11}, 10 D_{22}, 10 D_{44}	3 C_2, C_4, C_{11}, C_{22}, C_{44}, 4 D_2, D_4, 2 D_{11}, 2 D_{22}, D_{44}	3 C_2, 4 D_2, D_4, 2 D_{11}, 2 D_{22}, D_{44}	3 C_2, C_4, C_{11}, C_{22}, C_{44}, 4 D_2, D_4, 2 D_{11}, 2 D_{22}, D_{44}
R88.9	2 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, 6 C_9, 6 C_{12}, 6 C_{18}, 8 C_{24}, 12 C_{36}, 18 C_{72}, 2 D_2, D_3, D_4, D_6, 3 D_9, 2 D_{12}, 3 D_{18}, 6 D_{36}	2 C_2, 3 C_3, 2 C_4, 4 C_6, 4 C_9, 4 C_{12}, 4 C_{18}, 4 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 2 C_4, 4 C_6, 3 C_{12}, 4 C_{18}, 4 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 2 C_3, 2 D_2, D_3
R88.10	2 C_2, 3 C_3, 2 C_4, 3 C_6, C_8, 6 C_9, 6 C_{12}, 6 C_{18}, 2 C_{24}, 12 C_{36}, 6 C_{72}, 2 D_2, 3 D_3, D_4, 3 D_6, 6 D_9, 5 D_{12}, 6 D_{18}, 12 D_{36}	2 C_2, 3 C_3, 2 C_4, 3 C_6, 4 C_9, 4 C_{12}, 4 C_{18}, 4 C_{36}, 2 D_2, 3 D_3, D_4, 3 D_6, 4 D_9, 4 D_{12}, 4 D_{18}, 4 D_{36}	2 C_2, 2 C_4, 3 C_6, 3 C_{12}, 4 C_{18}, 4 C_{36}, 2 D_2, 3 D_3, D_4, 3 D_6, 4 D_9, 4 D_{12}, 4 D_{18}, 4 D_{36}	2 C_2, 3 C_3, C_9, 2 D_2, 3 D_3, D_9
R88.11	2 C_2, 2 C_4, 2 C_8, 6 C_{13}, 2 C_{16}, 6 C_{26}, 12 C_{52}, 12 C_{104}, 2 D_2, D_4, 2 D_8, 6 D_{13}, 6 D_{26}, 6 D_{52}, 12 D_{104}	2 C_2, 2 C_4, C_8, C_{13}, C_{26}, C_{52}, C_{104}, 2 D_2, D_4, D_8, D_{13}, D_{26}, D_{52}, D_{104}	2 C_2, 2 C_4, C_8, C_{26}, 2 D_2, D_4, D_8, D_{13}, D_{26}, D_{52}, D_{104}	2 C_2, C_{13}, 2 D_2, D_{13}
R88.12	3 C_2, 3 C_3, C_4, 8 C_6, 2 C_8, 6 C_9, 3 C_{12}, 15 C_{18}, 2 C_{24}, 6 C_{36}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	3 C_2, 3 C_3, C_4, 8 C_6, C_8, 4 C_9, 2 C_{12}, 9 C_{18}, 4 C_{36}, 4 D_2, D_3, 2 D_4, D_6, D_8, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	3 C_2, 6 C_6, 4 C_{18}, 4 D_2, D_3, 2 D_4, D_6, D_8, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	3 C_2, 2 C_3, C_4, 4 D_2, D_3, 2 D_4
R88.13	3 C_2, 3 C_3, C_4, 4 C_6, 2 C_8, 6 C_9, 5 C_{12}, 9 C_{18}, 4 C_{24}, 9 C_{36}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_8, 6 D_9, 7 D_{12}, 6 D_{18}, 4 D_{24}, 9 D_{36}	3 C_2, 3 C_3, C_4, 4 C_6, C_8, 4 C_9, 4 C_{12}, 5 C_{18}, C_{24}, 7 C_{36}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 4 D_9, 5 D_{12}, 4 D_{18}, D_{24}, 7 D_{36}	3 C_2, 2 C_6, 4 C_{18}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, D_8, 4 D_9, 5 D_{12}, 4 D_{18}, D_{24}, 7 D_{36}	3 C_2, 3 C_3, C_4, C_6, C_9, C_{12}, 4 D_2, 4 D_3, 2 D_4, 2 D_6, D_9, 2 D_{12}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R88.14	2 C_2, 3 C_3, C_4, 4 C_6, C_8, 6 C_9, 3 C_{12}, 6 C_{18}, 2 C_{24}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}	2 C_2, 3 C_3, C_4, 4 C_6, 4 C_9, 2 C_{12}, 4 C_{18}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}	2 C_2, C_4, 4 C_6, 2 C_{12}, 4 C_{18}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}	2 C_2, 2 C_3, 2 D_2, D_3
R88.15	3 C_2, C_3, 3 C_6, 3 C_9, 5 C_{11}, 9 C_{18}, 5 C_{22}, 5 C_{33}, 5 C_{66}, 15 C_{99}, 15 C_{198}, 3 D_2, 10 D_{11}, 5 D_{22}	3 C_2, C_3, 3 C_6, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	3 C_2, C_6, 3 D_2, 2 D_{11}, D_{22}	3 C_2, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}
R88.16	C_2, 5 C_{11}, 8 C_{17}, 8 C_{34}, 40 C_{187}, 5 D_{11}	C_2, C_{11}, D_{11}	C_2, D_{11}	C_2, C_{11}, D_{11}
R88.17	C_2, 3 C_3, C_6, 3 C_7, 6 C_9, 3 C_{14}, 15 C_{21}, 6 C_{42}, 27 C_{63}, D_3, 3 D_9	C_2, 3 C_3, C_6, 4 C_9, D_3, 3 D_9	C_2, C_6, D_3, 3 D_9	C_2, 2 C_3, D_3
R88.18	3 C_2, C_4, 2 C_8, 11 C_{23}, 33 C_{46}, 11 C_{92}, 22 C_{184}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8	3 C_2, 4 D_2, 2 D_4, D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8
R88.19	3 C_2, C_3, C_4, 2 C_5, 3 C_6, 3 C_9, 6 C_{10}, C_{12}, 4 C_{15}, 9 C_{18}, 2 C_{20}, 12 C_{30}, 3 C_{36}, 12 C_{45}, 4 C_{60}, 36 C_{90}, 12 C_{180}, 4 D_2, D_4	3 C_2, C_3, C_4, 3 C_6, 4 D_2, D_4	3 C_2, C_6, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R88.20	C_2, C_3, C_6, 29 C_{59}, 29 C_{118}, 58 C_{177}, 58 C_{354}	C_2, C_3, C_6	C_2, C_6	C_2
R88.21	3 C_2, 44 C_{89}, 132 C_{178}, 3 D_2	3 C_2, C_{89}, 3 C_{178}, 3 D_2	3 C_2, C_{178}, 3 D_2	3 C_2, C_{89}, 3 D_2
R88.22	C_2, C_4, 2 C_8, 5 C_{11}, 4 C_{16}, 5 C_{22}, 8 C_{32}, 10 C_{44}, 20 C_{88}, 40 C_{176}, 80 C_{352}	C_2, C_4, C_8, C_{11}, C_{16}, C_{22}, C_{44}, C_{88}, C_{176}	C_2, C_4, C_8, C_{16}, C_{22}, C_{44}, C_{88}, C_{176}	C_2, C_{11}
Genus 90				
R90.1	**Tet**, **Oct**, 2 C_2, C_3, C_4, 15 C_{31}, 15 C_{62}, 30 C_{93}, 3 D_2, D_3, D_4, 15 D_{31}, 15 D_{62}, 30 D_{93}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_{31}, C_{62}, C_{93}, 3 D_2, D_3, D_4, D_{31}, D_{62}, D_{93}	**Tet**, **Oct**, 2 C_2, C_4, C_{62}, 3 D_2, D_3, D_4, D_{31}, D_{62}, D_{93}	**Tet**, 2 C_2, C_3, C_{31}, 3 D_2, D_3, D_{31}
R90.2	3 C_2, C_4, 3 C_7, 6 C_{13}, 6 C_{14}, 12 C_{26}, 36 C_{91}, 72 C_{182}, 4 D_2, D_4, 3 D_7, 6 D_{13}, 3 D_{14}, 6 D_{26}, 36 D_{91}, 36 D_{182}	3 C_2, C_4, C_7, C_{13}, 2 C_{14}, 2 C_{26}, C_{91}, 2 C_{182}, 4 D_2, D_4, D_7, D_{13}, D_{14}, D_{26}, D_{91}, D_{182}	3 C_2, C_4, C_{14}, C_{26}, C_{182}, 4 D_2, D_4, D_7, D_{13}, D_{14}, D_{26}, D_{91}, D_{182}	3 C_2, C_7, C_{13}, C_{91}, 4 D_2, D_7, D_{13}, D_{91}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R90.3	2 C_2, C_3, 2 C_4, 2 C_5, C_6, C_8, 3 C_9, 2 C_{10}, 2 C_{12}, 4 C_{15}, 3 C_{18}, 4 C_{20}, 2 C_{24}, 4 C_{30}, 6 C_{36}, 4 C_{40}, 12 C_{45}, 8 C_{60}, 6 C_{72}, 12 C_{90}, 8 C_{120}, 24 C_{180}, 24 C_{360}, 2 D_2, D_3, D_4, 2 D_5, D_6, 3 D_9, 2 D_{10}, 2 D_{12}, 4 D_{15}, 3 D_{18}, 4 D_{20}, 4 D_{30}, 6 D_{36}, 12 D_{45}, 8 D_{60}, 12 D_{90}, 24 D_{180}	2 C_2, C_3, 2 C_4, C_5, C_6, C_9, C_{10}, C_{12}, C_{15}, C_{18}, C_{20}, C_{30}, C_{36}, C_{45}, C_{60}, C_{90}, C_{180}, 2 D_2, D_3, D_4, D_5, D_6, D_9, D_{10}, D_{12}, D_{15}, D_{18}, D_{20}, D_{30}, D_{36}, D_{45}, D_{60}, D_{90}, D_{180}	2 C_2, 2 C_4, C_6, C_{10}, C_{12}, C_{18}, C_{20}, C_{30}, C_{36}, C_{60}, C_{90}, C_{180}, 2 D_2, D_3, D_4, D_5, D_6, D_9, D_{10}, D_{12}, D_{15}, D_{18}, D_{20}, D_{30}, D_{36}, D_{45}, D_{60}, D_{90}, D_{180}	2 C_2, C_3, C_5, C_9, C_{15}, C_{45}, 2 D_2, D_3, D_5, D_9, D_{15}, D_{45}
R90.4	3 C_2, C_3, C_4, 2 C_6, 11 C_{23}, 11 C_{46}, 11 C_{69}, 22 C_{92}, 11 C_{138}, 4 D_2, D_3, D_4, D_6, 22 D_{23}, 22 D_{46}, 11 D_{69}, 22 D_{92}, 11 D_{138}	3 C_2, C_3, C_4, 2 C_6, C_{23}, C_{46}, C_{69}, C_{92}, C_{138}, 4 D_2, D_3, D_4, D_6, 2 D_{23}, 2 D_{46}, D_{69}, D_{92}, D_{138}	3 C_2, C_4, C_6, 4 D_2, D_3, D_4, D_6, 2 D_{23}, 2 D_{46}, D_{69}, D_{92}, D_{138}	3 C_2, C_3, C_{23}, C_{46}, 4 D_2, D_3, 2 D_{23}, 2 D_{46}
R90.5	3 C_2, C_4, 2 C_8, 15 C_{31}, 30 C_{62}, 15 C_{124}, 4 D_2, 2 D_4, 2 D_8, 15 D_{31}, 15 D_{62}, 15 D_{124}	3 C_2, C_4, C_8, C_{31}, 2 C_{62}, C_{124}, 4 D_2, 2 D_4, D_8, D_{31}, D_{62}, D_{124}	3 C_2, C_{62}, 4 D_2, 2 D_4, D_8, D_{31}, D_{62}, D_{124}	3 C_2, C_4, C_{31}, 4 D_2, 2 D_4, D_{31}
R90.6	3 C_2, C_3, C_4, C_6, 2 C_{12}, 9 C_{19}, 18 C_{38}, 9 C_{57}, 9 C_{114}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}, 9 D_{19}, 9 D_{38}, 9 D_{57}, 9 D_{114}	3 C_2, C_3, C_4, C_6, C_{12}, C_{19}, 2 C_{38}, C_{57}, C_{114}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}, D_{19}, D_{38}, D_{57}, D_{114}	3 C_2, C_4, C_{38}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}, D_{19}, D_{38}, D_{57}, D_{114}	3 C_2, C_3, C_6, C_{19}, 4 D_2, 2 D_3, 2 D_6, D_{19}
R90.7	3 C_2, C_4, 3 C_7, 2 C_8, 6 C_{14}, 4 C_{16}, 3 C_{28}, 8 C_{32}, 6 C_{56}, 12 C_{112}, 4 D_2, 2 D_4, 3 D_7, 4 D_8, 3 D_{14}, 8 D_{16}, 3 D_{28}, 8 D_{32}, 6 D_{56}, 12 D_{112}	3 C_2, C_4, C_7, C_8, 2 C_{14}, C_{16}, C_{28}, C_{32}, C_{56}, C_{112}, 4 D_2, 2 D_4, D_7, 2 D_8, D_{14}, 2 D_{16}, D_{28}, D_{32}, D_{56}, D_{112}	3 C_2, C_{14}, 4 D_2, 2 D_4, D_7, 2 D_8, D_{14}, 2 D_{16}, D_{28}, D_{32}, D_{56}, D_{112}	3 C_2, C_4, C_7, C_8, C_{16}, 4 D_2, 2 D_4, D_7, 2 D_8, 2 D_{16}
R90.8	3 C_2, C_3, 2 C_5, C_6, 3 C_7, 2 C_{10}, 9 C_{14}, 4 C_{15}, 3 C_{21}, 4 C_{30}, 6 C_{35}, 3 C_{42}, 6 C_{70}, 12 C_{105}, 12 C_{210}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 8 D_{15}, 4 D_{30}	3 C_2, C_3, C_5, C_6, C_7, C_{10}, 3 C_{14}, C_{15}, C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	3 C_2, C_{14}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	3 C_2, C_3, C_5, C_6, C_{10}, C_{15}, C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R90.9	3 C_2, C_4, 2 C_5, 2 C_{10}, 5 C_{11}, 4 C_{20}, 10 C_{22}, 10 C_{55}, 10 C_{110}, 4 D_2, D_4, 4 D_5, 4 D_{10}, 5 D_{11}, 4 D_{20}, 5 D_{22}, 10 D_{55}, 10 D_{110}	3 C_2, C_4, C_5, C_{10}, C_{11}, C_{20}, 2 C_{22}, C_{55}, C_{110}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{11}, D_{20}, D_{22}, D_{55}, D_{110}	3 C_2, C_4, C_{22}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{11}, D_{20}, D_{22}, D_{55}, D_{110}	3 C_2, C_5, C_{10}, C_{11}, 4 D_2, 2 D_5, 2 D_{10}, D_{11}
R90.10	**Tet**, 2 **Ico**, C_2, C_3, 2 C_5, 3 C_7, 3 C_{14}, 3 C_{21}, 6 C_{35}, D_2, D_3, 2 D_5	**Tet**, **Ico**, C_2, C_3, C_5, D_2, D_3, D_5	**Tet**, **Ico**, C_2, D_2, D_3, D_5	**Tet**, **Ico**, C_2, C_3, C_5, D_2, D_3, D_5
R90.11	3 C_2, C_3, C_6, 3 C_9, 5 C_{11}, 3 C_{18}, 15 C_{22}, 5 C_{33}, 5 C_{66}, 15 C_{99}, 15 C_{198}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}	3 C_2, C_3, C_6, C_9, C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, C_3, C_6, C_9, C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}
R90.12	C_2, C_3, 2 C_5, 6 C_{13}, 4 C_{15}, 6 C_{26}, 6 C_{39}, 12 C_{65}, 24 C_{195}, D_3, 2 D_5, 4 D_{15}	C_2, C_3, C_5, C_{13}, C_{15}, C_{26}, D_3, D_5, D_{15}	C_2, C_{26}, D_3, D_5, D_{15}	C_2, C_3, C_5, C_{15}, D_3, D_5, D_{15}
R90.13	3 C_2, 2 C_5, 2 C_{10}, 9 C_{19}, 27 C_{38}, 18 C_{95}, 18 C_{190}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}	3 C_2, 3 D_2, 2 D_5, D_{10}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}
R90.14	3 C_2, C_3, C_6, 15 C_{31}, 45 C_{62}, 15 C_{93}, 15 C_{186}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6	3 C_2, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6
R90.15	C_2, 2 C_5, 18 C_{37}, 18 C_{74}, 36 C_{185}, 2 D_5	C_2, C_5, D_5	C_2, D_5	C_2, C_5, D_5
R90.16	2 C_2, 2 C_4, C_8, 11 C_{23}, 22 C_{46}, 22 C_{92}, 22 C_{184}, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 D_2
R90.17	**Tet**, C_2, C_3, 15 C_{31}, 15 C_{62}, 30 C_{93}, D_2	**Tet**, C_2, C_3, C_{31}, C_{62}, C_{93}, D_2	**Tet**, C_2, C_{62}, D_2	**Tet**, C_2, C_3, C_{31}, D_2
R90.18	C_2, C_3, 30 C_{61}, 30 C_{122}, 30 C_{183}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R90.19	C_2, 90 C_{181}, 90 C_{362}	C_2	C_2	C_2
R90.20	3 C_2, 3 C_7, 6 C_{13}, 9 C_{14}, 18 C_{26}, 36 C_{91}, 108 C_{182}, 3 D_2	3 C_2, C_7, C_{13}, 3 C_{14}, 3 C_{26}, C_{91}, 3 C_{182}, 3 D_2	3 C_2, C_{14}, C_{26}, C_{182}, 3 D_2	3 C_2, C_7, C_{13}, C_{91}, 3 D_2
R90.21	C_2, C_3, C_4, 2 C_5, C_6, 2 C_8, 3 C_9, 2 C_{10}, 2 C_{12}, 4 C_{15}, 3 C_{18}, 4 C_{20}, 4 C_{24}, 4 C_{30}, 6 C_{36}, 8 C_{40}, 12 C_{45}, 8 C_{60}, 12 C_{72}, 12 C_{90}, 16 C_{120}, 24 C_{180}, 48 C_{360}	C_2, C_3, C_4, C_5, C_6, C_9, C_{10}, C_{12}, C_{15}, C_{18}, C_{20}, C_{30}, C_{36}, C_{45}, C_{60}, C_{90}, C_{180}	C_2, C_4, C_6, C_{10}, C_{12}, C_{18}, C_{20}, C_{30}, C_{36}, C_{60}, C_{90}, C_{180}	C_2, C_3, C_5, C_9, C_{15}, C_{45}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 91				
R91.1	C_2, 3 C_3, C_6, 3 C_7, 6 C_9, 3 C_{21}, 3 D_2, D_3, 3 D_7, 3 D_9	C_2, 3 C_3, C_6, C_7, 6 C_9, 3 D_2, D_3, D_7, 3 D_9	C_2, C_6, 3 D_2, D_3, D_7, 3 D_9	C_2, C_3, C_7, 6 C_9, 3 D_2, D_3, D_7, 3 D_9
R91.2	C_2, 4 C_3, 4 C_5, C_6, 2 C_{10}, 20 C_{15}, 4 C_{30}, 2 D_3, 2 D_5, 4 D_{15}	C_2, 4 C_3, 3 C_5, C_6, C_{10}, 14 C_{15}, C_{30}, 2 D_3, 2 D_5, 4 D_{15}	C_2, C_6, C_{10}, C_{30}, 2 D_3, 2 D_5, 4 D_{15}	C_2, 2 C_3, 2 C_5, 4 C_{15}, 2 D_3, 2 D_5, 4 D_{15}
R91.3	2 C_2, 4 C_3, 2 C_4, 5 C_6, 2 C_9, 8 C_{12}, 2 C_{18}, 4 C_{36}, 2 D_2, 3 D_3, D_4, 2 D_6, 2 D_{12}	2 C_2, 4 C_3, 2 C_4, 5 C_6, C_9, 7 C_{12}, C_{18}, C_{36}, 2 D_2, 3 D_3, D_4, 2 D_6, 2 D_{12}	2 C_2, C_4, 5 C_6, 2 C_{12}, C_{18}, 2 D_2, 3 D_3, D_4, 2 D_6, 2 D_{12}	2 C_2, 2 C_3, 2 D_2, 3 D_3
R91.4	2 C_2, 4 C_3, 2 C_4, 5 C_6, 3 C_9, 6 C_{12}, 3 C_{18}, 6 C_{36}, 2 D_2, 3 D_3, D_4, 3 D_6, 3 D_{12}	2 C_2, 4 C_3, 2 C_4, 5 C_6, C_9, 5 C_{12}, C_{18}, C_{36}, 2 D_2, 3 D_3, D_4, 3 D_6, 3 D_{12}	2 C_2, 2 C_4, 4 C_6, 3 C_{12}, 2 D_2, 3 D_3, D_4, 3 D_6, 3 D_{12}	2 C_2, 2 C_3, 2 D_2, 3 D_3
R91.5	**Tet**, 2 **Oct**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 8 C_5, C_6, 4 C_{10}, 2 C_{15}, 2 C_{20}, 6 D_2, 2 D_3, 3 D_4, 12 D_5, D_6, 6 D_{10}, 2 D_{15}, 2 D_{20}	**Tet**, 2 **Oct**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 7 C_5, C_6, 4 C_{10}, 2 C_{15}, 2 C_{20}, 6 D_2, 2 D_3, 3 D_4, 11 D_5, D_6, 6 D_{10}, 2 D_{15}, 2 D_{20}	**Tet**, 2 **Oct**, 2 **Ico**, 2 C_2, 2 C_4, 2 C_{10}, 2 C_{20}, 6 D_2, 2 D_3, 3 D_4, 9 D_5, D_6, 6 D_{10}, 2 D_{15}, 2 D_{20}	**Tet**, 2 **Ico**, 3 C_2, C_3, 7 C_5, C_6, 2 C_{10}, 2 C_{15}, 6 D_2, 2 D_3, 11 D_5, D_6, 2 D_{10}, 2 D_{15}
R91.6	**Tet**, 2 **Oct**, 2 **Ico**, 5 C_2, C_3, 2 C_4, 2 C_5, C_6, 4 C_8, 6 C_{10}, 16 D_2, 2 D_3, 6 D_4, 8 D_5, D_6, 8 D_8, 12 D_{10}	**Tet**, 2 **Oct**, 2 **Ico**, 5 C_2, C_3, 2 C_4, 2 C_5, C_6, 3 C_8, 6 C_{10}, 16 D_2, 2 D_3, 6 D_4, 8 D_5, D_6, 6 D_8, 12 D_{10}	**Tet**, 2 **Oct**, 2 **Ico**, 2 C_2, 2 C_4, 3 C_8, 2 C_{10}, 16 D_2, D_3, 6 D_4, 4 D_5, D_6, 6 D_8, 12 D_{10}	**Tet**, 2 **Ico**, 5 C_2, C_3, 2 C_5, C_6, 4 C_{10}, 16 D_2, 2 D_3, 8 D_5, D_6, 8 D_{10}
R91.7	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, 2 C_8, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, C_8, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 2 C_2, 3 C_4, C_8, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_5, C_6, C_{10}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}
R91.8	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 4 C_4, C_5, C_6, 2 C_8, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 4 C_4, C_5, C_6, C_8, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 2 C_2, 4 C_4, C_8, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_5, C_6, C_{10}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}
R91.9	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, 2 C_8, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, C_8, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 2 C_2, 2 C_4, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, **Oct**, **Ico**, 3 C_2, C_3, C_4, C_5, C_6, C_{10}, 6 D_2, 2 D_3, D_4, 2 D_5, D_6, D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R91.10	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, 2 C_8, C_{10}, 7 D_2, 2 D_3, 5 D_4, 2 D_5, D_6, 2 D_8, D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, C_8, C_{10}, 7 D_2, 2 D_3, 5 D_4, 2 D_5, D_6, D_8, D_{10}	**Tet**, 2 **Oct**, **Ico**, 2 C_2, 3 C_4, C_8, C_{10}, 7 D_2, D_3, 5 D_4, 2 D_5, D_6, D_8, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_5, C_6, 7 D_2, 2 D_3, 2 D_5, D_6
R91.11	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 4 C_4, C_5, C_6, 2 C_8, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 4 C_4, C_5, C_6, C_8, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 2 C_2, 4 C_4, C_8, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_5, C_6, C_{10}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}
R91.12	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, 2 C_8, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, C_8, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 2 C_2, 2 C_4, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, **Oct**, **Ico**, 3 C_2, C_3, C_4, C_5, C_6, C_{10}, 6 D_2, 2 D_3, D_4, 2 D_5, D_6, D_{10}
R91.13	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, 2 C_8, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, C_8, C_{10}, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, 2 **Oct**, **Ico**, 2 C_2, 3 C_4, C_8, 6 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_5, C_6, C_{10}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}
R91.14	**Tet**, 2 **Oct**, **Ico**, 5 C_2, C_3, 2 C_4, 5 C_5, 3 C_6, 9 C_{10}, 2 C_{15}, 2 C_{30}, 16 D_2, 4 D_3, 4 D_4, 6 D_5, 6 D_6, 9 D_{10}, 4 D_{15}, 2 D_{30}	**Tet**, 2 **Oct**, **Ico**, 5 C_2, C_3, 2 C_4, 4 C_5, 3 C_6, 8 C_{10}, 2 C_{15}, 2 C_{30}, 16 D_2, 4 D_3, 4 D_4, 6 D_5, 6 D_6, 9 D_{10}, 4 D_{15}, 2 D_{30}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, 2 C_4, 2 C_6, 6 C_{10}, 2 C_{30}, 16 D_2, 2 D_3, 4 D_4, 3 D_5, 6 D_6, 9 D_{10}, 2 D_{15}, 2 D_{30}	**Tet**, **Ico**, 5 C_2, C_3, 3 C_5, C_6, 2 C_{10}, 2 C_{15}, 16 D_2, 4 D_3, 6 D_5, 2 D_6, 2 D_{10}, 4 D_{15}
R91.15	5 C_2, 5 C_3, 3 C_4, 10 C_6, 2 C_8, 10 C_{12}, 4 C_{24}, 13 D_2, 12 D_3, 3 D_4, 18 D_6, 12 D_{12}	5 C_2, 5 C_3, 3 C_4, 10 C_6, C_8, 9 C_{12}, C_{24}, 13 D_2, 12 D_3, 3 D_4, 18 D_6, 11 D_{12}	3 C_2, 3 C_4, 5 C_6, C_8, 6 C_{12}, 13 D_2, 9 D_3, 3 D_4, 17 D_6, 9 D_{12}	5 C_2, 5 C_3, 4 C_6, 13 D_2, 12 D_3, 8 D_6
R91.16	5 C_2, 5 C_3, 3 C_4, 9 C_6, 2 C_8, 10 C_{12}, 10 C_{24}, 13 D_2, 10 D_3, 3 D_4, 14 D_6, 9 D_{12}	5 C_2, 5 C_3, 3 C_4, 9 C_6, C_8, 9 C_{12}, 4 C_{24}, 13 D_2, 10 D_3, 3 D_4, 14 D_6, 9 D_{12}	3 C_2, 2 C_4, 7 C_6, 2 C_{12}, 13 D_2, 5 D_3, 3 D_4, 14 D_6, 9 D_{12}	5 C_2, 4 C_3, C_4, 2 C_6, 13 D_2, 10 D_3, D_4, 3 D_6
R91.17	3 C_2, 5 C_3, 5 C_4, 6 C_6, C_8, 10 C_{12}, 2 C_{24}, 4 D_2, 9 D_3, 2 D_4, 9 D_6, 9 D_{12}	3 C_2, 5 C_3, 5 C_4, 6 C_6, 9 C_{12}, 4 D_2, 9 D_3, 2 D_4, 9 D_6, 9 D_{12}	3 C_2, 5 C_4, 5 C_6, 8 C_{12}, 4 D_2, 9 D_3, 2 D_4, 9 D_6, 9 D_{12}	3 C_2, 5 C_3, C_6, 4 D_2, 9 D_3, D_6
R91.18	3 C_2, 5 C_3, 5 C_4, 7 C_6, C_8, 9 C_{12}, 8 C_{24}, 4 D_2, 6 D_3, 2 D_4, 5 D_6, 3 D_{12}	3 C_2, 5 C_3, 5 C_4, 7 C_6, 8 C_{12}, 4 D_2, 6 D_3, 2 D_4, 5 D_6, 3 D_{12}	3 C_2, 4 C_4, 7 C_6, 3 C_{12}, 4 D_2, 6 D_3, 2 D_4, 5 D_6, 3 D_{12}	3 C_2, 4 C_3, 4 D_2, 6 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R91.19	5 C_2, 3 C_3, 3 C_4, 10 C_6, 2 C_8, 6 C_{12}, 4 C_{24}, 13 D_2, 7 D_3, 3 D_4, 11 D_6, 2 D_{12}	5 C_2, 3 C_3, 3 C_4, 10 C_6, C_8, 5 C_{12}, 13 D_2, 7 D_3, 3 D_4, 11 D_6, 2 D_{12}	3 C_2, 3 C_4, 4 C_6, C_8, 4 C_{12}, 13 D_2, 5 D_3, 3 D_4, 11 D_6, 2 D_{12}	5 C_2, 2 C_3, 3 C_6, 13 D_2, 7 D_3, 6 D_6
R91.20	3 C_2, 3 C_3, 5 C_4, 5 C_6, C_8, 13 C_{12}, 2 C_{24}, 4 D_2, 5 D_3, 2 D_4, 5 D_6, 5 D_{12}	3 C_2, 3 C_3, 5 C_4, 5 C_6, 12 C_{12}, 4 D_2, 5 D_3, 2 D_4, 5 D_6, 5 D_{12}	3 C_2, 4 C_4, 4 C_6, 7 C_{12}, 4 D_2, 5 D_3, 2 D_4, 5 D_6, 5 D_{12}	3 C_2, 2 C_3, 4 D_2, 5 D_3
R91.21	5 C_2, 3 C_3, 3 C_4, 7 C_6, 2 C_8, 6 C_{12}, 2 C_{24}, 13 D_2, 8 D_3, 3 D_4, 12 D_6, 4 D_{12}	5 C_2, 3 C_3, 3 C_4, 7 C_6, C_8, 5 C_{12}, 13 D_2, 8 D_3, 3 D_4, 12 D_6, 4 D_{12}	3 C_2, 2 C_4, 5 C_6, 3 C_{12}, 13 D_2, 4 D_3, 3 D_4, 12 D_6, 4 D_{12}	5 C_2, 3 C_3, C_4, 2 C_6, 13 D_2, 7 D_3, D_4, 3 D_6
R91.22	3 C_2, 3 C_3, 5 C_4, 5 C_6, C_8, 11 C_{12}, 2 C_{24}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 4 D_{12}	3 C_2, 3 C_3, 5 C_4, 5 C_6, 10 C_{12}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 4 D_{12}	3 C_2, 3 C_4, 5 C_6, 6 C_{12}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 4 D_{12}	3 C_2, 3 C_3, 4 D_2, 4 D_3
R91.23	5 C_2, 3 C_4, 5 C_5, 2 C_8, 9 C_{10}, 5 C_{20}, 4 C_{40}, 13 D_2, 3 D_4, 14 D_5, 17 D_{10}, 2 D_{20}	5 C_2, 3 C_4, 4 C_5, C_8, 8 C_{10}, 3 C_{20}, 13 D_2, 3 D_4, 12 D_5, 16 D_{10}, 2 D_{20}	3 C_2, 2 C_4, 6 C_{10}, 13 D_2, 3 D_4, 6 D_5, 16 D_{10}, 2 D_{20}	5 C_2, C_4, 4 C_5, 2 C_{10}, 13 D_2, D_4, 11 D_5, 4 D_{10}
R91.24	3 C_2, 5 C_4, 5 C_5, C_8, 7 C_{10}, 9 C_{20}, 4 C_{40}, 4 D_2, 2 D_4, 7 D_5, 7 D_{10}, 4 D_{20}	3 C_2, 5 C_4, 4 C_5, 6 C_{10}, 7 C_{20}, 4 D_2, 2 D_4, 6 D_5, 6 D_{10}, 4 D_{20}	3 C_2, 3 C_4, 6 C_{10}, 4 C_{20}, 4 D_2, 2 D_4, 6 D_5, 6 D_{10}, 4 D_{20}	3 C_2, 4 C_5, 4 D_2, 6 D_5
R91.25	3 C_2, 2 C_3, 2 C_4, 2 C_6, 5 C_{11}, 5 C_{22}, 10 C_{33}, 5 C_{44}, 3 D_2, 4 D_3, 2 D_6, 10 D_{11}, 5 D_{22}, 10 D_{33}	3 C_2, 2 C_3, 2 C_4, 2 C_6, C_{11}, C_{22}, 2 C_{33}, 3 D_2, 4 D_3, 2 D_6, 2 D_{11}, D_{22}, 2 D_{33}	2 C_2, 2 C_4, C_{22}, 3 D_2, 4 D_3, 2 D_6, D_{11}, D_{22}, 2 D_{33}	3 C_2, 2 C_3, 2 C_6, C_{11}, 3 D_2, 4 D_3, 2 D_6, D_{11}
R91.26	5 C_2, 3 C_4, 2 C_8, 11 C_{23}, 33 C_{46}, 44 C_{92}, 44 C_{184}, 13 D_2, 3 D_4, 22 D_{23}, 44 D_{46}, 66 D_{92}	5 C_2, 3 C_4, C_8, C_{23}, 3 C_{46}, 3 C_{92}, C_{184}, 13 D_2, 3 D_4, 2 D_{23}, 4 D_{46}, 5 D_{92}	3 C_2, 2 C_4, C_{46}, 13 D_2, 3 D_4, D_{23}, 3 D_{46}, 3 D_{92}	5 C_2, C_4, C_{23}, C_{46}, C_{92}, 13 D_2, D_4, 2 D_{23}, 2 D_{46}, D_{92}
R91.27	3 C_2, 5 C_4, C_8, 11 C_{23}, 22 C_{46}, 22 C_{92}, 22 C_{184}, 4 D_2, 2 D_4, 11 D_{23}, 11 D_{46}, 11 D_{92}	3 C_2, 5 C_4, C_{23}, 2 C_{46}, C_{92}, 4 D_2, 2 D_4, D_{23}, D_{46}, D_{92}	3 C_2, 4 C_4, C_{46}, 4 D_2, 2 D_4, D_{23}, D_{46}, D_{92}	3 C_2, C_{23}, C_{46}, 4 D_2, D_{23}, D_{46}
R91.28	3 C_2, 2 C_4, 3 C_7, 6 C_{13}, 3 C_{14}, 6 C_{26}, 3 C_{28}, 6 C_{52}, 36 C_{91}, 36 C_{182}, 36 C_{364}, 3 D_2, 6 D_7, 12 D_{13}, 3 D_{14}, 6 D_{26}, 72 D_{91}, 36 D_{182}	3 C_2, 2 C_4, C_7, C_{13}, C_{14}, C_{26}, C_{91}, C_{182}, 3 D_2, 2 D_7, 2 D_{13}, D_{14}, D_{26}, 2 D_{91}, D_{182}	2 C_2, 2 C_4, C_{14}, C_{26}, C_{182}, 3 D_2, D_7, D_{13}, D_{14}, D_{26}, D_{91}, D_{182}	3 C_2, C_7, C_{13}, C_{91}, 3 D_2, D_7, D_{13}, D_{91}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R91.29	**Tet**, **Oct**, 2 **Ico**, C_2, C_3, C_4, 8 C_5, 2 C_{10}, 2 C_{15}, 2 C_{20}, D_2, D_3, D_4, 2 D_5	**Tet**, **Oct**, 2 **Ico**, C_2, C_3, C_4, 7 C_5, 2 C_{10}, 2 C_{15}, 2 C_{20}, D_2, D_3, D_4, 2 D_5	**Tet**, **Oct**, 2 **Ico**, C_2, C_4, 2 C_{10}, 2 C_{20}, D_2, D_3, D_4, 2 D_5	**Tet**, 2 **Ico**, C_2, C_3, 7 C_5, 2 C_{15}, D_2, D_3, 2 D_5
R91.30	2 **Tet**, 3 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 6 C_6, C_{10}, C_{12}, C_{15}, 16 D_2, 9 D_3, 4 D_4, 2 D_5, 12 D_6, D_{10}, D_{12}, D_{15}	2 **Tet**, 3 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 6 C_6, C_{10}, C_{15}, 16 D_2, 9 D_3, 4 D_4, 2 D_5, 12 D_6, D_{10}, D_{15}	2 **Tet**, 2 **Oct**, **Ico**, 3 C_2, C_4, 16 D_2, 7 D_3, 4 D_4, 2 D_5, 12 D_6, D_{10}, D_{15}	2 **Tet**, **Oct**, **Ico**, 5 C_2, 3 C_3, C_4, C_5, C_6, C_{10}, 16 D_2, 9 D_3, 2 D_4, 2 D_5, D_6, D_{10}
R91.31	2 **Tet**, 2 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 11 C_6, C_{10}, 2 C_{12}, C_{15}, C_{30}, 16 D_2, 4 D_3, 4 D_4, 2 D_5, 6 D_6, D_{10}	2 **Tet**, 2 **Oct**, **Ico**, 5 C_2, 3 C_3, 2 C_4, C_5, 11 C_6, C_{10}, C_{12}, C_{15}, C_{30}, 16 D_2, 4 D_3, 4 D_4, 2 D_5, 6 D_6, D_{10}	2 **Tet**, **Oct**, **Ico**, 3 C_2, C_4, 4 C_6, 16 D_2, 3 D_3, 4 D_4, 2 D_5, 6 D_6, D_{10}	**Tet**, **Oct**, **Ico**, 5 C_2, C_3, C_4, C_5, 2 C_6, C_{10}, 16 D_2, 4 D_3, 2 D_4, 2 D_5, 4 D_6, D_{10}
R91.32	**Tet**, 3 C_2, 4 C_3, 6 C_6, 2 C_9, 2 C_{18}, 6 D_2, 4 D_3, 5 D_6	**Tet**, 3 C_2, 4 C_3, 6 C_6, C_9, C_{18}, 6 D_2, 4 D_3, 5 D_6	**Tet**, 2 C_2, 5 C_6, C_{18}, 6 D_2, 2 D_3, 5 D_6	3 C_2, 2 C_3, C_6, 6 D_2, 4 D_3, D_6
R91.33	C_2, 4 C_3, C_6, 5 C_{11}, 30 C_{33}, 2 D_3, 5 D_{11}, 15 D_{33}	C_2, 4 C_3, C_6, C_{11}, 5 C_{33}, 2 D_3, D_{11}, 3 D_{33}	C_2, C_6, 2 D_3, D_{11}, 3 D_{33}	C_2, 2 C_3, C_{11}, 2 D_3, D_{11}
R91.34	C_2, 3 C_3, C_6, 15 C_{31}, 75 C_{93}, D_3, 15 D_{31}, 30 D_{93}	C_2, 3 C_3, C_6, C_{31}, 4 C_{93}, D_3, D_{31}, 2 D_{93}	C_2, C_6, D_3, D_{31}, 2 D_{93}	C_2, C_3, C_{31}, D_3, D_{31}
R91.35	C_2, C_3, C_6, 3 C_7, 6 C_{13}, 3 C_{21}, 6 C_{39}, 36 C_{91}, 36 C_{273}, 3 D_7, 6 D_{13}, 36 D_{91}	C_2, C_3, C_6, C_7, C_{13}, C_{91}, D_7, D_{13}, D_{91}	C_2, C_6, D_7, D_{13}, D_{91}	C_2, C_7, C_{13}, C_{91}, D_7, D_{13}, D_{91}
R91.36	**Tet**, **Oct**, **Ico**, C_2, C_3, 2 C_4, C_5, C_8, D_2, D_3, D_4, D_5	**Tet**, **Oct**, **Ico**, C_2, C_3, 2 C_4, C_5, D_2, D_3, D_4, D_5	**Tet**, **Oct**, **Ico**, C_2, 2 C_4, D_2, D_3, D_4, D_5	**Tet**, **Ico**, C_2, C_3, C_5, D_2, D_3, D_5
R91.37	**Tet**, **Oct**, **Ico**, C_2, C_3, 2 C_4, C_5, C_8, D_2, D_3, D_4, D_5	**Tet**, **Oct**, **Ico**, C_2, C_3, 2 C_4, C_5, D_2, D_3, D_4, D_5	**Tet**, **Oct**, **Ico**, C_2, 2 C_4, D_2, D_3, D_4, D_5	**Tet**, **Ico**, C_2, C_3, C_5, D_2, D_3, D_5
R91.38	**Tet**, **Oct**, **Ico**, C_2, C_3, 2 C_4, C_5, C_8, D_2, D_3, D_4, D_5	**Tet**, **Oct**, **Ico**, C_2, C_3, 2 C_4, C_5, D_2, D_3, D_4, D_5	**Tet**, **Oct**, **Ico**, C_2, 2 C_4, D_2, D_3, D_4, D_5	**Tet**, **Ico**, C_2, C_3, C_5, D_2, D_3, D_5
R91.39	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, 2 C_8, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, 2 D_8, 2 D_{10}	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_8, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, D_8, 2 D_{10}	**Tet**, **Oct**, 2 **Ico**, C_2, C_4, C_8, 3 D_2, D_3, 2 D_4, 2 D_5, D_8, 2 D_{10}	**Tet**, 2 **Ico**, 2 C_2, C_3, 2 C_5, 2 C_{10}, 3 D_2, D_3, 4 D_5, 2 D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R91.40	3 C_2, 2 C_3, 3 C_4, 2 C_6, 4 C_8, 5 C_{12}, 4 C_{16}, 4 C_{24}, 4 D_2, 5 D_3, 2 D_4, 5 D_6, 2 D_8, 6 D_{12}, 4 D_{24}	3 C_2, 2 C_3, 3 C_4, 2 C_6, 2 C_8, 5 C_{12}, 4 C_{24}, 4 D_2, 5 D_3, 2 D_4, 5 D_6, 2 D_8, 6 D_{12}, 4 D_{24}	2 C_2, 3 C_4, 2 C_6, 2 C_8, 5 C_{12}, 4 C_{24}, 4 D_2, 3 D_3, 2 D_4, 5 D_6, 2 D_8, 6 D_{12}, 4 D_{24}	3 C_2, 2 C_3, 4 D_2, 5 D_3
R91.41	4 C_2, 2 C_3, 2 C_4, 5 C_6, 4 C_8, 2 C_{12}, 2 C_{16}, 3 C_{24}, 9 D_2, 6 D_3, 3 D_4, 9 D_6, 4 D_8, 3 D_{12}, 3 D_{24}	4 C_2, 2 C_3, 2 C_4, 5 C_6, 2 C_8, 2 C_{12}, 3 C_{24}, 9 D_2, 6 D_3, 3 D_4, 9 D_6, 3 D_8, 3 D_{12}, 3 D_{24}	2 C_2, 2 C_4, 2 C_6, 2 C_8, 2 C_{12}, 3 C_{24}, 9 D_2, 3 D_3, 3 D_4, 9 D_6, 3 D_8, 3 D_{12}, 3 D_{24}	4 C_2, 2 C_3, 3 C_6, 9 D_2, 6 D_3, 4 D_6
R91.42	**Tet**, 2 **Ico**, 3 C_2, C_3, 8 C_5, C_6, 12 C_{10}, 2 C_{15}, 2 C_{30}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, 2 **Ico**, 3 C_2, C_3, 6 C_5, C_6, 10 C_{10}, 2 C_{15}, 2 C_{30}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, 2 **Ico**, 2 C_2, C_6, 8 C_{10}, 2 C_{30}, 7 D_2, D_3, 2 D_5, D_6, 2 D_{10}	**Tet**, 2 **Ico**, 3 C_2, C_3, 4 C_5, 2 C_{10}, 2 C_{15}, 7 D_2, 2 D_3, 4 D_5
R91.43	C_2, 3 C_3, 8 C_5, C_6, 2 C_{10}, 52 C_{15}, 4 C_{30}, D_3, 2 D_5, 4 D_{15}	C_2, 3 C_3, 6 C_5, C_6, C_{10}, 37 C_{15}, C_{30}, D_3, 2 D_5, 4 D_{15}	C_2, C_6, C_{10}, C_{30}, D_3, 2 D_5, 4 D_{15}	C_2, C_3, 4 C_5, 8 C_{15}, D_3, 2 D_5, 4 D_{15}
R91.44	5 C_2, 3 C_4, 3 C_7, 4 C_8, 9 C_{14}, 4 C_{16}, 12 C_{28}, 12 C_{56}, 13 D_2, 3 D_4, 6 D_7, 6 D_8, 12 D_{14}, 9 D_{28}, 18 D_{56}	5 C_2, 3 C_4, C_7, 3 C_8, 3 C_{14}, C_{16}, 3 C_{28}, 3 C_{56}, 13 D_2, 3 D_4, 2 D_7, 5 D_8, 4 D_{14}, 3 D_{28}, 5 D_{56}	3 C_2, 2 C_4, C_{14}, C_{28}, 13 D_2, 2 D_4, D_7, 3 D_8, 4 D_{14}, 2 D_{28}, 3 D_{56}	5 C_2, C_4, C_7, C_8, C_{14}, 13 D_2, 2 D_4, 2 D_7, D_8, D_{14}
R91.45	3 C_2, 4 C_4, 3 C_7, 2 C_8, 6 C_{14}, 2 C_{16}, 12 C_{28}, 9 C_{56}, 4 D_2, 2 D_4, 3 D_7, D_8, 3 D_{14}, 3 D_{28}, 6 D_{56}	3 C_2, 4 C_4, C_7, C_8, 2 C_{14}, 3 C_{28}, 2 C_{56}, 4 D_2, 2 D_4, D_7, D_8, D_{14}, D_{28}, 2 D_{56}	3 C_2, 3 C_4, C_{14}, C_{28}, 4 D_2, 2 D_4, D_7, D_8, D_{14}, D_{28}, 2 D_{56}	3 C_2, C_4, C_7, 4 D_2, D_4, D_7
R91.46	3 C_2, 2 C_4, 4 C_8, 6 C_{13}, 8 C_{16}, 6 C_{26}, 6 C_{52}, 12 C_{104}, 24 C_{208}, 3 D_2, 12 D_{13}, 6 D_{26}	3 C_2, 2 C_4, 2 C_8, C_{13}, C_{26}, 3 D_2, 2 D_{13}, D_{26}	2 C_2, C_4, C_{26}, 3 D_2, D_{13}, D_{26}	3 C_2, C_{13}, 3 D_2, D_{13}
R91.47	2 C_2, 2 C_4, 3 C_8, 6 C_{13}, 4 C_{16}, 6 C_{26}, 6 C_{52}, 12 C_{104}, 24 C_{208}, 2 D_2, 6 D_{13}, 6 D_{26}	2 C_2, 2 C_4, 2 C_8, C_{13}, C_{26}, 2 D_2, D_{13}, D_{26}	2 C_2, C_4, C_{26}, 2 D_2, D_{13}, D_{26}	2 C_2, C_{13}, 2 D_2, D_{13}
R91.48	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 2 C_4, 7 C_6, 6 C_9, 2 C_{12}, 18 C_{18}, 6 C_{36}, 16 D_2, 2 D_3, 4 D_4, D_6	2 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 2 C_4, 7 C_6, 2 C_9, C_{12}, 6 C_{18}, C_{36}, 16 D_2, 2 D_3, 4 D_4, D_6	2 **Tet**, **Oct**, 3 C_2, C_4, 3 C_6, C_{18}, 16 D_2, D_3, 4 D_4, D_6	2 **Tet**, **Oct**, 5 C_2, 2 C_3, C_4, 16 D_2, 2 D_3, 2 D_4
R91.49	2 C_2, 3 C_3, 2 C_4, 4 C_6, 6 C_9, 5 C_{12}, 6 C_{18}, 6 C_{36}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 3 C_3, 2 C_4, 4 C_6, 2 C_9, 4 C_{12}, 2 C_{18}, C_{36}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_4, 3 C_6, 2 C_{12}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_3, 2 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R91.50	2 C_2, 5 C_3, 2 C_4, 6 C_6, 2 C_8, 8 C_{12}, 4 C_{24}, 2 D_2, 3 D_3, 2 D_6	2 C_2, 5 C_3, 2 C_4, 6 C_6, 6 C_{12}, 2 D_2, 3 D_3, 2 D_6	2 C_2, 2 C_4, 5 C_6, 5 C_{12}, 2 D_2, 3 D_3, 2 D_6	2 C_2, 5 C_3, C_6, 2 D_2, 3 D_3
R91.51	2 C_2, 3 C_3, 2 C_4, 4 C_6, 2 C_8, 5 C_{12}, 4 C_{24}, 2 D_2, 3 D_3, 2 D_6	2 C_2, 3 C_3, 2 C_4, 4 C_6, 4 C_{12}, 2 D_2, 3 D_3, 2 D_6	2 C_2, 2 C_4, 3 C_6, 2 C_{12}, 2 D_2, 3 D_3, 2 D_6	2 C_2, 2 C_3, 2 D_2, 3 D_3
R91.52	2 C_2, 4 C_3, 2 C_4, 5 C_6, 2 C_8, 7 C_{12}, 11 C_{24}, 2 D_2, 2 D_3, 2 D_6	2 C_2, 4 C_3, 2 C_4, 5 C_6, 5 C_{12}, 2 D_2, 2 D_3, 2 D_6	2 C_2, C_4, 5 C_6, C_{12}, 2 D_2, 2 D_3, 2 D_6	2 C_2, 2 C_3, 2 D_2, 2 D_3
R91.53	2 C_2, 7 C_3, 2 C_4, 8 C_6, 2 C_8, 12 C_{12}, 16 C_{24}, 2 D_2, 3 D_3, 3 D_6	2 C_2, 7 C_3, 2 C_4, 8 C_6, 10 C_{12}, 2 D_2, 3 D_3, 3 D_6	2 C_2, C_4, 8 C_6, C_{12}, 2 D_2, 3 D_3, 3 D_6	2 C_2, 5 C_3, 2 D_2, 3 D_3
R91.54	2 C_2, 4 C_3, 2 C_4, 5 C_6, 2 C_8, 6 C_{12}, 4 C_{24}, 2 D_2, 3 D_3, 3 D_6	2 C_2, 4 C_3, 2 C_4, 5 C_6, 4 C_{12}, 2 D_2, 3 D_3, 3 D_6	2 C_2, C_4, 5 C_6, 2 C_{12}, 2 D_2, 3 D_3, 3 D_6	2 C_2, 4 C_3, 2 D_2, 3 D_3
R91.55	3 C_2, 3 C_3, 2 C_4, 5 C_6, 4 C_8, 6 C_{12}, 8 C_{24}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 3 C_3, 2 C_4, 5 C_6, 2 C_8, 4 C_{12}, 3 D_2, 4 D_3, 2 D_6	2 C_2, 2 C_4, 3 C_6, 2 C_8, 2 C_{12}, 3 D_2, 2 D_3, 2 D_6	3 C_2, 2 C_3, 3 D_2, 4 D_3
R91.56	3 C_2, 5 C_3, 2 C_4, 7 C_6, 4 C_8, 10 C_{12}, 8 C_{24}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 5 C_3, 2 C_4, 7 C_6, 2 C_8, 9 C_{12}, 2 C_{24}, 3 D_2, 4 D_3, 2 D_6	2 C_2, 2 C_4, 5 C_6, 2 C_8, 6 C_{12}, 3 D_2, 2 D_3, 2 D_6	3 C_2, 5 C_3, C_6, 3 D_2, 4 D_3
R91.57	3 C_2, 4 C_3, 2 C_4, 6 C_6, 4 C_8, 5 C_{12}, 4 C_{24}, 3 D_2, 6 D_3, 3 D_6	3 C_2, 4 C_3, 2 C_4, 6 C_6, 2 C_8, 3 C_{12}, 3 D_2, 6 D_3, 3 D_6	2 C_2, C_4, 5 C_6, C_{12}, 3 D_2, 3 D_3, 3 D_6	3 C_2, 4 C_3, C_4, C_6, 3 D_2, 4 D_3
R91.58	3 C_2, 7 C_3, 2 C_4, 9 C_6, 4 C_8, 13 C_{12}, 20 C_{24}, 3 D_2, 6 D_3, 3 D_6	3 C_2, 7 C_3, 2 C_4, 9 C_6, 2 C_8, 11 C_{12}, 8 C_{24}, 3 D_2, 6 D_3, 3 D_6	2 C_2, C_4, 8 C_6, 2 C_{12}, 3 D_2, 3 D_3, 3 D_6	3 C_2, 5 C_3, C_4, C_6, 3 D_2, 6 D_3
R91.59	3 C_2, 4 C_3, 2 C_4, 6 C_6, 4 C_8, 8 C_{12}, 16 C_{24}, 3 D_2, 4 D_3, 2 D_6	3 C_2, 4 C_3, 2 C_4, 6 C_6, 2 C_8, 6 C_{12}, 5 C_{24}, 3 D_2, 4 D_3, 2 D_6	2 C_2, C_4, 5 C_6, 2 C_{12}, 3 D_2, 2 D_3, 2 D_6	3 C_2, 2 C_3, C_4, 3 D_2, 4 D_3
R91.60	C_2, C_3, 2 C_5, C_6, 2 C_{10}, 6 C_{13}, 4 C_{15}, 4 C_{30}, 6 C_{39}, 12 C_{65}, 24 C_{195}, 6 D_{13}	C_2, C_3, C_5, C_6, C_{10}, C_{13}, C_{15}, C_{30}, D_{13}	C_2, C_6, C_{10}, C_{30}, D_{13}	C_2, C_{13}, D_{13}
R91.61	2 C_2, 2 C_4, 8 C_5, 2 C_8, 8 C_{10}, 8 C_{20}, 8 C_{40}, 2 D_2, 8 D_5, 8 D_{10}	2 C_2, 2 C_4, 6 C_5, 6 C_{10}, 4 C_{20}, 2 D_2, 6 D_5, 6 D_{10}	2 C_2, C_4, 6 C_{10}, 2 D_2, 6 D_5, 6 D_{10}	2 C_2, 6 C_5, 2 D_2, 6 D_5
R91.62	2 C_2, 2 C_4, 8 C_5, 2 C_8, 10 C_{10}, 16 C_{20}, 28 C_{40}, 2 D_2, 2 D_5, 2 D_{10}	2 C_2, 2 C_4, 6 C_5, 7 C_{10}, 9 C_{20}, 2 D_2, 2 D_5, 2 D_{10}	2 C_2, C_4, 7 C_{10}, C_{20}, 2 D_2, 2 D_5, 2 D_{10}	2 C_2, 4 C_5, 2 D_2, 2 D_5
R91.63	3 C_2, 2 C_4, 8 C_5, 4 C_8, 8 C_{10}, 8 C_{20}, 8 C_{40}, 3 D_2, 16 D_5, 8 D_{10}	3 C_2, 2 C_4, 6 C_5, 2 C_8, 6 C_{10}, 4 C_{20}, 3 D_2, 12 D_5, 6 D_{10}	2 C_2, C_4, 6 C_{10}, 3 D_2, 6 D_5, 6 D_{10}	3 C_2, C_4, 6 C_5, 3 D_2, 10 D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R91.64	3 C_2, 2 C_4, 8 C_5, 4 C_8, 12 C_{10}, 18 C_{20}, 36 C_{40}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, 2 C_4, 6 C_5, 2 C_8, 8 C_{10}, 10 C_{20}, 9 C_{40}, 3 D_2, 4 D_5, 2 D_{10}	2 C_2, C_4, 7 C_{10}, 2 C_{20}, 3 D_2, 2 D_5, 2 D_{10}	3 C_2, C_4, 4 C_5, 3 D_2, 4 D_5
R91.65	C_2, 2 C_3, C_4, 5 C_{11}, 5 C_{22}, 10 C_{33}, 10 C_{44}, 2 D_3	C_2, 2 C_3, C_4, C_{11}, C_{22}, 2 C_{33}, 2 D_3	C_2, C_4, C_{22}, 2 D_3	C_2, 2 C_3, C_{11}, 2 D_3
R91.66	C_2, C_3, C_6, 3 C_7, 3 C_9, 3 C_{18}, 3 C_{21}, 9 C_{27}, 9 C_{54}, 9 C_{63}, 27 C_{189}, 3 D_7	C_2, C_3, C_6, C_7, C_9, C_{18}, D_7	C_2, C_6, C_{18}, D_7	C_2, C_7, D_7
R91.67	C_2, 3 C_3, C_6, 3 C_7, 6 C_9, 3 C_{14}, 3 C_{18}, 15 C_{21}, 6 C_{42}, 36 C_{63}, 18 C_{126}, D_3	C_2, 3 C_3, C_6, 2 C_9, C_{18}, D_3	C_2, C_6, C_{18}, D_3	C_2, 2 C_3, D_3
R91.68	C_2, C_3, C_6, 30 C_{61}, 30 C_{122}, 60 C_{183}, 60 C_{366}	C_2, C_3, C_6	C_2, C_6	C_2
R91.69	2 C_2, 2 C_4, 2 C_8, 11 C_{23}, 22 C_{46}, 33 C_{92}, 44 C_{184}, 2 D_2	2 C_2, 2 C_4, C_{23}, 2 C_{46}, C_{92}, 2 D_2	2 C_2, C_4, C_{46}, 2 D_2	2 C_2, C_{23}, C_{46}, 2 D_2
R91.70	3 C_2, 2 C_4, 4 C_8, 11 C_{23}, 33 C_{46}, 44 C_{92}, 88 C_{184}, 3 D_2	3 C_2, 2 C_4, 2 C_8, C_{23}, 3 C_{46}, 3 C_{92}, 2 C_{184}, 3 D_2	2 C_2, C_4, C_{46}, 3 D_2	3 C_2, C_4, C_{23}, C_{46}, C_{92}, 3 D_2
R91.71	C_2, C_4, 3 C_7, 6 C_{13}, 3 C_{14}, 6 C_{26}, 6 C_{28}, 12 C_{52}, 36 C_{91}, 36 C_{182}, 72 C_{364}	C_2, C_4, C_7, C_{13}, C_{14}, C_{26}, C_{91}, C_{182}	C_2, C_4, C_{14}, C_{26}, C_{182}	C_2, C_7, C_{13}, C_{91}
Genus 92				
R92.1	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, 3 C_7, 2 C_{12}, C_{13}, 3 C_{14}, 3 D_2, 2 D_3, D_4, 2 D_6, 6 D_7, 2 D_{12}, D_{13}, 3 D_{14}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, 3 C_7, C_{12}, C_{13}, 3 C_{14}, 3 D_2, 2 D_3, D_4, 2 D_6, 6 D_7, D_{12}, D_{13}, 3 D_{14}	**Tet**, **Oct**, 2 C_2, 3 C_{14}, 3 D_2, 2 D_3, D_4, 2 D_6, 6 D_7, D_{12}, D_{13}, 3 D_{14}	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 C_7, C_{13}, 3 D_2, 2 D_3, D_4, 6 D_7, D_{13}
R92.2	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, 3 C_7, 2 C_{12}, C_{13}, 3 C_{14}, 3 D_2, 2 D_3, D_4, 2 D_6, 6 D_7, 2 D_{12}, D_{13}, 3 D_{14}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, 3 C_7, C_{12}, C_{13}, 3 C_{14}, 3 D_2, 2 D_3, D_4, 2 D_6, 6 D_7, D_{12}, D_{13}, 3 D_{14}	**Tet**, **Oct**, 2 C_2, 3 C_{14}, 3 D_2, 2 D_3, D_4, 2 D_6, 6 D_7, D_{12}, D_{13}, 3 D_{14}	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 C_7, C_{13}, 3 D_2, 2 D_3, D_4, 6 D_7, D_{13}
R92.3	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, 3 C_7, 2 C_{12}, C_{13}, 3 C_{14}, 3 D_2, 2 D_3, D_4, 2 D_6, 6 D_7, 2 D_{12}, D_{13}, 3 D_{14}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, 3 C_7, 2 C_{12}, C_{13}, 3 C_{14}, 3 D_2, 2 D_3, D_4, 2 D_6, 6 D_7, 2 D_{12}, D_{13}, 3 D_{14}	**Tet**, **Oct**, 2 C_2, C_4, C_6, 3 C_{14}, 3 D_2, 2 D_3, D_4, 2 D_6, 6 D_7, 2 D_{12}, D_{13}, 3 D_{14}	**Tet**, 2 C_2, C_3, 3 C_7, C_{13}, 3 D_2, 2 D_3, 6 D_7, D_{13}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R92.4	3 C_2, C_3, C_4, 2 C_6, 15 C_{31}, 30 C_{62}, 30 C_{93}, 60 C_{186}, 4 D_2, D_3, D_4, D_6, 15 D_{31}, 15 D_{62}, 30 D_{93}, 30 D_{186}	3 C_2, C_3, C_4, 2 C_6, C_{31}, 2 C_{62}, C_{93}, 2 C_{186}, 4 D_2, D_3, D_4, D_6, D_{31}, D_{62}, D_{93}, D_{186}	3 C_2, C_4, C_6, C_{62}, C_{186}, 4 D_2, D_3, D_4, D_6, D_{31}, D_{62}, D_{93}, D_{186}	3 C_2, C_3, C_{31}, C_{93}, 4 D_2, D_3, D_{31}, D_{93}
R92.5	2 C_2, 2 C_4, 2 C_8, 2 C_{16}, 11 C_{23}, 11 C_{46}, 22 C_{92}, 44 C_{184}, 44 C_{368}, 2 D_2, D_4, 2 D_8, 11 D_{23}, 11 D_{46}, 22 D_{92}, 44 D_{184}	2 C_2, 2 C_4, C_8, C_{23}, C_{46}, C_{92}, C_{184}, 2 D_2, D_4, D_8, D_{23}, D_{46}, D_{92}, D_{184}	2 C_2, 2 C_4, C_8, C_{46}, C_{92}, C_{184}, 2 D_2, D_4, D_8, D_{23}, D_{46}, D_{92}, D_{184}	2 C_2, C_{23}, 2 D_2, D_{23}
R92.6	**Tet**, C_2, C_3, C_6, 3 C_7, C_{13}, D_2, D_3, D_6, 3 D_7, D_{13}	**Tet**, C_2, C_3, C_6, 3 C_7, C_{13}, D_2, D_3, D_6, 3 D_7, D_{13}	**Tet**, C_2, C_6, D_2, D_3, D_6, 3 D_7, D_{13}	**Tet**, C_2, C_3, 3 C_7, C_{13}, D_2, D_3, 3 D_7, D_{13}
R92.7	2 C_2, C_3, C_4, 2 C_6, C_7, 2 C_8, C_{14}, 2 C_{16}, 2 D_2, D_3, D_4, D_6, D_7, 2 D_8, D_{14}	2 C_2, C_3, C_4, 2 C_6, C_7, C_8, C_{14}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{14}	2 C_2, C_4, 2 C_6, C_8, C_{14}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{14}	2 C_2, C_3, C_7, 2 D_2, D_3, D_7
R92.8	2 C_2, C_3, C_4, 2 C_6, C_7, 2 C_8, C_{14}, 2 C_{16}, 2 D_2, D_3, D_4, D_6, D_7, 2 D_8, D_{14}	2 C_2, C_3, C_4, 2 C_6, C_7, C_8, C_{14}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{14}	2 C_2, C_4, 2 C_6, C_8, C_{14}, 2 D_2, D_3, D_4, D_6, D_7, D_8, D_{14}	2 C_2, C_3, C_7, 2 D_2, D_3, D_7
R92.9	3 C_2, C_3, C_6, 23 C_{47}, 23 C_{94}, 23 C_{141}, 3 D_2, 2 D_3, D_6, 46 D_{47}, 23 D_{94}, 23 D_{141}	3 C_2, C_3, C_6, C_{47}, C_{94}, C_{141}, 3 D_2, 2 D_3, D_6, 2 D_{47}, D_{94}, D_{141}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_{47}, D_{94}, D_{141}	3 C_2, C_3, C_{47}, 3 D_2, 2 D_3, 2 D_{47}
R92.10	3 C_2, C_3, C_4, 3 C_6, C_{12}, 11 C_{23}, 11 C_{46}, 11 C_{69}, 22 C_{92}, 11 C_{138}, 22 C_{276}, 4 D_2, D_4, 22 D_{23}, 22 D_{46}, 22 D_{92}	3 C_2, C_3, C_4, 3 C_6, C_{23}, C_{46}, C_{92}, 4 D_2, D_4, 2 D_{23}, 2 D_{46}, D_{92}	3 C_2, C_6, 4 D_2, D_4, 2 D_{23}, 2 D_{46}, D_{92}	3 C_2, C_4, C_{23}, C_{46}, C_{92}, 4 D_2, D_4, 2 D_{23}, 2 D_{46}, D_{92}
R92.11	2 C_2, C_3, C_4, C_6, C_8, 5 C_{11}, 5 C_{22}, 10 C_{33}, 5 C_{44}, 10 C_{66}, 2 D_2, D_3, D_4, D_6, 5 D_{11}, 5 D_{22}, 10 D_{33}, 5 D_{44}, 10 D_{66}	2 C_2, C_3, C_4, C_6, C_{11}, C_{22}, C_{33}, C_{44}, C_{66}, 2 D_2, D_3, D_4, D_6, D_{11}, D_{22}, D_{33}, D_{44}, D_{66}	2 C_2, C_4, C_6, C_{22}, C_{44}, C_{66}, 2 D_2, D_3, D_4, D_6, D_{11}, D_{22}, D_{33}, D_{44}, D_{66}	2 C_2, C_3, C_{11}, 2 D_2, D_3, D_{11}
R92.12	2 C_2, 2 C_4, C_8, 15 C_{31}, 15 C_{62}, 30 C_{124}, 2 D_2, D_4, 15 D_{31}, 15 D_{62}, 15 D_{124}	2 C_2, 2 C_4, C_{31}, C_{62}, C_{124}, 2 D_2, D_4, D_{31}, D_{62}, D_{124}	2 C_2, 2 C_4, C_{62}, 2 D_2, D_4, D_{31}, D_{62}, D_{124}	2 C_2, C_{31}, 2 D_2, D_{31}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R92.13	3 C_2, C_3, C_4, 2 C_5, C_6, 2 C_8, 4 C_{10}, 2 C_{12}, 2 C_{15}, 4 C_{16}, 2 C_{20}, 4 C_{24}, 2 C_{30}, 4 C_{40}, 8 C_{48}, 4 C_{60}, 8 C_{120}, 4 D_2, 2 D_3, 2 D_4, 2 D_5, 2 D_6, 4 D_8, 2 D_{10}, 4 D_{12}, 2 D_{15}, 4 D_{16}, 2 D_{20}, 8 D_{24}, 2 D_{30}, 4 D_{40}, 8 D_{48}, 4 D_{60}, 8 D_{120}	3 C_2, C_3, C_4, C_5, C_6, C_8, 2 C_{10}, C_{12}, C_{15}, C_{16}, C_{20}, C_{24}, C_{30}, C_{40}, C_{48}, C_{60}, C_{120}, 4 D_2, 2 D_3, 2 D_4, D_5, 2 D_6, 2 D_8, D_{10}, 2 D_{12}, D_{15}, D_{16}, D_{20}, 2 D_{24}, D_{30}, D_{40}, D_{48}, D_{60}, D_{120}	3 C_2, C_{10}, 4 D_2, 2 D_3, 2 D_4, D_5, 2 D_6, 2 D_8, D_{10}, 2 D_{12}, D_{15}, D_{16}, D_{20}, 2 D_{24}, D_{30}, D_{40}, D_{48}, D_{60}, D_{120}	3 C_2, C_3, C_4, C_5, C_6, C_8, C_{12}, C_{24}, 4 D_2, 2 D_3, 2 D_4, D_5, 2 D_6, 2 D_8, 2 D_{12}, 2 D_{24}
R92.14	3 C_2, 2 C_5, 6 C_{10}, 11 C_{23}, 11 C_{46}, 22 C_{115}, 22 C_{230}, 3 D_2, 22 D_{23}, 11 D_{46}	3 C_2, C_{23}, C_{46}, 3 D_2, 2 D_{23}, D_{46}	3 C_2, 3 D_2, 2 D_{23}, D_{46}	3 C_2, C_{23}, C_{46}, 3 D_2, 2 D_{23}, D_{46}
R92.15	C_2, C_3, C_6, 3 C_9, 3 C_{18}, 11 C_{23}, 11 C_{69}, 33 C_{207}, 11 D_{23}	C_2, C_3, C_6, C_{23}, D_{23}	C_2, C_6, D_{23}	C_2, C_{23}, D_{23}
R92.16	3 C_2, C_4, 23 C_{47}, 69 C_{94}, 23 C_{188}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R92.17	C_2, 2 C_5, 2 C_{10}, 18 C_{37}, 18 C_{74}, 72 C_{185}, 72 C_{370}	C_2	C_2	C_2
R92.18	3 C_2, C_3, 3 C_6, 15 C_{31}, 45 C_{62}, 30 C_{93}, 90 C_{186}, 3 D_2	3 C_2, C_3, 3 C_6, C_{31}, 3 C_{62}, C_{93}, 3 C_{186}, 3 D_2	3 C_2, C_6, C_{62}, C_{186}, 3 D_2	3 C_2, C_3, C_{31}, C_{93}, 3 D_2
R92.19	C_2, C_4, 2 C_8, 4 C_{16}, 11 C_{23}, 11 C_{46}, 22 C_{92}, 44 C_{184}, 88 C_{368}	C_2, C_4, C_8, C_{23}, C_{46}, C_{92}, C_{184}	C_2, C_4, C_8, C_{46}, C_{92}, C_{184}	C_2, C_{23}
Genus 93				
R93.1	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 4 C_8, 2 C_{12}, 8 C_{16}, 4 C_{24}, 8 C_{32}, 8 C_{48}, 8 C_{96}, 12 D_2, D_3, 4 D_4, D_6, 4 D_8, 2 D_{12}, 8 D_{16}, 4 D_{24}, 8 D_{48}	**Tet**, **Oct**, 4 C_2, C_3, 5 C_4, C_6, 3 C_8, C_{12}, 3 C_{16}, C_{24}, C_{32}, C_{48}, 12 D_2, D_3, 4 D_4, D_6, 3 D_8, D_{12}, 3 D_{16}, D_{24}, D_{48}	**Oct**, 3 C_2, 3 C_4, C_6, 11 D_2, D_3, 4 D_4, D_6, 3 D_8, D_{12}, 3 D_{16}, D_{24}, D_{48}	**Tet**, 4 C_2, C_3, 2 C_4, C_8, C_{16}, 12 D_2, D_3, 3 D_4, D_8, D_{16}
R93.2	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_6, 4 C_8, 2 C_{12}, 8 C_{16}, 4 C_{24}, 16 C_{32}, 8 C_{48}, 16 C_{96}, 18 D_2, 2 D_3, 8 D_4, 2 D_6, 8 D_8, 4 D_{12}, 16 D_{16}, 8 D_{24}, 16 D_{32}, 16 D_{48}, 16 D_{96}	**Tet**, 2 **Oct**, 5 C_2, C_3, 4 C_4, C_6, 3 C_8, C_{12}, 3 C_{16}, C_{24}, 3 C_{32}, C_{48}, C_{96}, 18 D_2, 2 D_3, 8 D_4, 2 D_6, 6 D_8, 2 D_{12}, 6 D_{16}, 2 D_{24}, 3 D_{32}, 2 D_{48}, D_{96}	**Tet**, 2 **Oct**, 3 C_2, 3 C_4, C_6, 16 D_2, D_3, 7 D_4, 2 D_6, 3 D_8, D_{12}, 3 D_{16}, D_{24}, 3 D_{32}, D_{48}, D_{96}	**Tet**, 5 C_2, C_3, C_4, C_8, C_{16}, C_{32}, 18 D_2, D_3, 2 D_4, 2 D_8, 2 D_{16}, D_{32}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R93.3	6 C_2, C_3, 6 C_4, 5 C_6, 6 C_8, 6 C_{12}, 8 C_{16}, 12 C_{24}, 8 C_{32}, 16 C_{48}, 16 C_{96}, 19 D_2, D_3, 4 D_4, 3 D_6, 4 D_8, 4 D_{12}, 4 D_{16}, 8 D_{24}, 8 D_{48}	6 C_2, C_3, 6 C_4, 5 C_6, 5 C_8, 5 C_{12}, 3 C_{16}, 5 C_{24}, C_{32}, 3 C_{48}, C_{96}, 19 D_2, D_3, 4 D_4, 3 D_6, 3 D_8, 3 D_{12}, 2 D_{16}, 3 D_{24}, 2 D_{48}	3 C_2, 4 C_4, C_6, 17 D_2, D_3, 4 D_4, 3 D_6, 3 D_8, 3 D_{12}, 2 D_{16}, 3 D_{24}, 2 D_{48}	6 C_2, C_3, 2 C_4, C_6, C_8, C_{12}, C_{24}, 19 D_2, D_3, 3 D_4, D_6, D_8, D_{12}, D_{24}
R93.4	4 C_2, C_3, 6 C_4, 3 C_6, 4 C_8, 4 C_{12}, 4 C_{16}, 8 C_{24}, 4 C_{32}, 8 C_{48}, 8 C_{96}, 12 D_2, D_3, 4 D_4, 3 D_6, 4 D_8, 4 D_{12}, 4 D_{16}, 8 D_{24}, 8 D_{48}	4 C_2, C_3, 6 C_4, 3 C_6, 3 C_8, 3 C_{12}, C_{16}, 3 C_{24}, C_{48}, 12 D_2, D_3, 4 D_4, 3 D_6, 3 D_8, 3 D_{12}, 2 D_{16}, 3 D_{24}, 2 D_{48}	3 C_2, 4 C_4, C_6, 12 D_2, D_3, 4 D_4, 3 D_6, 3 D_8, 3 D_{12}, 2 D_{16}, 3 D_{24}, 2 D_{48}	4 C_2, C_3, 2 C_4, C_6, C_8, C_{12}, C_{24}, 12 D_2, D_3, 3 D_4, D_6, D_8, D_{12}, D_{24}
R93.5	5 C_2, 2 C_4, 23 C_{47}, 69 C_{94}, 46 C_{188}, 13 D_2, 46 D_{47}, 92 D_{94}	5 C_2, 2 C_4, C_{47}, 3 C_{94}, C_{188}, 13 D_2, 2 D_{47}, 4 D_{94}	3 C_2, 2 C_4, C_{94}, 11 D_2, D_{47}, 3 D_{94}	5 C_2, C_{47}, C_{94}, 13 D_2, 2 D_{47}, D_{94}
R93.6	3 C_2, C_3, 2 C_4, C_6, C_{12}, 15 C_{31}, 15 C_{62}, 30 C_{93}, 15 C_{124}, 30 C_{186}, 30 C_{372}, 3 D_2, 2 D_3, D_6, 30 D_{31}, 15 D_{62}, 60 D_{93}, 30 D_{186}	3 C_2, C_3, 2 C_4, C_6, C_{31}, C_{62}, C_{93}, C_{186}, 3 D_2, 2 D_3, D_6, 2 D_{31}, D_{62}, 2 D_{93}, D_{186}	2 C_2, 2 C_4, C_6, C_{62}, C_{186}, 3 D_2, D_3, D_6, D_{31}, D_{62}, D_{93}, D_{186}	3 C_2, C_3, C_{31}, C_{93}, 3 D_2, D_3, D_{31}, D_{93}
R93.7	2 C_2, C_3, 2 C_4, C_6, C_7, 3 C_8, C_{12}, C_{14}, 2 C_{28}, 2 D_2, 2 D_3, D_4, D_6, 2 D_8	2 C_2, C_3, 2 C_4, C_6, 3 C_8, 2 D_2, 2 D_3, D_4, D_6, 2 D_8	2 C_2, C_4, C_6, 3 C_8, 2 D_2, 2 D_3, D_4, D_6, 2 D_8	2 C_2, C_3, 2 D_2, 2 D_3
R93.8	5 C_2, C_3, 6 C_4, 3 C_6, 2 C_8, 3 C_9, 4 C_{12}, 3 C_{18}, 16 D_2, 2 D_3, 7 D_4, 4 D_6, 6 D_9, 3 D_{12}, 3 D_{18}	5 C_2, C_3, 6 C_4, 3 C_6, C_8, C_9, 4 C_{12}, C_{18}, 16 D_2, 2 D_3, 7 D_4, 4 D_6, 2 D_9, 3 D_{12}, D_{18}	3 C_2, 5 C_4, C_6, 3 C_{12}, 16 D_2, D_3, 7 D_4, 4 D_6, D_9, 3 D_{12}, D_{18}	5 C_2, C_3, C_6, 16 D_2, 2 D_3, D_6
R93.9	5 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 3 C_9, 2 C_{12}, 3 C_{18}, 17 D_2, 2 D_3, 12 D_4, 4 D_6, 2 D_8, 6 D_9, 2 D_{12}, 3 D_{18}	5 C_2, C_3, 4 C_4, 3 C_6, C_8, C_9, 2 C_{12}, C_{18}, 17 D_2, 2 D_3, 12 D_4, 4 D_6, D_8, 2 D_9, 2 D_{12}, D_{18}	3 C_2, 3 C_4, C_6, C_8, C_{12}, 17 D_2, D_3, 11 D_4, 4 D_6, D_8, D_9, 2 D_{12}, D_{18}	5 C_2, C_3, C_4, 17 D_2, 2 D_3, 3 D_4
R93.10	6 C_2, C_3, 4 C_4, 5 C_6, 2 C_8, 3 C_9, 3 C_{12}, 15 C_{18}, 19 D_2, D_3, 4 D_4, 3 D_6, 3 D_9, 2 D_{12}, 9 D_{18}	6 C_2, C_3, 4 C_4, 5 C_6, C_8, C_9, 3 C_{12}, 5 C_{18}, 19 D_2, D_3, 4 D_4, 3 D_6, D_9, 2 D_{12}, 3 D_{18}	3 C_2, 3 C_4, C_6, C_8, 3 C_{12}, C_{18}, 17 D_2, D_3, 4 D_4, 3 D_6, D_9, 2 D_{12}, 3 D_{18}	6 C_2, C_3, C_4, 19 D_2, D_3, 2 D_4
R93.11	6 C_2, C_3, 3 C_4, 5 C_6, 4 C_8, 3 C_9, 2 C_{12}, 6 C_{18}, 3 C_{36}, 26 D_2, D_3, 8 D_4, 3 D_6, 6 D_8, 3 D_9, 2 D_{12}, 3 D_{18}, 3 D_{36}	6 C_2, C_3, 3 C_4, 5 C_6, 3 C_8, C_9, 2 C_{12}, 2 C_{18}, C_{36}, 26 D_2, D_3, 8 D_4, 3 D_6, 5 D_8, D_9, 2 D_{12}, D_{18}, D_{36}	3 C_2, 2 C_4, C_6, 3 C_8, 2 C_{12}, C_{18}, C_{36}, 19 D_2, D_3, 8 D_4, 3 D_6, 5 D_8, D_9, 2 D_{12}, D_{18}, D_{36}	6 C_2, C_3, C_4, 26 D_2, D_3, 2 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R93.12	4 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, 3 C_9, 2 C_{12}, 3 C_{18}, 12 D_2, D_3, 3 D_4, 3 D_6, 3 D_9, D_{12}, 3 D_{18}	4 C_2, C_3, 3 C_4, 3 C_6, C_8, C_9, 2 C_{12}, C_{18}, 12 D_2, D_3, 3 D_4, 3 D_6, D_9, D_{12}, D_{18}	3 C_2, 2 C_4, C_6, C_8, 2 C_{12}, 11 D_2, D_3, 3 D_4, 3 D_6, D_9, D_{12}, D_{18}	4 C_2, C_3, C_4, C_6, 12 D_2, D_3, 2 D_4, D_6
R93.13	5 C_2, 5 C_4, 8 C_8, 12 C_{16}, 24 C_{32}, 16 C_{64}, 15 D_2, 7 D_4, 10 D_8, 20 D_{16}, 32 D_{32}	5 C_2, 5 C_4, 6 C_8, 7 C_{16}, 7 C_{32}, C_{64}, 15 D_2, 7 D_4, 8 D_8, 10 D_{16}, 11 D_{32}	3 C_2, 2 C_4, 2 C_8, 13 D_2, 6 D_4, 5 D_8, 7 D_{16}, 7 D_{32}	5 C_2, 3 C_4, C_8, C_{16}, C_{32}, 15 D_2, 4 D_4, 2 D_8, 2 D_{16}, D_{32}
R93.14	5 C_2, 6 C_4, 8 C_8, 12 C_{16}, 24 C_{32}, 32 C_{64}, 13 D_2, 3 D_4, 6 D_8, 12 D_{16}, 24 D_{32}	5 C_2, 6 C_4, 6 C_8, 7 C_{16}, 9 C_{32}, 3 C_{64}, 13 D_2, 3 D_4, 4 D_8, 5 D_{16}, 12 D_{32}	3 C_2, 3 C_4, 2 C_8, 13 D_2, 2 D_4, 3 D_8, 3 D_{16}, 8 D_{32}	5 C_2, 2 C_4, C_8, C_{16}, 13 D_2, 2 D_4, 2 D_8, D_{16}
R93.15	5 C_2, 5 C_4, 7 C_8, 10 C_{16}, 16 C_{32}, 16 C_{64}, 13 D_2, 3 D_4, 6 D_8, 12 D_{16}, 12 D_{32}	5 C_2, 5 C_4, 5 C_8, 5 C_{16}, 5 C_{32}, C_{64}, 13 D_2, 3 D_4, 4 D_8, 5 D_{16}, 6 D_{32}	3 C_2, 2 C_4, 2 C_8, 13 D_2, 2 D_4, 3 D_8, 3 D_{16}, 4 D_{32}	5 C_2, 3 C_4, C_8, C_{16}, 13 D_2, 2 D_4, 2 D_8, D_{16}
R93.16	4 C_2, 4 C_4, 6 C_8, 8 C_{16}, 8 C_{32}, 8 C_{64}, 12 D_2, 3 D_4, 4 D_8, 8 D_{16}, 8 D_{32}	4 C_2, 4 C_4, 4 C_8, 3 C_{16}, C_{32}, 12 D_2, 3 D_4, 3 D_8, 3 D_{16}, 2 D_{32}	2 C_2, 3 C_4, 4 C_8, 3 C_{16}, C_{32}, 10 D_2, 3 D_4, 3 D_8, 3 D_{16}, 2 D_{32}	4 C_2, C_4, 12 D_2, D_4
R93.17	5 C_2, 4 C_4, 7 C_8, 10 C_{16}, 16 C_{32}, 16 C_{64}, 15 D_2, 3 D_4, 4 D_8, 8 D_{16}, 8 D_{32}	5 C_2, 4 C_4, 5 C_8, 4 C_{16}, 3 C_{32}, C_{64}, 15 D_2, 3 D_4, 3 D_8, 3 D_{16}, 2 D_{32}	2 C_2, 3 C_4, 5 C_8, 4 C_{16}, 3 C_{32}, C_{64}, 11 D_2, 3 D_4, 3 D_8, 3 D_{16}, 2 D_{32}	5 C_2, C_4, 15 D_2, D_4
R93.18	4 C_2, 5 C_4, 7 C_8, 10 C_{16}, 16 C_{32}, 16 C_{64}, 9 D_2, 2 D_4, 4 D_8, 8 D_{16}, 8 D_{32}	4 C_2, 5 C_4, 5 C_8, 5 C_{16}, 5 C_{32}, 9 D_2, 2 D_4, 3 D_8, 3 D_{16}, 4 D_{32}	3 C_2, 3 C_4, 2 C_8, 9 D_2, 2 D_4, 3 D_8, 3 D_{16}, 4 D_{32}	4 C_2, 2 C_4, C_8, C_{16}, 9 D_2, D_4, D_8, D_{16}
R93.19	3 C_2, 2 C_4, 4 C_8, 15 C_{31}, 15 C_{62}, 15 C_{124}, 30 C_{248}, 3 D_2, 30 D_{31}, 15 D_{62}	3 C_2, 2 C_4, 2 C_8, C_{31}, C_{62}, 3 D_2, 2 D_{31}, D_{62}	2 C_2, C_4, C_{62}, 3 D_2, D_{31}, D_{62}	3 C_2, C_{31}, 3 D_2, D_{31}
R93.20	2 C_2, 2 C_4, 2 C_8, 15 C_{31}, 15 C_{62}, 15 C_{124}, 30 C_{248}, 2 D_2, 15 D_{31}, 15 D_{62}	2 C_2, 2 C_4, C_{31}, C_{62}, 2 D_2, D_{31}, D_{62}	2 C_2, C_4, C_{62}, 2 D_2, D_{31}, D_{62}	2 C_2, C_{31}, 2 D_2, D_{31}
R93.21	**Tet**, 7 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 10 C_{10}, C_{12}, 2 C_{15}, 6 C_{30}, 34 D_2, 5 D_4, 4 D_5, 12 D_{10}	**Tet**, 7 C_2, C_3, 2 C_4, C_5, 3 C_6, 5 C_{10}, 34 D_2, 5 D_4, 2 D_5, 6 D_{10}	3 C_2, 2 C_4, 2 C_6, C_{10}, 27 D_2, 5 D_4, D_5, 6 D_{10}	7 C_2, C_5, 34 D_2, 2 D_5
R93.22	5 C_2, C_3, 4 C_4, 2 C_5, 3 C_6, 6 C_{10}, 4 C_{12}, 2 C_{15}, 4 C_{20}, 6 C_{30}, 13 D_2, 3 D_4, 4 D_5, 8 D_{10}, 6 D_{20}	5 C_2, C_3, 4 C_4, C_5, 3 C_6, 3 C_{10}, 3 C_{12}, 2 C_{20}, 13 D_2, 3 D_4, 2 D_5, 4 D_{10}, 3 D_{20}	3 C_2, 4 C_4, 2 C_6, C_{10}, 3 C_{12}, 2 C_{20}, 13 D_2, 3 D_4, D_5, 4 D_{10}, 3 D_{20}	5 C_2, C_5, C_{10}, 13 D_2, 2 D_5, D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R93.23	3 C_2, C_3, 2 C_4, C_6, C_{12}, 9 C_{19}, 9 C_{38}, 9 C_{57}, 9 C_{76}, 9 C_{114}, 3 D_2, 2 D_3, D_6, 18 D_{19}, 9 D_{38}, 18 D_{57}, 9 D_{114}	3 C_2, C_3, 2 C_4, C_6, C_{19}, C_{38}, C_{57}, C_{114}, 3 D_2, 2 D_3, D_6, 2 D_{19}, D_{38}, 2 D_{57}, D_{114}	2 C_2, 2 C_4, C_6, C_{38}, 3 D_2, D_3, D_6, D_{19}, D_{38}, D_{57}, D_{114}	3 C_2, C_3, C_{19}, 3 D_2, D_3, D_{19}
R93.24	C_2, 3 C_7, 3 C_{14}, 15 C_{31}, 45 C_{217}, 15 D_{31}	C_2, C_{31}, D_{31}	C_2, D_{31}	C_2, C_{31}, D_{31}
R93.25	2 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, 6 C_{16}, 2 C_{24}, 12 C_{32}, 4 C_{48}, 16 C_{64}, 8 C_{96}, 16 C_{192}, 2 D_2, D_3, D_6	2 C_2, C_3, 2 C_4, C_6, C_8, 2 D_2, D_3, D_6	2 C_2, C_4, C_6, 2 D_2, D_3, D_6	2 C_2, C_3, 2 D_2, D_3
R93.26	3 C_2, C_3, 2 C_4, C_6, 4 C_8, C_{12}, 8 C_{16}, 2 C_{24}, 16 C_{32}, 4 C_{48}, 32 C_{64}, 8 C_{96}, 16 C_{192}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 2 C_8, 3 D_2, 2 D_3, D_6	2 C_2, C_4, C_6, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, D_3
R93.27	2 C_2, C_3, 2 C_4, C_6, 3 C_8, 2 C_{12}, 6 C_{16}, 4 C_{24}, 12 C_{32}, 8 C_{48}, 16 C_{96}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, C_6, 2 C_8, C_{12}, C_{16}, C_{24}, 2 D_2, D_4	2 C_2, C_4, C_6, 2 D_2, D_4	2 C_2, C_3, C_4, C_8, 2 D_2
R93.28	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 4 C_8, 2 C_{12}, 8 C_{16}, 4 C_{24}, 16 C_{32}, 8 C_{48}, 16 C_{96}, 6 D_2	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, 3 C_{16}, C_{24}, 2 C_{32}, C_{48}, 6 D_2	2 C_2, C_4, C_6, 5 D_2	**Tet**, 3 C_2, C_3, C_4, C_8, C_{16}, 6 D_2
R93.29	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 4 C_8, 2 C_{12}, 8 C_{16}, 4 C_{24}, 16 C_{32}, 8 C_{48}, 16 C_{96}, 6 D_2	**Tet**, 3 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, 3 C_{16}, C_{24}, 3 C_{32}, C_{48}, C_{96}, 6 D_2	**Tet**, 2 C_2, C_4, C_6, 6 D_2	**Tet**, 3 C_2, C_3, C_4, C_8, C_{16}, C_{32}, 6 D_2
R93.30	5 C_2, C_3, 3 C_4, 5 C_6, 6 C_8, 6 C_{12}, 12 C_{16}, 12 C_{24}, 16 C_{32}, 24 C_{48}, 32 C_{96}, 13 D_2	5 C_2, C_3, 3 C_4, 5 C_6, 5 C_8, 5 C_{12}, 4 C_{16}, 5 C_{24}, 2 C_{32}, 4 C_{48}, 2 C_{96}, 13 D_2	2 C_2, 2 C_4, C_6, 11 D_2	5 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}, 13 D_2
R93.31	3 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 4 C_{12}, 8 C_{16}, 8 C_{24}, 12 C_{32}, 16 C_{48}, 24 C_{96}, 4 D_2, 2 D_4	3 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, 3 C_{12}, 2 C_{24}, 4 D_2, 2 D_4	2 C_2, 2 C_4, C_6, 4 D_2, 2 D_4	3 C_2, C_3, C_4, C_6, C_{12}, 4 D_2
R93.32	3 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 4 C_{12}, 6 C_{16}, 8 C_{24}, 8 C_{32}, 12 C_{48}, 16 C_{96}, 6 D_2	3 C_2, C_3, 3 C_4, 3 C_6, 3 C_8, 3 C_{12}, C_{16}, 3 C_{24}, C_{48}, 6 D_2	2 C_2, 2 C_4, C_6, 6 D_2	3 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}, 6 D_2
R93.33	C_2, 5 C_{11}, 8 C_{17}, 5 C_{22}, 8 C_{34}, 80 C_{187}, 80 C_{374}	C_2	C_2	C_2
R93.34	3 C_2, 2 C_4, 23 C_{47}, 69 C_{94}, 92 C_{188}, 3 D_2	3 C_2, 2 C_4, C_{47}, 3 C_{94}, 2 C_{188}, 3 D_2	2 C_2, 2 C_4, C_{94}, 3 D_2	3 C_2, C_{47}, C_{94}, 3 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R93.35	C_2, C_3, C_4, C_6, 2 C_{12}, 15 C_{31}, 15 C_{62}, 30 C_{93}, 30 C_{124}, 30 C_{186}, 60 C_{372}	C_2, C_3, C_4, C_6, C_{31}, C_{62}, C_{93}, C_{186}	C_2, C_4, C_6, C_{62}, C_{186}	C_2, C_3, C_{31}, C_{93}
Genus 94				
R94.1	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_6, 3 C_7, 3 C_{14}, 3 C_{21}, 3 C_{35}, 3 D_2, 2 D_3, D_4, D_5, D_6, 3 D_7, 3 D_{14}, 3 D_{21}	**Tet**, **Oct**, 2 C_2, C_3, C_4, C_6, C_7, C_{14}, C_{21}, 3 D_2, 2 D_3, D_4, D_6, D_7, D_{14}, D_{21}	**Tet**, **Oct**, 2 C_2, C_4, C_6, C_{14}, 3 D_2, 2 D_3, D_4, D_6, D_7, D_{14}, D_{21}	2 C_2, C_3, C_7, 3 D_2, 2 D_3, D_7
R94.2	3 C_2, 2 C_3, C_4, 2 C_6, 5 C_{11}, 10 C_{22}, 10 C_{33}, 5 C_{66}, 4 D_2, 4 D_3, D_4, 2 D_6, 5 D_{11}, 5 D_{22}, 5 D_{33}	3 C_2, 2 C_3, C_4, 2 C_6, C_{11}, 2 C_{22}, C_{33}, 4 D_2, 4 D_3, D_4, 2 D_6, D_{11}, D_{22}, D_{33}	3 C_2, C_4, C_6, C_{22}, 4 D_2, 4 D_3, D_4, 2 D_6, D_{11}, D_{22}, D_{33}	3 C_2, 2 C_3, C_{11}, 4 D_2, 4 D_3, D_{11}
R94.3	3 C_2, C_4, 2 C_5, 4 C_{10}, 9 C_{19}, 18 C_{38}, 36 C_{95}, 72 C_{190}, 4 D_2, D_4, 2 D_5, 2 D_{10}, 9 D_{19}, 9 D_{38}, 36 D_{95}, 36 D_{190}	3 C_2, C_4, C_5, 2 C_{10}, C_{19}, 2 C_{38}, C_{95}, 2 C_{190}, 4 D_2, D_4, D_5, D_{10}, D_{19}, D_{38}, D_{95}, D_{190}	3 C_2, C_4, C_{10}, C_{38}, C_{190}, 4 D_2, D_4, D_5, D_{10}, D_{19}, D_{38}, D_{95}, D_{190}	3 C_2, C_5, C_{19}, C_{95}, 4 D_2, D_5, D_{19}, D_{95}
R94.4	2 C_2, 2 C_4, C_8, 23 C_{47}, 23 C_{94}, 46 C_{188}, 46 C_{376}, 2 D_2, D_4, 23 D_{47}, 23 D_{94}, 46 D_{188}	2 C_2, 2 C_4, C_{47}, C_{94}, C_{188}, 2 D_2, D_4, D_{47}, D_{94}, D_{188}	2 C_2, 2 C_4, C_{94}, C_{188}, 2 D_2, D_4, D_{47}, D_{94}, D_{188}	2 C_2, C_{47}, 2 D_2, D_{47}
R94.5	3 C_2, 3 C_3, C_4, 8 C_6, 2 C_8, 3 C_{12}, 4 C_{16}, 6 C_{24}, 8 C_{32}, 12 C_{48}, 8 C_{96}, 4 D_2, D_3, 2 D_4, D_6, 4 D_8, D_{12}, 8 D_{16}, 2 D_{24}, 8 D_{32}, 4 D_{48}	3 C_2, 3 C_3, C_4, 8 C_6, C_8, 2 C_{12}, C_{16}, 2 C_{24}, C_{32}, 2 C_{48}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{16}, D_{24}, D_{32}, D_{48}	3 C_2, 6 C_6, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}, 2 D_{16}, D_{24}, D_{32}, D_{48}	3 C_2, C_3, C_4, C_8, C_{16}, 4 D_2, D_3, 2 D_4, 2 D_8, 2 D_{16}
R94.6	3 C_2, 3 C_3, C_4, 5 C_6, 2 C_8, 5 C_{12}, 4 C_{16}, 10 C_{24}, 8 C_{32}, 20 C_{48}, 40 C_{96}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 4 D_8, 4 D_{12}, 8 D_{16}, 8 D_{24}, 8 D_{32}, 16 D_{48}, 16 D_{96}	3 C_2, 3 C_3, C_4, 5 C_6, C_8, 4 C_{12}, C_{16}, 4 C_{24}, C_{32}, 4 C_{48}, 4 C_{96}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 4 D_{12}, 2 D_{16}, 4 D_{24}, D_{32}, 4 D_{48}, 2 D_{96}	3 C_2, 4 C_6, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 4 D_{12}, 2 D_{16}, 4 D_{24}, D_{32}, 4 D_{48}, 2 D_{96}	3 C_2, C_3, C_4, C_8, C_{16}, C_{32}, 4 D_2, 2 D_3, 2 D_4, 2 D_8, 2 D_{16}, D_{32}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R94.7	3 C_2, 3 C_3, C_4, 4 C_6, 2 C_8, 5 C_{12}, 4 C_{16}, 10 C_{24}, 8 C_{32}, 20 C_{48}, 16 C_{96}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 4 D_8, 7 D_{12}, 8 D_{16}, 14 D_{24}, 8 D_{32}, 28 D_{48}, 16 D_{96}	3 C_2, 3 C_3, C_4, 4 C_6, C_8, 4 C_{12}, C_{16}, 4 C_{24}, C_{32}, 4 C_{48}, C_{96}, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_8, 5 D_{12}, 2 D_{16}, 5 D_{24}, D_{32}, 5 D_{48}, D_{96}	3 C_2, 2 C_6, 4 D_2, 4 D_3, 2 D_4, 4 D_6, 2 D_8, 5 D_{12}, 2 D_{16}, 5 D_{24}, D_{32}, 5 D_{48}, D_{96}	3 C_2, 3 C_3, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{48}, 4 D_2, 4 D_3, 2 D_4, 2 D_6, 2 D_8, 2 D_{12}, 2 D_{16}, 2 D_{24}, 2 D_{48}
R94.8	3 C_2, C_3, 3 C_6, 23 C_{47}, 23 C_{94}, 23 C_{141}, 23 C_{282}, 3 D_2, 46 D_{47}, 23 D_{94}	3 C_2, C_3, 3 C_6, C_{47}, C_{94}, 3 D_2, 2 D_{47}, D_{94}	3 C_2, C_6, 3 D_2, 2 D_{47}, D_{94}	3 C_2, C_{47}, C_{94}, 3 D_2, 2 D_{47}, D_{94}
R94.9	C_2, 2 C_5, 2 C_{10}, 23 C_{47}, 46 C_{235}, 23 D_{47}	C_2, C_5, C_{10}, C_{47}, D_{47}	C_2, C_{10}, D_{47}	C_2, C_{47}, D_{47}
R94.10	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, 3 C_7, C_{12}, 3 C_{14}, 15 C_{21}, 3 C_{42}, 3 D_2, D_3, D_4, 3 D_7, 3 D_{14}, 6 D_{21}	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, C_7, C_{14}, 4 C_{21}, C_{42}, 3 D_2, D_3, D_4, D_7, D_{14}, 2 D_{21}	2 **Tet**, **Oct**, 2 C_2, C_4, C_6, C_{14}, 3 D_2, D_3, D_4, D_7, D_{14}, 2 D_{21}	2 C_2, C_3, C_7, 3 D_2, D_3, D_7
R94.11	2 **Tet**, **Oct**, C_2, 3 C_3, C_4, C_6, C_7, C_{12}, 2 C_{21}, D_2, D_3, D_4	2 **Tet**, **Oct**, C_2, 3 C_3, C_4, C_6, D_2, D_3, D_4	2 **Tet**, **Oct**, C_2, C_4, C_6, D_2, D_3, D_4	C_2, 2 C_3, D_2, D_3
R94.12	3 C_2, C_3, C_4, 3 C_6, C_{12}, 9 C_{19}, 18 C_{38}, 9 C_{57}, 27 C_{114}, 4 D_2, D_4, 9 D_{19}, 9 D_{38}	3 C_2, C_3, C_4, 3 C_6, C_{19}, 2 C_{38}, 4 D_2, D_4, D_{19}, D_{38}	3 C_2, C_4, C_6, C_{38}, 4 D_2, D_4, D_{19}, D_{38}	3 C_2, C_{19}, 4 D_2, D_{19}
R94.13	3 C_2, 3 C_3, C_4, 8 C_6, 2 C_8, 6 C_9, 3 C_{12}, 18 C_{18}, 2 C_{24}, 6 C_{36}, 6 C_{72}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_{12}	3 C_2, 3 C_3, C_4, 8 C_6, C_8, 2 C_9, 2 C_{12}, 6 C_{18}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}	3 C_2, 6 C_6, C_{18}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}	3 C_2, 2 C_3, C_4, 4 D_2, D_3, 2 D_4
R94.14	3 C_2, 3 C_3, C_4, 5 C_6, 2 C_8, 6 C_9, 5 C_{12}, 12 C_{18}, 10 C_{24}, 9 C_{36}, 18 C_{72}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 4 D_{12}, 4 D_{24}	3 C_2, 3 C_3, C_4, 5 C_6, C_8, 2 C_9, 4 C_{12}, 4 C_{18}, 4 C_{24}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 4 D_{12}, 2 D_{24}	3 C_2, 3 C_6, C_{18}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 4 D_{12}, 2 D_{24}	3 C_2, 2 C_3, C_4, C_8, 4 D_2, 2 D_3, 2 D_4, D_8
R94.15	2 C_2, 3 C_3, C_4, 4 C_6, C_8, 6 C_9, C_{12}, 9 C_{18}, 2 C_{24}, 3 C_{36}, 6 C_{72}, 2 D_2, D_3, D_4, D_6	2 C_2, 3 C_3, C_4, 4 C_6, 2 C_9, 3 C_{18}, 2 D_2, D_3, D_4, D_6	2 C_2, C_4, 3 C_6, C_{18}, 2 D_2, D_3, D_4, D_6	2 C_2, 2 C_3, 2 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R94.16	2 C_2, 3 C_3, 2 C_4, 3 C_6, C_8, 6 C_9, 6 C_{12}, 6 C_{18}, 2 C_{24}, 12 C_{36}, 2 D_2, 3 D_3, D_4, 3 D_6, 6 D_9, 5 D_{12}, 6 D_{18}, 9 D_{36}	2 C_2, 3 C_3, 2 C_4, 3 C_6, 4 C_9, 4 C_{12}, 4 C_{18}, 7 C_{36}, 2 D_2, 3 D_3, D_4, 3 D_6, 4 D_9, 4 D_{12}, 4 D_{18}, 7 D_{36}	2 C_2, 2 C_4, 3 C_6, 3 C_{12}, 4 C_{18}, 2 D_2, 3 D_3, D_4, 3 D_6, 4 D_9, 4 D_{12}, 4 D_{18}, 7 D_{36}	2 C_2, 3 C_3, C_9, 2 D_2, 3 D_3, D_9
R94.17	2 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, 6 C_9, 7 C_{12}, 6 C_{18}, 2 C_{24}, 15 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 3 C_3, 2 C_4, 4 C_6, 4 C_9, 5 C_{12}, 4 C_{18}, 4 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 2 C_4, 4 C_6, 4 C_{12}, 4 C_{18}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 2 C_3, 2 D_2, D_3
R94.18	3 C_2, C_3, 2 C_5, 3 C_6, 3 C_7, 2 C_{10}, 3 C_{14}, 2 C_{15}, 3 C_{21}, 2 C_{30}, 6 C_{35}, 3 C_{42}, 6 C_{105}, 3 D_2, 4 D_5, 6 D_7, 2 D_{10}, 3 D_{14}, 6 D_{35}	3 C_2, C_3, C_5, 3 C_6, C_7, C_{10}, C_{14}, C_{35}, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, D_{35}	3 C_2, C_6, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, D_{35}	3 C_2, C_5, C_7, 3 D_2, 2 D_5, 2 D_7
R94.19	**Tet**, 2 **Ico**, C_2, C_3, 2 C_5, 3 C_7, 3 C_{14}, 3 C_{21}, 6 C_{35}, D_2, D_3, 2 D_5	**Tet**, C_2, C_3, C_7, C_{14}, C_{21}, D_2, D_3	**Tet**, C_2, C_{14}, D_2, D_3	C_2, C_3, C_7, D_2, D_3
R94.20	3 C_2, 3 C_3, 2 C_6, 5 C_{11}, 15 C_{22}, 15 C_{33}, 10 C_{66}, 3 D_2, 5 D_3, 2 D_6	3 C_2, 3 C_3, 2 C_6, C_{11}, 3 C_{22}, C_{33}, 3 D_2, 5 D_3, 2 D_6	3 C_2, C_{22}, 3 D_2, 5 D_3, 2 D_6	3 C_2, 3 C_3, C_{11}, 3 D_2, 5 D_3
R94.21	3 C_2, 3 C_3, 5 C_6, 5 C_{11}, 15 C_{22}, 25 C_{33}, 45 C_{66}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, 5 C_6, C_{11}, 3 C_{22}, 3 C_{33}, 5 C_{66}, 3 D_2, 2 D_3, D_6	3 C_2, 4 C_6, C_{22}, C_{66}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_{11}, 3 D_2, 2 D_3
R94.22	C_2, C_3, C_6, 3 C_7, 3 C_9, 3 C_{14}, 3 C_{18}, 6 C_{21}, 9 C_{27}, 6 C_{42}, 9 C_{54}, 18 C_{63}, 18 C_{126}, 54 C_{189}, 54 C_{378}	C_2, C_3, C_6	C_2, C_6	C_2
R94.23	3 C_2, 2 C_5, 6 C_{10}, 9 C_{19}, 27 C_{38}, 36 C_{95}, 108 C_{190}, 3 D_2	3 C_2, C_5, 3 C_{10}, C_{19}, 3 C_{38}, C_{95}, 3 C_{190}, 3 D_2	3 C_2, C_{10}, C_{38}, C_{190}, 3 D_2	3 C_2, C_5, C_{19}, C_{95}, 3 D_2
R94.24	C_2, C_4, 2 C_8, 23 C_{47}, 23 C_{94}, 46 C_{188}, 92 C_{376}	C_2, C_4, C_{47}, C_{94}, C_{188}	C_2, C_4, C_{94}, C_{188}	C_2, C_{47}
Genus 95				
R95.1	5 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 4 C_{12}, 8 C_{16}, 8 C_{24}, 16 C_{32}, 16 C_{48}, 16 C_{64}, 32 C_{96}, 32 C_{192}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_8, 6 D_{12}, 12 D_{16}, 12 D_{24}, 24 D_{32}, 24 D_{48}, 48 D_{96}	5 C_2, C_3, 3 C_4, 3 C_6, 3 C_8, 3 C_{12}, 3 C_{16}, 3 C_{24}, 3 C_{32}, 3 C_{48}, C_{64}, 3 C_{96}, C_{192}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 4 D_8, 4 D_{12}, 4 D_{16}, 4 D_{24}, 5 D_{32}, 4 D_{48}, 5 D_{96}	3 C_2, 2 C_4, C_6, 13 D_2, D_3, 2 D_4, 3 D_6, 3 D_8, 3 D_{12}, 3 D_{16}, 3 D_{24}, 3 D_{32}, 3 D_{48}, 3 D_{96}	5 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{32}, C_{48}, C_{96}, 13 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 2 D_{12}, 2 D_{16}, 2 D_{24}, D_{32}, 2 D_{48}, D_{96}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R95.2	3 C_2, C_3, 4 C_4, 2 C_6, 3 C_8, 3 C_{12}, 6 C_{16}, 6 C_{24}, 8 C_{32}, 12 C_{48}, 8 C_{64}, 16 C_{96}, 16 C_{192}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, 2 D_{12}, 4 D_{16}, 4 D_{24}, 4 D_{32}, 8 D_{48}, 8 D_{96}	3 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, 2 C_{12}, 2 C_{16}, 2 C_{24}, C_{32}, 2 C_{48}, C_{96}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{32}, D_{48}, D_{96}	3 C_2, 3 C_4, C_6, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{32}, D_{48}, D_{96}	3 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{48}, 4 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{48}
R95.3	3 C_2, 2 C_4, 2 C_5, 2 C_{10}, 9 C_{19}, 2 C_{20}, 9 C_{38}, 9 C_{76}, 36 C_{95}, 36 C_{190}, 36 C_{380}, 3 D_2, 4 D_5, 2 D_{10}, 18 D_{19}, 9 D_{38}, 72 D_{95}, 36 D_{190}	3 C_2, 2 C_4, C_5, C_{10}, C_{19}, C_{38}, C_{95}, C_{190}, 3 D_2, 2 D_5, D_{10}, 2 D_{19}, D_{38}, 2 D_{95}, D_{190}	2 C_2, 2 C_4, C_{10}, C_{38}, C_{190}, 3 D_2, D_5, D_{10}, D_{19}, D_{38}, D_{95}, D_{190}	3 C_2, C_5, C_{19}, C_{95}, 3 D_2, D_5, D_{19}, D_{95}
R95.4	C_2, C_3, 2 C_5, C_6, 2 C_{15}, 9 C_{19}, 9 C_{57}, 36 C_{95}, 36 C_{285}, 2 D_5, 9 D_{19}, 36 D_{95}	C_2, C_3, C_5, C_6, C_{19}, C_{95}, D_5, D_{19}, D_{95}	C_2, C_6, D_5, D_{19}, D_{95}	C_2, C_5, C_{19}, C_{95}, D_5, D_{19}, D_{95}
R95.5	4 C_2, 2 C_4, 4 C_8, 6 C_{16}, 12 C_{32}, 24 C_{64}, 16 C_{128}, 9 D_2, 3 D_4, 5 D_8, 10 D_{16}, 20 D_{32}, 32 D_{64}	4 C_2, 2 C_4, 2 C_8, 2 C_{16}, 2 C_{32}, 2 C_{64}, 9 D_2, 3 D_4, 3 D_8, 3 D_{16}, 3 D_{32}, 3 D_{64}	2 C_2, 2 C_4, 2 C_8, 2 C_{16}, 2 C_{32}, 2 C_{64}, 9 D_2, 3 D_4, 3 D_8, 3 D_{16}, 3 D_{32}, 3 D_{64}	4 C_2, 9 D_2
R95.6	3 C_2, 3 C_4, 4 C_8, 6 C_{16}, 12 C_{32}, 24 C_{64}, 32 C_{128}, 4 D_2, 2 D_4, 2 D_8, 4 D_{16}, 8 D_{32}, 16 D_{64}	3 C_2, 3 C_4, 2 C_8, 2 C_{16}, 2 C_{32}, 2 C_{64}, 4 D_2, 2 D_4, D_8, D_{16}, D_{32}, 2 D_{64}	2 C_2, 3 C_4, 2 C_8, 2 C_{16}, 2 C_{32}, 2 C_{64}, 4 D_2, 2 D_4, D_8, D_{16}, D_{32}, 2 D_{64}	3 C_2, 4 D_2
R95.7	4 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_8, 4 C_{10}, 2 C_{12}, 2 C_{15}, 2 C_{20}, 2 C_{30}, 4 C_{40}, 12 D_2, 2 D_3, 4 D_4, 4 D_5, 2 D_6, 2 D_8, 8 D_{10}, 2 D_{12}, 4 D_{15}, 4 D_{20}, 2 D_{30}, 4 D_{40}	4 C_2, C_3, 2 C_4, C_5, C_6, C_8, 2 C_{10}, C_{12}, C_{15}, C_{30}, 12 D_2, 2 D_3, 4 D_4, 2 D_5, 2 D_6, D_8, 4 D_{10}, D_{12}, 2 D_{15}, D_{30}	2 C_2, 2 C_4, C_6, C_8, C_{10}, C_{12}, C_{30}, 12 D_2, D_3, 4 D_4, D_5, 2 D_6, D_8, 4 D_{10}, D_{12}, 2 D_{15}, D_{30}	4 C_2, C_3, C_5, 12 D_2, D_3, 2 D_5
R95.8	3 C_2, C_3, 3 C_4, 2 C_5, C_6, 3 C_8, 2 C_{10}, C_{12}, 2 C_{15}, 4 C_{20}, 2 C_{30}, 4 C_{40}, 4 D_2, D_3, 3 D_4, 4 D_5, D_6, 2 D_8, 4 D_{10}, 2 D_{15}, 6 D_{20}, 2 D_{30}, 4 D_{40}	3 C_2, C_3, 3 C_4, C_5, C_6, 2 C_8, C_{10}, C_{15}, C_{20}, C_{30}, 4 D_2, D_3, 3 D_4, 2 D_5, D_6, D_8, 2 D_{10}, D_{15}, D_{20}, D_{30}	2 C_2, 3 C_4, C_6, 2 C_8, C_{10}, C_{20}, C_{30}, 4 D_2, D_3, 3 D_4, D_5, D_6, D_8, 2 D_{10}, D_{15}, D_{20}, D_{30}	3 C_2, C_3, C_5, 4 D_2, D_3, 2 D_5
R95.9	5 C_2, C_3, 3 C_4, 2 C_5, 3 C_6, 2 C_8, 6 C_{10}, 4 C_{12}, 2 C_{15}, 8 C_{20}, 6 C_{30}, 8 C_{40}, 8 C_{60}, 13 D_2, 2 D_3, 3 D_4, 4 D_5, 4 D_6, 8 D_{10}, 3 D_{12}, 4 D_{15}, 12 D_{20}, 8 D_{30}, 12 D_{60}	5 C_2, C_3, 3 C_4, C_5, 3 C_6, C_8, 3 C_{10}, 3 C_{12}, C_{15}, 3 C_{20}, 3 C_{30}, C_{40}, 3 C_{60}, 13 D_2, 2 D_3, 3 D_4, 2 D_5, 4 D_6, 4 D_{10}, 3 D_{12}, 2 D_{15}, 5 D_{20}, 4 D_{30}, 5 D_{60}	3 C_2, 2 C_4, C_6, C_{10}, C_{12}, 13 D_2, D_3, 3 D_4, D_5, 4 D_6, 3 D_{10}, 3 D_{12}, D_{15}, 3 D_{20}, 3 D_{30}, 3 D_{60}	5 C_2, C_3, C_4, C_5, C_6, C_{10}, C_{20}, 13 D_2, 2 D_3, D_4, 2 D_5, D_6, 2 D_{10}, D_{20}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R95.10	3 C_2, C_3, 5 C_4, 2 C_5, 2 C_6, C_8, 4 C_{10}, 7 C_{12}, 2 C_{15}, 4 C_{20}, 4 C_{30}, 4 C_{40}, 6 C_{60}, 4 D_2, D_3, 2 D_4, 2 D_5, D_6, 2 D_{10}, 2 D_{12}, 2 D_{15}, 2 D_{20}, 2 D_{30}, 4 D_{60}	3 C_2, C_3, 5 C_4, C_5, 2 C_6, 2 C_{10}, 6 C_{12}, C_{15}, C_{20}, 2 C_{30}, 2 C_{60}, 4 D_2, D_3, 2 D_4, D_5, D_6, D_{10}, 2 D_{12}, D_{15}, D_{20}, D_{30}, 2 D_{60}	3 C_2, 4 C_4, C_6, C_{10}, 2 C_{12}, 4 D_2, D_3, 2 D_4, D_5, D_6, D_{10}, 2 D_{12}, D_{15}, D_{20}, D_{30}, 2 D_{60}	3 C_2, C_3, C_5, C_{10}, 4 D_2, D_3, D_5, D_{10}
R95.11	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_{12}, 9 C_{19}, 9 C_{38}, 9 C_{57}, 9 C_{76}, 9 C_{114}, 18 C_{228}, 3 D_2, 18 D_{19}, 9 D_{38}	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, C_{19}, C_{38}, 3 D_2, 2 D_{19}, D_{38}	2 C_2, 2 C_4, C_6, C_{38}, 3 D_2, D_{19}, D_{38}	3 C_2, C_{19}, 3 D_2, D_{19}
R95.12	3 C_2, 3 C_4, 3 C_7, 4 C_8, 6 C_{14}, 4 C_{16}, 6 C_{28}, 15 C_{56}, 4 D_2, 2 D_4, 3 D_7, 2 D_8, 3 D_{14}, 3 D_{28}, 6 D_{56}	3 C_2, 3 C_4, C_7, 2 C_8, 2 C_{14}, C_{28}, 2 C_{56}, 4 D_2, 2 D_4, D_7, 2 D_8, D_{14}, D_{28}, 2 D_{56}	2 C_2, 3 C_4, 2 C_8, C_{14}, 4 D_2, 2 D_4, D_7, 2 D_8, D_{14}, D_{28}, 2 D_{56}	3 C_2, C_7, 4 D_2, D_7
R95.13	4 C_2, 2 C_4, 3 C_7, 4 C_8, 6 C_{14}, 2 C_{16}, 9 C_{28}, 18 C_{56}, 9 D_2, 3 D_4, 6 D_7, 4 D_8, 9 D_{14}, 12 D_{28}, 18 D_{56}	4 C_2, 2 C_4, C_7, 2 C_8, 2 C_{14}, 2 C_{28}, 3 C_{56}, 9 D_2, 3 D_4, 2 D_7, 3 D_8, 3 D_{14}, 3 D_{28}, 5 D_{56}	2 C_2, 2 C_4, 2 C_8, C_{14}, C_{28}, 9 D_2, 3 D_4, D_7, 3 D_8, 3 D_{14}, 2 D_{28}, 3 D_{56}	4 C_2, C_7, 9 D_2, 2 D_7
R95.14	3 C_2, 2 C_4, 2 C_5, 2 C_{10}, 5 C_{11}, 2 C_{20}, 5 C_{22}, 5 C_{44}, 10 C_{55}, 10 C_{110}, 3 D_2, 4 D_5, 2 D_{10}, 10 D_{11}, 5 D_{22}, 20 D_{55}, 10 D_{110}	3 C_2, 2 C_4, C_5, C_{10}, C_{11}, C_{22}, C_{55}, C_{110}, 3 D_2, 2 D_5, D_{10}, 2 D_{11}, D_{22}, 2 D_{55}, D_{110}	2 C_2, 2 C_4, C_{10}, C_{22}, 3 D_2, D_5, D_{10}, D_{11}, D_{22}, D_{55}, D_{110}	3 C_2, C_5, C_{11}, 3 D_2, D_5, D_{11}
R95.15	C_2, 5 C_{11}, 9 C_{19}, 5 C_{22}, 45 C_{209}, 9 D_{19}	C_2, C_{19}, D_{19}	C_2, D_{19}	C_2, C_{19}, D_{19}
R95.16	C_2, C_3, 2 C_5, C_6, 6 C_{13}, 2 C_{15}, 6 C_{26}, 12 C_{39}, 12 C_{65}, 12 C_{78}, 24 C_{195}, 2 D_5	C_2, C_3, C_5, C_6, D_5	C_2, C_6, D_5	C_2, C_5, D_5
R95.17	C_2, 95 C_{191}, 95 C_{382}	C_2	C_2	C_2
R95.18	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_8, 3 C_{12}, 6 C_{16}, 6 C_{24}, 12 C_{32}, 12 C_{48}, 16 C_{64}, 24 C_{96}, 32 C_{192}, 2 D_2	2 C_2, C_3, 2 C_4, 2 C_6, 2 C_8, 2 C_{12}, 2 C_{16}, 2 C_{24}, C_{32}, 2 C_{48}, C_{96}, 2 D_2	2 C_2, C_4, C_6, 2 D_2	2 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{48}, 2 D_2
R95.19	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_8, 4 C_{12}, 8 C_{16}, 8 C_{24}, 16 C_{32}, 16 C_{48}, 32 C_{64}, 32 C_{96}, 64 C_{192}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, 3 C_8, 3 C_{12}, 3 C_{16}, 3 C_{24}, 3 C_{32}, 3 C_{48}, 2 C_{64}, 3 C_{96}, 2 C_{192}, 3 D_2	2 C_2, C_4, C_6, 3 D_2	3 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{32}, C_{48}, C_{96}, 3 D_2
R95.20	C_2, C_4, 2 C_5, 2 C_{10}, 9 C_{19}, 4 C_{20}, 9 C_{38}, 18 C_{76}, 36 C_{95}, 36 C_{190}, 72 C_{380}	C_2, C_4, C_5, C_{10}, C_{19}, C_{38}, C_{95}, C_{190}	C_2, C_4, C_{10}, C_{38}, C_{190}	C_2, C_5, C_{19}, C_{95}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 96				
R96.1	**Tet**, 2 **Ico**, C_2, C_3, 2 C_5, 3 C_9, 2 C_{10}, C_{19}, D_2, D_3, 2 D_5, 3 D_9, 2 D_{10}	**Tet**, 2 **Ico**, C_2, C_3, 2 C_5, C_9, 2 C_{10}, C_{19}, D_2, D_3, 2 D_5, D_9, 2 D_{10}	**Tet**, 2 **Ico**, C_2, 2 C_{10}, D_2, D_3, 2 D_5, D_9, 2 D_{10}	**Tet**, C_2, C_3, 2 C_5, C_{19}, D_2, D_3, 2 D_5
R96.2	**Tet**, 4 **Ico**, C_2, C_3, 2 C_5, 3 C_9, 2 C_{10}, C_{19}, D_2, D_3, 4 D_5, 3 D_9, 2 D_{10}	**Tet**, 4 **Ico**, C_2, C_3, 2 C_5, C_9, 2 C_{10}, C_{19}, D_2, D_3, 4 D_5, D_9, 2 D_{10}	**Tet**, 4 **Ico**, C_2, 2 C_{10}, D_2, D_3, 4 D_5, D_9, 2 D_{10}	**Tet**, C_2, C_3, 2 C_5, C_{19}, D_2, D_3, 4 D_5
R96.3	**Tet**, 4 **Ico**, C_2, C_3, 2 C_5, 3 C_9, 2 C_{10}, C_{19}, D_2, D_3, 4 D_5, 3 D_9, 2 D_{10}	**Tet**, 4 **Ico**, C_2, C_3, 2 C_5, C_9, 2 C_{10}, C_{19}, D_2, D_3, 4 D_5, D_9, 2 D_{10}	**Tet**, 4 **Ico**, C_2, 2 C_{10}, D_2, D_3, 4 D_5, D_9, 2 D_{10}	**Tet**, C_2, C_3, 2 C_5, C_{19}, D_2, D_3, 4 D_5
R96.4	2 C_2, C_3, C_4, C_6, 3 C_9, 5 C_{11}, 5 C_{22}, 10 C_{33}, 10 C_{66}, 30 C_{99}, 3 D_2, D_3, D_4, D_6, 3 D_9, 5 D_{11}, 5 D_{22}, 10 D_{33}, 10 D_{66}, 30 D_{99}	2 C_2, C_3, C_4, C_6, C_9, C_{11}, C_{22}, C_{33}, C_{66}, C_{99}, 3 D_2, D_3, D_4, D_6, D_9, D_{11}, D_{22}, D_{33}, D_{66}, D_{99}	2 C_2, C_4, C_6, C_{22}, C_{66}, 3 D_2, D_3, D_4, D_6, D_9, D_{11}, D_{22}, D_{33}, D_{66}, D_{99}	2 C_2, C_3, C_{11}, C_{33}, 3 D_2, D_3, D_{11}, D_{33}
R96.5	3 C_2, C_4, 48 C_{97}, 96 C_{194}, 4 D_2, D_4, 48 D_{97}, 48 D_{194}	3 C_2, C_4, C_{97}, 2 C_{194}, 4 D_2, D_4, D_{97}, D_{194}	3 C_2, C_4, C_{194}, 4 D_2, D_4, D_{97}, D_{194}	3 C_2, C_{97}, 4 D_2, D_{97}
R96.6	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 2 C_{12}, 4 C_{16}, 4 C_{24}, 8 C_{32}, 8 C_{48}, 16 C_{64}, 16 C_{96}, 16 C_{128}, 32 C_{192}, 32 C_{384}, 2 D_2, D_3, D_4, D_6, 2 D_8, 2 D_{12}, 4 D_{16}, 4 D_{24}, 8 D_{32}, 8 D_{48}, 16 D_{64}, 16 D_{96}, 32 D_{192}	2 C_2, C_3, 2 C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{32}, C_{48}, C_{64}, C_{96}, C_{192}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{32}, D_{48}, D_{64}, D_{96}, D_{192}	2 C_2, 2 C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{32}, C_{48}, C_{64}, C_{96}, C_{192}, 2 D_2, D_3, D_4, D_6, D_8, D_{12}, D_{16}, D_{24}, D_{32}, D_{48}, D_{64}, D_{96}, D_{192}	2 C_2, C_3, 2 D_2, D_3
R96.7	3 C_2, C_3, C_6, 3 C_7, 3 C_{14}, 3 C_{21}, 21 C_{49}, 21 C_{98}, 21 C_{147}, 3 D_2, 2 D_3, D_6, 6 D_7, 3 D_{14}, 3 D_{21}, 42 D_{49}, 21 D_{98}, 21 D_{147}	3 C_2, C_3, C_6, C_7, C_{14}, C_{21}, C_{49}, C_{98}, C_{147}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, D_{21}, 2 D_{49}, D_{98}, D_{147}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, D_{21}, 2 D_{49}, D_{98}, D_{147}	3 C_2, C_3, C_7, C_{49}, 3 D_2, 2 D_3, 2 D_7, 2 D_{49}
R96.8	2 C_2, C_3, C_4, C_6, C_8, 5 C_{11}, 5 C_{22}, 10 C_{33}, 5 C_{44}, 10 C_{66}, 2 D_2, D_3, D_4, D_6, 5 D_{11}, 5 D_{22}, 10 D_{33}, 5 D_{44}, 10 D_{66}	2 C_2, C_3, C_4, C_6, C_{11}, C_{22}, C_{33}, C_{44}, C_{66}, 2 D_2, D_3, D_4, D_6, D_{11}, D_{22}, D_{33}, D_{44}, D_{66}	2 C_2, C_4, C_6, C_{22}, C_{44}, C_{66}, 2 D_2, D_3, D_4, D_6, D_{11}, D_{22}, D_{33}, D_{44}, D_{66}	2 C_2, C_3, C_{11}, 2 D_2, D_3, D_{11}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R96.9	3 C_2, C_3, C_4, 2 C_6, 2 C_8, 5 C_{11}, C_{12}, 10 C_{22}, 10 C_{33}, 5 C_{44}, 20 C_{66}, 10 C_{132}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, 5 D_{11}, D_{12}, 5 D_{22}, 10 D_{33}, 5 D_{44}, 10 D_{66}, 10 D_{132}	3 C_2, C_3, C_4, 2 C_6, C_8, C_{11}, C_{12}, 2 C_{22}, C_{33}, C_{44}, 2 C_{66}, C_{132}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{11}, D_{12}, D_{22}, D_{33}, D_{44}, D_{66}, D_{132}	3 C_2, C_6, C_{22}, C_{66}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_{11}, D_{12}, D_{22}, D_{33}, D_{44}, D_{66}, D_{132}	3 C_2, C_3, C_4, C_{11}, C_{33}, 4 D_2, D_3, 2 D_4, D_{11}, D_{33}
R96.10	3 C_2, C_3, C_4, 4 C_5, C_6, 8 C_{10}, 2 C_{12}, 4 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 4 D_{10}, 2 D_{12}	3 C_2, C_3, C_4, 3 C_5, C_6, 6 C_{10}, C_{12}, 4 D_2, 2 D_3, D_4, 3 D_5, 2 D_6, 3 D_{10}, D_{12}	3 C_2, C_4, C_6, 5 C_{10}, C_{12}, 4 D_2, 2 D_3, D_4, 3 D_5, 2 D_6, 3 D_{10}, D_{12}	3 C_2, C_3, 3 C_5, 4 D_2, 2 D_3, 3 D_5
R96.11	3 C_2, C_3, C_4, 5 C_5, C_6, 4 C_{10}, 2 C_{12}, 5 C_{15}, 4 D_2, 2 D_3, D_4, 9 D_5, 2 D_6, 4 D_{10}, 2 D_{12}, 4 D_{15}	3 C_2, C_3, C_4, 4 C_5, C_6, 3 C_{10}, C_{12}, 4 C_{15}, 4 D_2, 2 D_3, D_4, 7 D_5, 2 D_6, 3 D_{10}, D_{12}, 3 D_{15}	3 C_2, 2 C_{10}, 4 D_2, 2 D_3, D_4, 7 D_5, 2 D_6, 3 D_{10}, D_{12}, 3 D_{15}	3 C_2, C_3, C_4, 4 C_5, 4 D_2, 2 D_3, D_4, 7 D_5
R96.12	3 C_2, C_3, C_4, 4 C_5, C_6, 8 C_{10}, 2 C_{12}, 4 C_{20}, 4 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 4 D_{10}, 2 D_{12}, 2 D_{20}	3 C_2, C_3, C_4, 3 C_5, C_6, 5 C_{10}, C_{12}, 3 C_{20}, 4 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 4 D_{10}, D_{12}, 2 D_{20}	3 C_2, C_6, 4 C_{10}, 4 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 4 D_{10}, D_{12}, 2 D_{20}	3 C_2, C_3, C_4, 2 C_5, 4 D_2, 2 D_3, D_4, 4 D_5
R96.13	3 C_2, 8 C_5, 12 C_{10}, 30 C_{25}, 30 C_{50}, 3 D_2, 4 D_5, 2 D_{10}, 20 D_{25}, 10 D_{50}	3 C_2, 6 C_5, 8 C_{10}, 11 C_{25}, 11 C_{50}, 3 D_2, 2 D_5, D_{10}, 10 D_{25}, 5 D_{50}	3 C_2, 6 C_{10}, 3 D_2, 2 D_5, D_{10}, 10 D_{25}, 5 D_{50}	3 C_2, 5 C_5, C_{10}, 3 D_2, 2 D_5, D_{10}
R96.14	3 C_2, 8 C_5, 4 C_{10}, 30 C_{25}, 10 C_{50}, 3 D_2, 12 D_5, 4 D_{10}, 40 D_{25}, 10 D_{50}	3 C_2, 6 C_5, 2 C_{10}, 11 C_{25}, C_{50}, 3 D_2, 8 D_5, 2 D_{10}, 12 D_{25}, D_{50}	3 C_2, 3 D_2, 8 D_5, 2 D_{10}, 12 D_{25}, D_{50}	3 C_2, 6 C_5, C_{25}, 3 D_2, 8 D_5, 2 D_{25}
R96.15	3 C_2, C_3, C_4, 2 C_5, C_6, 2 C_8, 6 C_{10}, 2 C_{12}, 2 C_{15}, 4 C_{16}, 2 C_{20}, 4 C_{24}, 2 C_{30}, 4 C_{40}, 8 C_{48}, 4 C_{60}, 8 C_{80}, 8 C_{120}, 16 C_{240}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 4 D_8, 4 D_{12}, 4 D_{16}, 8 D_{24}, 8 D_{48}	3 C_2, C_3, C_4, C_5, C_6, C_8, 3 C_{10}, C_{12}, C_{16}, C_{24}, C_{48}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 2 D_{12}, D_{16}, 2 D_{24}, D_{48}	3 C_2, C_{10}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 2 D_{12}, D_{16}, 2 D_{24}, D_{48}	3 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{48}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 2 D_{12}, D_{16}, 2 D_{24}, D_{48}
R96.16	3 C_2, 3 C_7, 3 C_{14}, 8 C_{17}, 8 C_{34}, 24 C_{119}, 3 D_2, 6 D_7, 3 D_{14}, 16 D_{17}, 8 D_{34}, 24 D_{119}	3 C_2, C_7, C_{14}, C_{17}, C_{34}, C_{119}, 3 D_2, 2 D_7, D_{14}, 2 D_{17}, D_{34}, D_{119}	3 C_2, 3 D_2, 2 D_7, D_{14}, 2 D_{17}, D_{34}, D_{119}	3 C_2, C_7, C_{17}, 3 D_2, 2 D_7, 2 D_{17}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R96.17	3 C_2, C_4, 3 C_7, 2 C_8, 9 C_{14}, 4 C_{16}, 3 C_{28}, 8 C_{32}, 6 C_{56}, 12 C_{112}, 24 C_{224}, 4 D_2, 2 D_4, 4 D_8, 8 D_{16}, 8 D_{32}	3 C_2, C_4, C_8, C_{16}, C_{32}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}, D_{32}	3 C_2, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}, D_{32}	3 C_2, C_4, C_8, C_{16}, C_{32}, 4 D_2, 2 D_4, 2 D_8, 2 D_{16}, D_{32}
R96.18	3 C_2, C_3, C_6, 3 C_9, 6 C_{13}, 3 C_{18}, 6 C_{26}, 6 C_{39}, 18 C_{117}, 3 D_2, 2 D_3, D_6, 6 D_9, 12 D_{13}, 3 D_{18}, 6 D_{26}, 6 D_{39}, 18 D_{117}	3 C_2, C_3, C_6, C_9, C_{13}, C_{18}, C_{26}, C_{39}, C_{117}, 3 D_2, 2 D_3, D_6, 2 D_9, 2 D_{13}, D_{18}, D_{26}, D_{39}, D_{117}	3 C_2, 3 D_2, 2 D_3, D_6, 2 D_9, 2 D_{13}, D_{18}, D_{26}, D_{39}, D_{117}	3 C_2, C_3, C_9, C_{13}, 3 D_2, 2 D_3, 2 D_9, 2 D_{13}
R96.19	3 C_2, C_4, 2 C_8, 6 C_{13}, 4 C_{16}, 18 C_{26}, 6 C_{52}, 12 C_{104}, 24 C_{208}, 4 D_2, 2 D_4, 4 D_8, 4 D_{16}	3 C_2, C_4, C_8, C_{16}, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, C_4, C_8, C_{16}, 4 D_2, 2 D_4, 2 D_8, D_{16}
R96.20	3 C_2, C_3, 2 C_5, C_6, 3 C_7, 6 C_{10}, 3 C_{14}, 2 C_{15}, 3 C_{21}, 2 C_{30}, 6 C_{35}, 6 C_{70}, 6 C_{105}, 3 D_2, 2 D_3, D_6, 6 D_7, 3 D_{14}, 3 D_{21}	3 C_2, C_3, C_5, C_6, C_7, 3 C_{10}, C_{14}, C_{21}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, D_{21}	3 C_2, C_{10}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, D_{21}	3 C_2, C_3, C_7, 3 D_2, 2 D_3, 2 D_7
R96.21	3 C_2, C_3, C_4, C_6, 2 C_{12}, 8 C_{17}, 24 C_{34}, 8 C_{51}, 8 C_{68}, 8 C_{102}, 16 C_{204}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_{12}	3 C_2, C_3, C_4, C_6, C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}	3 C_2, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}	3 C_2, C_3, C_4, C_6, C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}
R96.22	3 C_2, C_4, 2 C_5, 2 C_8, 6 C_{10}, 2 C_{20}, 10 C_{25}, 4 C_{40}, 30 C_{50}, 10 C_{100}, 20 C_{200}, 4 D_2, 2 D_4, 2 D_8	3 C_2, C_4, C_5, C_8, 3 C_{10}, 4 D_2, 2 D_4, D_8	3 C_2, C_{10}, 4 D_2, 2 D_4, D_8	3 C_2, C_4, C_8, 4 D_2, 2 D_4, D_8
R96.23	**Tet**, **Oct**, 2 C_2, C_3, C_4, 8 C_{17}, 16 C_{34}, 8 C_{51}, 8 C_{68}, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, 3 D_2, D_3, D_4	**Tet**, **Oct**, 2 C_2, C_3, C_4, 3 D_2, D_3, D_4
R96.24	3 C_2, C_4, 3 C_7, 9 C_{14}, 3 C_{28}, 21 C_{49}, 63 C_{98}, 21 C_{196}, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4	3 C_2, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R96.25	C_2, C_3, C_6, 3 C_9, 5 C_{11}, 5 C_{22}, 10 C_{33}, 10 C_{66}, 30 C_{99}, D_2	C_2, C_3, C_6, C_9, C_{11}, C_{22}, C_{33}, C_{66}, C_{99}, D_2	C_2, C_6, C_{22}, C_{66}, D_2	C_2, C_3, C_{11}, C_{33}, D_2
R96.26	C_2, C_3, 2 C_5, 2 C_{10}, 6 C_{13}, 2 C_{15}, 6 C_{26}, 6 C_{39}, 24 C_{65}, 24 C_{130}, 24 C_{195}, D_3	C_2, C_3, C_5, C_{10}, D_3	C_2, C_{10}, D_3	C_2, C_3, D_3
R96.27	C_2, 96 C_{193}, 96 C_{386}	C_2	C_2	C_2
R96.28	3 C_2, 48 C_{97}, 144 C_{194}, 3 D_2	3 C_2, C_{97}, 3 C_{194}, 3 D_2	3 C_2, C_{194}, 3 D_2	3 C_2, C_{97}, 3 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R96.29	C_2, C_3, C_4, C_6, 2 C_8, 2 C_{12}, 4 C_{16}, 4 C_{24}, 8 C_{32}, 8 C_{48}, 16 C_{64}, 16 C_{96}, 32 C_{128}, 32 C_{192}, 64 C_{384}	C_2, C_3, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{32}, C_{48}, C_{64}, C_{96}, C_{192}	C_2, C_4, C_6, C_8, C_{12}, C_{16}, C_{24}, C_{32}, C_{48}, C_{64}, C_{96}, C_{192}	C_2, C_3
Genus 98				
R98.1	3 C_2, C_3, C_4, 2 C_6, 3 C_9, 5 C_{11}, 6 C_{18}, 10 C_{22}, 10 C_{33}, 20 C_{66}, 30 C_{99}, 60 C_{198}, 4 D_2, D_3, D_4, D_6, 3 D_9, 5 D_{11}, 3 D_{18}, 5 D_{22}, 10 D_{33}, 10 D_{66}, 30 D_{99}, 30 D_{198}	3 C_2, C_3, C_4, 2 C_6, C_9, C_{11}, 2 C_{18}, 2 C_{22}, C_{33}, 2 C_{66}, C_{99}, 2 C_{198}, 4 D_2, D_3, D_4, D_6, D_9, D_{11}, D_{18}, D_{22}, D_{33}, D_{66}, D_{99}, D_{198}	3 C_2, C_4, C_6, C_{18}, C_{22}, C_{66}, C_{198}, 4 D_2, D_3, D_4, D_6, D_9, D_{11}, D_{18}, D_{22}, D_{33}, D_{66}, D_{99}, D_{198}	3 C_2, C_3, C_9, C_{11}, C_{33}, C_{99}, 4 D_2, D_3, D_9, D_{11}, D_{33}, D_{99}
R98.2	2 C_2, 2 C_4, 3 C_7, C_8, 3 C_{14}, 6 C_{28}, 21 C_{49}, 6 C_{56}, 21 C_{98}, 42 C_{196}, 42 C_{392}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 6 D_{28}, 21 D_{49}, 21 D_{98}, 42 D_{196}	2 C_2, 2 C_4, C_7, C_{14}, C_{28}, C_{49}, C_{98}, C_{196}, 2 D_2, D_4, D_7, D_{14}, D_{28}, D_{49}, D_{98}, D_{196}	2 C_2, 2 C_4, C_{14}, C_{28}, C_{98}, C_{196}, 2 D_2, D_4, D_7, D_{14}, D_{28}, D_{49}, D_{98}, D_{196}	2 C_2, C_7, C_{49}, 2 D_2, D_7, D_{49}
R98.3	3 C_2, C_3, C_4, 2 C_5, 2 C_6, 2 C_{10}, 2 C_{15}, 4 C_{20}, 10 C_{25}, 2 C_{30}, 10 C_{50}, 10 C_{75}, 20 C_{100}, 10 C_{150}, 4 D_2, D_3, D_4, 4 D_5, D_6, 4 D_{10}, 2 D_{15}, 4 D_{20}, 20 D_{25}, 2 D_{30}, 20 D_{50}, 10 D_{75}, 20 D_{100}, 10 D_{150}	3 C_2, C_3, C_4, C_5, 2 C_6, C_{10}, C_{15}, C_{20}, C_{25}, C_{30}, C_{50}, C_{75}, C_{100}, C_{150}, 4 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, D_{15}, D_{20}, 2 D_{25}, D_{30}, 2 D_{50}, D_{75}, D_{100}, D_{150}	3 C_2, C_4, C_6, 4 D_2, D_3, D_4, 2 D_5, D_6, 2 D_{10}, D_{15}, D_{20}, 2 D_{25}, D_{30}, 2 D_{50}, D_{75}, D_{100}, D_{150}	3 C_2, C_3, C_5, C_{10}, C_{25}, C_{50}, 4 D_2, D_3, 2 D_5, 2 D_{10}, 2 D_{25}, 2 D_{50}
R98.4	3 C_2, C_3, 3 C_6, 3 C_7, 3 C_{14}, 3 C_{21}, 3 C_{42}, 21 C_{49}, 21 C_{98}, 21 C_{147}, 21 C_{294}, 3 D_2, 6 D_7, 3 D_{14}, 42 D_{49}, 21 D_{98}	3 C_2, C_3, 3 C_6, C_7, C_{14}, C_{49}, C_{98}, 3 D_2, 2 D_7, D_{14}, 2 D_{49}, D_{98}	3 C_2, C_6, 3 D_2, 2 D_7, D_{14}, 2 D_{49}, D_{98}	3 C_2, C_7, C_{14}, C_{49}, C_{98}, 3 D_2, 2 D_7, D_{14}, 2 D_{49}, D_{98}
R98.5	2 C_2, C_3, 2 C_4, C_6, C_8, 5 C_{11}, 2 C_{12}, 5 C_{22}, 10 C_{33}, 10 C_{44}, 10 C_{66}, 20 C_{132}, 2 D_2, D_3, D_4, D_6, 5 D_{11}, D_{12}, 5 D_{22}, 10 D_{33}, 5 D_{44}, 10 D_{66}, 10 D_{132}	2 C_2, C_3, 2 C_4, C_6, C_{11}, C_{12}, C_{22}, C_{33}, C_{44}, C_{66}, C_{132}, 2 D_2, D_3, D_4, D_6, D_{11}, D_{12}, D_{22}, D_{33}, D_{44}, D_{66}, D_{132}	2 C_2, 2 C_4, C_6, C_{22}, C_{66}, 2 D_2, D_3, D_4, D_6, D_{11}, D_{12}, D_{22}, D_{33}, D_{44}, D_{66}, D_{132}	2 C_2, C_3, C_{11}, C_{33}, 2 D_2, D_3, D_{11}, D_{33}
R98.6	C_2, 2 C_5, 3 C_7, 2 C_{10}, 6 C_{35}, 21 C_{49}, 42 C_{245}, 3 D_7, 21 D_{49}	C_2, C_7, C_{49}, D_7, D_{49}	C_2, D_7, D_{49}	C_2, C_7, C_{49}, D_7, D_{49}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R98.7	2 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_8, 2 C_{10}, 2 C_{12}, 2 C_{15}, 2 C_{16}, 4 C_{20}, 2 C_{24}, 2 C_{30}, 8 C_{40}, 4 C_{60}, 8 C_{80}, 8 C_{120}, 2 D_2, D_3, D_4, 2 D_5, D_6, 2 D_8, 2 D_{10}, D_{12}, 2 D_{15}, 4 D_{20}, 2 D_{24}, 2 D_{30}, 8 D_{40}, 4 D_{60}, 8 D_{120}	2 C_2, C_3, 2 C_4, C_5, C_6, C_8, C_{10}, C_{12}, C_{15}, C_{20}, C_{24}, C_{30}, C_{40}, C_{60}, C_{120}, 2 D_2, D_3, D_4, D_5, D_6, D_8, D_{10}, D_{12}, D_{15}, D_{20}, D_{24}, D_{30}, D_{40}, D_{60}, D_{120}	2 C_2, 2 C_4, C_6, C_8, C_{10}, C_{20}, C_{40}, 2 D_2, D_3, D_4, D_5, D_6, D_8, D_{10}, D_{12}, D_{15}, D_{20}, D_{24}, D_{30}, D_{40}, D_{60}, D_{120}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5
R98.8	3 C_2, C_3, C_4, 2 C_5, 2 C_6, 2 C_8, 4 C_{10}, C_{12}, 4 C_{15}, 4 C_{16}, 2 C_{20}, 2 C_{24}, 8 C_{30}, 4 C_{40}, 4 C_{60}, 8 C_{120}, 4 D_2, D_3, 2 D_4, 2 D_5, D_6, 4 D_8, 2 D_{10}, D_{12}, 4 D_{15}, 4 D_{16}, 2 D_{20}, 2 D_{24}, 4 D_{30}, 4 D_{40}, 4 D_{60}, 8 D_{120}	3 C_2, C_3, C_4, C_5, 2 C_6, C_8, 2 C_{10}, C_{12}, C_{15}, C_{16}, C_{20}, C_{24}, 2 C_{30}, C_{40}, C_{60}, C_{120}, 4 D_2, D_3, 2 D_4, D_5, D_6, 2 D_8, D_{10}, D_{12}, D_{15}, D_{16}, D_{20}, D_{24}, D_{30}, D_{40}, D_{60}, D_{120}	3 C_2, C_6, C_{10}, C_{30}, 4 D_2, D_3, 2 D_4, D_5, D_6, 2 D_8, D_{10}, D_{12}, D_{15}, D_{16}, D_{20}, D_{24}, D_{30}, D_{40}, D_{60}, D_{120}	3 C_2, C_3, C_4, C_5, C_8, C_{15}, 4 D_2, D_3, 2 D_4, D_5, 2 D_8, D_{15}
R98.9	3 C_2, C_4, 2 C_5, 6 C_{10}, 5 C_{11}, 2 C_{20}, 10 C_{22}, 10 C_{55}, 30 C_{110}, 4 D_2, D_4, 5 D_{11}, 5 D_{22}	3 C_2, C_4, C_{11}, 2 C_{22}, 4 D_2, D_4, D_{11}, D_{22}	3 C_2, C_4, C_{22}, 4 D_2, D_4, D_{11}, D_{22}	3 C_2, C_{11}, 4 D_2, D_{11}
R98.10	2 C_2, 2 C_4, 3 C_7, 2 C_8, 3 C_{14}, 4 C_{16}, 6 C_{28}, 4 C_{32}, 6 C_{56}, 12 C_{112}, 2 D_2, D_4, 3 D_7, 2 D_8, 3 D_{14}, 4 D_{16}, 3 D_{28}, 6 D_{56}, 12 D_{112}	2 C_2, 2 C_4, C_7, C_8, C_{14}, C_{16}, C_{28}, C_{56}, C_{112}, 2 D_2, D_4, D_7, D_8, D_{14}, D_{16}, D_{28}, D_{56}, D_{112}	2 C_2, 2 C_4, C_8, C_{14}, C_{16}, 2 D_2, D_4, D_7, D_8, D_{14}, D_{16}, D_{28}, D_{56}, D_{112}	2 C_2, C_7, 2 D_2, D_7
R98.11	3 C_2, C_3, 2 C_5, 3 C_6, 3 C_7, 6 C_{10}, 3 C_{14}, 4 C_{15}, 3 C_{21}, 12 C_{30}, 6 C_{35}, 3 C_{42}, 6 C_{70}, 12 C_{105}, 12 C_{210}, 3 D_2, 6 D_7, 3 D_{14}	3 C_2, C_3, 3 C_6, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}	3 C_2, C_6, 3 D_2, 2 D_7, D_{14}	3 C_2, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}
R98.12	3 C_2, C_3, 2 C_5, C_6, 3 C_7, 2 C_{10}, 9 C_{14}, 2 C_{15}, 3 C_{21}, 6 C_{35}, 3 C_{42}, 6 C_{70}, 6 C_{105}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}, 2 D_{15}	3 C_2, C_3, C_5, C_6, C_{10}, C_{15}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}	3 C_2, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}	3 C_2, C_3, C_5, 3 D_2, 2 D_3, 2 D_5
R98.13	C_2, 3 C_7, 14 C_{29}, 14 C_{58}, 42 C_{203}, 3 D_7	C_2, C_7, D_7	C_2, D_7	C_2, C_7, D_7
R98.14	3 C_2, C_3, C_4, 2 C_6, 8 C_{17}, 24 C_{34}, 8 C_{51}, 8 C_{68}, 24 C_{102}, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, C_4, 2 C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_4, C_6, 4 D_2, D_3, D_4, D_6	3 C_2, C_3, 4 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R98.15	2 C_2, 2 C_4, 2 C_5, C_8, 4 C_{10}, 4 C_{20}, 10 C_{25}, 4 C_{40}, 20 C_{50}, 20 C_{100}, 20 C_{200}, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 C_4, 2 D_2, D_4	2 C_2, 2 D_2
R98.16	C_2, 98 C_{197}, 98 C_{394}	C_2	C_2	C_2
R98.17	3 C_2, C_3, 3 C_6, 3 C_9, 5 C_{11}, 9 C_{18}, 15 C_{22}, 10 C_{33}, 30 C_{66}, 30 C_{99}, 90 C_{198}, 3 D_2	3 C_2, C_3, 3 C_6, C_9, C_{11}, 3 C_{18}, 3 C_{22}, C_{33}, 3 C_{66}, C_{99}, 3 C_{198}, 3 D_2	3 C_2, C_6, C_{18}, C_{22}, C_{66}, C_{198}, 3 D_2	3 C_2, C_3, C_9, C_{11}, C_{33}, C_{99}, 3 D_2
R98.18	C_2, C_4, 3 C_7, 2 C_8, 3 C_{14}, 6 C_{28}, 21 C_{49}, 12 C_{56}, 21 C_{98}, 42 C_{196}, 84 C_{392}	C_2, C_4, C_7, C_{14}, C_{28}, C_{49}, C_{98}, C_{196}	C_2, C_4, C_{14}, C_{28}, C_{98}, C_{196}	C_2, C_7, C_{49}
Genus 99				
R99.1	2 C_2, C_3, 2 C_4, C_6, 7 C_7, 2 C_{12}, 7 C_{14}, 15 C_{28}, 2 D_2, D_4, 15 D_7, 15 D_{14}, 15 D_{28}	2 C_2, C_3, 2 C_4, C_6, 7 C_7, C_{12}, 7 C_{14}, 15 C_{28}, 2 D_2, D_4, 15 D_7, 15 D_{14}, 15 D_{28}	2 C_2, 2 C_4, C_6, C_{12}, 7 C_{14}, 15 C_{28}, 2 D_2, D_4, 15 D_7, 15 D_{14}, 15 D_{28}	2 C_2, 7 C_7, 2 D_2, 15 D_7
R99.2	C_2, C_3, 10 C_7, 3 C_{14}, 6 C_{21}, D_3, 6 D_7, 6 D_{21}	C_2, C_3, 8 C_7, C_{14}, 6 C_{21}, D_3, 6 D_7, 6 D_{21}	C_2, C_{14}, D_3, 6 D_7, 6 D_{21}	C_2, C_3, 7 C_7, D_3, 6 D_7
R99.3	5 C_2, 3 C_4, 9 C_7, 2 C_8, 24 C_{14}, 9 C_{28}, 13 D_2, 3 D_4, 33 D_7, 54 D_{14}, 9 D_{28}	5 C_2, 3 C_4, 9 C_7, C_8, 24 C_{14}, 9 C_{28}, 13 D_2, 3 D_4, 33 D_7, 54 D_{14}, 9 D_{28}	3 C_2, 3 C_4, C_8, 9 C_{14}, 9 C_{28}, 13 D_2, 3 D_4, 24 D_7, 54 D_{14}, 9 D_{28}	5 C_2, 9 C_7, 15 C_{14}, 13 D_2, 33 D_7, 30 D_{14}
R99.4	3 C_2, 5 C_4, 9 C_7, C_8, 9 C_{14}, 24 C_{28}, 4 D_2, 2 D_4, 24 D_7, 24 D_{14}, 24 D_{28}	3 C_2, 5 C_4, 9 C_7, 9 C_{14}, 24 C_{28}, 4 D_2, 2 D_4, 24 D_7, 24 D_{14}, 24 D_{28}	3 C_2, 4 C_4, 9 C_{14}, 24 C_{28}, 4 D_2, 2 D_4, 24 D_7, 24 D_{14}, 24 D_{28}	3 C_2, 9 C_7, 4 D_2, 24 D_7
R99.5	3 C_2, C_3, 2 C_4, C_6, 9 C_7, C_{12}, 9 C_{14}, 9 C_{21}, 3 D_2, 2 D_3, D_6, 18 D_7, 9 D_{14}, 9 D_{21}	3 C_2, C_3, 2 C_4, C_6, 9 C_7, 9 C_{14}, 9 C_{21}, 3 D_2, 2 D_3, D_6, 18 D_7, 9 D_{14}, 9 D_{21}	2 C_2, 2 C_4, C_6, 3 D_2, D_3, D_6, 18 D_7, 9 D_{14}, 9 D_{21}	3 C_2, C_3, 9 C_7, 9 C_{14}, 3 D_2, D_3, 18 D_7, 9 D_{14}
R99.6	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, 8 C_{17}, 24 C_{34}, 16 C_{51}, 16 C_{102}, 16 D_2, 2 D_3, 4 D_4, D_6, 16 D_{17}, 32 D_{34}, 32 D_{51}, 16 D_{102}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, C_{17}, 3 C_{34}, C_{51}, C_{102}, 16 D_2, 2 D_3, 4 D_4, D_6, 2 D_{17}, 4 D_{34}, 2 D_{51}, D_{102}	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, C_6, C_{34}, 16 D_2, D_3, 4 D_4, D_6, D_{17}, 4 D_{34}, D_{51}, D_{102}	**Tet**, 5 C_2, C_3, C_{17}, C_{34}, 16 D_2, D_3, 2 D_{17}, D_{34}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R99.7	5 C_2, 3 C_4, 2 C_5, 2 C_8, 6 C_{10}, 8 C_{20}, 10 C_{25}, 8 C_{40}, 30 C_{50}, 40 C_{100}, 40 C_{200}, 13 D_2, 3 D_4, 4 D_5, 8 D_{10}, 12 D_{20}, 20 D_{25}, 40 D_{50}, 60 D_{100}	5 C_2, 3 C_4, C_5, C_8, 3 C_{10}, 3 C_{20}, C_{25}, C_{40}, 3 C_{50}, 3 C_{100}, C_{200}, 13 D_2, 3 D_4, 2 D_5, 4 D_{10}, 5 D_{20}, 2 D_{25}, 4 D_{50}, 5 D_{100}	3 C_2, 2 C_4, C_{10}, C_{50}, 13 D_2, 3 D_4, D_5, 3 D_{10}, 3 D_{20}, D_{25}, 3 D_{50}, 3 D_{100}	5 C_2, C_4, C_5, C_{10}, C_{20}, C_{25}, C_{50}, C_{100}, 13 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}, 2 D_{25}, 2 D_{50}, D_{100}
R99.8	3 C_2, 5 C_4, 2 C_5, C_8, 4 C_{10}, 4 C_{20}, 10 C_{25}, 4 C_{40}, 20 C_{50}, 20 C_{100}, 20 C_{200}, 4 D_2, 2 D_4, 2 D_5, 2 D_{10}, 2 D_{20}, 10 D_{25}, 10 D_{50}, 10 D_{100}	3 C_2, 5 C_4, C_5, 2 C_{10}, C_{20}, C_{25}, 2 C_{50}, C_{100}, 4 D_2, 2 D_4, D_5, D_{10}, D_{20}, D_{25}, D_{50}, D_{100}	3 C_2, 4 C_4, C_{10}, C_{50}, 4 D_2, 2 D_4, D_5, D_{10}, D_{20}, D_{25}, D_{50}, D_{100}	3 C_2, C_5, C_{10}, C_{25}, C_{50}, 4 D_2, D_5, D_{10}, D_{25}, D_{50}
R99.9	3 C_2, C_3, 2 C_4, C_6, 3 C_9, 5 C_{11}, C_{12}, 3 C_{18}, 5 C_{22}, 10 C_{33}, 3 C_{36}, 5 C_{44}, 10 C_{66}, 30 C_{99}, 10 C_{132}, 30 C_{198}, 30 C_{396}, 3 D_2, 2 D_3, D_6, 6 D_9, 10 D_{11}, 3 D_{18}, 5 D_{22}, 20 D_{33}, 10 D_{66}, 60 D_{99}, 30 D_{198}	3 C_2, C_3, 2 C_4, C_6, C_9, C_{11}, C_{18}, C_{22}, C_{33}, C_{66}, C_{99}, C_{198}, 3 D_2, 2 D_3, D_6, 2 D_9, 2 D_{11}, D_{18}, D_{22}, 2 D_{33}, D_{66}, 2 D_{99}, D_{198}	2 C_2, 2 C_4, C_6, C_{18}, C_{22}, C_{66}, C_{198}, 3 D_2, D_3, D_6, D_9, D_{11}, D_{18}, D_{22}, D_{33}, D_{66}, D_{99}, D_{198}	3 C_2, C_3, C_9, C_{11}, C_{33}, C_{99}, 3 D_2, D_3, D_9, D_{11}, D_{33}, D_{99}
R99.10	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, 6 C_{13}, 12 C_{26}, 6 C_{39}, 6 C_{52}, 16 D_2, 2 D_3, 4 D_4, D_6, 18 D_{13}, 30 D_{26}, 6 D_{39}, 6 D_{52}	**Tet**, 2 **Oct**, 5 C_2, C_3, 2 C_4, C_6, C_{13}, 2 C_{26}, C_{39}, 16 D_2, 2 D_3, 4 D_4, D_6, 3 D_{13}, 5 D_{26}, D_{39}	**Tet**, **Oct**, 3 C_2, C_4, C_6, 16 D_2, D_3, 4 D_4, D_6, 2 D_{13}, 4 D_{26}, D_{39}	**Tet**, 5 C_2, C_3, C_4, C_{13}, 16 D_2, D_3, 2 D_4, 3 D_{13}
R99.11	C_2, 18 C_7, 3 C_{14}, 6 D_7	C_2, 14 C_7, C_{14}, 6 D_7	C_2, C_{14}, 6 D_7	C_2, 12 C_7, 6 D_7
R99.12	2 C_2, 2 C_4, 9 C_7, 2 C_8, 9 C_{14}, 9 C_{28}, 2 D_2, 15 D_7, 9 D_{14}	2 C_2, 2 C_4, 9 C_7, 9 C_{14}, 9 C_{28}, 2 D_2, 15 D_7, 9 D_{14}	2 C_2, 2 C_4, 9 C_{14}, 9 C_{28}, 2 D_2, 15 D_7, 9 D_{14}	2 C_2, 9 C_7, 2 D_2, 15 D_7
R99.13	3 C_2, 2 C_4, 6 C_7, 4 C_8, 6 C_{14}, 3 D_2, 12 D_7, 6 D_{14}	3 C_2, 2 C_4, 6 C_7, 2 C_8, 6 C_{14}, 3 D_2, 12 D_7, 6 D_{14}	2 C_2, C_4, 3 D_2, 12 D_7, 6 D_{14}	3 C_2, C_4, 6 C_7, 6 C_{14}, 3 D_2, 12 D_7, 6 D_{14}
R99.14	3 C_2, 2 C_4, 9 C_7, 4 C_8, 9 C_{14}, 9 C_{28}, 3 D_2, 18 D_7, 9 D_{14}	3 C_2, 2 C_4, 9 C_7, 2 C_8, 9 C_{14}, 9 C_{28}, 3 D_2, 18 D_7, 9 D_{14}	2 C_2, 2 C_4, 2 C_8, 9 C_{14}, 9 C_{28}, 3 D_2, 9 D_7, 9 D_{14}	3 C_2, 9 C_7, 3 D_2, 18 D_7
R99.15	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, 2 C_8, C_{12}, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, C_8, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 2 C_2, 3 C_4, C_6, C_8, C_{14}, 6 D_2, D_3, 3 D_4, D_6	**Tet**, 3 C_2, C_3, C_7, 6 D_2, D_3
R99.16	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, 2 C_8, C_{12}, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, C_8, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, C_6, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 3 C_2, C_3, C_4, C_7, 6 D_2, 2 D_3, D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R99.17	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, 2 C_8, C_{12}, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, C_8, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, C_6, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 3 C_2, C_3, C_4, C_7, 6 D_2, 2 D_3, D_4
R99.18	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, 2 C_8, C_{12}, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, C_8, C_{14}, 6 D_2, 2 D_3, 3 D_4, D_6	**Tet**, 2 **Oct**, 2 C_2, 3 C_4, C_6, C_8, C_{14}, 6 D_2, D_3, 3 D_4, D_6	**Tet**, 3 C_2, C_3, C_7, 6 D_2, D_3
R99.19	5 C_2, 3 C_4, 2 C_8, 8 C_{17}, 24 C_{34}, 32 C_{68}, 13 D_2, 3 D_4, 16 D_{17}, 32 D_{34}, 24 D_{68}	5 C_2, 3 C_4, C_8, C_{17}, 3 C_{34}, 3 C_{68}, 13 D_2, 3 D_4, 2 D_{17}, 4 D_{34}, 3 D_{68}	3 C_2, 2 C_4, C_{34}, C_{68}, 13 D_2, 3 D_4, D_{17}, 4 D_{34}, 3 D_{68}	5 C_2, C_4, C_{17}, C_{34}, 13 D_2, D_4, 2 D_{17}, D_{34}
R99.20	3 C_2, 5 C_4, C_8, 8 C_{17}, 16 C_{34}, 56 C_{68}, 4 D_2, 2 D_4, 8 D_{17}, 8 D_{34}, 16 D_{68}	3 C_2, 5 C_4, C_{17}, 2 C_{34}, 6 C_{68}, 4 D_2, 2 D_4, D_{17}, D_{34}, 2 D_{68}	3 C_2, 3 C_4, C_{34}, 2 C_{68}, 4 D_2, 2 D_4, D_{17}, D_{34}, 2 D_{68}	3 C_2, C_{17}, 4 D_2, D_{17}
R99.21	2 C_2, C_3, 2 C_4, C_6, 2 C_8, 5 C_{11}, C_{12}, 5 C_{22}, 2 C_{24}, 10 C_{33}, 5 C_{44}, 10 C_{66}, 10 C_{88}, 10 C_{132}, 20 C_{264}, 2 D_2, D_3, D_6, 5 D_{11}, 5 D_{22}, 10 D_{33}, 10 D_{66}	2 C_2, C_3, 2 C_4, C_6, C_{11}, C_{22}, C_{33}, C_{66}, 2 D_2, D_3, D_6, D_{11}, D_{22}, D_{33}, D_{66}	2 C_2, C_4, C_6, C_{22}, C_{66}, 2 D_2, D_3, D_6, D_{11}, D_{22}, D_{33}, D_{66}	2 C_2, C_3, C_{11}, C_{33}, 2 D_2, D_3, D_{11}, D_{33}
R99.22	3 C_2, C_3, 2 C_4, C_6, 4 C_8, 5 C_{11}, C_{12}, 5 C_{22}, 2 C_{24}, 10 C_{33}, 5 C_{44}, 10 C_{66}, 10 C_{88}, 10 C_{132}, 20 C_{264}, 3 D_2, 2 D_3, D_6, 10 D_{11}, 5 D_{22}, 20 D_{33}, 10 D_{66}	3 C_2, C_3, 2 C_4, C_6, 2 C_8, C_{11}, C_{22}, C_{33}, C_{66}, 3 D_2, 2 D_3, D_6, 2 D_{11}, D_{22}, 2 D_{33}, D_{66}	2 C_2, C_4, C_6, C_{22}, C_{66}, 3 D_2, D_3, D_6, D_{11}, D_{22}, D_{33}, D_{66}	3 C_2, C_3, C_{11}, C_{33}, 3 D_2, D_3, D_{11}, D_{33}
R99.23	C_2, C_3, C_4, C_6, 9 C_7, 2 C_{12}, 9 C_{21}, 9 D_7	C_2, C_3, C_4, C_6, 9 C_7, 9 C_{21}, 9 D_7	C_2, C_4, C_6, 9 D_7	C_2, C_3, 9 C_7, 9 D_7
R99.24	3 C_2, C_3, 5 C_4, 2 C_5, 3 C_6, C_8, 4 C_{10}, 8 C_{12}, 2 C_{15}, 4 C_{20}, 2 C_{24}, 4 C_{30}, 4 C_{40}, 6 C_{60}, 8 C_{120}, 4 D_2, 2 D_4, 2 D_5, 2 D_{10}, 2 D_{20}	3 C_2, C_3, 5 C_4, C_5, 3 C_6, 2 C_{10}, 6 C_{12}, C_{20}, 4 D_2, 2 D_4, D_5, D_{10}, D_{20}	3 C_2, 4 C_4, C_6, C_{10}, 4 D_2, 2 D_4, D_5, D_{10}, D_{20}	3 C_2, C_5, C_{10}, 4 D_2, D_5, D_{10}
R99.25	5 C_2, C_3, 3 C_4, 2 C_5, 5 C_6, 2 C_8, 6 C_{10}, 4 C_{12}, 2 C_{15}, 8 C_{20}, 4 C_{24}, 6 C_{30}, 8 C_{40}, 8 C_{60}, 16 C_{120}, 13 D_2, 3 D_4, 4 D_5, 8 D_{10}, 12 D_{20}	5 C_2, C_3, 3 C_4, C_5, 5 C_6, C_8, 3 C_{10}, 2 C_{12}, 3 C_{20}, C_{40}, 13 D_2, 3 D_4, 2 D_5, 4 D_{10}, 5 D_{20}	3 C_2, 2 C_4, C_6, C_{10}, 13 D_2, 3 D_4, D_5, 3 D_{10}, 3 D_{20}	5 C_2, C_4, C_5, C_{10}, C_{20}, 13 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}
R99.26	C_2, 2 C_5, 15 C_7, 3 C_{14}, 54 C_{35}, 2 D_5, 3 D_7, 12 D_{35}	C_2, C_5, 11 C_7, C_{14}, 20 C_{35}, D_5, 3 D_7, 6 D_{35}	C_2, C_{14}, D_5, 3 D_7, 6 D_{35}	C_2, C_5, 9 C_7, D_5, 3 D_7

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R99.27	C_2, C_3, 3 C_7, 5 C_{11}, 3 C_{14}, 3 C_{21}, 10 C_{33}, 15 C_{77}, 30 C_{231}, D_3, 5 D_{11}, 10 D_{33}	C_2, C_3, C_7, C_{11}, C_{14}, C_{33}, D_3, D_{11}, D_{33}	C_2, C_{14}, D_3, D_{11}, D_{33}	C_2, C_3, C_{11}, C_{33}, D_3, D_{11}, D_{33}
R99.28	**Tet**, **Oct**, 2 C_2, C_3, 3 C_4, 2 C_5, C_8, 4 C_{10}, 2 C_{15}, 8 C_{20}, 4 C_{40}, 3 D_2, D_3, 2 D_4	**Tet**, **Oct**, 2 C_2, C_3, 3 C_4, C_5, 2 C_{10}, 3 C_{20}, 3 D_2, D_3, 2 D_4	**Tet**, **Oct**, 2 C_2, 2 C_4, C_{10}, 3 D_2, D_3, 2 D_4	**Tet**, 2 C_2, C_3, 3 D_2, D_3
R99.29	5 C_2, C_3, 3 C_4, 2 C_5, 3 C_6, 2 C_8, 6 C_{10}, 4 C_{12}, 2 C_{15}, 8 C_{20}, 4 C_{24}, 6 C_{30}, 8 C_{60}, 13 D_2, 2 D_3, 3 D_4, 4 D_5, 4 D_6, 8 D_{10}, 6 D_{12}, 4 D_{15}, 6 D_{20}, 8 D_{30}, 12 D_{60}	5 C_2, C_3, 3 C_4, C_5, 3 C_6, C_8, 3 C_{10}, 3 C_{12}, C_{15}, 3 C_{20}, C_{24}, 3 C_{30}, 3 C_{60}, 13 D_2, 2 D_3, 3 D_4, 2 D_5, 4 D_6, 4 D_{10}, 5 D_{12}, 2 D_{15}, 3 D_{20}, 4 D_{30}, 5 D_{60}	3 C_2, 2 C_4, C_6, C_{10}, C_{20}, 13 D_2, D_3, 3 D_4, D_5, 3 D_6, 4 D_{10}, 3 D_{12}, D_{15}, 3 D_{20}, 3 D_{30}, 3 D_{60}	5 C_2, C_3, C_4, C_5, C_6, C_{10}, C_{12}, 13 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, D_{10}, D_{12}
R99.30	3 C_2, C_3, 5 C_4, 2 C_5, 2 C_6, C_8, 4 C_{10}, 2 C_{12}, 2 C_{15}, 14 C_{20}, 2 C_{24}, 4 C_{30}, 6 C_{60}, 4 D_2, D_3, 2 D_4, 2 D_5, D_6, 2 D_{10}, D_{12}, 2 D_{15}, 4 D_{20}, 2 D_{30}, 4 D_{60}	3 C_2, C_3, 5 C_4, C_5, 2 C_6, 2 C_{10}, C_{12}, C_{15}, 6 C_{20}, 2 C_{30}, 2 C_{60}, 4 D_2, D_3, 2 D_4, D_5, D_6, D_{10}, D_{12}, D_{15}, 2 D_{20}, D_{30}, 2 D_{60}	3 C_2, 4 C_4, C_6, C_{10}, 2 C_{20}, 4 D_2, D_3, 2 D_4, D_5, D_6, D_{10}, D_{12}, D_{15}, 2 D_{20}, D_{30}, 2 D_{60}	3 C_2, C_3, C_5, C_6, 4 D_2, D_3, D_5, D_6
R99.31	3 C_2, 2 C_4, 2 C_5, 6 C_{10}, 5 C_{11}, 8 C_{20}, 5 C_{22}, 5 C_{44}, 10 C_{55}, 10 C_{110}, 20 C_{220}, 3 D_2, 10 D_{11}, 5 D_{22}	3 C_2, 2 C_4, C_5, 3 C_{10}, C_{11}, 2 C_{20}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	2 C_2, 2 C_4, C_{10}, C_{22}, 3 D_2, D_{11}, D_{22}	3 C_2, C_{11}, 3 D_2, D_{11}
R99.32	2 C_2, C_3, 2 C_4, 2 C_6, 3 C_9, 3 C_{12}, 6 C_{18}, 9 C_{27}, 9 C_{36}, 9 C_{54}, 18 C_{108}, 2 D_2, D_4	2 C_2, C_3, 2 C_4, 2 C_6, 2 C_{12}, 2 D_2, D_4	2 C_2, C_4, C_6, 2 D_2, D_4	2 C_2, 2 D_2
R99.33	C_2, 5 C_{11}, 9 C_{19}, 9 C_{38}, 45 C_{209}, 5 D_{11}	C_2, C_{11}, D_{11}	C_2, D_{11}	C_2, C_{11}, D_{11}
R99.34	C_2, C_3, 3 C_9, 11 C_{23}, 11 C_{46}, 11 C_{69}, 33 C_{207}, D_3, 3 D_9	C_2, C_3, C_9, D_3, D_9	C_2, D_3, D_9	C_2, C_3, C_9, D_3, D_9
R99.35	5 C_2, 3 C_4, 2 C_8, 6 C_{13}, 30 C_{26}, 24 C_{52}, 24 C_{104}, 13 D_2, 3 D_4	5 C_2, 3 C_4, C_8, 13 D_2, 3 D_4	3 C_2, 2 C_4, 13 D_2, 3 D_4	5 C_2, C_4, 13 D_2, D_4
R99.36	3 C_2, 5 C_4, C_8, 6 C_{13}, 18 C_{26}, 48 C_{52}, 12 C_{104}, 4 D_2, 2 D_4	3 C_2, 5 C_4, 4 D_2, 2 D_4	3 C_2, 3 C_4, 4 D_2, 2 D_4	3 C_2, 4 D_2
R99.37	3 C_2, C_3, 2 C_4, C_6, C_{12}, 8 C_{17}, 24 C_{34}, 8 C_{51}, 32 C_{68}, 8 C_{102}, 16 C_{204}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 3 D_2, 2 D_3, D_6	2 C_2, 2 C_4, C_6, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R99.38	**Tet**, 3 C_2, C_3, C_6, 8 C_{17}, 24 C_{34}, 16 C_{51}, 16 C_{102}, 6 D_2	**Tet**, 3 C_2, C_3, C_6, C_{17}, 3 C_{34}, C_{51}, C_{102}, 6 D_2	**Tet**, 2 C_2, C_6, C_{34}, 6 D_2	**Tet**, 3 C_2, C_3, C_{17}, C_{34}, 6 D_2
R99.39	C_2, C_3, 33 C_{67}, 33 C_{134}, 33 C_{201}, D_3	C_2, C_3, D_3	C_2, D_3	C_2, C_3, D_3
R99.40	C_2, 99 C_{199}, 99 C_{398}	C_2	C_2	C_2
R99.41	2 C_2, 2 C_4, 2 C_5, 2 C_8, 4 C_{10}, 6 C_{20}, 10 C_{25}, 8 C_{40}, 20 C_{50}, 30 C_{100}, 40 C_{200}, 2 D_2	2 C_2, 2 C_4, C_5, 2 C_{10}, C_{20}, C_{25}, 2 C_{50}, C_{100}, 2 D_2	2 C_2, C_4, C_{10}, C_{50}, 2 D_2	2 C_2, C_5, C_{10}, C_{25}, C_{50}, 2 D_2
R99.42	3 C_2, 2 C_4, 2 C_5, 4 C_8, 6 C_{10}, 8 C_{20}, 10 C_{25}, 16 C_{40}, 30 C_{50}, 40 C_{100}, 80 C_{200}, 3 D_2	3 C_2, 2 C_4, C_5, 2 C_8, 3 C_{10}, 3 C_{20}, C_{25}, 2 C_{40}, 3 C_{50}, 3 C_{100}, 2 C_{200}, 3 D_2	2 C_2, C_4, C_{10}, C_{50}, 3 D_2	3 C_2, C_4, C_5, C_{10}, C_{20}, C_{25}, C_{50}, C_{100}, 3 D_2
R99.43	C_2, C_3, C_4, C_6, 3 C_9, 5 C_{11}, 2 C_{12}, 3 C_{18}, 5 C_{22}, 10 C_{33}, 6 C_{36}, 10 C_{44}, 10 C_{66}, 30 C_{99}, 20 C_{132}, 30 C_{198}, 60 C_{396}	C_2, C_3, C_4, C_6, C_9, C_{11}, C_{18}, C_{22}, C_{33}, C_{66}, C_{99}, C_{198}	C_2, C_4, C_6, C_{18}, C_{22}, C_{66}, C_{198}	C_2, C_3, C_9, C_{11}, C_{33}, C_{99}
Genus 100				
R100.1	2 C_2, 4 C_3, C_4, 5 C_6, C_8, 3 C_9, 3 C_{12}, 6 C_{18}, 2 C_{24}, 6 C_{36}, 6 C_{72}, 2 D_2, 2 D_3, D_4, 2 D_6, D_{12}	2 C_2, 4 C_3, C_4, 5 C_6, C_9, 2 C_{12}, 2 C_{18}, 2 D_2, 2 D_3, D_4, 2 D_6, D_{12}	2 C_2, C_4, 4 C_6, 2 C_{12}, C_{18}, 2 D_2, 2 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_3, 2 D_2, 2 D_3
R100.2	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_6, C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, **Ico**, 2 C_2, C_4, C_6, 2 C_{12}, 3 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, D_{10}, D_{11}, 2 D_{12}	2 C_2, C_3, C_5, C_{10}, C_{11}, 3 D_2, 2 D_3, 2 D_5, D_{10}, D_{11}
R100.3	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 4 D_5, 2 D_6, 2 D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_6, C_{10}, C_{11}, 2 C_{12}, 3 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, D_{10}, D_{11}, 2 D_{12}	**Tet**, **Oct**, **Ico**, 2 C_2, C_4, C_6, 2 C_{12}, 3 D_2, 2 D_3, D_4, 2 D_5, 2 D_6, D_{10}, D_{11}, 2 D_{12}	2 C_2, C_3, C_5, C_{10}, C_{11}, 3 D_2, 2 D_3, 2 D_5, D_{10}, D_{11}
R100.4	2 **Tet**, **Oct**, 2 **Ico**, C_2, 2 C_3, C_4, 2 C_5, C_6, C_{12}, 2 C_{15}, D_2, D_3, D_4, 2 D_5	2 **Tet**, **Oct**, **Ico**, C_2, 2 C_3, C_4, C_5, C_6, C_{12}, D_2, D_3, D_4, D_5	2 **Tet**, **Oct**, **Ico**, C_2, C_4, C_6, C_{12}, D_2, D_3, D_4, D_5	C_2, C_3, C_5, D_2, D_3, D_5
R100.5	3 C_2, C_4, 20 C_{11}, 10 C_{22}, 4 D_2, D_4, 30 D_{11}, 10 D_{22}	3 C_2, C_4, 16 C_{11}, 6 C_{22}, 4 D_2, D_4, 22 D_{11}, 6 D_{22}	3 C_2, 5 C_{22}, 4 D_2, D_4, 22 D_{11}, 6 D_{22}	3 C_2, C_4, 16 C_{11}, 4 D_2, D_4, 22 D_{11}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R100.6	3 C_2, C_4, 50 C_{101}, 100 C_{202}, 4 D_2, D_4, 50 D_{101}, 50 D_{202}	3 C_2, C_4, C_{101}, 2 C_{202}, 4 D_2, D_4, D_{101}, D_{202}	3 C_2, C_4, C_{202}, 4 D_2, D_4, D_{101}, D_{202}	3 C_2, C_{101}, 4 D_2, D_{101}
R100.7	2 C_2, 2 C_4, 2 C_5, 2 C_8, 2 C_{10}, 2 C_{16}, 4 C_{20}, 10 C_{25}, 8 C_{40}, 10 C_{50}, 8 C_{80}, 20 C_{100}, 40 C_{200}, 40 C_{400}, 2 D_2, D_4, 2 D_5, 2 D_8, 2 D_{10}, 4 D_{20}, 10 D_{25}, 8 D_{40}, 10 D_{50}, 20 D_{100}, 40 D_{200}	2 C_2, 2 C_4, C_5, C_8, C_{10}, C_{20}, C_{25}, C_{40}, C_{50}, C_{100}, C_{200}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{20}, D_{25}, D_{40}, D_{50}, D_{100}, D_{200}	2 C_2, 2 C_4, C_8, C_{10}, C_{20}, C_{40}, C_{50}, C_{100}, C_{200}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{20}, D_{25}, D_{40}, D_{50}, D_{100}, D_{200}	2 C_2, C_5, C_{25}, 2 D_2, D_5, D_{25}
R100.8	3 C_2, 3 C_3, C_4, 3 C_6, 5 C_9, 2 C_{12}, 3 C_{18}, 6 C_{36}, 4 D_2, 6 D_3, D_4, 4 D_6, 8 D_9, 2 D_{12}, 6 D_{18}, 6 D_{36}	3 C_2, 3 C_3, C_4, 3 C_6, 3 C_9, C_{12}, C_{18}, C_{36}, 4 D_2, 6 D_3, D_4, 4 D_6, 4 D_9, D_{12}, 2 D_{18}, D_{36}	3 C_2, C_6, 4 D_2, 6 D_3, D_4, 4 D_6, 4 D_9, D_{12}, 2 D_{18}, D_{36}	3 C_2, 3 C_3, C_4, C_9, 4 D_2, 6 D_3, D_4, 2 D_9
R100.9	3 C_2, 5 C_3, C_4, 3 C_6, 9 C_9, 2 C_{12}, 3 C_{18}, 6 C_{36}, 4 D_2, 8 D_3, D_4, 4 D_6, 12 D_9, 2 D_{12}, 6 D_{18}, 6 D_{36}	3 C_2, 5 C_3, C_4, 3 C_6, 7 C_9, C_{12}, C_{18}, C_{36}, 4 D_2, 8 D_3, D_4, 4 D_6, 8 D_9, D_{12}, 2 D_{18}, D_{36}	3 C_2, C_6, 4 D_2, 8 D_3, D_4, 4 D_6, 8 D_9, D_{12}, 2 D_{18}, D_{36}	3 C_2, 5 C_3, C_4, C_9, 4 D_2, 8 D_3, D_4, 2 D_9
R100.10	3 C_2, 3 C_3, C_4, 3 C_6, 5 C_9, 2 C_{12}, 3 C_{18}, 6 C_{36}, 4 D_2, 6 D_3, D_4, 4 D_6, 8 D_9, 2 D_{12}, 6 D_{18}, 6 D_{36}	3 C_2, 3 C_3, C_4, 3 C_6, 3 C_9, C_{12}, C_{18}, C_{36}, 4 D_2, 6 D_3, D_4, 4 D_6, 4 D_9, D_{12}, 2 D_{18}, D_{36}	3 C_2, C_6, 4 D_2, 6 D_3, D_4, 4 D_6, 4 D_9, D_{12}, 2 D_{18}, D_{36}	3 C_2, 3 C_3, C_4, C_9, 4 D_2, 6 D_3, D_4, 2 D_9
R100.11	3 C_2, 7 C_3, C_4, 12 C_6, 12 C_9, 5 C_{12}, 12 C_{18}, 12 C_{36}, 4 D_2, 4 D_3, D_4, 4 D_6, 9 D_9, 2 D_{12}, 9 D_{18}, 6 D_{36}	3 C_2, 7 C_3, C_4, 12 C_6, 10 C_9, 4 C_{12}, 10 C_{18}, 4 C_{36}, 4 D_2, 4 D_3, D_4, 4 D_6, 9 D_9, D_{12}, 9 D_{18}, 3 D_{36}	3 C_2, C_4, 10 C_6, 3 C_{12}, 4 D_2, 4 D_3, D_4, 4 D_6, 9 D_9, D_{12}, 9 D_{18}, 3 D_{36}	3 C_2, 6 C_3, C_6, 4 D_2, 4 D_3, 2 D_6
R100.12	3 C_2, 5 C_3, C_4, 7 C_6, 6 C_9, 2 C_{12}, 6 C_{18}, 6 C_{36}, 4 D_2, 6 D_3, D_4, 6 D_6, 9 D_9, 2 D_{12}, 9 D_{18}, 6 D_{36}	3 C_2, 5 C_3, C_4, 7 C_6, 4 C_9, C_{12}, 4 C_{18}, C_{36}, 4 D_2, 6 D_3, D_4, 6 D_6, 5 D_9, D_{12}, 5 D_{18}, D_{36}	3 C_2, C_4, 5 C_6, 4 D_2, 6 D_3, D_4, 6 D_6, 5 D_9, D_{12}, 5 D_{18}, D_{36}	3 C_2, 5 C_3, C_6, 4 D_2, 6 D_3, 2 D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R100.13	3 C_2, 3 C_3, C_4, 5 C_6, 4 C_9, 2 C_{12}, 4 C_{18}, 6 C_{36}, 4 D_2, 4 D_3, D_4, 4 D_6, 7 D_9, 2 D_{12}, 7 D_{18}, 6 D_{36}	3 C_2, 3 C_3, C_4, 5 C_6, 2 C_9, C_{12}, 2 C_{18}, C_{36}, 4 D_2, 4 D_3, D_4, 4 D_6, 3 D_9, D_{12}, 3 D_{18}, D_{36}	3 C_2, C_4, 3 C_6, 4 D_2, 4 D_3, D_4, 4 D_6, 3 D_9, D_{12}, 3 D_{18}, D_{36}	3 C_2, 3 C_3, C_6, 4 D_2, 4 D_3, 2 D_6
R100.14	3 C_2, 4 C_3, C_4, 6 C_6, 3 C_9, 2 C_{12}, 3 C_{18}, 6 C_{36}, 4 D_2, 5 D_3, D_4, 5 D_6, 6 D_9, 2 D_{12}, 6 D_{18}, 6 D_{36}	3 C_2, 4 C_3, C_4, 6 C_6, C_9, C_{12}, C_{18}, C_{36}, 4 D_2, 5 D_3, D_4, 5 D_6, 2 D_9, D_{12}, 2 D_{18}, D_{36}	3 C_2, C_4, 4 C_6, 4 D_2, 5 D_3, D_4, 5 D_6, 2 D_9, D_{12}, 2 D_{18}, D_{36}	3 C_2, 4 C_3, C_6, 4 D_2, 5 D_3, 2 D_6
R100.15	3 C_2, 4 C_3, C_4, 10 C_6, 3 C_9, C_{12}, 9 C_{18}, 3 C_{36}, 4 D_2, 2 D_3, D_4, 2 D_6	3 C_2, 4 C_3, C_4, 10 C_6, C_9, 3 C_{18}, 4 D_2, 2 D_3, D_4, 2 D_6	3 C_2, C_4, 9 C_6, 2 C_{18}, 4 D_2, 2 D_3, D_4, 2 D_6	3 C_2, 2 C_3, 4 D_2, 2 D_3
R100.16	3 C_2, 5 C_3, C_4, 7 C_6, 6 C_9, 8 C_{12}, 6 C_{18}, 12 C_{36}, 4 D_2, 6 D_3, D_4, 6 D_6, 6 D_9, 5 D_{12}, 6 D_{18}, 6 D_{36}	3 C_2, 5 C_3, C_4, 7 C_6, 4 C_9, 7 C_{12}, 4 C_{18}, 4 C_{36}, 4 D_2, 6 D_3, D_4, 6 D_6, 6 D_9, 4 D_{12}, 6 D_{18}, 3 D_{36}	3 C_2, 5 C_6, 4 D_2, 6 D_3, D_4, 6 D_6, 6 D_9, 4 D_{12}, 6 D_{18}, 3 D_{36}	3 C_2, 4 C_3, C_4, C_6, C_{12}, 4 D_2, 6 D_3, D_4, 2 D_6, D_{12}
R100.17	3 C_2, 6 C_3, C_4, 14 C_6, C_9, 7 C_{12}, C_{18}, 2 C_{36}, 4 D_2, 4 D_3, D_4, 4 D_6, 3 D_{12}	3 C_2, 6 C_3, C_4, 14 C_6, 6 C_{12}, 4 D_2, 4 D_3, D_4, 4 D_6, 3 D_{12}	3 C_2, 12 C_6, 4 D_2, 4 D_3, D_4, 4 D_6, 3 D_{12}	3 C_2, 4 C_3, C_4, 4 D_2, 4 D_3, D_4
R100.18	3 C_2, 3 C_3, C_4, 5 C_6, 4 C_9, 4 C_{12}, 4 C_{18}, 8 C_{36}, 4 D_2, 4 D_3, D_4, 4 D_6, 6 D_9, 3 D_{12}, 6 D_{18}, 6 D_{36}	3 C_2, 3 C_3, C_4, 5 C_6, 3 C_9, 3 C_{12}, 3 C_{18}, 3 C_{36}, 4 D_2, 4 D_3, D_4, 4 D_6, 6 D_9, 2 D_{12}, 6 D_{18}, 3 D_{36}	3 C_2, 3 C_6, 4 D_2, 4 D_3, D_4, 4 D_6, 6 D_9, 2 D_{12}, 6 D_{18}, 3 D_{36}	3 C_2, 2 C_3, C_4, C_6, C_{12}, 4 D_2, 4 D_3, D_4, 2 D_6, D_{12}
R100.19	3 C_2, 6 C_3, C_4, 8 C_6, C_9, 10 C_{12}, C_{18}, 2 C_{36}, 4 D_2, 10 D_3, D_4, 10 D_6, 9 D_{12}	3 C_2, 6 C_3, C_4, 8 C_6, 9 C_{12}, 4 D_2, 10 D_3, D_4, 10 D_6, 8 D_{12}	3 C_2, 6 C_6, 4 D_2, 10 D_3, D_4, 10 D_6, 8 D_{12}	3 C_2, 5 C_3, C_4, C_6, C_{12}, 4 D_2, 10 D_3, D_4, 2 D_6, D_{12}
R100.20	3 C_2, 3 C_3, 5 C_6, 8 C_{17}, 8 C_{34}, 24 C_{51}, 8 C_{102}, 3 D_2, 2 D_3, D_6, 16 D_{17}, 8 D_{34}, 8 D_{51}	3 C_2, 3 C_3, 5 C_6, C_{17}, C_{34}, 2 C_{51}, 3 D_2, 2 D_3, D_6, 2 D_{17}, D_{34}, D_{51}	3 C_2, 4 C_6, 3 D_2, 2 D_3, D_6, 2 D_{17}, D_{34}, D_{51}	3 C_2, C_3, C_{17}, 3 D_2, 2 D_3, 2 D_{17}
R100.21	3 C_2, 3 C_3, 5 C_6, 8 C_{17}, 8 C_{34}, 40 C_{51}, 40 C_{102}, 3 D_2, 2 D_3, D_6, 16 D_{17}, 8 D_{34}, 32 D_{51}, 16 D_{102}	3 C_2, 3 C_3, 5 C_6, C_{17}, C_{34}, 4 C_{51}, 4 C_{102}, 3 D_2, 2 D_3, D_6, 2 D_{17}, D_{34}, 4 D_{51}, 2 D_{102}	3 C_2, 4 C_6, 3 D_2, 2 D_3, D_6, 2 D_{17}, D_{34}, 4 D_{51}, 2 D_{102}	3 C_2, C_3, C_{17}, C_{34}, 3 D_2, 2 D_3, 2 D_{17}, D_{34}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R100.22	3 C_2, 3 C_3, 2 C_6, 8 C_{17}, 8 C_{34}, 40 C_{51}, 16 C_{102}, 3 D_2, 5 D_3, 2 D_6, 16 D_{17}, 8 D_{34}, 56 D_{51}, 16 D_{102}	3 C_2, 3 C_3, 2 C_6, C_{17}, C_{34}, 4 C_{51}, C_{102}, 3 D_2, 5 D_3, 2 D_6, 2 D_{17}, D_{34}, 5 D_{51}, D_{102}	3 C_2, 3 D_2, 5 D_3, 2 D_6, 2 D_{17}, D_{34}, 5 D_{51}, D_{102}	3 C_2, 3 C_3, C_{17}, C_{51}, 3 D_2, 5 D_3, 2 D_{17}, 2 D_{51}
R100.23	3 C_2, C_3, C_4, 2 C_5, 3 C_6, 2 C_{10}, C_{12}, 2 C_{15}, 4 C_{20}, 10 C_{25}, 2 C_{30}, 10 C_{50}, 4 C_{60}, 10 C_{75}, 20 C_{100}, 10 C_{150}, 20 C_{300}, 4 D_2, D_4, 4 D_5, 4 D_{10}, 4 D_{20}, 20 D_{25}, 20 D_{50}, 20 D_{100}	3 C_2, C_3, C_4, C_5, 3 C_6, C_{10}, C_{20}, C_{25}, C_{50}, C_{100}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}, 2 D_{25}, 2 D_{50}, D_{100}	3 C_2, C_6, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}, 2 D_{25}, 2 D_{50}, D_{100}	3 C_2, C_4, C_5, C_{10}, C_{20}, C_{25}, C_{50}, C_{100}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}, 2 D_{25}, 2 D_{50}, D_{100}
R100.24	2 C_2, C_3, C_4, 2 C_6, C_7, 2 C_8, C_{14}, 2 C_{16}, 2 D_2, D_3, D_4, D_6, D_7, 2 D_8, D_{14}	2 C_2, C_3, C_4, 2 C_6, C_8, 2 D_2, D_3, D_4, D_6, D_8	2 C_2, C_4, 2 C_6, C_8, 2 D_2, D_3, D_4, D_6, D_8	2 C_2, C_3, 2 D_2, D_3
R100.25	2 C_2, C_3, C_4, 2 C_6, C_7, 2 C_8, C_{14}, 2 C_{16}, 2 D_2, D_3, D_4, D_6, D_7, 2 D_8, D_{14}	2 C_2, C_3, C_4, 2 C_6, C_8, 2 D_2, D_3, D_4, D_6, D_8	2 C_2, C_4, 2 C_6, C_8, 2 D_2, D_3, D_4, D_6, D_8	2 C_2, C_3, 2 D_2, D_3
R100.26	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, 2 C_8, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, 2 D_8, 2 D_{10}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_8, C_{10}, 3 D_2, D_3, 2 D_4, 2 D_5, D_8, D_{10}	**Tet**, **Oct**, **Ico**, 2 C_2, C_4, C_8, 3 D_2, D_3, 2 D_4, 2 D_5, D_8, D_{10}	2 C_2, C_3, C_5, C_{10}, 3 D_2, D_3, 2 D_5, D_{10}
R100.27	**Tet**, **Oct**, 2 **Ico**, 2 C_2, C_3, C_4, 2 C_5, 2 C_8, 2 C_{10}, 3 D_2, D_3, 2 D_4, 4 D_5, 2 D_8, 2 D_{10}	**Tet**, **Oct**, **Ico**, 2 C_2, C_3, C_4, C_5, C_8, C_{10}, 3 D_2, D_3, 2 D_4, 2 D_5, D_8, D_{10}	**Tet**, **Oct**, **Ico**, 2 C_2, C_4, C_8, 3 D_2, D_3, 2 D_4, 2 D_5, D_8, D_{10}	2 C_2, C_3, C_5, C_{10}, 3 D_2, D_3, 2 D_5, D_{10}
R100.28	**Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 2 C_6, 2 C_9, 2 C_{12}, 3 D_2, 6 D_3, D_4, 3 D_6, 2 D_9, 2 D_{12}	**Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 2 C_6, C_9, C_{12}, 3 D_2, 6 D_3, D_4, 3 D_6, D_9, D_{12}	**Tet**, **Oct**, 2 C_2, C_6, 3 D_2, 6 D_3, D_4, 3 D_6, D_9, D_{12}	2 C_2, 4 C_3, C_4, 3 D_2, 6 D_3, D_4
R100.29	**Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 2 C_6, 2 C_9, 2 C_{12}, 3 D_2, 6 D_3, D_4, 3 D_6, 2 D_9, 2 D_{12}	**Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 2 C_6, C_9, C_{12}, 3 D_2, 6 D_3, D_4, 3 D_6, D_9, D_{12}	**Tet**, **Oct**, 2 C_2, C_6, 3 D_2, 6 D_3, D_4, 3 D_6, D_9, D_{12}	2 C_2, 4 C_3, C_4, 3 D_2, 6 D_3, D_4
R100.30	2 C_2, 5 C_3, C_4, 8 C_6, 6 C_9, C_{12}, 3 D_2, 3 D_3, D_4, 3 D_6, 3 D_9	2 C_2, 5 C_3, C_4, 8 C_6, 4 C_9, 3 D_2, 3 D_3, D_4, 3 D_6, 3 D_9	2 C_2, C_4, 7 C_6, 3 D_2, 3 D_3, D_4, 3 D_6, 3 D_9	2 C_2, 4 C_3, 3 D_2, 3 D_3
R100.31	3 **Tet**, 3 **Oct**, 2 C_2, 6 C_3, C_4, 5 C_6, C_9, C_{12}, 3 D_2, 5 D_3, D_4, 2 D_6	3 **Tet**, 3 **Oct**, 2 C_2, 6 C_3, C_4, 5 C_6, 3 D_2, 5 D_3, D_4, 2 D_6	3 **Tet**, 3 **Oct**, 2 C_2, C_4, 5 C_6, 3 D_2, 5 D_3, D_4, 2 D_6	2 C_2, 5 C_3, 3 D_2, 5 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R100.32	2 C_2, 3 C_3, C_4, 5 C_6, 4 C_9, C_{12}, 3 D_2, 2 D_3, D_4, 2 D_6, 3 D_9	2 C_2, 3 C_3, C_4, 5 C_6, 3 C_9, 3 D_2, 2 D_3, D_4, 2 D_6, 3 D_9	2 C_2, C_4, 5 C_6, 3 D_2, 2 D_3, D_4, 2 D_6, 3 D_9	2 C_2, 2 C_3, 3 D_2, 2 D_3
R100.33	**Tet**, **Oct**, 2 C_2, 6 C_3, C_4, 13 C_6, C_9, 4 C_{12}, 3 D_2, 2 D_3, D_4, D_6	**Tet**, **Oct**, 2 C_2, 6 C_3, C_4, 13 C_6, 3 C_{12}, 3 D_2, 2 D_3, D_4, D_6	**Tet**, **Oct**, 2 C_2, C_4, 12 C_6, 3 C_{12}, 3 D_2, 2 D_3, D_4, D_6	2 C_2, 4 C_3, 3 D_2, 2 D_3
R100.34	2 **Tet**, 2 **Ico**, C_2, 3 C_3, 2 C_5, C_6, 6 C_9, 2 C_{15}, 3 C_{18}, 6 C_{45}, D_2, D_3, 2 D_5	2 **Tet**, **Ico**, C_2, 3 C_3, C_5, C_6, 2 C_9, C_{18}, D_2, D_3, D_5	2 **Tet**, **Ico**, C_2, C_6, C_{18}, D_2, D_3, D_5	C_2, 2 C_3, C_5, D_2, D_3, D_5
R100.35	3 C_2, C_4, 2 C_5, 4 C_{10}, 6 C_{13}, 6 C_{26}, 12 C_{52}, 12 C_{65}, 12 C_{130}, 4 D_2, D_4, 2 D_5, 2 D_{10}, 12 D_{13}, 12 D_{26}, 12 D_{52}, 12 D_{65}, 12 D_{130}	3 C_2, C_4, C_5, 2 C_{10}, C_{13}, C_{26}, C_{52}, C_{65}, C_{130}, 4 D_2, D_4, D_5, D_{10}, 2 D_{13}, 2 D_{26}, D_{52}, D_{65}, D_{130}	3 C_2, C_4, C_{10}, 4 D_2, D_4, D_5, D_{10}, 2 D_{13}, 2 D_{26}, D_{52}, D_{65}, D_{130}	3 C_2, C_5, C_{13}, C_{26}, 4 D_2, D_5, 2 D_{13}, 2 D_{26}
R100.36	3 C_2, 3 C_3, C_4, 8 C_6, 3 C_7, C_{12}, 6 C_{14}, 15 C_{21}, 39 C_{42}, 4 D_2, D_3, D_4, D_6, 3 D_7, 3 D_{14}, 6 D_{21}, 6 D_{42}	3 C_2, 3 C_3, C_4, 8 C_6, C_7, 2 C_{14}, 4 C_{21}, 10 C_{42}, 4 D_2, D_3, D_4, D_6, D_7, D_{14}, 2 D_{21}, 2 D_{42}	3 C_2, C_4, 6 C_6, C_{14}, 3 C_{42}, 4 D_2, D_3, D_4, D_6, D_7, D_{14}, 2 D_{21}, 2 D_{42}	3 C_2, C_3, C_7, 4 D_2, D_3, D_7
R100.37	3 C_2, 3 C_3, C_4, 4 C_6, 3 C_7, 2 C_{12}, 6 C_{14}, 15 C_{21}, 21 C_{42}, 4 D_2, 4 D_3, D_4, 4 D_6, 3 D_7, 2 D_{12}, 3 D_{14}, 15 D_{21}, 15 D_{42}	3 C_2, 3 C_3, C_4, 4 C_6, C_7, C_{12}, 2 C_{14}, 4 C_{21}, 5 C_{42}, 4 D_2, 4 D_3, D_4, 4 D_6, D_7, D_{12}, D_{14}, 4 D_{21}, 4 D_{42}	3 C_2, C_4, 2 C_6, C_{14}, 3 C_{42}, 4 D_2, 4 D_3, D_4, 4 D_6, D_7, D_{12}, D_{14}, 4 D_{21}, 4 D_{42}	3 C_2, 3 C_3, C_6, C_7, C_{21}, 4 D_2, 4 D_3, 2 D_6, D_7, D_{21}
R100.38	3 C_2, 3 C_3, C_4, 5 C_6, 3 C_7, 5 C_{12}, 6 C_{14}, 9 C_{21}, 15 C_{42}, 4 D_2, 2 D_3, D_4, 2 D_6, 3 D_7, 2 D_{12}, 3 D_{14}, 3 D_{21}, 3 D_{42}	3 C_2, 3 C_3, C_4, 5 C_6, C_7, 4 C_{12}, 2 C_{14}, 2 C_{21}, 2 C_{42}, 4 D_2, 2 D_3, D_4, 2 D_6, D_7, 2 D_{12}, D_{14}, D_{21}, D_{42}	3 C_2, C_4, 4 C_6, 4 C_{12}, C_{14}, 2 C_{42}, 4 D_2, 2 D_3, D_4, 2 D_6, D_7, 2 D_{12}, D_{14}, D_{21}, D_{42}	3 C_2, C_3, C_7, 4 D_2, 2 D_3, D_7
R100.39	2 C_2, C_3, 2 C_4, 2 C_5, 2 C_6, 2 C_8, 2 C_{10}, 2 C_{12}, 2 C_{15}, 2 C_{16}, 4 C_{20}, 2 C_{24}, 2 C_{30}, 8 C_{40}, 4 C_{48}, 4 C_{60}, 8 C_{80}, 8 C_{120}, 16 C_{240}, 2 D_2, D_4, 2 D_5, 2 D_8, 2 D_{10}, 4 D_{20}, 8 D_{40}	2 C_2, C_3, 2 C_4, C_5, 2 C_6, C_8, C_{10}, C_{20}, C_{40}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{20}, D_{40}	2 C_2, 2 C_4, C_6, C_8, C_{10}, C_{20}, C_{40}, 2 D_2, D_4, D_5, D_8, D_{10}, D_{20}, D_{40}	2 C_2, C_5, 2 D_2, D_5
R100.40	C_2, 3 C_3, C_6, 21 C_9, 3 C_{18}, 45 C_{27}, D_3, 3 D_9, 9 D_{27}	C_2, 3 C_3, C_6, 17 C_9, C_{18}, 25 C_{27}, D_3, 3 D_9, 9 D_{27}	C_2, C_6, C_{18}, D_3, 3 D_9, 9 D_{27}	C_2, 2 C_3, 9 C_9, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R100.41	C_2, C_3, 2 C_5, C_6, 3 C_9, 2 C_{15}, 3 C_{18}, 10 C_{25}, 6 C_{45}, 10 C_{75}, 30 C_{225}, 2 D_5, 10 D_{25}	C_2, C_3, C_5, C_6, C_9, C_{18}, C_{25}, D_5, D_{25}	C_2, C_6, C_{18}, D_5, D_{25}	C_2, C_5, C_{25}, D_5, D_{25}
R100.42	3 C_2, 35 C_{11}, 10 C_{22}, 3 D_2, 45 D_{11}, 10 D_{22}	3 C_2, 27 C_{11}, 2 C_{22}, 3 D_2, 29 D_{11}, 2 D_{22}	3 C_2, 3 D_2, 29 D_{11}, 2 D_{22}	3 C_2, 27 C_{11}, 3 D_2, 29 D_{11}
R100.43	3 C_2, 35 C_{11}, 45 C_{22}, 3 D_2, 10 D_{11}, 5 D_{22}	3 C_2, 27 C_{11}, 29 C_{22}, 3 D_2, 10 D_{11}, 5 D_{22}	3 C_2, 28 C_{22}, 3 D_2, 10 D_{11}, 5 D_{22}	3 C_2, 25 C_{11}, 3 D_2, 10 D_{11}
R100.44	3 C_2, C_4, 2 C_5, 2 C_{10}, 5 C_{11}, 4 C_{20}, 15 C_{22}, 5 C_{44}, 10 C_{55}, 10 C_{110}, 20 C_{220}, 4 D_2, D_4, 4 D_5, 4 D_{10}, 4 D_{20}	3 C_2, C_4, C_5, C_{10}, C_{11}, C_{20}, 3 C_{22}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}	3 C_2, C_{22}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}	3 C_2, C_4, C_5, C_{10}, C_{20}, 4 D_2, D_4, 2 D_5, 2 D_{10}, D_{20}
R100.45	2 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, 6 C_9, 6 C_{12}, 9 C_{18}, 8 C_{24}, 12 C_{36}, 18 C_{72}, 2 D_2, D_3, D_4, D_6, 2 D_{12}	2 C_2, 3 C_3, 2 C_4, 4 C_6, 2 C_9, 4 C_{12}, 3 C_{18}, 2 D_2, D_3, D_4, D_6, 2 D_{12}	2 C_2, 2 C_4, 3 C_6, 4 C_{12}, C_{18}, 2 D_2, D_3, D_4, D_6, 2 D_{12}	2 C_2, 2 C_3, 2 D_2, D_3
R100.46	2 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, 6 C_9, 7 C_{12}, 9 C_{18}, 2 C_{24}, 15 C_{36}, 6 C_{72}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 3 C_3, 2 C_4, 4 C_6, 2 C_9, 5 C_{12}, 3 C_{18}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_4, 3 C_6, 5 C_{12}, C_{18}, 2 D_2, D_3, D_4, D_6, D_{12}	2 C_2, 2 C_3, 2 D_2, D_3
R100.47	3 C_2, C_3, 2 C_5, 3 C_6, 3 C_7, 2 C_{10}, 9 C_{14}, 2 C_{15}, 6 C_{21}, 2 C_{30}, 6 C_{35}, 18 C_{42}, 6 C_{70}, 12 C_{105}, 12 C_{210}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_3, C_5, 3 C_6, C_{10}, 3 D_2, 2 D_5, D_{10}	3 C_2, C_6, 3 D_2, 2 D_5, D_{10}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}
R100.48	2 C_2, 2 C_4, 2 C_8, 6 C_{13}, 2 C_{16}, 12 C_{26}, 12 C_{52}, 12 C_{104}, 24 C_{208}, 2 D_2, D_4, 2 D_8	2 C_2, 2 C_4, C_8, 2 D_2, D_4, D_8	2 C_2, 2 C_4, C_8, 2 D_2, D_4, D_8	2 C_2, 2 D_2
R100.49	C_2, 3 C_3, C_6, 11 C_{23}, 11 C_{46}, 55 C_{69}, 22 C_{138}, D_3	C_2, 3 C_3, C_6, D_3	C_2, C_6, D_3	C_2, C_3, D_3
R100.50	C_2, 2 C_5, 20 C_{41}, 20 C_{82}, 40 C_{205}, 2 D_5	C_2, C_5, D_5	C_2, D_5	C_2, C_5, D_5
R100.51	3 C_2, C_3, C_4, 3 C_6, C_{12}, 8 C_{17}, 24 C_{34}, 16 C_{51}, 8 C_{68}, 48 C_{102}, 16 C_{204}, 4 D_2, D_4	3 C_2, C_3, C_4, 3 C_6, 4 D_2, D_4	3 C_2, C_6, 4 D_2, D_4	3 C_2, C_4, 4 D_2, D_4
R100.52	C_2, C_3, C_6, 33 C_{67}, 33 C_{134}, 66 C_{201}, 66 C_{402}	C_2, C_3, C_6	C_2, C_6	C_2
R100.53	3 C_2, 50 C_{101}, 150 C_{202}, 3 D_2	3 C_2, C_{101}, 3 C_{202}, 3 D_2	3 C_2, C_{202}, 3 D_2	3 C_2, C_{101}, 3 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R100.54	C_2, C_4, 2 C_5, 2 C_8, 2 C_{10}, 4 C_{16}, 4 C_{20}, 10 C_{25}, 8 C_{40}, 10 C_{50}, 16 C_{80}, 20 C_{100}, 40 C_{200}, 80 C_{400}	C_2, C_4, C_5, C_8, C_{10}, C_{20}, C_{25}, C_{40}, C_{50}, C_{100}, C_{200}	C_2, C_4, C_8, C_{10}, C_{20}, C_{40}, C_{50}, C_{100}, C_{200}	C_2, C_5, C_{25}
Genus 101				
R101.1	6 C_2, 5 C_4, 5 C_5, 2 C_8, 15 C_{10}, 22 C_{20}, 19 D_2, 3 D_4, 18 D_5, 44 D_{10}, 42 D_{20}	6 C_2, 5 C_4, 5 C_5, C_8, 15 C_{10}, 22 C_{20}, 19 D_2, 3 D_4, 18 D_5, 44 D_{10}, 42 D_{20}	3 C_2, 4 C_4, C_8, 5 C_{10}, 8 C_{20}, 17 D_2, 3 D_4, 13 D_5, 39 D_{10}, 42 D_{20}	6 C_2, C_4, 5 C_5, 10 C_{10}, 14 C_{20}, 19 D_2, 2 D_4, 18 D_5, 31 D_{10}, 28 D_{20}
R101.2	6 C_2, 3 C_4, 5 C_5, C_8, 21 C_{10}, 14 C_{20}, 27 D_2, 3 D_4, 21 D_5, 73 D_{10}, 28 D_{20}	6 C_2, 3 C_4, 5 C_5, 21 C_{10}, 14 C_{20}, 27 D_2, 3 D_4, 21 D_5, 73 D_{10}, 28 D_{20}	3 C_2, 2 C_4, 5 C_{10}, 21 D_2, 3 D_4, 13 D_5, 57 D_{10}, 28 D_{20}	6 C_2, C_4, 5 C_5, 16 C_{10}, 14 C_{20}, 27 D_2, 2 D_4, 21 D_5, 60 D_{10}, 28 D_{20}
R101.3	5 C_2, C_3, 2 C_4, 5 C_5, 3 C_6, 13 C_{10}, 2 C_{12}, 5 C_{15}, 5 C_{30}, 13 D_2, 2 D_3, 18 D_5, 4 D_6, 26 D_{10}, 8 D_{15}, 5 D_{30}	5 C_2, C_3, 2 C_4, 5 C_5, 3 C_6, 13 C_{10}, C_{12}, 5 C_{15}, 5 C_{30}, 13 D_2, 2 D_3, 18 D_5, 4 D_6, 26 D_{10}, 8 D_{15}, 5 D_{30}	3 C_2, 2 C_4, C_6, 11 D_2, D_3, 18 D_5, 3 D_6, 26 D_{10}, 8 D_{15}, 5 D_{30}	5 C_2, C_3, 5 C_5, 13 C_{10}, 13 D_2, 2 D_3, 18 D_5, 26 D_{10}
R101.4	3 C_2, 2 C_4, 7 C_5, 11 C_{10}, 8 C_{20}, 3 D_2, 10 D_5, 5 D_{10}	3 C_2, 2 C_4, 6 C_5, 8 C_{10}, 3 C_{20}, 3 D_2, 10 D_5, 5 D_{10}	2 C_2, 2 C_4, 2 C_{10}, C_{20}, 3 D_2, 10 D_5, 5 D_{10}	3 C_2, 5 C_5, 5 C_{10}, 3 D_2, 10 D_5, 5 D_{10}
R101.5	3 C_2, 2 C_4, 17 C_5, 7 C_{10}, 2 C_{20}, 3 D_2, 24 D_5, 7 D_{10}	3 C_2, 2 C_4, 16 C_5, 6 C_{10}, 3 D_2, 22 D_5, 6 D_{10}	2 C_2, 2 C_4, C_{10}, 3 D_2, 21 D_5, 6 D_{10}	3 C_2, 16 C_5, 5 C_{10}, 3 D_2, 21 D_5, 5 D_{10}
R101.6	5 C_2, C_3, 8 C_4, C_5, 3 C_6, 2 C_8, 3 C_{10}, 2 C_{12}, 2 C_{20}, 4 C_{24}, 13 D_2, 2 D_3, 3 D_4, 2 D_5, 4 D_6, 4 D_{10}	5 C_2, C_3, 8 C_4, C_5, 3 C_6, C_8, 3 C_{10}, C_{12}, 2 C_{20}, 13 D_2, 2 D_3, 3 D_4, 2 D_5, 4 D_6, 4 D_{10}	3 C_2, 6 C_4, C_6, C_{10}, C_{12}, C_{20}, 13 D_2, 2 D_3, 3 D_4, 2 D_5, 4 D_6, 4 D_{10}	5 C_2, C_3, C_5, 2 C_{10}, 13 D_2, 2 D_3, 2 D_5, 2 D_{10}
R101.7	4 C_2, C_3, 6 C_4, C_5, 2 C_6, 2 C_8, 2 C_{10}, 2 C_{12}, 2 C_{20}, 2 C_{24}, 9 D_2, 3 D_3, 3 D_4, 3 D_5, 4 D_6, 4 D_{10}	4 C_2, C_3, 6 C_4, C_5, 2 C_6, C_8, 2 C_{10}, C_{12}, 2 C_{20}, 9 D_2, 3 D_3, 3 D_4, 3 D_5, 4 D_6, 4 D_{10}	3 C_2, 5 C_4, C_6, C_{10}, C_{12}, C_{20}, 9 D_2, 3 D_3, 3 D_4, 3 D_5, 4 D_6, 4 D_{10}	4 C_2, C_3, C_5, C_{10}, 9 D_2, 3 D_3, 3 D_5, 2 D_{10}
R101.8	**Tet**, **Ico**, 5 C_2, C_3, 4 C_4, C_5, 2 C_6, 2 C_8, 2 C_{10}, 2 C_{12}, C_{20}, C_{24}, 20 D_2, 3 D_3, 4 D_4, 3 D_5, 4 D_6, 4 D_{10}, D_{12}, D_{20}	**Tet**, **Ico**, 5 C_2, C_3, 4 C_4, C_5, 2 C_6, C_8, 2 C_{10}, C_{12}, C_{20}, 20 D_2, 3 D_3, 4 D_4, 3 D_5, 4 D_6, 4 D_{10}, D_{20}	3 C_2, 3 C_4, C_6, C_8, C_{10}, C_{12}, 19 D_2, 2 D_3, 3 D_4, 2 D_5, 4 D_6, 4 D_{10}, D_{20}	**Tet**, **Ico**, 5 C_2, C_3, C_4, C_5, C_{10}, 20 D_2, 3 D_3, 2 D_4, 3 D_5, 2 D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R101.9	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 3 C_4, C_5, 3 C_6, 4 C_8, 2 C_{10}, C_{12}, C_{20}, 2 C_{24}, 26 D_2, 4 D_3, 8 D_4, 3 D_5, 7 D_6, 6 D_8, 4 D_{10}, 2 D_{12}, D_{20}, 2 D_{24}	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 3 C_4, C_5, 3 C_6, 3 C_8, 2 C_{10}, C_{20}, 26 D_2, 4 D_3, 8 D_4, 3 D_5, 7 D_6, 4 D_8, 4 D_{10}, D_{20}	**Tet**, **Oct**, **Ico**, 3 C_2, 2 C_4, C_6, 2 C_8, C_{10}, 24 D_2, 2 D_3, 6 D_4, 2 D_5, 6 D_6, 3 D_8, 4 D_{10}, D_{20}	**Tet**, **Ico**, 6 C_2, C_3, C_4, C_5, C_{10}, 26 D_2, 4 D_3, 3 D_4, 3 D_5, 2 D_{10}
R101.10	6 C_2, C_3, 3 C_4, 5 C_6, 3 C_9, 15 C_{18}, 9 C_{27}, 18 C_{54}, 26 D_2, D_3, 5 D_4, 3 D_6, 3 D_9, 9 D_{18}, 9 D_{27}, 9 D_{54}	6 C_2, C_3, 3 C_4, 5 C_6, C_9, 5 C_{18}, C_{27}, 2 C_{54}, 26 D_2, D_3, 5 D_4, 3 D_6, D_9, 3 D_{18}, D_{27}, D_{54}	3 C_2, C_4, C_6, C_{18}, 21 D_2, D_3, 5 D_4, 3 D_6, D_9, 3 D_{18}, D_{27}, D_{54}	6 C_2, C_3, 2 C_4, C_9, 26 D_2, D_3, 4 D_4, D_9
R101.11	6 C_2, 5 C_4, 2 C_8, 6 C_{13}, 30 C_{26}, 24 C_{52}, 24 C_{104}, 19 D_2, 3 D_4, 6 D_{13}, 18 D_{26}, 12 D_{52}	6 C_2, 5 C_4, C_8, C_{13}, 5 C_{26}, 3 C_{52}, C_{104}, 19 D_2, 3 D_4, D_{13}, 3 D_{26}, 2 D_{52}	3 C_2, 4 C_4, C_8, C_{26}, 17 D_2, 3 D_4, D_{13}, 3 D_{26}, 2 D_{52}	6 C_2, C_4, C_{13}, C_{26}, 19 D_2, 2 D_4, D_{13}, D_{26}
R101.12	6 C_2, 3 C_4, C_8, 6 C_{13}, 24 C_{26}, 6 C_{52}, 12 C_{104}, 27 D_2, 3 D_4, 12 D_{13}, 42 D_{26}	6 C_2, 3 C_4, C_{13}, 4 C_{26}, 27 D_2, 3 D_4, 2 D_{13}, 7 D_{26}	3 C_2, 2 C_4, C_{26}, 21 D_2, 3 D_4, D_{13}, 5 D_{26}	6 C_2, C_4, C_{13}, C_{26}, 27 D_2, 2 D_4, 2 D_{13}, D_{26}
R101.13	5 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, 8 C_{17}, 24 C_{34}, 16 C_{51}, 16 C_{68}, 48 C_{102}, 32 C_{204}, 13 D_2, 2 D_3, 4 D_6, 16 D_{17}, 32 D_{34}, 32 D_{51}, 64 D_{102}	5 C_2, C_3, 2 C_4, 3 C_6, C_{12}, C_{17}, 3 C_{34}, C_{51}, C_{68}, 3 C_{102}, C_{204}, 13 D_2, 2 D_3, 4 D_6, 2 D_{17}, 4 D_{34}, 2 D_{51}, 4 D_{102}	3 C_2, 2 C_4, C_6, C_{34}, C_{102}, 11 D_2, D_3, 3 D_6, D_{17}, 3 D_{34}, D_{51}, 3 D_{102}	5 C_2, C_3, C_6, C_{17}, C_{34}, C_{51}, C_{102}, 13 D_2, 2 D_3, D_6, 2 D_{17}, D_{34}, 2 D_{51}, D_{102}
R101.14	3 C_2, 2 C_4, 50 C_{101}, 50 C_{202}, 50 C_{404}, 3 D_2, 100 D_{101}, 50 D_{202}	3 C_2, 2 C_4, C_{101}, C_{202}, 3 D_2, 2 D_{101}, D_{202}	2 C_2, 2 C_4, C_{202}, 3 D_2, D_{101}, D_{202}	3 C_2, C_{101}, 3 D_2, D_{101}
R101.15	4 C_2, 3 C_4, 8 C_5, 8 C_{10}, 6 C_{20}, 21 D_2, 6 D_4, 2 D_5	4 C_2, 3 C_4, 6 C_5, 4 C_{10}, 2 C_{20}, 21 D_2, 6 D_4, 2 D_5	2 C_2, C_4, C_{10}, 17 D_2, 6 D_4, 2 D_5	4 C_2, 2 C_4, 4 C_5, 21 D_2, 4 D_4, 2 D_5
R101.16	**Tet**, 7 C_2, C_3, 4 C_5, 3 C_6, 20 C_{10}, 31 D_2, 24 D_5, 72 D_{10}	**Tet**, 7 C_2, C_3, 4 C_5, 3 C_6, 20 C_{10}, 31 D_2, 24 D_5, 72 D_{10}	3 C_2, 2 C_6, 4 C_{10}, 23 D_2, 12 D_5, 56 D_{10}	**Tet**, 7 C_2, C_3, 4 C_5, 16 C_{10}, 31 D_2, 24 D_5, 60 D_{10}
R101.17	5 C_2, C_3, 4 C_4, C_5, 4 C_6, 3 C_8, 3 C_{10}, 3 C_{12}, C_{20}, 15 D_2, 3 D_3, 6 D_4, 2 D_5, 7 D_6, 2 D_8, 4 D_{10}, 4 D_{12}	5 C_2, C_3, 4 C_4, C_5, 4 C_6, 2 C_8, 3 C_{10}, 3 C_{12}, C_{20}, 15 D_2, 3 D_3, 6 D_4, 2 D_5, 7 D_6, D_8, 4 D_{10}, 4 D_{12}	3 C_2, 3 C_4, C_6, 2 C_8, C_{10}, C_{12}, C_{20}, 15 D_2, 3 D_3, 6 D_4, 2 D_5, 7 D_6, D_8, 4 D_{10}, 4 D_{12}	5 C_2, C_3, C_4, C_5, 2 C_{10}, 15 D_2, 3 D_3, 2 D_4, 2 D_5, 3 D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R101.18	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 3 C_4, C_5, 3 C_6, 4 C_8, 2 C_{10}, C_{12}, C_{20}, 2 C_{24}, 26 D_2, 4 D_3, 8 D_4, 3 D_5, 7 D_6, 6 D_8, 4 D_{10}, 2 D_{12}, D_{20}, 2 D_{24}	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, 3 C_4, C_5, 3 C_6, 3 C_8, 2 C_{10}, C_{12}, C_{20}, 2 C_{24}, 26 D_2, 4 D_3, 8 D_4, 3 D_5, 7 D_6, 5 D_8, 4 D_{10}, 2 D_{12}, D_{20}, 2 D_{24}	**Oct**, 3 C_2, 2 C_4, C_6, 3 C_8, C_{10}, C_{12}, C_{20}, 2 C_{24}, 23 D_2, 2 D_3, 8 D_4, D_5, 7 D_6, 5 D_8, 4 D_{10}, 2 D_{12}, D_{20}, 2 D_{24}	**Tet**, **Oct**, **Ico**, 6 C_2, C_3, C_4, C_5, C_{10}, 26 D_2, 4 D_3, 2 D_4, 3 D_5, 2 D_{10}
R101.19	C_2, C_3, 18 C_5, C_6, 2 C_{15}, 18 D_5	C_2, C_3, 17 C_5, C_6, 17 D_5	C_2, C_6, 17 D_5	C_2, 17 C_5, 17 D_5
R101.20	C_2, C_3, 6 C_5, C_6, 2 C_{10}, 4 C_{15}, 4 C_{30}, 4 D_5	C_2, C_3, 5 C_5, C_6, C_{10}, C_{15}, C_{30}, 4 D_5	C_2, C_6, C_{10}, C_{30}, 4 D_5	C_2, 4 C_5, 4 D_5
R101.21	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_6, 3 C_7, 9 C_{14}, 3 C_{21}, 12 C_{28}, 3 C_{42}, 26 D_2, D_3, 5 D_4, D_6, 9 D_7, 27 D_{14}, 3 D_{21}, 18 D_{28}, 3 D_{42}	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_6, C_7, 3 C_{14}, C_{21}, 3 C_{28}, C_{42}, 26 D_2, D_3, 5 D_4, D_6, 3 D_7, 9 D_{14}, D_{21}, 5 D_{28}, D_{42}	**Oct**, 3 C_2, C_4, C_6, 21 D_2, D_3, 5 D_4, D_6, 2 D_7, 6 D_{14}, D_{21}, 5 D_{28}, D_{42}	**Tet**, **Oct**, 6 C_2, C_3, 2 C_4, C_7, 26 D_2, D_3, 4 D_4, 3 D_7
R101.22	2 C_2, C_3, 2 C_4, C_6, C_7, 3 C_8, C_{12}, C_{14}, 2 C_{28}, 2 D_2, 2 D_3, D_4, D_6, 2 D_8	2 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, 2 D_2, 2 D_3, D_4, D_6, 2 D_8	2 C_2, 2 C_4, C_6, 3 C_8, C_{12}, 2 D_2, 2 D_3, D_4, D_6, 2 D_8	2 C_2, C_3, 2 D_2, 2 D_3
R101.23	**Tet**, 7 C_2, C_3, 3 C_6, 6 C_{13}, 18 C_{26}, 6 C_{39}, 6 C_{78}, 31 D_2, 24 D_{13}, 54 D_{26}	**Tet**, 7 C_2, C_3, 3 C_6, C_{13}, 3 C_{26}, 31 D_2, 4 D_{13}, 9 D_{26}	3 C_2, 2 C_6, 23 D_2, 2 D_{13}, 7 D_{26}	7 C_2, C_{13}, C_{26}, 31 D_2, 4 D_{13}, 2 D_{26}
R101.24	C_2, C_3, C_6, 50 C_{101}, 50 C_{303}, 50 D_{101}	C_2, C_3, C_6, C_{101}, D_{101}	C_2, C_6, D_{101}	C_2, C_{101}, D_{101}
R101.25	4 C_2, 2 C_4, 5 C_5, 2 C_8, 21 C_{10}, 10 D_2, 2 D_4, 8 D_5, 16 D_{10}	4 C_2, 2 C_4, 5 C_5, 21 C_{10}, 10 D_2, 2 D_4, 8 D_5, 16 D_{10}	2 C_2, 2 C_4, 5 C_{10}, 8 D_2, 2 D_4, 8 D_5, 16 D_{10}	4 C_2, 5 C_5, 16 C_{10}, 10 D_2, 8 D_5, 8 D_{10}
R101.26	5 C_2, 3 C_4, 5 C_5, 4 C_8, 15 C_{10}, 8 C_{20}, 13 D_2, 16 D_5, 26 D_{10}	5 C_2, 3 C_4, 5 C_5, 2 C_8, 15 C_{10}, 8 C_{20}, 13 D_2, 16 D_5, 26 D_{10}	2 C_2, 3 C_4, 2 C_8, 5 C_{10}, 8 C_{20}, 11 D_2, 8 D_5, 21 D_{10}	5 C_2, 5 C_5, 10 C_{10}, 13 D_2, 16 D_5, 18 D_{10}
R101.27	5 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 3 C_9, 8 C_{12}, 9 C_{18}, 12 C_{36}, 15 D_2, 2 D_3, 8 D_4, 6 D_6, 6 D_9, 12 D_{12}, 18 D_{18}, 12 D_{36}	5 C_2, C_3, 5 C_4, 3 C_6, C_8, C_9, 7 C_{12}, 3 C_{18}, 3 C_{36}, 15 D_2, 2 D_3, 8 D_4, 6 D_6, 2 D_9, 11 D_{12}, 6 D_{18}, 3 D_{36}	3 C_2, 3 C_4, C_6, C_8, 2 C_{12}, C_{18}, 13 D_2, D_3, 8 D_4, 4 D_6, D_9, 11 D_{12}, 4 D_{18}, 3 D_{36}	5 C_2, C_3, 2 C_4, C_6, C_{12}, 15 D_2, 2 D_3, 3 D_4, 2 D_6, D_{12}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R101.28	4 C_2, C_3, 5 C_4, 3 C_6, 3 C_8, 3 C_9, 6 C_{12}, 9 C_{18}, 6 C_{36}, 9 D_2, D_3, 2 D_4, 3 D_6, 3 D_9, 2 D_{12}, 9 D_{18}	4 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, C_9, 5 C_{12}, 3 C_{18}, C_{36}, 9 D_2, D_3, 2 D_4, 3 D_6, D_9, 2 D_{12}, 3 D_{18}	3 C_2, 4 C_4, C_6, 2 C_8, 2 C_{12}, C_{18}, 9 D_2, D_3, 2 D_4, 3 D_6, D_9, 2 D_{12}, 3 D_{18}	4 C_2, C_3, C_4, C_6, 9 D_2, D_3, D_6
R101.29	5 C_2, C_3, 6 C_4, 3 C_6, 4 C_8, 3 C_9, 5 C_{12}, 9 C_{18}, 6 C_{36}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_9, 4 D_{12}, 12 D_{18}	5 C_2, C_3, 6 C_4, 3 C_6, 3 C_8, C_9, 4 C_{12}, 3 C_{18}, C_{36}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 2 D_9, 4 D_{12}, 4 D_{18}	3 C_2, 4 C_4, C_6, 3 C_8, 2 C_{12}, C_{18}, 13 D_2, D_3, 3 D_4, 4 D_6, D_9, 4 D_{12}, 4 D_{18}	5 C_2, C_3, C_4, C_6, 13 D_2, 2 D_3, D_6
R101.30	5 C_2, C_3, 5 C_4, 3 C_6, 3 C_8, 3 C_9, 5 C_{12}, 9 C_{18}, 6 C_{36}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 6 D_9, 4 D_{12}, 12 D_{18}	5 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, C_9, 4 C_{12}, 3 C_{18}, C_{36}, 13 D_2, 2 D_3, 3 D_4, 4 D_6, 2 D_9, 4 D_{12}, 4 D_{18}	3 C_2, 3 C_4, C_6, 2 C_8, 2 C_{12}, C_{18}, 13 D_2, D_3, 3 D_4, 4 D_6, D_9, 4 D_{12}, 4 D_{18}	5 C_2, C_3, 2 C_4, C_6, 13 D_2, 2 D_3, D_6
R101.31	5 C_2, C_3, 4 C_4, 4 C_6, 3 C_8, 3 C_9, 4 C_{12}, 9 C_{18}, 6 C_{36}, 15 D_2, D_3, 6 D_4, 3 D_6, 2 D_8, 3 D_9, 2 D_{12}, 9 D_{18}	5 C_2, C_3, 4 C_4, 4 C_6, 2 C_8, C_9, 3 C_{12}, 3 C_{18}, C_{36}, 15 D_2, D_3, 6 D_4, 3 D_6, D_8, D_9, 2 D_{12}, 3 D_{18}	2 C_2, 3 C_4, C_6, 2 C_8, 3 C_{12}, C_{18}, C_{36}, 11 D_2, D_3, 6 D_4, 3 D_6, D_8, D_9, 2 D_{12}, 3 D_{18}	5 C_2, C_3, C_4, 15 D_2, D_3, 2 D_4
R101.32	4 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 3 C_9, 4 C_{12}, 3 C_{18}, 6 C_{36}, 12 D_2, D_3, 4 D_4, 3 D_6, 3 D_9, 2 D_{12}, 3 D_{18}, 3 D_{36}	4 C_2, C_3, 5 C_4, 3 C_6, C_8, C_9, 3 C_{12}, C_{18}, C_{36}, 12 D_2, D_3, 4 D_4, 3 D_6, D_9, 2 D_{12}, D_{18}, D_{36}	2 C_2, 4 C_4, C_6, C_8, 3 C_{12}, C_{18}, C_{36}, 9 D_2, D_3, 4 D_4, 3 D_6, D_9, 2 D_{12}, D_{18}, D_{36}	4 C_2, C_3, C_4, 12 D_2, D_3, 2 D_4
R101.33	6 C_2, C_3, 5 C_4, 5 C_6, 2 C_8, 3 C_9, 7 C_{12}, 15 C_{18}, 21 C_{36}, 19 D_2, D_3, 3 D_4, 3 D_6, 3 D_9, 2 D_{12}, 9 D_{18}, 6 D_{36}	6 C_2, C_3, 5 C_4, 5 C_6, C_8, C_9, 6 C_{12}, 5 C_{18}, 6 C_{36}, 19 D_2, D_3, 3 D_4, 3 D_6, D_9, 2 D_{12}, 3 D_{18}, 2 D_{36}	3 C_2, 4 C_4, C_6, C_8, 3 C_{12}, C_{18}, 3 C_{36}, 17 D_2, D_3, 3 D_4, 3 D_6, D_9, 2 D_{12}, 3 D_{18}, 2 D_{36}	6 C_2, C_3, C_4, C_9, 19 D_2, D_3, 2 D_4, D_9
R101.34	6 C_2, C_3, 3 C_4, 4 C_6, C_8, 3 C_9, 3 C_{12}, 12 C_{18}, 9 C_{36}, 27 D_2, 2 D_3, 3 D_4, 7 D_6, 6 D_9, 21 D_{18}	6 C_2, C_3, 3 C_4, 4 C_6, C_9, 2 C_{12}, 4 C_{18}, 2 C_{36}, 27 D_2, 2 D_3, 3 D_4, 7 D_6, 2 D_9, 7 D_{18}	3 C_2, 2 C_4, C_6, C_{12}, C_{18}, C_{36}, 21 D_2, D_3, 3 D_4, 5 D_6, D_9, 5 D_{18}	6 C_2, C_3, C_4, C_9, 27 D_2, 2 D_3, 2 D_4, 2 D_9
R101.35	4 C_2, 2 C_4, 2 C_8, 8 C_{17}, 16 C_{34}, 24 C_{68}, 16 C_{136}, 10 D_2, 2 D_4, 16 D_{17}, 32 D_{34}, 24 D_{68}	4 C_2, 2 C_4, C_{17}, 2 C_{34}, 2 C_{68}, 10 D_2, 2 D_4, 2 D_{17}, 4 D_{34}, 2 D_{68}	2 C_2, 2 C_4, C_{34}, C_{68}, 8 D_2, 2 D_4, D_{17}, 3 D_{34}, 2 D_{68}	4 C_2, C_{17}, 10 D_2, 2 D_{17}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R101.36	5 C_2, 3 C_4, 4 C_8, 8 C_{17}, 24 C_{34}, 16 C_{68}, 32 C_{136}, 13 D_2, 16 D_{17}, 32 D_{34}	5 C_2, 3 C_4, 2 C_8, C_{17}, 3 C_{34}, C_{68}, 13 D_2, 2 D_{17}, 4 D_{34}	2 C_2, 3 C_4, 2 C_8, C_{34}, 11 D_2, D_{17}, 3 D_{34}	5 C_2, C_{17}, 13 D_2, 2 D_{17}
R101.37	**Tet**, 2 **Ico**, 3 C_2, C_3, 8 C_5, C_6, 4 C_{10}, 2 C_{15}, 7 D_2, 2 D_3, 12 D_5, D_6, 6 D_{10}, 2 D_{15}	**Tet**, **Ico**, 3 C_2, C_3, 6 C_5, C_6, 2 C_{10}, 7 D_2, 2 D_3, 8 D_5, D_6, 3 D_{10}	2 C_2, C_6, C_{10}, 6 D_2, D_3, 7 D_5, D_6, 3 D_{10}	**Tet**, 3 C_2, C_3, 6 C_5, 7 D_2, 2 D_3, 7 D_5
R101.38	**Tet**, 2 **Ico**, 3 C_2, C_3, 8 C_5, C_6, 12 C_{10}, 2 C_{15}, 2 C_{30}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	**Tet**, 2 **Ico**, 3 C_2, C_3, 6 C_5, C_6, 8 C_{10}, 7 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	2 C_2, C_6, 7 C_{10}, 6 D_2, D_3, 2 D_5, D_6, 2 D_{10}	**Tet**, 2 **Ico**, 3 C_2, C_3, 4 C_5, 7 D_2, 2 D_3, 4 D_5
R101.39	3 C_2, C_3, 2 C_4, 4 C_5, 3 C_6, 4 C_{10}, 4 C_{12}, 4 C_{20}, 3 D_2, 8 D_5, 4 D_{10}	3 C_2, C_3, 2 C_4, 4 C_5, 3 C_6, 4 C_{10}, 2 C_{12}, 4 C_{20}, 3 D_2, 8 D_5, 4 D_{10}	2 C_2, 2 C_4, 2 C_6, 4 C_{10}, 2 C_{12}, 4 C_{20}, 3 D_2, 4 D_5, 4 D_{10}	3 C_2, C_3, 4 C_5, 3 D_2, 8 D_5
R101.40	3 C_2, C_3, 2 C_4, 5 C_5, 3 C_6, 5 C_{10}, 4 C_{12}, 5 C_{15}, 5 C_{30}, 3 D_2, 10 D_5, 5 D_{10}	3 C_2, C_3, 2 C_4, 5 C_5, 3 C_6, 5 C_{10}, 2 C_{12}, 5 C_{15}, 5 C_{30}, 3 D_2, 10 D_5, 5 D_{10}	2 C_2, 2 C_4, C_6, 3 D_2, 10 D_5, 5 D_{10}	3 C_2, C_3, 5 C_5, 5 C_{10}, 3 D_2, 10 D_5, 5 D_{10}
R101.41	C_2, C_4, 17 C_5, 2 C_{10}, 4 C_{20}, 5 D_5	C_2, C_4, 16 C_5, C_{10}, 5 D_5	C_2, C_4, C_{10}, 5 D_5	C_2, 16 C_5, 5 D_5
R101.42	C_2, C_4, 7 C_5, 2 C_{10}, 4 C_{20}, 5 D_5	C_2, C_4, 5 C_5, 5 D_5	C_2, C_4, 5 D_5	C_2, 5 C_5, 5 D_5
R101.43	C_2, C_4, 7 C_5, 2 C_{10}, 4 C_{20}, 5 D_5	C_2, C_4, 6 C_5, C_{10}, C_{20}, 5 D_5	C_2, C_4, C_{10}, C_{20}, 5 D_5	C_2, 5 C_5, 5 D_5
R101.44	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_5, 2 C_6, 12 C_{10}, 2 C_{15}, 6 C_{20}, 6 C_{30}, 26 D_2, D_3, 5 D_4, D_6	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, C_5, 2 C_6, 6 C_{10}, 2 C_{20}, 26 D_2, D_3, 5 D_4, D_6	**Oct**, 3 C_2, C_4, C_6, C_{10}, 21 D_2, D_3, 5 D_4, D_6	**Tet**, **Oct**, 6 C_2, C_3, 2 C_4, 26 D_2, D_3, 4 D_4
R101.45	2 C_2, C_3, 4 C_4, C_5, C_6, C_8, C_{10}, C_{12}, C_{20}, 2 C_{24}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, 4 C_4, C_5, C_6, C_{10}, C_{20}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, 3 C_4, C_6, C_{10}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5
R101.46	2 C_2, C_3, 4 C_4, C_5, C_6, C_8, C_{10}, C_{12}, C_{20}, 2 C_{24}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, 4 C_4, C_5, C_6, C_{10}, C_{20}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, 3 C_4, C_6, C_{10}, 2 D_2, D_3, D_4, D_5, D_6, D_{10}	2 C_2, C_3, C_5, 2 D_2, D_3, D_5
R101.47	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, 4 C_8, C_{10}, C_{12}, C_{20}, 2 C_{24}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, 2 C_8, C_{10}, C_{20}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	2 C_2, C_4, C_6, 2 C_8, C_{10}, 5 D_2, D_3, D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_4, C_5, 6 D_2, 2 D_3, 2 D_5
R101.48	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, 4 C_8, C_{10}, C_{12}, C_{20}, 2 C_{24}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, C_6, 3 C_8, C_{10}, C_{20}, 6 D_2, 2 D_3, 2 D_5, D_6, D_{10}	**Tet**, **Ico**, 2 C_2, C_4, C_6, 2 C_8, C_{10}, 6 D_2, D_3, D_5, D_6, D_{10}	**Tet**, **Ico**, 3 C_2, C_3, C_4, C_5, 6 D_2, 2 D_3, 2 D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
R101.49	6 C_2, 5 C_4, 3 C_7, 2 C_8, 18 C_{14}, 24 C_{28}, 12 C_{56}, 19 D_2, 3 D_4	6 C_2, 5 C_4, C_8, 19 D_2, 3 D_4	3 C_2, 4 C_4, C_8, 17 D_2, 3 D_4	6 C_2, C_4, 19 D_2, 2 D_4
R101.50	6 C_2, 3 C_4, 3 C_7, C_8, 18 C_{14}, 12 C_{28}, 6 C_{56}, 27 D_2, 3 D_4	6 C_2, 3 C_4, 27 D_2, 3 D_4	3 C_2, 2 C_4, 21 D_2, 3 D_4	6 C_2, C_4, 27 D_2, 2 D_4
R101.51	7 C_2, C_3, 7 C_6, 3 C_9, 21 C_{18}, 9 C_{27}, 27 C_{54}, 31 D_2	7 C_2, C_3, 7 C_6, C_9, 7 C_{18}, C_{27}, 3 C_{54}, 31 D_2	3 C_2, C_6, C_{18}, 23 D_2	7 C_2, C_3, C_9, 31 D_2
R101.52	4 C_2, 2 C_4, 2 C_8, 6 C_{13}, 24 C_{26}, 12 C_{52}, 24 C_{104}, 10 D_2, 2 D_4	4 C_2, 2 C_4, C_{13}, 4 C_{26}, 10 D_2, 2 D_4	2 C_2, 2 C_4, C_{26}, 8 D_2, 2 D_4	4 C_2, C_{13}, C_{26}, 10 D_2
R101.53	5 C_2, 3 C_4, 4 C_8, 6 C_{13}, 30 C_{26}, 36 C_{52}, 48 C_{104}, 13 D_2	5 C_2, 3 C_4, 2 C_8, C_{13}, 5 C_{26}, 4 C_{52}, 2 C_{104}, 13 D_2	2 C_2, 3 C_4, 2 C_8, C_{26}, 11 D_2	5 C_2, C_{13}, C_{26}, 13 D_2
R101.54	C_2, 3 C_7, 3 C_{14}, 14 C_{29}, 14 C_{58}, 84 C_{203}, 84 C_{406}	C_2	C_2	C_2
R101.55	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_{12}, 8 C_{17}, 24 C_{34}, 16 C_{51}, 32 C_{68}, 48 C_{102}, 64 C_{204}, 3 D_2	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, C_{17}, 3 C_{34}, C_{51}, 2 C_{68}, 3 C_{102}, 2 C_{204}, 3 D_2	2 C_2, 2 C_4, C_6, C_{34}, C_{102}, 3 D_2	3 C_2, C_3, C_6, C_{17}, C_{34}, C_{51}, C_{102}, 3 D_2
R101.56	C_2, C_4, 50 C_{101}, 50 C_{202}, 100 C_{404}	C_2, C_4, C_{101}, C_{202}	C_2, C_4, C_{202}	C_2, C_{101}

1.0.2 Chiral Maps

	Mapping	Immersion		Embedding
	necessary and sufficient	necessary	sufficient	necessary
Genus 2				
None				
Genus 3				
None				
Genus 4				
None				
Genus 5				
None				
Genus 6				
None				
Genus 7				
C7.1	C_2, 2 C_3, C_6, 2 C_9, D_3, D_9	C_2, 2 C_3, C_6, C_9, D_3, D_9	C_2, C_6, D_3, D_9	C_2, C_3, D_3
C7.2	C_2, 3 C_7, 3 D_2	C_2, C_7, 3 D_2	C_2, 3 D_2	C_2, C_7, 3 D_2
Genus 8				
C8.1	3 C_2, C_3, 3 C_6, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}	3 C_2, C_3, 3 C_6, C_7, C_{14}, 3 D_2, 2 D_7, D_{14}	3 C_2, 2 C_6, C_{14}, 3 D_2, 2 D_7, D_{14}	3 C_2, C_3, C_7, 3 D_2, 2 D_7
Genus 9				
None				
Genus 10				
C10.1	2 C_2, 3 C_3, C_4, 2 C_6, C_8, 2 D_2, 5 D_3, D_4, 2 D_6	2 C_2, 3 C_3, C_4, 2 C_6, 2 D_2, 5 D_3, D_4, 2 D_6	2 C_2, C_4, 2 C_6, 2 D_2, 5 D_3, D_4, 2 D_6	2 C_2, 3 C_3, 2 D_2, 5 D_3
C10.2	2 C_2, C_3, 2 C_4, C_6, C_8, 2 D_2, 2 D_3, D_4, D_6	2 C_2, C_3, 2 C_4, C_6, 2 D_2, 2 D_3, D_4, D_6	2 C_2, 2 C_4, C_6, 2 D_2, 2 D_3, D_4, D_6	2 C_2, C_3, 2 D_2, 2 D_3
C10.3	C_2, C_3, C_4, 2 C_8, D_3	C_2, C_3, C_4, D_3	C_2, C_4, D_3	C_2, C_3, D_3
Genus 11				
C11.1	3 C_2, 5 C_4, C_5, C_8, C_{10}, 3 C_{20}, 4 D_2, 2 D_4, 3 D_5, 3 D_{10}, 3 D_{20}	3 C_2, 5 C_4, C_5, C_{10}, 3 C_{20}, 4 D_2, 2 D_4, 3 D_5, 3 D_{10}, 3 D_{20}	3 C_2, 4 C_4, C_{10}, 3 C_{20}, 4 D_2, 2 D_4, 3 D_5, 3 D_{10}, 3 D_{20}	3 C_2, C_5, 4 D_2, 3 D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C11.2	5 C_2, 3 C_4, C_5, 2 C_8, 3 C_{10}, C_{20}, 13 D_2, 3 D_4, 4 D_5, 7 D_{10}, D_{20}	5 C_2, 3 C_4, C_5, C_8, 3 C_{10}, C_{20}, 13 D_2, 3 D_4, 4 D_5, 7 D_{10}, D_{20}	3 C_2, 3 C_4, C_8, C_{10}, C_{20}, 13 D_2, 3 D_4, 3 D_5, 7 D_{10}, D_{20}	5 C_2, C_5, 2 C_{10}, 13 D_2, 4 D_5, 4 D_{10}
C11.3	3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, C_{15}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}	3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{15}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}	2 C_2, 2 C_4, C_6, 3 D_2, D_3, 2 D_5, D_6, D_{10}, D_{15}	3 C_2, C_3, C_5, C_{10}, 3 D_2, D_3, 2 D_5, D_{10}
C11.4	2 C_2, 2 C_4, C_5, 2 C_8, C_{10}, C_{20}, 2 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_5, C_{10}, C_{20}, 2 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_{10}, C_{20}, 2 D_2, 2 D_5, D_{10}	2 C_2, C_5, 2 D_2, 2 D_5
C11.5	3 C_2, 2 C_4, C_5, 4 C_8, C_{10}, C_{20}, 3 D_2, 2 D_5, D_{10}	3 C_2, 2 C_4, C_5, 2 C_8, C_{10}, C_{20}, 3 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, 2 C_8, C_{10}, C_{20}, 3 D_2, D_5, D_{10}	3 C_2, C_5, 3 D_2, 2 D_5
C11.6	C_2, C_3, C_4, C_5, C_6, 2 C_{12}, C_{15}, D_5	C_2, C_3, C_4, C_5, C_6, C_{15}, D_5	C_2, C_4, C_6, D_5	C_2, C_3, C_5, D_5
Genus 12				
C12.1	C_2, 2 C_5, 2 C_{10}, C_{11}, D_{11}	C_2, C_{11}, D_{11}	C_2, D_{11}	C_2, C_{11}, D_{11}
C12.2	C_2, 2 C_5, 2 C_{10}, C_{11}, D_{11}	C_2, C_{11}, D_{11}	C_2, D_{11}	C_2, C_{11}, D_{11}
Genus 13				
		None		
Genus 14				
C14.1	3 C_2, C_3, 3 C_6, 2 C_{13}, 2 C_{26}, 3 D_2, 4 D_{13}, 2 D_{26}	3 C_2, C_3, 3 C_6, 2 C_{13}, 2 C_{26}, 3 D_2, 4 D_{13}, 2 D_{26}	3 C_2, 2 C_6, 2 C_{26}, 3 D_2, 4 D_{13}, 2 D_{26}	3 C_2, C_3, 2 C_{13}, 3 D_2, 4 D_{13}
Genus 15				
C15.1	2 C_2, C_3, 2 C_4, C_6, C_7, 2 C_{12}, C_{14}, 3 C_{28}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 3 D_{28}	2 C_2, C_3, 2 C_4, C_6, C_7, C_{12}, C_{14}, 3 C_{28}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 3 D_{28}	2 C_2, 2 C_4, C_6, C_{12}, C_{14}, 3 C_{28}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 3 D_{28}	2 C_2, C_7, 2 D_2, 3 D_7
Genus 16				
C16.1	3 C_2, 2 C_3, 4 C_6, 2 C_9, 2 C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, 2 C_3, 4 C_6, C_9, C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, 2 C_6, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, C_3, C_6, 3 D_2, 2 D_3, D_6
Genus 17				
C17.1	2 **Tet**, 2 **Oct**, 2 C_2, C_3, 2 C_4, C_6, C_7, 2 C_8, 6 D_2, 2 D_3, 6 D_4, D_6, 2 D_8	2 **Tet**, 2 **Oct**, 2 C_2, C_3, 2 C_4, C_6, 2 C_8, 6 D_2, 2 D_3, 6 D_4, D_6, 2 D_8	**Tet**, 2 **Oct**, C_2, 5 D_2, 2 D_3, 6 D_4, D_6, 2 D_8	2 **Tet**, 2 **Oct**, 2 C_2, C_3, 2 C_4, 2 C_8, 6 D_2, 2 D_3, 6 D_4, 2 D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C17.2	**Tet**, **Oct**, 5 C_2, C_3, 5 C_4, 2 C_6, C_8, 19 D_2, D_3, 9 D_4, D_6, D_8	**Tet**, **Oct**, 5 C_2, C_3, 5 C_4, 2 C_6, C_8, 19 D_2, D_3, 9 D_4, D_6, D_8	**Oct**, 3 C_2, C_4, C_6, 16 D_2, D_3, 9 D_4, D_6, D_8	**Tet**, **Oct**, 5 C_2, C_3, 4 C_4, C_8, 19 D_2, D_3, 9 D_4, D_8
C17.3	**Tet**, 5 C_2, C_3, 3 C_4, 3 C_6, 19 D_2, 4 D_4	**Tet**, 5 C_2, C_3, 3 C_4, 3 C_6, 19 D_2, 4 D_4	3 C_2, 2 C_6, 16 D_2, 4 D_4	**Tet**, 5 C_2, C_3, 3 C_4, 19 D_2, 4 D_4
C17.4	3 C_2, 3 C_7, 3 C_{14}, 15 D_2	3 C_2, 15 D_2	2 C_2, 12 D_2	3 C_2, 15 D_2
Genus 18				
C18.1	C_2, C_4, 2 C_8, 2 C_{17}, 2 D_{17}	C_2, C_4, 2 C_{17}, 2 D_{17}	C_2, C_4, 2 D_{17}	C_2, 2 C_{17}, 2 D_{17}
Genus 19				
C19.1	5 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, 13 D_2, 4 D_3, 3 D_4, 6 D_6	5 C_2, C_3, 3 C_4, 3 C_6, C_8, 13 D_2, 4 D_3, 3 D_4, 6 D_6	3 C_2, 2 C_4, C_6, 13 D_2, 3 D_3, 3 D_4, 6 D_6	5 C_2, C_3, C_4, 2 C_6, 13 D_2, 4 D_3, D_4, 4 D_6
C19.2	3 C_2, C_3, 2 C_4, C_6, 4 C_8, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 2 C_8, 3 D_2, 2 D_3, D_6	2 C_2, C_4, 3 D_2, 2 D_3, D_6	3 C_2, C_3, C_4, C_6, 3 D_2, 2 D_3, D_6
Genus 20				
C20.1	3 C_2, C_3, 3 C_6, 3 C_{19}, 3 C_{38}, 3 D_2, 6 D_{19}, 3 D_{38}	3 C_2, C_3, 3 C_6, 3 C_{19}, 3 C_{38}, 3 D_2, 6 D_{19}, 3 D_{38}	3 C_2, 2 C_6, 3 C_{38}, 3 D_2, 6 D_{19}, 3 D_{38}	3 C_2, C_3, 3 C_{19}, 3 D_2, 6 D_{19}
Genus 21				
C21.1	3 C_2, 3 C_4, C_5, C_8, 12 D_2, 3 D_4, D_5	3 C_2, 3 C_4, C_5, 12 D_2, 3 D_4, D_5	2 C_2, 2 C_4, 10 D_2, 3 D_4, D_5	3 C_2, C_4, C_5, 12 D_2, 2 D_4, D_5
C21.2	6 C_2, 5 C_4, C_5, 2 C_8, 3 C_{10}, 6 C_{20}, 19 D_2, 3 D_4, 4 D_5, 10 D_{10}, 12 D_{20}	6 C_2, 5 C_4, C_5, C_8, 3 C_{10}, 6 C_{20}, 19 D_2, 3 D_4, 4 D_5, 10 D_{10}, 12 D_{20}	3 C_2, 4 C_4, C_8, C_{10}, 2 C_{20}, 17 D_2, 3 D_4, 3 D_5, 9 D_{10}, 12 D_{20}	6 C_2, C_4, C_5, 2 C_{10}, 4 C_{20}, 19 D_2, 2 D_4, 4 D_5, 7 D_{10}, 8 D_{20}
C21.3	6 C_2, 3 C_4, C_5, C_8, 5 C_{10}, 4 C_{20}, 33 D_2, 3 D_4, 5 D_5, 19 D_{10}, 8 D_{20}	6 C_2, 3 C_4, C_5, 5 C_{10}, 4 C_{20}, 33 D_2, 3 D_4, 5 D_5, 19 D_{10}, 8 D_{20}	3 C_2, 2 C_4, C_{10}, 25 D_2, 3 D_4, 3 D_5, 15 D_{10}, 8 D_{20}	6 C_2, C_4, C_5, 4 C_{10}, 4 C_{20}, 33 D_2, 2 D_4, 5 D_5, 16 D_{10}, 8 D_{20}
C21.4	5 C_2, C_3, 2 C_4, C_5, 3 C_6, 3 C_{10}, 2 C_{12}, C_{15}, C_{30}, 13 D_2, 2 D_3, 4 D_5, 4 D_6, 6 D_{10}, 2 D_{15}, D_{30}	5 C_2, C_3, 2 C_4, C_5, 3 C_6, 3 C_{10}, C_{12}, C_{15}, C_{30}, 13 D_2, 2 D_3, 4 D_5, 4 D_6, 6 D_{10}, 2 D_{15}, D_{30}	3 C_2, 2 C_4, C_6, 11 D_2, D_3, 4 D_5, 3 D_6, 6 D_{10}, 2 D_{15}, D_{30}	5 C_2, C_3, C_5, 3 C_{10}, 13 D_2, 2 D_3, 4 D_5, 6 D_{10}
C21.5	3 C_2, 2 C_4, 5 C_5, 3 C_{10}, 2 C_{20}, 3 D_2, 8 D_5, 3 D_{10}	3 C_2, 2 C_4, 4 C_5, 2 C_{10}, 3 D_2, 6 D_5, 2 D_{10}	2 C_2, 2 C_4, C_{10}, 3 D_2, 5 D_5, 2 D_{10}	3 C_2, 4 C_5, C_{10}, 3 D_2, 5 D_5, D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C21.6	5 C_2, 3 C_4, C_5, 4 C_8, 3 C_{10}, 2 C_{20}, 13 D_2, 4 D_5, 6 D_{10}	5 C_2, 3 C_4, C_5, 2 C_8, 3 C_{10}, 2 C_{20}, 13 D_2, 4 D_5, 6 D_{10}	2 C_2, 3 C_4, 2 C_8, C_{10}, 2 C_{20}, 11 D_2, 2 D_5, 5 D_{10}	5 C_2, C_5, 2 C_{10}, 13 D_2, 4 D_5, 4 D_{10}
C21.7	4 C_2, 2 C_4, C_5, 2 C_8, 5 C_{10}, 12 D_2, 2 D_4, 2 D_5, 4 D_{10}	4 C_2, 2 C_4, C_5, 5 C_{10}, 12 D_2, 2 D_4, 2 D_5, 4 D_{10}	2 C_2, 2 C_4, C_{10}, 9 D_2, 2 D_4, 2 D_5, 4 D_{10}	4 C_2, C_5, 4 C_{10}, 12 D_2, 2 D_5, 2 D_{10}
C21.8	3 C_2, C_3, 2 C_4, C_5, 3 C_6, C_{10}, 4 C_{12}, C_{15}, C_{30}, 3 D_2, 2 D_5, D_{10}	3 C_2, C_3, 2 C_4, C_5, 3 C_6, C_{10}, 2 C_{12}, C_{15}, C_{30}, 3 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_6, 3 D_2, 2 D_5, D_{10}	3 C_2, C_3, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}
C21.9	3 C_2, 3 C_7, 3 C_{14}, 15 D_2	3 C_2, C_7, C_{14}, 15 D_2	2 C_2, C_{14}, 15 D_2	3 C_2, C_7, 15 D_2
C21.10	C_2, C_4, 5 C_5, 2 C_{10}, 4 C_{20}, D_5	C_2, C_4, 4 C_5, C_{10}, D_5	C_2, C_4, C_{10}, D_5	C_2, 4 C_5, D_5

Genus 22

C22.1	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, C_7, C_{12}, C_{14}, 2 C_{21}, 3 D_2, D_3, D_4, D_7, D_{14}, 2 D_{21}	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, C_7, C_{14}, 2 C_{21}, 3 D_2, D_3, D_4, D_7, D_{14}, 2 D_{21}	2 **Tet**, **Oct**, 2 C_2, C_4, 2 C_6, C_{14}, 3 D_2, D_3, D_4, D_7, D_{14}, 2 D_{21}	2 C_2, C_3, C_7, 2 C_{21}, 3 D_2, D_3, D_7, 2 D_{21}
C22.2	3 C_2, 3 C_3, 5 C_6, C_7, C_{14}, C_{21}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, D_{21}	3 C_2, 3 C_3, 5 C_6, C_7, C_{14}, C_{21}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, D_{21}	3 C_2, 5 C_6, C_{14}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, D_{21}	3 C_2, C_3, C_7, C_{21}, 3 D_2, 2 D_3, 2 D_7, D_{21}
C22.3	3 C_2, 3 C_3, 5 C_6, C_7, C_{14}, 2 C_{21}, 2 C_{42}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 4 D_{21}, 2 D_{42}	3 C_2, 3 C_3, 5 C_6, C_7, C_{14}, 2 C_{21}, 2 C_{42}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 4 D_{21}, 2 D_{42}	3 C_2, 4 C_6, C_{14}, 2 C_{42}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 4 D_{21}, 2 D_{42}	3 C_2, C_3, C_7, 2 C_{21}, 3 D_2, 2 D_3, 2 D_7, 4 D_{21}
C22.4	3 C_2, C_3, C_4, 3 C_6, C_7, C_{12}, 2 C_{14}, 4 D_2, D_4, D_7, D_{14}	3 C_2, C_3, C_4, 3 C_6, C_7, 2 C_{14}, 4 D_2, D_4, D_7, D_{14}	3 C_2, C_4, 3 C_6, 2 C_{14}, 4 D_2, D_4, D_7, D_{14}	3 C_2, C_7, 4 D_2, D_7
C22.5	3 C_2, C_3, C_4, 3 C_6, C_7, C_{12}, C_{14}, 2 C_{28}, 4 D_2, D_4, 2 D_7, 2 D_{14}, 2 D_{28}	3 C_2, C_3, C_4, 3 C_6, C_7, C_{14}, 2 C_{28}, 4 D_2, D_4, 2 D_7, 2 D_{14}, 2 D_{28}	3 C_2, 2 C_6, C_{14}, 4 D_2, D_4, 2 D_7, 2 D_{14}, 2 D_{28}	3 C_2, C_4, C_7, 4 D_2, D_4, 2 D_7
C22.6	C_2, C_3, C_6, C_7, 3 C_9, 3 C_{18}, C_{21}, D_7	C_2, C_3, C_6, C_7, C_{21}, D_7	C_2, C_6, D_7	C_2, C_7, D_7

Genus 23

None

Genus 24

None

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 25				
C25.1	4 C_2, 5 C_4, 3 C_8, 2 C_{16}, 12 D_2, 5 D_4, 4 D_8	4 C_2, 5 C_4, 2 C_8, 12 D_2, 5 D_4, 4 D_8	3 C_2, 2 C_4, 12 D_2, 5 D_4, 4 D_8	4 C_2, 3 C_4, 2 C_8, 12 D_2, 4 D_4, 4 D_8
C25.2	**Tet**, 3 C_2, 2 C_3, 2 C_6, 2 C_9, 3 C_{18}, 7 D_2, 2 D_3, 2 D_6, 4 D_9, 6 D_{18}	**Tet**, 3 C_2, 2 C_3, 2 C_6, C_9, 3 C_{18}, 7 D_2, 2 D_3, 2 D_6, 4 D_9, 6 D_{18}	2 C_2, C_6, 6 D_2, 2 D_3, 2 D_6, 4 D_9, 6 D_{18}	3 C_2, C_3, 7 D_2, 2 D_3
C25.3	C_2, 2 C_3, C_6, 4 C_9, 6 C_{27}, D_3, 3 D_9, 3 D_{27}	C_2, 2 C_3, C_6, 2 C_9, C_{27}, D_3, D_9, D_{27}	C_2, C_6, D_3, D_9, D_{27}	C_2, C_3, C_9, D_3, D_9
C25.4	3 C_2, 4 C_4, 2 C_8, 4 C_{16}, 8 D_2, 4 D_4	3 C_2, 4 C_4, 8 D_2, 4 D_4	2 C_2, 2 C_4, 8 D_2, 4 D_4	3 C_2, 2 C_4, 8 D_2, 2 D_4
Genus 26				
C26.1	C_2, C_4, 3 C_5, 2 C_8, 3 D_5	C_2, C_4, 3 C_5, 3 D_5	C_2, C_4, 3 D_5	C_2, 3 C_5, 3 D_5
Genus 27				
C27.1	2 C_2, C_3, 2 C_4, C_6, 2 C_{12}, 2 C_{13}, 2 C_{26}, 6 C_{52}, 2 D_2, D_4, 6 D_{13}, 6 D_{26}, 6 D_{52}	2 C_2, C_3, 2 C_4, C_6, C_{12}, 2 C_{13}, 2 C_{26}, 6 C_{52}, 2 D_2, D_4, 6 D_{13}, 6 D_{26}, 6 D_{52}	2 C_2, 2 C_4, C_6, C_{12}, 2 C_{26}, 6 C_{52}, 2 D_2, D_4, 6 D_{13}, 6 D_{26}, 6 D_{52}	2 C_2, 2 C_{13}, 2 D_2, 6 D_{13}
C27.2	5 C_2, 3 C_4, 2 C_8, 3 C_{13}, 9 C_{26}, 3 C_{52}, 13 D_2, 3 D_4, 12 D_{13}, 21 D_{26}, 3 D_{52}	5 C_2, 3 C_4, C_8, 3 C_{13}, 9 C_{26}, 3 C_{52}, 13 D_2, 3 D_4, 12 D_{13}, 21 D_{26}, 3 D_{52}	3 C_2, 3 C_4, C_8, 3 C_{26}, 3 C_{52}, 13 D_2, 3 D_4, 9 D_{13}, 21 D_{26}, 3 D_{52}	5 C_2, 3 C_{13}, 6 C_{26}, 13 D_2, 12 D_{13}, 12 D_{26}
C27.3	3 C_2, 5 C_4, C_8, 3 C_{13}, 3 C_{26}, 9 C_{52}, 4 D_2, 2 D_4, 9 D_{13}, 9 D_{26}, 9 D_{52}	3 C_2, 5 C_4, 3 C_{13}, 3 C_{26}, 9 C_{52}, 4 D_2, 2 D_4, 9 D_{13}, 9 D_{26}, 9 D_{52}	3 C_2, 4 C_4, 3 C_{26}, 9 C_{52}, 4 D_2, 2 D_4, 9 D_{13}, 9 D_{26}, 9 D_{52}	3 C_2, 3 C_{13}, 4 D_2, 9 D_{13}
C27.4	3 C_2, C_3, 2 C_4, C_6, C_{12}, 3 C_{13}, 3 C_{26}, 3 C_{39}, 3 D_2, 2 D_3, D_6, 6 D_{13}, 3 D_{26}, 3 D_{39}	3 C_2, C_3, 2 C_4, C_6, 3 C_{13}, 3 C_{26}, 3 C_{39}, 3 D_2, 2 D_3, D_6, 6 D_{13}, 3 D_{26}, 3 D_{39}	2 C_2, 2 C_4, C_6, 3 D_2, D_3, D_6, 6 D_{13}, 3 D_{26}, 3 D_{39}	3 C_2, C_3, 3 C_{13}, 3 C_{26}, 3 D_2, D_3, 6 D_{13}, 3 D_{26}
C27.5	3 C_2, 2 C_4, 4 C_8, 3 C_{13}, 3 C_{26}, 3 C_{52}, 3 D_2, 6 D_{13}, 3 D_{26}	3 C_2, 2 C_4, 2 C_8, 3 C_{13}, 3 C_{26}, 3 C_{52}, 3 D_2, 6 D_{13}, 3 D_{26}	2 C_2, 2 C_4, 2 C_8, 3 C_{26}, 3 C_{52}, 3 D_2, 3 D_{13}, 3 D_{26}	3 C_2, 3 C_{13}, 3 D_2, 6 D_{13}
C27.6	2 C_2, 2 C_4, 2 C_8, 3 C_{13}, 3 C_{26}, 3 C_{52}, 2 D_2, 6 D_{13}, 3 D_{26}	2 C_2, 2 C_4, 3 C_{13}, 3 C_{26}, 3 C_{52}, 2 D_2, 6 D_{13}, 3 D_{26}	2 C_2, 2 C_4, 3 C_{26}, 3 C_{52}, 2 D_2, 6 D_{13}, 3 D_{26}	2 C_2, 3 C_{13}, 2 D_2, 6 D_{13}
C27.7	C_2, C_3, C_4, C_6, 2 C_{12}, C_{13}, D_{13}	C_2, C_3, C_4, C_6, C_{13}, D_{13}	C_2, C_4, C_6, D_{13}	C_2, C_3, C_{13}, D_{13}
C27.8	C_2, C_3, C_4, C_6, 2 C_{12}, 3 C_{13}, 3 C_{39}, 3 D_{13}	C_2, C_3, C_4, C_6, 3 C_{13}, 3 C_{39}, 3 D_{13}	C_2, C_4, C_6, 3 D_{13}	C_2, C_3, 3 C_{13}, 3 D_{13}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 28				
C28.1	2 C_2, 3 C_3, C_4, 2 C_6, C_8, 3 C_9, C_{12}, 3 C_{18}, 2 D_2, 4 D_3, D_4, 2 D_6, 6 D_9, D_{12}, 3 D_{18}	2 C_2, 3 C_3, C_4, 2 C_6, 3 C_9, C_{12}, 3 C_{18}, 2 D_2, 4 D_3, D_4, 2 D_6, 6 D_9, D_{12}, 3 D_{18}	2 C_2, C_4, 2 C_6, C_{12}, 3 C_{18}, 2 D_2, 4 D_3, D_4, 2 D_6, 6 D_9, D_{12}, 3 D_{18}	2 C_2, 3 C_3, 3 C_9, 2 D_2, 4 D_3, 6 D_9
C28.2	C_2, 3 C_3, C_6, 5 C_9, 3 C_{18}, D_3, 2 D_9	C_2, 3 C_3, C_6, 3 C_9, C_{18}, D_3, 2 D_9	C_2, C_6, C_{18}, D_3, 2 D_9	C_2, C_3, 2 C_9, D_3, 2 D_9
C28.3	2 C_2, 2 C_3, 2 C_4, 2 C_6, C_8, 2 C_{12}, 2 D_2, 3 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_3, 2 C_4, 2 C_6, 2 C_{12}, 2 D_2, 3 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_4, 2 C_6, 2 C_{12}, 2 D_2, 3 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_3, 2 D_2, 3 D_3
C28.4	C_2, 2 C_3, C_4, C_6, 2 C_8, C_{12}, D_3	C_2, 2 C_3, C_4, C_6, C_{12}, D_3	C_2, C_4, C_6, C_{12}, D_3	C_2, 2 C_3, D_3
C28.5	C_2, 3 C_3, C_6, 8 C_9, 3 C_{18}, D_3, D_9	C_2, 3 C_3, C_6, 4 C_9, C_{18}, D_3, D_9	C_2, C_6, C_{18}, D_3, D_9	C_2, C_3, 2 C_9, D_3, D_9
Genus 29				
C29.1	**Tet**, 7 C_2, C_3, 3 C_6, C_7, 7 C_{14}, 37 D_2, 8 D_7, 28 D_{14}	**Tet**, 7 C_2, C_3, 3 C_6, C_7, 7 C_{14}, 37 D_2, 8 D_7, 28 D_{14}	3 C_2, 2 C_6, C_{14}, 27 D_2, 4 D_7, 22 D_{14}	**Tet**, 7 C_2, C_3, C_7, 6 C_{14}, 37 D_2, 8 D_7, 24 D_{14}
C29.2	C_2, C_3, 2 C_5, C_6, C_7, 2 C_{15}, 4 C_{35}, 2 D_5, D_7, 4 D_{35}	C_2, C_3, C_5, C_6, C_7, 2 C_{35}, D_5, D_7, 2 D_{35}	C_2, C_6, D_5, D_7, 2 D_{35}	C_2, C_5, C_7, D_5, D_7
C29.3	3 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_{12}, C_{14}, C_{28}, 3 D_2, 2 D_7, D_{14}	3 C_2, C_3, 2 C_4, 3 C_6, C_7, 2 C_{12}, C_{14}, C_{28}, 3 D_2, 2 D_7, D_{14}	2 C_2, 2 C_4, 2 C_6, 2 C_{12}, C_{14}, C_{28}, 3 D_2, D_7, D_{14}	3 C_2, C_3, C_7, 3 D_2, 2 D_7
Genus 30				
	None			
Genus 31				
C31.1	3 C_2, 4 C_4, C_5, 2 C_8, C_{10}, 2 C_{16}, 3 C_{20}, 2 C_{40}, 4 D_2, 2 D_4, 3 D_5, D_8, 3 D_{10}, 4 D_{20}, 2 D_{40}	3 C_2, 4 C_4, C_5, C_8, C_{10}, 3 C_{20}, 2 C_{40}, 4 D_2, 2 D_4, 3 D_5, D_8, 3 D_{10}, 4 D_{20}, 2 D_{40}	3 C_2, 3 C_4, C_{10}, 2 C_{20}, 4 D_2, 2 D_4, 3 D_5, D_8, 3 D_{10}, 4 D_{20}, 2 D_{40}	3 C_2, C_4, C_5, 4 D_2, D_4, 3 D_5
C31.2	5 C_2, 3 C_4, C_5, 4 C_8, 3 C_{10}, 4 C_{16}, C_{20}, 2 C_{40}, 13 D_2, 3 D_4, 4 D_5, 6 D_8, 7 D_{10}, 2 D_{20}, 2 D_{40}	5 C_2, 3 C_4, C_5, 3 C_8, 3 C_{10}, C_{16}, C_{20}, 2 C_{40}, 13 D_2, 3 D_4, 4 D_5, 5 D_8, 7 D_{10}, 2 D_{20}, 2 D_{40}	3 C_2, 2 C_4, C_{10}, 13 D_2, 2 D_4, 3 D_5, 3 D_8, 7 D_{10}, 2 D_{20}, 2 D_{40}	5 C_2, C_4, C_5, 2 C_{10}, 13 D_2, 2 D_4, 4 D_5, 4 D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C31.3	3 C_2, 2 C_4, C_5, 3 C_7, C_{10}, 3 C_{14}, 3 C_{28}, 3 C_{35}, 3 D_2, 2 D_5, 6 D_7, D_{10}, 3 D_{14}, 3 D_{35}	3 C_2, 2 C_4, C_5, C_7, C_{10}, C_{14}, C_{35}, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, D_{35}	2 C_2, 2 C_4, C_{14}, 3 D_2, 2 D_5, D_7, D_{10}, D_{14}, D_{35}	3 C_2, C_5, C_7, C_{10}, 3 D_2, 2 D_5, D_7, D_{10}
C31.4	3 C_2, 2 C_4, C_5, 4 C_8, C_{10}, 8 C_{16}, C_{20}, 2 C_{40}, 3 D_2, 2 D_5, D_{10}	3 C_2, 2 C_4, C_5, 3 C_8, C_{10}, 2 C_{16}, C_{20}, 2 C_{40}, 3 D_2, 2 D_5, D_{10}	2 C_2, C_4, C_{10}, 3 D_2, D_5, D_{10}	3 C_2, C_4, C_5, 3 D_2, 2 D_5
C31.5	2 C_2, 2 C_4, C_5, 3 C_8, C_{10}, 4 C_{16}, C_{20}, 2 C_{40}, 2 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_5, C_8, C_{10}, C_{20}, 2 C_{40}, 2 D_2, 2 D_5, D_{10}	2 C_2, C_4, C_{10}, 2 D_2, 2 D_5, D_{10}	2 C_2, C_4, C_5, 2 D_2, 2 D_5
C31.6	C_2, C_4, C_5, 3 C_7, 3 C_{14}, 6 C_{28}, 3 C_{35}, D_5	C_2, C_4, C_5, C_7, C_{14}, C_{35}, D_5	C_2, C_4, C_{14}, D_5	C_2, C_5, C_7, D_5
Genus 32				
C32.1	C_2, 2 C_5, 2 C_{10}, 3 C_{31}, 3 D_{31}	C_2, 3 C_{31}, 3 D_{31}	C_2, 3 D_{31}	C_2, 3 C_{31}, 3 D_{31}
C32.2	C_2, 2 C_5, 2 C_{10}, 3 C_{31}, 3 D_{31}	C_2, 3 C_{31}, 3 D_{31}	C_2, 3 D_{31}	C_2, 3 C_{31}, 3 D_{31}
C32.3	3 C_2, C_3, 3 C_6, 5 C_{31}, 5 C_{62}, 3 D_2, 10 D_{31}, 5 D_{62}	3 C_2, C_3, 3 C_6, 5 C_{31}, 5 C_{62}, 3 D_2, 10 D_{31}, 5 D_{62}	3 C_2, 2 C_6, 5 C_{62}, 3 D_2, 10 D_{31}, 5 D_{62}	3 C_2, C_3, 5 C_{31}, 3 D_2, 10 D_{31}
Genus 33				
C33.1	**Tet**, 3 C_2, C_3, 4 C_4, C_6, 2 C_8, 2 C_{12}, 9 D_2, 7 D_4, 4 D_8	**Tet**, 3 C_2, C_3, 4 C_4, C_6, 2 C_8, C_{12}, 9 D_2, 7 D_4, 4 D_8	2 C_2, C_4, C_6, C_{12}, 8 D_2, 7 D_4, 4 D_8	3 C_2, 3 C_4, 2 C_8, 9 D_2, 7 D_4, 4 D_8
C33.2	**Tet**, **Oct**, 6 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, C_{12}, 22 D_2, 4 D_3, 15 D_4, 7 D_6, 11 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, C_{12}, 22 D_2, 4 D_3, 15 D_4, 7 D_6, 11 D_8, D_{12}	**Tet**, **Oct**, 3 C_2, C_4, C_6, 18 D_2, 3 D_3, 13 D_4, 6 D_6, 11 D_8, D_{12}	**Tet**, 6 C_2, C_3, 4 C_4, 6 C_8, 22 D_2, 4 D_3, 13 D_4, 11 D_8
C33.3	**Tet**, **Oct**, 7 C_2, C_3, 6 C_4, 2 C_6, 4 C_8, C_{12}, 42 D_2, D_3, 15 D_4, D_6, 8 D_8, D_{12}	**Tet**, **Oct**, 7 C_2, C_3, 6 C_4, 2 C_6, 4 C_8, C_{12}, 42 D_2, D_3, 15 D_4, D_6, 8 D_8, D_{12}	**Oct**, 3 C_2, C_4, C_6, 32 D_2, D_3, 14 D_4, D_6, 8 D_8, D_{12}	**Tet**, **Oct**, 7 C_2, C_3, 5 C_4, 4 C_8, 42 D_2, D_3, 15 D_4, 8 D_8
C33.4	**Tet**, 7 C_2, C_3, 6 C_4, 3 C_6, C_{12}, 43 D_2, 14 D_4	**Tet**, 7 C_2, C_3, 6 C_4, 3 C_6, C_{12}, 43 D_2, 14 D_4	3 C_2, 2 C_6, 30 D_2, 13 D_4	**Tet**, 7 C_2, C_3, 6 C_4, 43 D_2, 14 D_4
C33.5	**Tet**, 4 C_2, C_3, 3 C_4, 3 C_6, C_8, C_{12}, 14 D_2, 4 D_4, D_8	**Tet**, 4 C_2, C_3, 3 C_4, 3 C_6, C_8, C_{12}, 14 D_2, 4 D_4, D_8	**Tet**, 2 C_2, C_6, 12 D_2, 4 D_4, D_8	**Tet**, 4 C_2, C_3, 3 C_4, C_8, 14 D_2, 4 D_4, D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 34				
C34.1	3 C_2, 2 C_3, C_4, 4 C_6, 2 C_9, 3 C_{12}, 2 C_{18}, 4 C_{36}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_9, 2 D_{12}, 2 D_{18}, 2 D_{36}	3 C_2, 2 C_3, C_4, 4 C_6, C_9, 2 C_{12}, C_{18}, C_{36}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_9, D_{12}, 2 D_{18}, D_{36}	3 C_2, 2 C_6, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_9, D_{12}, 2 D_{18}, D_{36}	3 C_2, C_3, C_4, C_6, C_{12}, 4 D_2, 2 D_3, D_4, 2 D_6, D_{12}
C34.2	2 C_2, 2 C_3, C_4, 4 C_6, 2 C_9, C_{12}, 3 D_2, D_3, D_4, D_6, D_9	2 C_2, 2 C_3, C_4, 4 C_6, C_9, 3 D_2, D_3, D_4, D_6, D_9	2 C_2, C_4, 3 C_6, 3 D_2, D_3, D_4, D_6, D_9	2 C_2, C_3, 3 D_2, D_3
C34.3	3 C_2, 2 C_5, 6 C_{10}, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	3 C_2, C_5, 3 C_{10}, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	3 C_2, 2 C_{10}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	3 C_2, C_5, C_{11}, 3 D_2, 2 D_{11}
C34.4	3 C_2, 2 C_5, 6 C_{10}, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	3 C_2, C_5, 3 C_{10}, C_{11}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	3 C_2, 2 C_{10}, C_{22}, 3 D_2, 2 D_{11}, D_{22}	3 C_2, C_5, C_{11}, 3 D_2, 2 D_{11}
Genus 35				
C35.1	5 C_2, 3 C_4, 2 C_8, 4 C_{17}, 12 C_{34}, 4 C_{68}, 13 D_2, 3 D_4, 16 D_{17}, 28 D_{34}, 4 D_{68}	5 C_2, 3 C_4, C_8, 4 C_{17}, 12 C_{34}, 4 C_{68}, 13 D_2, 3 D_4, 16 D_{17}, 28 D_{34}, 4 D_{68}	3 C_2, 3 C_4, C_8, 4 C_{34}, 4 C_{68}, 13 D_2, 3 D_4, 12 D_{17}, 28 D_{34}, 4 D_{68}	5 C_2, 4 C_{17}, 8 C_{34}, 13 D_2, 16 D_{17}, 16 D_{34}
C35.2	3 C_2, 5 C_4, C_8, 4 C_{17}, 4 C_{34}, 12 C_{68}, 4 D_2, 2 D_4, 12 D_{17}, 12 D_{34}, 12 D_{68}	3 C_2, 5 C_4, 4 C_{17}, 4 C_{34}, 12 C_{68}, 4 D_2, 2 D_4, 12 D_{17}, 12 D_{34}, 12 D_{68}	3 C_2, 4 C_4, 4 C_{34}, 12 C_{68}, 4 D_2, 2 D_4, 12 D_{17}, 12 D_{34}, 12 D_{68}	3 C_2, 4 C_{17}, 4 D_2, 12 D_{17}
C35.3	3 C_2, C_3, 2 C_4, C_6, C_{12}, 4 C_{17}, 4 C_{34}, 4 C_{51}, 3 D_2, 2 D_3, D_6, 8 D_{17}, 4 D_{34}, 4 D_{51}	3 C_2, C_3, 2 C_4, C_6, 4 C_{17}, 4 C_{34}, 4 C_{51}, 3 D_2, 2 D_3, D_6, 8 D_{17}, 4 D_{34}, 4 D_{51}	2 C_2, 2 C_4, C_6, 3 D_2, D_3, D_6, 8 D_{17}, 4 D_{34}, 4 D_{51}	3 C_2, C_3, 4 C_{17}, 4 C_{34}, 3 D_2, D_3, 8 D_{17}, 4 D_{34}
C35.4	3 C_2, 2 C_4, 4 C_8, 4 C_{17}, 4 C_{34}, 4 C_{68}, 3 D_2, 8 D_{17}, 4 D_{34}	3 C_2, 2 C_4, 2 C_8, 4 C_{17}, 4 C_{34}, 4 C_{68}, 3 D_2, 8 D_{17}, 4 D_{34}	2 C_2, 2 C_4, 2 C_8, 4 C_{34}, 4 C_{68}, 3 D_2, 4 D_{17}, 4 D_{34}	3 C_2, 4 C_{17}, 3 D_2, 8 D_{17}
C35.5	3 C_2, 2 C_4, 4 C_8, 2 C_{17}, 2 C_{34}, 3 D_2, 4 D_{17}, 2 D_{34}	3 C_2, 2 C_4, 2 C_8, 2 C_{17}, 2 C_{34}, 3 D_2, 4 D_{17}, 2 D_{34}	2 C_2, C_4, 3 D_2, 4 D_{17}, 2 D_{34}	3 C_2, C_4, 2 C_{17}, 2 C_{34}, 3 D_2, 4 D_{17}, 2 D_{34}
C35.6	2 C_2, 2 C_4, 2 C_8, 4 C_{17}, 4 C_{34}, 4 C_{68}, 2 D_2, 8 D_{17}, 4 D_{34}	2 C_2, 2 C_4, 4 C_{17}, 4 C_{34}, 4 C_{68}, 2 D_2, 8 D_{17}, 4 D_{34}	2 C_2, 2 C_4, 4 C_{34}, 4 C_{68}, 2 D_2, 8 D_{17}, 4 D_{34}	2 C_2, 4 C_{17}, 2 D_2, 8 D_{17}
C35.7	C_2, C_3, C_4, C_6, 2 C_{12}, 4 C_{17}, 4 C_{51}, 4 D_{17}	C_2, C_3, C_4, C_6, 4 C_{17}, 4 C_{51}, 4 D_{17}	C_2, C_4, C_6, 4 D_{17}	C_2, C_3, 4 C_{17}, 4 D_{17}
C35.8	C_2, C_3, C_6, 3 C_7, 6 C_{21}, 3 D_2	C_2, C_3, C_6, C_7, C_{21}, 3 D_2	C_2, C_6, 3 D_2	C_2, C_3, C_7, 3 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 36				
	None			
Genus 37				
C37.1	2 **Tet**, 3 **Oct**, 4 C_2, 3 C_3, 3 C_4, 3 C_6, 2 C_8, C_{12}, 12 D_2, 6 D_3, 3 D_4, 6 D_6, D_{12}	2 **Tet**, 3 **Oct**, 4 C_2, 3 C_3, 3 C_4, 3 C_6, C_8, C_{12}, 12 D_2, 6 D_3, 3 D_4, 6 D_6, D_{12}	3 **Oct**, 2 C_2, 2 C_4, C_6, C_8, 11 D_2, 5 D_3, 3 D_4, 6 D_6, D_{12}	2 **Tet**, 2 **Oct**, 4 C_2, 3 C_3, C_4, 2 C_6, C_{12}, 12 D_2, 6 D_3, 2 D_4, 4 D_6, D_{12}
C37.2	6 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, C_{12}, 19 D_2, 4 D_3, 3 D_4, 7 D_6, D_{12}	6 C_2, C_3, 5 C_4, 3 C_6, C_8, C_{12}, 19 D_2, 4 D_3, 3 D_4, 7 D_6, D_{12}	3 C_2, 4 C_4, C_6, C_8, 17 D_2, 3 D_3, 3 D_4, 7 D_6, D_{12}	6 C_2, C_3, C_4, 2 C_6, C_{12}, 19 D_2, 4 D_3, 2 D_4, 5 D_6, D_{12}
C37.3	5 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, 13 D_2, 4 D_3, 6 D_6	5 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, 13 D_2, 4 D_3, 6 D_6	2 C_2, 3 C_4, 2 C_8, 11 D_2, 3 D_3, 6 D_6	5 C_2, C_3, 3 C_6, 13 D_2, 4 D_3, 6 D_6
Genus 38				
C38.1	3 C_2, C_3, 3 C_6, 6 C_{37}, 6 C_{74}, 3 D_2, 12 D_{37}, 6 D_{74}	3 C_2, C_3, 3 C_6, 6 C_{37}, 6 C_{74}, 3 D_2, 12 D_{37}, 6 D_{74}	3 C_2, 2 C_6, 6 C_{74}, 3 D_2, 12 D_{37}, 6 D_{74}	3 C_2, C_3, 6 C_{37}, 3 D_2, 12 D_{37}
Genus 39				
C39.1	2 C_2, C_3, 2 C_4, C_6, 2 C_{12}, 3 C_{19}, 3 C_{38}, 9 C_{76}, 2 D_2, D_4, 9 D_{19}, 9 D_{38}, 9 D_{76}	2 C_2, C_3, 2 C_4, C_6, C_{12}, 3 C_{19}, 3 C_{38}, 9 C_{76}, 2 D_2, D_4, 9 D_{19}, 9 D_{38}, 9 D_{76}	2 C_2, 2 C_4, C_6, C_{12}, 3 C_{38}, 9 C_{76}, 2 D_2, D_4, 9 D_{19}, 9 D_{38}, 9 D_{76}	2 C_2, 3 C_{19}, 2 D_2, 9 D_{19}
Genus 40				
C40.1	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, C_{12}, 2 C_{13}, 2 C_{26}, 4 C_{39}, 3 D_2, D_3, D_4, 2 D_{13}, 2 D_{26}, 4 D_{39}	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, 2 C_{13}, 2 C_{26}, 4 C_{39}, 3 D_2, D_3, D_4, 2 D_{13}, 2 D_{26}, 4 D_{39}	2 **Tet**, **Oct**, 2 C_2, C_4, 2 C_6, 2 C_{26}, 3 D_2, D_3, D_4, 2 D_{13}, 2 D_{26}, 4 D_{39}	2 C_2, C_3, 2 C_{13}, 4 C_{39}, 3 D_2, D_3, 2 D_{13}, 4 D_{39}
C40.2	3 C_2, 3 C_3, 5 C_6, 2 C_{13}, 2 C_{26}, 2 C_{39}, 3 D_2, 2 D_3, D_6, 4 D_{13}, 2 D_{26}, 2 D_{39}	3 C_2, 3 C_3, 5 C_6, 2 C_{13}, 2 C_{26}, 2 C_{39}, 3 D_2, 2 D_3, D_6, 4 D_{13}, 2 D_{26}, 2 D_{39}	3 C_2, 5 C_6, 2 C_{26}, 3 D_2, 2 D_3, D_6, 4 D_{13}, 2 D_{26}, 2 D_{39}	3 C_2, C_3, 2 C_{13}, 2 C_{39}, 3 D_2, 2 D_3, 4 D_{13}, 2 D_{39}
C40.3	3 C_2, 3 C_3, 5 C_6, 2 C_{13}, 2 C_{26}, 4 C_{39}, 4 C_{78}, 3 D_2, 2 D_3, D_6, 4 D_{13}, 2 D_{26}, 8 D_{39}, 4 D_{78}	3 C_2, 3 C_3, 5 C_6, 2 C_{13}, 2 C_{26}, 4 C_{39}, 4 C_{78}, 3 D_2, 2 D_3, D_6, 4 D_{13}, 2 D_{26}, 8 D_{39}, 4 D_{78}	3 C_2, 4 C_6, 2 C_{26}, 4 C_{78}, 3 D_2, 2 D_3, D_6, 4 D_{13}, 2 D_{26}, 8 D_{39}, 4 D_{78}	3 C_2, C_3, 2 C_{13}, 4 C_{39}, 3 D_2, 2 D_3, 4 D_{13}, 8 D_{39}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C40.4	3 C_2, C_3, C_4, 3 C_6, C_{12}, 2 C_{13}, 4 C_{26}, 4 D_2, D_4, 2 D_{13}, 2 D_{26}	3 C_2, C_3, C_4, 3 C_6, 2 C_{13}, 4 C_{26}, 4 D_2, D_4, 2 D_{13}, 2 D_{26}	3 C_2, C_4, 3 C_6, 4 C_{26}, 4 D_2, D_4, 2 D_{13}, 2 D_{26}	3 C_2, 2 C_{13}, 4 D_2, 2 D_{13}
C40.5	3 C_2, C_3, C_4, 3 C_6, C_{12}, 2 C_{13}, 2 C_{26}, 4 C_{52}, 4 D_2, D_4, 4 D_{13}, 4 D_{26}, 4 D_{52}	3 C_2, C_3, C_4, 3 C_6, 2 C_{13}, 2 C_{26}, 4 C_{52}, 4 D_2, D_4, 4 D_{13}, 4 D_{26}, 4 D_{52}	3 C_2, 2 C_6, 2 C_{26}, 4 D_2, D_4, 4 D_{13}, 4 D_{26}, 4 D_{52}	3 C_2, C_4, 2 C_{13}, 4 D_2, D_4, 4 D_{13}
C40.6	C_2, C_3, C_6, 3 C_9, 2 C_{13}, 3 C_{18}, 2 C_{39}, 2 D_{13}	C_2, C_3, C_6, 2 C_{13}, 2 C_{39}, 2 D_{13}	C_2, C_6, 2 D_{13}	C_2, 2 C_{13}, 2 D_{13}
C40.7	3 C_2, 2 C_3, C_4, 5 C_6, 2 C_9, C_{12}, 5 C_{18}, 4 D_2, D_3, D_4, D_6, D_9, D_{18}	3 C_2, 2 C_3, C_4, 5 C_6, C_9, 2 C_{18}, 4 D_2, D_3, D_4, D_6, D_9, D_{18}	3 C_2, C_4, 4 C_6, C_{18}, 4 D_2, D_3, D_4, D_6, D_9, D_{18}	3 C_2, C_3, 4 D_2, D_3
Genus 41				
C41.1	7 C_2, 6 C_4, C_5, 2 C_8, C_{10}, 51 D_2, 12 D_4, 2 D_5, D_{10}	7 C_2, 6 C_4, C_5, C_8, C_{10}, 51 D_2, 12 D_4, 2 D_5, D_{10}	3 C_2, 4 C_4, C_8, 33 D_2, 12 D_4, 2 D_5, D_{10}	7 C_2, 2 C_4, C_5, C_{10}, 51 D_2, 8 D_4, 2 D_5, D_{10}
C41.2	3 C_2, 3 C_4, C_5, 3 C_8, C_{10}, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}	3 C_2, 3 C_4, C_5, 2 C_8, C_{10}, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}	2 C_2, 2 C_4, C_8, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}	3 C_2, C_4, C_5, C_8, C_{10}, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}
C41.3	3 C_2, 3 C_4, C_5, 3 C_8, C_{10}, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}	3 C_2, 3 C_4, C_5, 2 C_8, C_{10}, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}	2 C_2, 2 C_4, C_8, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}	3 C_2, C_4, C_5, C_8, C_{10}, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}
C41.4	9 C_2, 6 C_4, C_5, 2 C_8, 7 C_{10}, 12 C_{20}, 54 D_2, 12 D_4, 6 D_5, 30 D_{10}, 48 D_{20}	9 C_2, 6 C_4, C_5, C_8, 7 C_{10}, 12 C_{20}, 54 D_2, 12 D_4, 6 D_5, 30 D_{10}, 48 D_{20}	3 C_2, 3 C_4, C_8, C_{10}, 37 D_2, 9 D_4, 3 D_5, 21 D_{10}, 36 D_{20}	9 C_2, 3 C_4, C_5, 6 C_{10}, 12 C_{20}, 54 D_2, 12 D_4, 6 D_5, 27 D_{10}, 48 D_{20}
C41.5	4 C_2, 5 C_4, C_5, 3 C_8, 2 C_{10}, 4 C_{20}, 4 C_{40}, 8 D_2, 4 D_4, 3 D_5, D_8, 5 D_{10}, 8 D_{20}, 4 D_{40}	4 C_2, 5 C_4, C_5, 2 C_8, 2 C_{10}, 4 C_{20}, 4 C_{40}, 8 D_2, 4 D_4, 3 D_5, D_8, 5 D_{10}, 8 D_{20}, 4 D_{40}	3 C_2, 2 C_4, C_8, C_{10}, 8 D_2, 4 D_4, 3 D_5, D_8, 5 D_{10}, 8 D_{20}, 4 D_{40}	4 C_2, 3 C_4, C_5, C_8, C_{10}, 4 C_{20}, 4 C_{40}, 8 D_2, 4 D_4, 3 D_5, D_8, 3 D_{10}, 8 D_{20}, 4 D_{40}
C41.6	5 C_2, 5 C_4, C_5, 3 C_8, 4 C_{10}, 2 C_{20}, 4 C_{40}, 15 D_2, 8 D_4, 3 D_5, D_8, 7 D_{10}, 6 D_{20}, 4 D_{40}	5 C_2, 5 C_4, C_5, 2 C_8, 4 C_{10}, 2 C_{20}, 4 C_{40}, 15 D_2, 8 D_4, 3 D_5, D_8, 7 D_{10}, 6 D_{20}, 4 D_{40}	3 C_2, 3 C_4, C_8, C_{10}, 13 D_2, 7 D_4, 3 D_5, D_8, 7 D_{10}, 6 D_{20}, 4 D_{40}	5 C_2, 2 C_4, C_5, C_8, 3 C_{10}, 2 C_{20}, 4 C_{40}, 15 D_2, 6 D_4, 3 D_5, D_8, 5 D_{10}, 6 D_{20}, 4 D_{40}
C41.7	4 C_2, 4 C_4, C_5, 3 C_8, 3 C_{10}, 8 C_{20}, 8 C_{40}, 12 D_2, 5 D_4, 3 D_5, 4 D_8, 9 D_{10}, 20 D_{20}, 16 D_{40}	4 C_2, 4 C_4, C_5, 2 C_8, 3 C_{10}, 8 C_{20}, 8 C_{40}, 12 D_2, 5 D_4, 3 D_5, 4 D_8, 9 D_{10}, 20 D_{20}, 16 D_{40}	3 C_2, 3 C_4, 2 C_8, C_{10}, 4 C_{20}, 8 C_{40}, 12 D_2, 5 D_4, 3 D_5, 4 D_8, 9 D_{10}, 20 D_{20}, 16 D_{40}	4 C_2, C_4, C_5, 2 C_{10}, 4 C_{20}, 12 D_2, 2 D_4, 3 D_5, 6 D_{10}, 8 D_{20}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C41.8	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, C_5, C_6, 2 C_{10}, C_{12}, C_{15}, C_{20}, 16 D_2, 2 D_3, 4 D_4, 3 D_5, D_6, 5 D_{10}, D_{15}, D_{20}	**Tet**, 2 **Oct**, 5 C_2, C_3, 6 C_4, C_5, C_6, 2 C_{10}, C_{15}, C_{20}, 16 D_2, 2 D_3, 4 D_4, 3 D_5, D_6, 5 D_{10}, D_{15}, D_{20}	**Oct**, 3 C_2, 3 C_4, C_6, 13 D_2, D_3, 3 D_4, 3 D_5, D_6, 5 D_{10}, D_{15}, D_{20}	**Tet**, 5 C_2, C_3, 2 C_4, C_5, 2 C_{10}, C_{20}, 16 D_2, D_3, 4 D_4, 3 D_5, 5 D_{10}, D_{20}
C41.9	5 C_2, C_3, 3 C_4, C_5, 4 C_6, 3 C_{10}, 2 C_{12}, C_{15}, 4 C_{20}, 3 C_{30}, 14 D_2, D_3, 2 D_4, 4 D_5, 2 D_6, 8 D_{10}, 4 D_{15}, 8 D_{20}, 6 D_{30}	5 C_2, C_3, 3 C_4, C_5, 4 C_6, 3 C_{10}, C_{12}, C_{15}, 4 C_{20}, 3 C_{30}, 14 D_2, D_3, 2 D_4, 4 D_5, 2 D_6, 8 D_{10}, 4 D_{15}, 8 D_{20}, 6 D_{30}	3 C_2, 2 C_4, C_6, 12 D_2, D_3, 2 D_4, 4 D_5, 2 D_6, 8 D_{10}, 4 D_{15}, 8 D_{20}, 6 D_{30}	5 C_2, C_3, C_4, C_5, 3 C_{10}, 4 C_{20}, 14 D_2, D_3, 2 D_4, 4 D_5, 8 D_{10}, 8 D_{20}
C41.10	5 C_2, 2 C_4, 5 C_5, 11 C_{10}, 4 C_{20}, 13 D_2, 12 D_5, 16 D_{10}	5 C_2, 2 C_4, 4 C_5, 8 C_{10}, C_{20}, 13 D_2, 10 D_5, 12 D_{10}	3 C_2, 2 C_4, C_{10}, 11 D_2, 9 D_5, 11 D_{10}	5 C_2, 4 C_5, 5 C_{10}, 13 D_2, 10 D_5, 8 D_{10}
C41.11	3 C_2, C_3, 2 C_4, C_5, C_6, 3 C_9, C_{10}, C_{12}, C_{15}, 3 C_{18}, 3 C_{36}, 3 C_{45}, 3 D_2, 2 D_3, 2 D_5, D_6, 6 D_9, D_{10}, D_{15}, 3 D_{18}, 3 D_{45}	3 C_2, C_3, 2 C_4, C_5, C_6, C_9, C_{10}, C_{15}, C_{18}, C_{45}, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_9, D_{10}, D_{15}, D_{18}, D_{45}	2 C_2, 2 C_4, C_6, C_{18}, 3 D_2, D_3, 2 D_5, D_6, D_9, D_{10}, D_{15}, D_{18}, D_{45}	3 C_2, C_3, C_5, C_9, C_{10}, 3 D_2, D_3, 2 D_5, D_9, D_{10}
C41.12	2 **Tet**, 2 **Oct**, 5 C_2, C_3, 5 C_4, 2 C_6, C_8, 22 D_2, D_3, 10 D_4, D_6	2 **Tet**, 2 **Oct**, 5 C_2, C_3, 5 C_4, 2 C_6, 22 D_2, D_3, 10 D_4, D_6	**Tet**, 2 **Oct**, 3 C_2, 3 C_4, C_6, 19 D_2, D_3, 10 D_4, D_6	2 **Tet**, **Oct**, 5 C_2, C_3, 2 C_4, 22 D_2, D_3, 4 D_4
C41.13	3 C_2, 3 C_4, C_5, C_8, 12 D_2, 3 D_4, D_5	3 C_2, 3 C_4, C_5, 12 D_2, 3 D_4, D_5	2 C_2, 2 C_4, 10 D_2, 3 D_4, D_5	3 C_2, C_4, C_5, 12 D_2, 2 D_4, D_5
C41.14	7 C_2, 3 C_4, C_5, 4 C_8, 7 C_{10}, 4 C_{20}, 35 D_2, 4 D_5, 16 D_{10}	7 C_2, 3 C_4, C_5, 2 C_8, 7 C_{10}, 4 C_{20}, 35 D_2, 4 D_5, 16 D_{10}	2 C_2, 2 C_4, 2 C_8, C_{10}, 23 D_2, 2 D_5, 12 D_{10}	7 C_2, C_4, C_5, 6 C_{10}, 4 C_{20}, 35 D_2, 4 D_5, 14 D_{10}
C41.15	5 C_2, 6 C_4, C_5, 6 C_8, 3 C_{10}, 4 C_{20}, 13 D_2, 3 D_4, 4 D_5, 8 D_{10}, 4 D_{20}	5 C_2, 6 C_4, C_5, 4 C_8, 3 C_{10}, 4 C_{20}, 13 D_2, 3 D_4, 4 D_5, 8 D_{10}, 4 D_{20}	3 C_2, 4 C_4, 4 C_8, 2 C_{10}, 2 C_{20}, 11 D_2, 2 D_4, 2 D_5, 6 D_{10}, 3 D_{20}	5 C_2, 2 C_4, C_5, C_{10}, 2 C_{20}, 13 D_2, 3 D_4, 4 D_5, 4 D_{10}, 4 D_{20}
C41.16	5 C_2, 5 C_4, C_5, 4 C_8, 5 C_{10}, 2 C_{20}, 15 D_2, 6 D_4, 2 D_5, 6 D_{10}, 4 D_{20}	5 C_2, 5 C_4, C_5, 2 C_8, 5 C_{10}, 2 C_{20}, 15 D_2, 6 D_4, 2 D_5, 6 D_{10}, 4 D_{20}	3 C_2, 4 C_4, 2 C_8, 2 C_{10}, 13 D_2, 5 D_4, 2 D_5, 6 D_{10}, 4 D_{20}	5 C_2, C_4, C_5, 3 C_{10}, 2 C_{20}, 15 D_2, 2 D_4, 2 D_5, 2 D_{10}, 4 D_{20}
C41.17	4 C_2, 4 C_4, C_5, 4 C_8, 3 C_{10}, 4 C_{20}, 9 D_2, D_4, 2 D_5, 6 D_{10}, 4 D_{20}	4 C_2, 4 C_4, C_5, 2 C_8, 3 C_{10}, 4 C_{20}, 9 D_2, D_4, 2 D_5, 6 D_{10}, 4 D_{20}	3 C_2, 2 C_4, 2 C_8, 2 C_{10}, 9 D_2, D_4, 2 D_5, 6 D_{10}, 4 D_{20}	4 C_2, 2 C_4, C_5, C_{10}, 4 C_{20}, 9 D_2, D_4, 2 D_5, 2 D_{10}, 4 D_{20}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C41.18	3 C_2, 4 C_4, C_5, 2 C_8, 3 C_{10}, 8 C_{20}, 8 D_2, D_4, 2 D_5, 6 D_{10}, 4 D_{20}	3 C_2, 4 C_4, C_5, 3 C_{10}, 8 C_{20}, 8 D_2, D_4, 2 D_5, 6 D_{10}, 4 D_{20}	2 C_2, 3 C_4, C_{10}, 4 C_{20}, 8 D_2, D_4, 2 D_5, 6 D_{10}, 4 D_{20}	3 C_2, C_4, C_5, 2 C_{10}, 4 C_{20}, 8 D_2, 2 D_5, 4 D_{10}
C41.19	3 C_2, 5 C_4, 3 C_8, 2 C_{16}, 8 D_2, 2 D_4	3 C_2, 5 C_4, C_8, 8 D_2, 2 D_4	2 C_2, 2 C_4, 8 D_2, 2 D_4	3 C_2, 3 C_4, C_8, 8 D_2, 2 D_4
C41.20	2 C_2, C_3, 2 C_4, C_5, C_6, 2 C_8, C_{10}, C_{12}, C_{15}, C_{20}, 2 C_{24}, C_{30}, 2 D_2, D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{15}, C_{20}, C_{30}, 2 D_2, D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	2 C_2, 2 C_4, C_6, C_{10}, C_{20}, C_{30}, 2 D_2, D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	2 C_2, C_3, C_5, 2 D_2, D_3, 2 D_5
C41.21	3 C_2, C_3, 2 C_4, C_5, C_6, 4 C_8, C_{10}, C_{12}, C_{15}, C_{20}, 2 C_{24}, C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	3 C_2, C_3, 2 C_4, C_5, C_6, 2 C_8, C_{10}, C_{15}, C_{20}, C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	2 C_2, 2 C_4, C_6, 2 C_8, C_{10}, C_{20}, C_{30}, 3 D_2, D_3, D_5, D_6, D_{10}, D_{15}, D_{30}	3 C_2, C_3, C_5, 3 D_2, D_3, 2 D_5
C41.22	**Tet**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, 2 C_{12}, C_{15}, 7 D_2, 2 D_5, 2 D_{10}	**Tet**, 3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{15}, 7 D_2, 2 D_5, 2 D_{10}	2 C_2, C_4, C_6, 6 D_2, 2 D_5, 2 D_{10}	**Tet**, 3 C_2, C_3, C_5, C_{10}, 7 D_2, 2 D_5, 2 D_{10}
C41.23	5 C_2, C_3, 2 C_4, C_5, 5 C_6, 3 C_{10}, 4 C_{12}, C_{15}, 3 C_{30}, 13 D_2, 4 D_5, 6 D_{10}	5 C_2, C_3, 2 C_4, C_5, 5 C_6, 3 C_{10}, 2 C_{12}, C_{15}, 3 C_{30}, 13 D_2, 4 D_5, 6 D_{10}	3 C_2, 2 C_4, C_6, 11 D_2, 4 D_5, 6 D_{10}	5 C_2, C_3, C_5, 3 C_{10}, 13 D_2, 4 D_5, 6 D_{10}
C41.24	7 C_2, 3 C_7, 9 C_{14}, 69 D_2	7 C_2, C_7, 3 C_{14}, 69 D_2	3 C_2, 2 C_{14}, 45 D_2	7 C_2, C_7, 69 D_2
C41.25	3 C_2, 2 C_4, 5 C_5, 9 C_{10}, 8 C_{20}, 3 D_2, 2 D_5, D_{10}	3 C_2, 2 C_4, 4 C_5, 6 C_{10}, 2 C_{20}, 3 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_{10}, 3 D_2, 2 D_5, D_{10}	3 C_2, 4 C_5, 3 C_{10}, 3 D_2, 2 D_5, D_{10}
C41.26	C_2, C_3, C_4, C_5, C_6, 3 C_9, 2 C_{12}, C_{15}, 3 C_{18}, 6 C_{36}, 3 C_{45}, D_5	C_2, C_3, C_4, C_5, C_6, C_9, C_{15}, C_{18}, C_{45}, D_5	C_2, C_4, C_6, C_{18}, D_5	C_2, C_3, C_5, C_9, D_5
Genus 42				
C42.1	C_2, 2 C_5, 2 C_{10}, 4 C_{41}, 4 D_{41}	C_2, 4 C_{41}, 4 D_{41}	C_2, 4 D_{41}	C_2, 4 C_{41}, 4 D_{41}
C42.2	C_2, 2 C_5, 2 C_{10}, 4 C_{41}, 4 D_{41}	C_2, 4 C_{41}, 4 D_{41}	C_2, 4 D_{41}	C_2, 4 C_{41}, 4 D_{41}
C42.3	C_2, C_4, 2 C_8, 5 C_{41}, 5 D_{41}	C_2, C_4, 5 C_{41}, 5 D_{41}	C_2, C_4, 5 D_{41}	C_2, 5 C_{41}, 5 D_{41}
Genus 43				
C43.1	**Tet**, C_2, 2 C_3, C_6, C_7, 2 C_9, D_2, D_3, D_7, D_9	**Tet**, C_2, 2 C_3, C_6, C_7, C_9, D_2, D_3, D_7, D_9	**Tet**, C_2, C_6, D_2, D_3, D_7, D_9	C_2, C_3, C_7, D_2, D_3, D_7

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C43.2	2 C_2, 3 C_3, 2 C_4, 3 C_6, C_7, 3 C_{12}, C_{14}, 2 C_{21}, 3 C_{28}, 2 C_{42}, 6 C_{84}, 2 D_2, D_3, D_4, D_6, 3 D_7, D_{12}, 3 D_{14}, 6 D_{21}, 3 D_{28}, 6 D_{42}, 6 D_{84}	2 C_2, 3 C_3, 2 C_4, 3 C_6, C_7, 2 C_{12}, C_{14}, 2 C_{21}, 3 C_{28}, 2 C_{42}, 6 C_{84}, 2 D_2, D_3, D_4, D_6, 3 D_7, D_{12}, 3 D_{14}, 6 D_{21}, 3 D_{28}, 6 D_{42}, 6 D_{84}	2 C_2, 2 C_4, 3 C_6, 2 C_{12}, C_{14}, 3 C_{28}, 2 C_{42}, 6 C_{84}, 2 D_2, D_3, D_4, D_6, 3 D_7, D_{12}, 3 D_{14}, 6 D_{21}, 3 D_{28}, 6 D_{42}, 6 D_{84}	2 C_2, C_3, C_7, 2 C_{21}, 2 D_2, D_3, 3 D_7, 6 D_{21}
C43.3	C_2, 3 C_3, C_6, C_7, 6 C_9, 2 C_{21}, 6 C_{63}, D_3, D_7, 3 D_9, 2 D_{21}, 6 D_{63}	C_2, 3 C_3, C_6, C_7, 4 C_9, 2 C_{21}, 6 C_{63}, D_3, D_7, 3 D_9, 2 D_{21}, 6 D_{63}	C_2, C_6, D_3, D_7, 3 D_9, 2 D_{21}, 6 D_{63}	C_2, 2 C_3, C_7, D_3, D_7
C43.4	C_2, 2 C_3, C_6, C_7, 2 C_9, 2 C_{21}, 6 C_{63}, D_3, D_7, D_9, 2 D_{21}, 6 D_{63}	C_2, 2 C_3, C_6, C_7, C_9, 2 C_{21}, 6 C_{63}, D_3, D_7, D_9, 2 D_{21}, 6 D_{63}	C_2, C_6, D_3, D_7, D_9, 2 D_{21}, 6 D_{63}	C_2, C_3, C_7, D_3, D_7
C43.5	C_2, 2 C_3, C_6, C_7, 2 C_9, 2 C_{21}, 6 C_{63}, D_3, D_7, D_9, 2 D_{21}, 6 D_{63}	C_2, 2 C_3, C_6, C_7, C_9, 2 C_{21}, 6 C_{63}, D_3, D_7, D_9, 2 D_{21}, 6 D_{63}	C_2, C_6, D_3, D_7, D_9, 2 D_{21}, 6 D_{63}	C_2, C_3, C_7, D_3, D_7
C43.6	2 C_2, C_3, 2 C_4, C_6, C_7, 2 C_{12}, C_{14}, 3 C_{28}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 3 D_{28}	2 C_2, C_3, 2 C_4, C_6, C_7, C_{12}, C_{14}, 3 C_{28}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 3 D_{28}	2 C_2, 2 C_4, C_6, C_{12}, C_{14}, 3 C_{28}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 3 D_{28}	2 C_2, C_7, 2 D_2, 3 D_7
C43.7	C_2, C_3, C_6, 10 C_7, 3 C_{21}, 10 D_7	C_2, C_3, C_6, 8 C_7, 8 D_7	C_2, C_6, 8 D_7	C_2, 8 C_7, 8 D_7
C43.8	C_2, 2 C_3, 2 C_5, C_6, 2 C_9, 6 C_{15}, 8 C_{45}, D_3, 2 D_5, D_9, 4 D_{15}, 4 D_{45}	C_2, 2 C_3, C_5, C_6, C_9, 2 C_{15}, C_{45}, D_3, D_5, D_9, D_{15}, D_{45}	C_2, C_6, D_3, D_5, D_9, D_{15}, D_{45}	C_2, C_3, C_5, C_{15}, D_3, D_5, D_{15}
C43.9	3 C_2, 2 C_3, 2 C_4, 4 C_6, 2 C_9, 5 C_{12}, 2 C_{18}, 3 C_{36}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, 2 C_3, 2 C_4, 4 C_6, C_9, 3 C_{12}, C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	2 C_2, 2 C_4, 3 C_6, 3 C_{12}, C_{18}, 3 D_2, D_3, D_6, D_9, D_{18}	3 C_2, C_3, 3 D_2, D_3
C43.10	C_2, C_3, 2 C_5, C_6, C_7, 2 C_{10}, 4 C_{15}, 4 C_{30}, 2 C_{35}, D_7	C_2, C_3, C_6, C_7, D_7	C_2, C_6, D_7	C_2, C_7, D_7
Genus 44				
C44.1	3 C_2, C_3, 3 C_6, 7 C_{43}, 7 C_{86}, 3 D_2, 14 D_{43}, 7 D_{86}	3 C_2, C_3, 3 C_6, 7 C_{43}, 7 C_{86}, 3 D_2, 14 D_{43}, 7 D_{86}	3 C_2, 2 C_6, 7 C_{86}, 3 D_2, 14 D_{43}, 7 D_{86}	3 C_2, C_3, 7 C_{43}, 3 D_2, 14 D_{43}
Genus 45				
C45.1	3 C_2, 4 C_4, 6 C_8, 4 C_{16}, 4 C_{32}, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, 4 C_4, 4 C_8, 2 C_{16}, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, 3 C_4, 3 C_8, 4 D_2, 2 D_4, 2 D_8, D_{16}	3 C_2, C_4, 4 D_2, D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C45.2	**Tet**, C_2, C_3, 2 C_5, 4 C_{15}, 7 D_2	**Tet**, C_2, C_3, C_5, C_{15}, 7 D_2	**Tet**, C_2, 7 D_2	**Tet**, C_2, C_3, C_5, C_{15}, 7 D_2
Genus 46				
C46.1	2 **Tet**, **Oct**, 2 **Ico**, 2 C_2, 2 C_3, C_4, 2 C_5, C_6, 2 C_8, 2 C_{10}, C_{12}, 2 C_{15}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, D_6, 2 D_8, 2 D_{10}, D_{12}, 2 D_{15}	2 **Tet**, **Oct**, 2 **Ico**, 2 C_2, 2 C_3, C_4, 2 C_5, C_6, C_8, 2 C_{10}, C_{12}, 2 C_{15}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, D_6, D_8, 2 D_{10}, D_{12}, 2 D_{15}	2 **Tet**, **Oct**, 2 **Ico**, 2 C_2, C_6, 2 C_{10}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, D_6, D_8, 2 D_{10}, D_{12}, 2 D_{15}	2 **Tet**, **Oct**, 2 C_2, 2 C_3, C_4, 2 C_5, 2 C_{15}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, 2 D_{15}
C46.2	C_2, 3 C_3, C_4, C_5, C_6, 2 C_{12}, 9 C_{15}, 2 D_3, D_5, 8 D_{15}	C_2, 3 C_3, C_4, C_5, C_6, C_{12}, 9 C_{15}, 2 D_3, D_5, 8 D_{15}	C_2, C_4, C_6, C_{12}, 2 D_3, D_5, 8 D_{15}	C_2, 2 C_3, C_5, 8 C_{15}, 2 D_3, D_5, 8 D_{15}
C46.3	2 C_2, 3 C_3, 2 C_4, 2 C_6, C_8, 2 C_{12}, 2 C_{24}, 2 D_2, 4 D_3, D_4, 2 D_6, 2 D_{12}	2 C_2, 3 C_3, 2 C_4, 2 C_6, C_{12}, 2 D_2, 4 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_4, 2 C_6, C_{12}, 2 D_2, 4 D_3, D_4, 2 D_6, D_{12}	2 C_2, 3 C_3, 2 D_2, 4 D_3
C46.4	2 C_2, 3 C_3, C_4, 2 C_6, C_8, 2 D_2, 5 D_3, D_4, 2 D_6	2 C_2, 3 C_3, C_4, 2 C_6, 2 D_2, 5 D_3, D_4, 2 D_6	2 C_2, C_4, 2 C_6, 2 D_2, 5 D_3, D_4, 2 D_6	2 C_2, 3 C_3, 2 D_2, 5 D_3
C46.5	3 C_2, 5 C_3, 6 C_6, 4 C_9, 2 C_{18}, 3 D_2, 5 D_3, 2 D_6, 3 D_9, D_{18}	3 C_2, 5 C_3, 6 C_6, 3 C_9, C_{18}, 3 D_2, 5 D_3, 2 D_6, 3 D_9, D_{18}	3 C_2, 5 C_6, 3 D_2, 5 D_3, 2 D_6, 3 D_9, D_{18}	3 C_2, 4 C_3, 3 D_2, 5 D_3
C46.6	C_2, 4 C_5, 2 C_{10}, 6 C_{25}, 2 D_5, 2 D_{25}	C_2, 2 C_5, C_{10}, 2 C_{25}, D_5, D_{25}	C_2, C_{10}, D_5, D_{25}	C_2, C_5, D_5
C46.7	C_2, 4 C_5, 2 C_{10}, 6 C_{25}, 2 D_5, 2 D_{25}	C_2, 2 C_5, C_{10}, 2 C_{25}, D_5, D_{25}	C_2, C_{10}, D_5, D_{25}	C_2, C_5, D_5
C46.8	C_2, 3 C_3, C_4, C_6, 2 C_8, 2 C_{12}, 4 C_{24}, D_3	C_2, 3 C_3, C_4, C_6, C_{12}, D_3	C_2, C_4, C_6, C_{12}, D_3	C_2, 3 C_3, D_3
Genus 47				
	None			
Genus 48				
	None			
Genus 49				
C49.1	2 **Tet**, 6 **Oct**, **Ico**, 5 C_2, C_3, 5 C_4, C_5, 3 C_6, C_8, C_{12}, 31 D_2, 4 D_3, 16 D_4, D_5, 7 D_6, D_8, D_{12}	2 **Tet**, 6 **Oct**, 5 C_2, C_3, 5 C_4, 3 C_6, C_8, C_{12}, 31 D_2, 4 D_3, 16 D_4, 7 D_6, D_8, D_{12}	**Tet**, 5 **Oct**, 2 C_2, C_4, 24 D_2, 3 D_3, 14 D_4, 7 D_6, D_8, D_{12}	2 **Tet**, 4 **Oct**, 5 C_2, C_3, 4 C_4, 3 C_6, C_8, C_{12}, 31 D_2, 4 D_3, 14 D_4, 7 D_6, D_8, D_{12}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C49.2	3 **Tet**, 6 **Oct**, 6 C_2, 2 C_3, 6 C_4, 3 C_6, C_8, C_{12}, 35 D_2, 5 D_3, 19 D_4, 6 D_6, D_8, D_{12}	3 **Tet**, 6 **Oct**, 6 C_2, 2 C_3, 6 C_4, 3 C_6, C_8, C_{12}, 35 D_2, 5 D_3, 19 D_4, 6 D_6, D_8, D_{12}	5 **Oct**, 3 C_2, C_4, C_6, 27 D_2, 4 D_3, 17 D_4, 6 D_6, D_8, D_{12}	3 **Tet**, 3 **Oct**, 6 C_2, 2 C_3, 5 C_4, 2 C_6, C_8, C_{12}, 35 D_2, 5 D_3, 17 D_4, 5 D_6, D_8, D_{12}
C49.3	2 **Tet**, **Oct**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 2 C_5, 2 C_6, 10 D_2, D_3, 5 D_4, 2 D_5, D_6	2 **Tet**, **Oct**, 3 C_2, C_3, 2 C_4, 2 C_6, 10 D_2, D_3, 5 D_4, D_6	**Tet**, **Oct**, C_2, 5 D_2, D_3, 5 D_4, D_6	2 **Tet**, **Oct**, 3 C_2, C_3, 2 C_4, 2 C_6, 10 D_2, D_3, 5 D_4, D_6
C49.4	2 **Tet**, 5 C_2, 3 C_3, 3 C_4, 6 C_6, 3 C_{12}, 19 D_2, 3 D_3, 4 D_4, 7 D_6, 6 D_{12}	2 **Tet**, 5 C_2, 3 C_3, 3 C_4, 6 C_6, 3 C_{12}, 19 D_2, 3 D_3, 4 D_4, 7 D_6, 6 D_{12}	3 C_2, 4 C_6, 16 D_2, 2 D_3, 4 D_4, 6 D_6, 6 D_{12}	5 C_2, C_3, 3 C_4, C_6, 3 C_{12}, 19 D_2, 3 D_3, 4 D_4, 5 D_6, 6 D_{12}
C49.5	5 **Tet**, 7 **Oct**, 5 C_2, 3 C_3, 4 C_4, 3 C_6, 18 D_2, 5 D_3, 11 D_4, 3 D_6	5 **Tet**, 7 **Oct**, 5 C_2, 3 C_3, 4 C_4, 3 C_6, 18 D_2, 5 D_3, 11 D_4, 3 D_6	7 **Oct**, 3 C_2, 2 C_6, 11 D_2, 5 D_3, 11 D_4, 3 D_6	5 **Tet**, **Oct**, 5 C_2, 3 C_3, 4 C_4, C_6, 18 D_2, 5 D_3, 11 D_4, D_6
C49.6	**Tet**, 6 C_2, C_3, 5 C_4, 3 C_6, 4 C_{12}, 31 D_2, 8 D_4	**Tet**, 6 C_2, C_3, 5 C_4, 3 C_6, 3 C_{12}, 31 D_2, 8 D_4	3 C_2, 2 C_4, 2 C_6, 3 C_{12}, 25 D_2, 8 D_4	6 C_2, 3 C_4, 31 D_2, 8 D_4
C49.7	**Tet**, 6 C_2, C_3, 5 C_4, 3 C_6, C_{12}, 33 D_2, 14 D_4	**Tet**, 6 C_2, C_3, 5 C_4, 3 C_6, 33 D_2, 14 D_4	3 C_2, C_4, 2 C_6, 25 D_2, 14 D_4	6 C_2, 4 C_4, 33 D_2, 12 D_4
C49.8	3 C_2, 2 C_4, 3 C_7, 3 C_{14}, 6 C_{28}, 15 D_2	3 C_2, 2 C_4, C_7, C_{14}, C_{28}, 15 D_2	2 C_2, C_4, C_{14}, 15 D_2	3 C_2, C_4, C_7, 15 D_2
C49.9	3 C_2, 2 C_4, 3 C_7, 3 C_{14}, 6 C_{28}, 15 D_2	3 C_2, 2 C_4, C_7, C_{14}, 15 D_2	2 C_2, C_4, C_{14}, 12 D_2	3 C_2, C_7, 15 D_2
Genus 50				
C50.1	3 C_2, C_3, C_4, 2 C_6, 4 C_7, 4 C_{14}, 4 D_2, D_3, D_4, D_6, 8 D_7, 4 D_{14}	3 C_2, C_3, C_4, 2 C_6, 4 C_7, 4 C_{14}, 4 D_2, D_3, D_4, D_6, 8 D_7, 4 D_{14}	3 C_2, C_4, 2 C_6, 4 C_{14}, 4 D_2, D_3, D_4, D_6, 8 D_7, 4 D_{14}	3 C_2, C_3, 4 C_7, 4 D_2, D_3, 8 D_7
C50.2	3 C_2, C_3, 3 C_6, C_7, C_{14}, 7 C_{49}, 7 C_{98}, 3 D_2, 2 D_7, D_{14}, 14 D_{49}, 7 D_{98}	3 C_2, C_3, 3 C_6, C_7, C_{14}, 7 C_{49}, 7 C_{98}, 3 D_2, 2 D_7, D_{14}, 14 D_{49}, 7 D_{98}	3 C_2, 2 C_6, C_{14}, 7 C_{98}, 3 D_2, 2 D_7, D_{14}, 14 D_{49}, 7 D_{98}	3 C_2, C_3, C_7, 7 C_{49}, 3 D_2, 2 D_7, 14 D_{49}
C50.3	3 C_2, C_3, 3 C_6, 5 C_7, 2 C_{14}, 3 D_2, 7 D_7, 2 D_{14}	3 C_2, C_3, 3 C_6, 5 C_7, 2 C_{14}, 3 D_2, 7 D_7, 2 D_{14}	3 C_2, 3 C_6, 2 C_{14}, 3 D_2, 7 D_7, 2 D_{14}	3 C_2, C_3, 5 C_7, 3 D_2, 7 D_7
C50.4	3 C_2, C_3, 3 C_6, 5 C_7, 2 C_{14}, 3 D_2, 7 D_7, 2 D_{14}	3 C_2, C_3, 3 C_6, 5 C_7, 2 C_{14}, 3 D_2, 7 D_7, 2 D_{14}	3 C_2, 3 C_6, 2 C_{14}, 3 D_2, 7 D_7, 2 D_{14}	3 C_2, C_3, 5 C_7, 3 D_2, 7 D_7

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C50.5	3 C_2, C_3, C_4, 3 C_6, C_7, 2 C_8, C_{12}, 2 C_{14}, 2 C_{24}, C_{28}, 4 D_2, 2 D_4, D_7, 2 D_8, D_{14}, D_{28}	3 C_2, C_3, C_4, 3 C_6, C_7, C_8, 2 C_{14}, C_{28}, 4 D_2, 2 D_4, D_7, D_8, D_{14}, D_{28}	3 C_2, 3 C_6, 2 C_{14}, 4 D_2, 2 D_4, D_7, D_8, D_{14}, D_{28}	3 C_2, C_4, C_7, 4 D_2, 2 D_4, D_7
C50.6	3 C_2, C_3, C_4, 3 C_6, C_7, 2 C_8, C_{12}, C_{14}, 2 C_{24}, 2 C_{28}, 4 C_{56}, 4 D_2, 2 D_4, 2 D_7, 2 D_8, 2 D_{14}, 4 D_{28}, 4 D_{56}	3 C_2, C_3, C_4, 3 C_6, C_7, C_8, C_{14}, 2 C_{28}, 2 C_{56}, 4 D_2, 2 D_4, 2 D_7, D_8, 2 D_{14}, 4 D_{28}, 2 D_{56}	3 C_2, 2 C_6, C_{14}, 4 D_2, 2 D_4, 2 D_7, D_8, 2 D_{14}, 4 D_{28}, 2 D_{56}	3 C_2, C_4, C_7, C_8, 4 D_2, 2 D_4, 2 D_7, D_8
C50.7	3 C_2, C_3, 3 C_6, C_7, 3 C_9, C_{14}, 9 C_{18}, C_{21}, C_{42}, 3 D_2, 2 D_7, D_{14}	3 C_2, C_3, 3 C_6, C_7, C_9, C_{14}, 3 C_{18}, C_{21}, C_{42}, 3 D_2, 2 D_7, D_{14}	3 C_2, C_6, C_{14}, C_{18}, 3 D_2, 2 D_7, D_{14}	3 C_2, C_3, C_7, 3 D_2, 2 D_7
Genus 51				
C51.1	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, 2 C_{12}, 2 D_2, D_4, 2 D_5, D_{10}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, 2 D_2, D_4, 2 D_5, D_{10}	2 C_2, C_4, C_6, C_{10}, 2 D_2, D_4, 2 D_5, D_{10}	2 C_2, C_5, 2 D_2, 2 D_5
C51.2	3 C_2, 5 C_4, 2 C_5, C_8, 2 C_{10}, C_{20}, 4 D_2, 2 D_4, 4 D_5, 2 D_{10}	3 C_2, 5 C_4, 2 C_5, 2 C_{10}, C_{20}, 4 D_2, 2 D_4, 4 D_5, 2 D_{10}	3 C_2, 4 C_4, 2 C_{10}, C_{20}, 4 D_2, 2 D_4, 4 D_5, 2 D_{10}	3 C_2, 2 C_5, 4 D_2, 4 D_5
C51.3	3 C_2, 5 C_4, C_5, C_8, C_{10}, 3 C_{20}, 5 C_{25}, 5 C_{50}, 15 C_{100}, 4 D_2, 2 D_4, 3 D_5, 3 D_{10}, 3 D_{20}, 15 D_{25}, 15 D_{50}, 15 D_{100}	3 C_2, 5 C_4, C_5, C_{10}, 3 C_{20}, 5 C_{25}, 5 C_{50}, 15 C_{100}, 4 D_2, 2 D_4, 3 D_5, 3 D_{10}, 3 D_{20}, 15 D_{25}, 15 D_{50}, 15 D_{100}	3 C_2, 4 C_4, C_{10}, 3 C_{20}, 5 C_{50}, 15 C_{100}, 4 D_2, 2 D_4, 3 D_5, 3 D_{10}, 3 D_{20}, 15 D_{25}, 15 D_{50}, 15 D_{100}	3 C_2, C_5, 5 C_{25}, 4 D_2, 3 D_5, 15 D_{25}
C51.4	5 C_2, 3 C_4, C_5, 2 C_8, 3 C_{10}, C_{20}, 5 C_{25}, 15 C_{50}, 5 C_{100}, 13 D_2, 3 D_4, 4 D_5, 7 D_{10}, D_{20}, 20 D_{25}, 35 D_{50}, 5 D_{100}	5 C_2, 3 C_4, C_5, C_8, 3 C_{10}, C_{20}, 5 C_{25}, 15 C_{50}, 5 C_{100}, 13 D_2, 3 D_4, 4 D_5, 7 D_{10}, D_{20}, 20 D_{25}, 35 D_{50}, 5 D_{100}	3 C_2, 3 C_4, C_8, C_{10}, C_{20}, 5 C_{50}, 5 C_{100}, 13 D_2, 3 D_4, 3 D_5, 7 D_{10}, D_{20}, 15 D_{25}, 35 D_{50}, 5 D_{100}	5 C_2, C_5, 2 C_{10}, 5 C_{25}, 10 C_{50}, 13 D_2, 4 D_5, 4 D_{10}, 20 D_{25}, 20 D_{50}
C51.5	3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, C_{12}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	3 C_2, C_3, 2 C_4, 2 C_5, C_6, 2 C_{10}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_{10}	2 C_2, 2 C_4, C_6, C_{10}, 3 D_2, D_3, 3 D_5, D_6, 2 D_{10}	3 C_2, C_3, 2 C_5, C_{10}, 3 D_2, D_3, 4 D_5, D_{10}
C51.6	3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{12}, C_{15}, 5 C_{25}, 5 C_{50}, 5 C_{75}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}, 10 D_{25}, 5 D_{50}, 5 D_{75}	3 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{15}, 5 C_{25}, 5 C_{50}, 5 C_{75}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}, 10 D_{25}, 5 D_{50}, 5 D_{75}	2 C_2, 2 C_4, C_6, 3 D_2, D_3, 2 D_5, D_6, D_{10}, D_{15}, 10 D_{25}, 5 D_{50}, 5 D_{75}	3 C_2, C_3, C_5, C_{10}, 5 C_{25}, 5 C_{50}, 3 D_2, D_3, 2 D_5, D_{10}, 10 D_{25}, 5 D_{50}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C51.7	5 C_2, C_3, 3 C_4, C_5, 3 C_6, 2 C_8, 3 C_{10}, 4 C_{12}, C_{15}, C_{20}, 4 C_{24}, C_{30}, 2 C_{60}, 13 D_2, 2 D_3, 3 D_4, 4 D_5, 4 D_6, 7 D_{10}, 6 D_{12}, 2 D_{15}, D_{20}, 2 D_{30}, 2 D_{60}	5 C_2, C_3, 3 C_4, C_5, 3 C_6, C_8, 3 C_{10}, 3 C_{12}, C_{15}, C_{20}, C_{24}, C_{30}, 2 C_{60}, 13 D_2, 2 D_3, 3 D_4, 4 D_5, 4 D_6, 7 D_{10}, 5 D_{12}, 2 D_{15}, D_{20}, 2 D_{30}, 2 D_{60}	3 C_2, 3 C_4, C_6, C_8, C_{10}, C_{20}, 13 D_2, D_3, 3 D_4, 3 D_5, 3 D_6, 7 D_{10}, 3 D_{12}, 2 D_{15}, D_{20}, 2 D_{30}, 2 D_{60}	5 C_2, C_3, C_5, C_6, 2 C_{10}, 13 D_2, 2 D_3, 4 D_5, 2 D_6, 4 D_{10}
C51.8	3 C_2, C_3, 5 C_4, C_5, 2 C_6, C_8, C_{10}, 2 C_{12}, C_{15}, 3 C_{20}, 2 C_{24}, C_{30}, 2 C_{60}, 4 D_2, D_3, 2 D_4, 3 D_5, D_6, 3 D_{10}, D_{12}, 2 D_{15}, 3 D_{20}, 2 D_{30}, 2 D_{60}	3 C_2, C_3, 5 C_4, C_5, 2 C_6, C_{10}, C_{12}, C_{15}, 3 C_{20}, C_{30}, 2 C_{60}, 4 D_2, D_3, 2 D_4, 3 D_5, D_6, 3 D_{10}, D_{12}, 2 D_{15}, 3 D_{20}, 2 D_{30}, 2 D_{60}	3 C_2, 5 C_4, C_6, C_{10}, 3 C_{20}, 4 D_2, D_3, 2 D_4, 3 D_5, D_6, 3 D_{10}, D_{12}, 2 D_{15}, 3 D_{20}, 2 D_{30}, 2 D_{60}	3 C_2, C_3, C_5, C_6, 4 D_2, D_3, 3 D_5, D_6
C51.9	3 C_2, 2 C_4, C_5, C_{10}, 5 C_{11}, 5 C_{22}, 5 C_{44}, 5 C_{55}, 3 D_2, 2 D_5, D_{10}, 10 D_{11}, 5 D_{22}, 5 D_{55}	3 C_2, 2 C_4, C_5, C_{10}, C_{11}, C_{22}, C_{55}, 3 D_2, 2 D_5, D_{10}, 2 D_{11}, D_{22}, D_{55}	2 C_2, 2 C_4, C_{22}, 3 D_2, 2 D_5, D_{10}, D_{11}, D_{22}, D_{55}	3 C_2, C_5, C_{10}, C_{11}, 3 D_2, 2 D_5, D_{10}, D_{11}
C51.10	3 C_2, 2 C_4, 3 C_5, 4 C_8, 3 C_{10}, 3 D_2, 6 D_5, 3 D_{10}	3 C_2, 2 C_4, 3 C_5, 2 C_8, 3 C_{10}, 3 D_2, 6 D_5, 3 D_{10}	2 C_2, C_4, 3 D_2, 6 D_5, 3 D_{10}	3 C_2, C_4, 3 C_5, 3 C_{10}, 3 D_2, 6 D_5, 3 D_{10}
C51.11	3 C_2, 2 C_4, C_5, 4 C_8, C_{10}, C_{20}, 5 C_{25}, 5 C_{50}, 5 C_{100}, 3 D_2, 2 D_5, D_{10}, 10 D_{25}, 5 D_{50}	3 C_2, 2 C_4, C_5, 2 C_8, C_{10}, C_{20}, 5 C_{25}, 5 C_{50}, 5 C_{100}, 3 D_2, 2 D_5, D_{10}, 10 D_{25}, 5 D_{50}	2 C_2, 2 C_4, 2 C_8, C_{10}, C_{20}, 5 C_{50}, 5 C_{100}, 3 D_2, D_5, D_{10}, 5 D_{25}, 5 D_{50}	3 C_2, C_5, 5 C_{25}, 3 D_2, 2 D_5, 10 D_{25}
C51.12	2 C_2, 2 C_4, 2 C_5, 2 C_8, C_{10}, 2 D_2, 3 D_5, D_{10}	2 C_2, 2 C_4, 2 C_5, C_{10}, 2 D_2, 3 D_5, D_{10}	2 C_2, C_4, C_{10}, 2 D_2, 3 D_5, D_{10}	2 C_2, 2 C_5, 2 D_2, 3 D_5
C51.13	2 C_2, 2 C_4, C_5, 2 C_8, C_{10}, C_{20}, 5 C_{25}, 5 C_{50}, 5 C_{100}, 2 D_2, 2 D_5, D_{10}, 10 D_{25}, 5 D_{50}	2 C_2, 2 C_4, C_5, C_{10}, C_{20}, 5 C_{25}, 5 C_{50}, 5 C_{100}, 2 D_2, 2 D_5, D_{10}, 10 D_{25}, 5 D_{50}	2 C_2, 2 C_4, C_{10}, C_{20}, 5 C_{50}, 5 C_{100}, 2 D_2, 2 D_5, D_{10}, 10 D_{25}, 5 D_{50}	2 C_2, C_5, 5 C_{25}, 2 D_2, 2 D_5, 10 D_{25}
C51.14	3 C_2, 3 C_4, C_5, 4 C_8, C_{10}, 4 C_{16}, 3 C_{20}, 2 C_{40}, 4 D_2, 2 D_4, 3 D_5, 2 D_8, 3 D_{10}, 4 D_{20}, 2 D_{40}	3 C_2, 3 C_4, C_5, 2 C_8, C_{10}, 3 C_{20}, 2 C_{40}, 4 D_2, 2 D_4, 3 D_5, 2 D_8, 3 D_{10}, 4 D_{20}, 2 D_{40}	2 C_2, 3 C_4, 2 C_8, C_{10}, 3 C_{20}, 2 C_{40}, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 3 D_{10}, 4 D_{20}, 2 D_{40}	3 C_2, C_5, 4 D_2, 3 D_5
C51.15	4 C_2, 2 C_4, C_5, 4 C_8, 3 C_{10}, 2 C_{16}, C_{20}, 2 C_{40}, 12 D_2, 3 D_4, 4 D_5, 4 D_8, 7 D_{10}, 2 D_{20}, 2 D_{40}	4 C_2, 2 C_4, C_5, 2 C_8, 3 C_{10}, C_{20}, 2 C_{40}, 12 D_2, 3 D_4, 4 D_5, 3 D_8, 7 D_{10}, 2 D_{20}, 2 D_{40}	2 C_2, 2 C_4, 2 C_8, C_{10}, C_{20}, 2 C_{40}, 12 D_2, 3 D_4, 2 D_5, 3 D_8, 7 D_{10}, 2 D_{20}, 2 D_{40}	4 C_2, C_5, 2 C_{10}, 12 D_2, 4 D_5, 4 D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C51.16	C_2, C_3, C_4, 2 C_5, C_6, 2 C_{12}, 2 D_5	C_2, C_3, C_4, 2 C_5, C_6, 2 D_5	C_2, C_4, C_6, 2 D_5	C_2, C_3, 2 C_5, 2 D_5
C51.17	C_2, C_3, C_4, C_5, C_6, 2 C_{12}, C_{15}, 5 C_{25}, 5 C_{75}, D_5, 5 D_{25}	C_2, C_3, C_4, C_5, C_6, C_{15}, 5 C_{25}, 5 C_{75}, D_5, 5 D_{25}	C_2, C_4, C_6, D_5, 5 D_{25}	C_2, C_3, C_5, 5 C_{25}, D_5, 5 D_{25}
C51.18	3 C_2, C_3, 2 C_4, C_5, 3 C_6, 4 C_8, C_{10}, 4 C_{12}, C_{15}, C_{20}, 8 C_{24}, C_{30}, 2 C_{60}, 3 D_2, 2 D_5, D_{10}	3 C_2, C_3, 2 C_4, C_5, 3 C_6, 2 C_8, C_{10}, 3 C_{12}, C_{15}, C_{20}, 2 C_{24}, C_{30}, 2 C_{60}, 3 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_6, 2 C_8, C_{10}, C_{20}, 3 D_2, D_5, D_{10}	3 C_2, C_3, C_5, C_6, 3 D_2, 2 D_5
C51.19	2 C_2, C_3, 2 C_4, C_5, 2 C_6, 2 C_8, C_{10}, 3 C_{12}, C_{15}, C_{20}, 4 C_{24}, C_{30}, 2 C_{60}, 2 D_2, 2 D_5, D_{10}	2 C_2, C_3, 2 C_4, C_5, 2 C_6, C_{10}, C_{12}, C_{15}, C_{20}, C_{30}, 2 C_{60}, 2 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_6, C_{10}, C_{20}, 2 D_2, 2 D_5, D_{10}	2 C_2, C_3, C_5, C_6, 2 D_2, 2 D_5
C51.20	C_2, C_4, C_5, 5 C_{11}, 5 C_{22}, 10 C_{44}, 5 C_{55}, D_5	C_2, C_4, C_5, C_{11}, C_{22}, C_{55}, D_5	C_2, C_4, C_{22}, D_5	C_2, C_5, C_{11}, D_5
Genus 52				
C52.1	3 C_2, 2 C_3, 4 C_6, 4 C_9, 4 C_{18}, 6 C_{27}, 6 C_{54}, 3 D_2, 2 D_3, D_6, 6 D_9, 3 D_{18}, 6 D_{27}, 3 D_{54}	3 C_2, 2 C_3, 4 C_6, 2 C_9, 2 C_{18}, C_{27}, C_{54}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}, 2 D_{27}, D_{54}	3 C_2, 2 C_6, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}, 2 D_{27}, D_{54}	3 C_2, C_3, C_6, C_9, C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}
C52.2	C_2, C_4, 2 C_8, 4 C_{16}, C_{17}, D_{17}	C_2, C_4, C_8, C_{17}, D_{17}	C_2, C_4, C_8, D_{17}	C_2, C_{17}, D_{17}
C52.3	C_2, C_4, 2 C_8, 4 C_{16}, C_{17}, D_{17}	C_2, C_4, C_8, C_{17}, D_{17}	C_2, C_4, C_8, D_{17}	C_2, C_{17}, D_{17}
Genus 53				
C53.1	6 C_2, 5 C_4, 2 C_8, 3 C_{13}, 9 C_{26}, 18 C_{52}, 19 D_2, 3 D_4, 12 D_{13}, 30 D_{26}, 36 D_{52}	6 C_2, 5 C_4, C_8, 3 C_{13}, 9 C_{26}, 18 C_{52}, 19 D_2, 3 D_4, 12 D_{13}, 30 D_{26}, 36 D_{52}	3 C_2, 4 C_4, C_8, 3 C_{26}, 6 C_{52}, 17 D_2, 3 D_4, 9 D_{13}, 27 D_{26}, 36 D_{52}	6 C_2, C_4, 3 C_{13}, 6 C_{26}, 12 C_{52}, 19 D_2, 2 D_4, 12 D_{13}, 21 D_{26}, 24 D_{52}
C53.2	6 C_2, 3 C_4, C_8, 3 C_{13}, 15 C_{26}, 12 C_{52}, 33 D_2, 3 D_4, 15 D_{13}, 57 D_{26}, 24 D_{52}	6 C_2, 3 C_4, 3 C_{13}, 15 C_{26}, 12 C_{52}, 33 D_2, 3 D_4, 15 D_{13}, 57 D_{26}, 24 D_{52}	3 C_2, 2 C_4, 3 C_{26}, 25 D_2, 3 D_4, 9 D_{13}, 45 D_{26}, 24 D_{52}	6 C_2, C_4, 3 C_{13}, 12 C_{26}, 12 C_{52}, 33 D_2, 2 D_4, 15 D_{13}, 48 D_{26}, 24 D_{52}
C53.3	5 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, 3 C_{13}, 9 C_{26}, 3 C_{39}, 3 C_{78}, 13 D_2, 2 D_3, 4 D_6, 12 D_{13}, 18 D_{26}, 6 D_{39}, 3 D_{78}	5 C_2, C_3, 2 C_4, 3 C_6, C_{12}, 3 C_{13}, 9 C_{26}, 3 C_{39}, 3 C_{78}, 13 D_2, 2 D_3, 4 D_6, 12 D_{13}, 18 D_{26}, 6 D_{39}, 3 D_{78}	3 C_2, 2 C_4, C_6, 11 D_2, D_3, 3 D_6, 12 D_{13}, 18 D_{26}, 6 D_{39}, 3 D_{78}	5 C_2, C_3, 3 C_{13}, 9 C_{26}, 13 D_2, 2 D_3, 12 D_{13}, 18 D_{26}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C53.4	3 C_2, 2 C_4, 2 C_5, 2 C_{10}, 3 C_{13}, 2 C_{20}, 3 C_{26}, 6 C_{65}, 3 D_2, 4 D_5, 2 D_{10}, 6 D_{13}, 3 D_{26}, 6 D_{65}	3 C_2, 2 C_4, C_5, C_{10}, 3 C_{13}, 3 C_{26}, 3 C_{65}, 3 D_2, 2 D_5, D_{10}, 6 D_{13}, 3 D_{26}, 3 D_{65}	2 C_2, 2 C_4, C_{10}, 3 D_2, D_5, D_{10}, 6 D_{13}, 3 D_{26}, 3 D_{65}	3 C_2, C_5, 3 C_{13}, 3 C_{26}, 3 D_2, D_5, 6 D_{13}, 3 D_{26}
C53.5	**Tet**, 7 C_2, C_3, 3 C_6, 2 C_{13}, 14 C_{26}, 37 D_2, 16 D_{13}, 56 D_{26}	**Tet**, 7 C_2, C_3, 3 C_6, 2 C_{13}, 14 C_{26}, 37 D_2, 16 D_{13}, 56 D_{26}	3 C_2, 2 C_6, 2 C_{26}, 27 D_2, 8 D_{13}, 44 D_{26}	**Tet**, 7 C_2, C_3, 2 C_{13}, 12 C_{26}, 37 D_2, 16 D_{13}, 48 D_{26}
C53.6	C_2, C_3, 2 C_5, C_6, 2 C_{13}, 2 C_{15}, 8 C_{65}, 2 D_5, 2 D_{13}, 8 D_{65}	C_2, C_3, C_5, C_6, 2 C_{13}, 4 C_{65}, D_5, 2 D_{13}, 4 D_{65}	C_2, C_6, D_5, 2 D_{13}, 4 D_{65}	C_2, C_5, 2 C_{13}, D_5, 2 D_{13}
C53.7	5 C_2, 3 C_4, 4 C_8, 3 C_{13}, 9 C_{26}, 6 C_{52}, 13 D_2, 12 D_{13}, 18 D_{26}	5 C_2, 3 C_4, 2 C_8, 3 C_{13}, 9 C_{26}, 6 C_{52}, 13 D_2, 12 D_{13}, 18 D_{26}	2 C_2, 3 C_4, 2 C_8, 3 C_{26}, 6 C_{52}, 11 D_2, 6 D_{13}, 15 D_{26}	5 C_2, 3 C_{13}, 6 C_{26}, 13 D_2, 12 D_{13}, 12 D_{26}
C53.8	4 C_2, 2 C_4, 2 C_8, 3 C_{13}, 15 C_{26}, 12 D_2, 2 D_4, 6 D_{13}, 12 D_{26}	4 C_2, 2 C_4, 3 C_{13}, 15 C_{26}, 12 D_2, 2 D_4, 6 D_{13}, 12 D_{26}	2 C_2, 2 C_4, 3 C_{26}, 9 D_2, 2 D_4, 6 D_{13}, 12 D_{26}	4 C_2, 3 C_{13}, 12 C_{26}, 12 D_2, 6 D_{13}, 6 D_{26}
C53.9	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_{12}, 3 C_{13}, 3 C_{26}, 3 C_{39}, 3 C_{78}, 3 D_2, 6 D_{13}, 3 D_{26}	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, 3 C_{13}, 3 C_{26}, 3 C_{39}, 3 C_{78}, 3 D_2, 6 D_{13}, 3 D_{26}	2 C_2, 2 C_4, C_6, 3 D_2, 6 D_{13}, 3 D_{26}	3 C_2, C_3, 3 C_{13}, 3 C_{26}, 3 D_2, 6 D_{13}, 3 D_{26}
C53.10	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_{12}, 2 C_{13}, 2 C_{26}, 2 C_{52}, 3 D_2, 4 D_{13}, 2 D_{26}	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, 2 C_{13}, 2 C_{26}, 2 C_{52}, 3 D_2, 4 D_{13}, 2 D_{26}	2 C_2, 2 C_4, 2 C_6, 2 C_{12}, 2 C_{26}, 2 C_{52}, 3 D_2, 2 D_{13}, 2 D_{26}	3 C_2, C_3, 2 C_{13}, 3 D_2, 4 D_{13}
C53.11	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_{12}, C_{13}, C_{26}, 3 D_2, 2 D_{13}, D_{26}	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, C_{13}, C_{26}, 3 D_2, 2 D_{13}, D_{26}	2 C_2, 2 C_4, C_6, 3 D_2, 2 D_{13}, D_{26}	3 C_2, C_3, C_6, C_{13}, C_{26}, 3 D_2, 2 D_{13}, D_{26}
C53.12	4 C_2, 4 C_4, 4 C_8, 6 C_{16}, 4 C_{32}, 12 D_2, 3 D_4, 6 D_8, 4 D_{16}	4 C_2, 4 C_4, 2 C_8, 2 C_{16}, 12 D_2, 3 D_4, 5 D_8, 4 D_{16}	2 C_2, 2 C_4, 2 C_8, 2 C_{16}, 12 D_2, 3 D_4, 5 D_8, 4 D_{16}	4 C_2, 2 C_4, 12 D_2
C53.13	C_2, C_4, 2 C_5, 2 C_{10}, 3 C_{13}, 4 C_{20}, 6 C_{65}, 3 D_{13}	C_2, C_4, C_5, C_{10}, 3 C_{13}, 3 C_{65}, 3 D_{13}	C_2, C_4, C_{10}, 3 D_{13}	C_2, C_5, 3 C_{13}, 3 D_{13}

Genus 54

None

Genus 55

C55.1	**Tet**, 2 **Oct**, 5 C_2, 4 C_3, 2 C_4, 8 C_6, C_9, C_{12}, 16 D_2, 12 D_3, 4 D_4, 15 D_6, D_9, D_{12}	**Tet**, 2 **Oct**, 5 C_2, 4 C_3, 2 C_4, 8 C_6, C_9, C_{12}, 16 D_2, 12 D_3, 4 D_4, 15 D_6, D_9, D_{12}	**Tet**, 2 **Oct**, 3 C_2, 2 C_4, 3 C_6, C_{12}, 16 D_2, 9 D_3, 4 D_4, 15 D_6, D_9, D_{12}	**Tet**, 5 C_2, 4 C_3, 5 C_6, C_9, 16 D_2, 11 D_3, 9 D_6, D_9

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C55.2	5 C_2, 2 C_3, 3 C_4, 6 C_6, 2 C_8, 4 C_{12}, 13 D_2, 6 D_3, 3 D_4, 10 D_6, 4 D_{12}	5 C_2, 2 C_3, 3 C_4, 6 C_6, C_8, 4 C_{12}, 13 D_2, 6 D_3, 3 D_4, 10 D_6, 4 D_{12}	3 C_2, 2 C_4, 3 C_6, 3 C_{12}, 13 D_2, 4 D_3, 3 D_4, 10 D_6, 4 D_{12}	5 C_2, 2 C_3, C_4, 3 C_6, 13 D_2, 6 D_3, D_4, 5 D_6
C55.3	5 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, C_{12}, 4 C_{16}, 13 D_2, 4 D_3, 3 D_4, 7 D_6, 6 D_8, D_{12}	5 C_2, C_3, 3 C_4, 3 C_6, 3 C_8, C_{12}, C_{16}, 13 D_2, 4 D_3, 3 D_4, 7 D_6, 5 D_8, D_{12}	3 C_2, 3 C_4, 2 C_6, 3 C_8, C_{12}, C_{16}, 13 D_2, 2 D_3, 3 D_4, 7 D_6, 5 D_8, D_{12}	5 C_2, C_3, C_6, 13 D_2, 4 D_3, 2 D_6
C55.4	3 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, 3 C_{12}, 2 C_{16}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}	3 C_2, C_3, 4 C_4, 2 C_6, C_8, 3 C_{12}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}	3 C_2, 4 C_4, 2 C_6, C_8, 3 C_{12}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}	3 C_2, C_3, 4 D_2, 2 D_3
C55.5	**Tet**, 3 C_2, 4 C_3, 5 C_6, C_9, 7 D_2, 7 D_3, 7 D_6	**Tet**, 3 C_2, 4 C_3, 5 C_6, C_9, 7 D_2, 7 D_3, 7 D_6	**Tet**, 2 C_2, 2 C_6, 7 D_2, 6 D_3, 7 D_6	**Tet**, 3 C_2, 4 C_3, 3 C_6, C_9, 7 D_2, 7 D_3, 5 D_6
C55.6	C_2, 3 C_3, C_6, 13 C_9, 2 D_3, 12 D_9	C_2, 3 C_3, C_6, 12 C_9, 2 D_3, 12 D_9	C_2, C_6, 2 D_3, 12 D_9	C_2, 2 C_3, 9 C_9, 2 D_3, 9 D_9
C55.7	3 C_2, 2 C_3, 2 C_4, 4 C_6, 4 C_8, 2 C_{12}, 3 D_2, 2 D_3, D_6	3 C_2, 2 C_3, 2 C_4, 4 C_6, 2 C_8, 2 C_{12}, 3 D_2, 2 D_3, D_6	2 C_2, C_4, 2 C_6, C_{12}, 3 D_2, 2 D_3, D_6	3 C_2, 2 C_3, C_4, 2 C_6, 3 D_2, 2 D_3, D_6
C55.8	3 C_2, C_3, 2 C_4, C_6, 4 C_8, C_{12}, 8 C_{16}, 3 D_2, 2 D_3, D_6	3 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, 2 C_{16}, 3 D_2, 2 D_3, D_6	2 C_2, 2 C_4, C_6, 3 C_8, C_{12}, 2 C_{16}, 3 D_2, D_3, D_6	3 C_2, C_3, 3 D_2, 2 D_3
C55.9	2 C_2, C_3, 2 C_4, C_6, 3 C_8, C_{12}, 4 C_{16}, 2 D_2, 2 D_3, D_6	2 C_2, C_3, 2 C_4, C_6, C_8, C_{12}, 2 D_2, 2 D_3, D_6	2 C_2, 2 C_4, C_6, C_8, C_{12}, 2 D_2, 2 D_3, D_6	2 C_2, C_3, 2 D_2, 2 D_3
Genus 56				
C56.1	C_2, 8 C_5, 2 C_{10}, C_{11}, 4 C_{55}, 2 D_5, D_{11}, 4 D_{55}	C_2, 6 C_5, C_{10}, C_{11}, 4 C_{55}, 2 D_5, D_{11}, 4 D_{55}	C_2, C_{10}, 2 D_5, D_{11}, 4 D_{55}	C_2, 4 C_5, C_{11}, 4 C_{55}, 2 D_5, D_{11}, 4 D_{55}
C56.2	C_2, 8 C_5, 2 C_{10}, C_{11}, 4 C_{55}, 2 D_5, D_{11}, 4 D_{55}	C_2, 6 C_5, C_{10}, C_{11}, 4 C_{55}, 2 D_5, D_{11}, 4 D_{55}	C_2, C_{10}, 2 D_5, D_{11}, 4 D_{55}	C_2, 4 C_5, C_{11}, 4 C_{55}, 2 D_5, D_{11}, 4 D_{55}
C56.3	C_2, C_3, 2 C_5, 2 C_{10}, C_{11}, 2 C_{15}, 2 C_{33}, D_3, D_{11}, 2 D_{33}	C_2, C_3, C_5, C_{10}, C_{11}, 2 C_{33}, D_3, D_{11}, 2 D_{33}	C_2, C_{10}, D_3, D_{11}, 2 D_{33}	C_2, C_3, C_{11}, D_3, D_{11}
C56.4	C_2, C_3, 2 C_5, 2 C_{10}, C_{11}, 2 C_{15}, 2 C_{33}, D_3, D_{11}, 2 D_{33}	C_2, C_3, C_5, C_{10}, C_{11}, 2 C_{33}, D_3, D_{11}, 2 D_{33}	C_2, C_{10}, D_3, D_{11}, 2 D_{33}	C_2, C_3, C_{11}, D_3, D_{11}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 57				
C57.1	**Tet**, 5 C_2, C_3, 3 C_4, C_6, C_7, 2 C_{12}, 7 C_{14}, 12 C_{28}, 31 D_2, 8 D_4, 6 D_7, 30 D_{14}, 48 D_{28}	**Tet**, 5 C_2, C_3, 3 C_4, C_6, C_7, C_{12}, 7 C_{14}, 12 C_{28}, 31 D_2, 8 D_4, 6 D_7, 30 D_{14}, 48 D_{28}	2 C_2, C_4, C_6, C_{12}, C_{14}, 21 D_2, 6 D_4, 3 D_7, 21 D_{14}, 36 D_{28}	5 C_2, 2 C_4, C_7, 6 C_{14}, 12 C_{28}, 31 D_2, 8 D_4, 6 D_7, 27 D_{14}, 48 D_{28}
C57.2	4 C_2, C_3, 4 C_4, 3 C_6, C_7, C_{12}, 2 C_{14}, 6 C_{28}, 6 D_2, 4 D_4, 4 D_7, 4 D_{14}, 6 D_{28}	4 C_2, C_3, 4 C_4, 3 C_6, C_7, C_{12}, 2 C_{14}, 6 C_{28}, 6 D_2, 4 D_4, 4 D_7, 4 D_{14}, 6 D_{28}	3 C_2, 2 C_6, C_{14}, 6 D_2, 4 D_4, 4 D_7, 4 D_{14}, 6 D_{28}	4 C_2, C_3, 4 C_4, C_7, C_{14}, 6 C_{28}, 6 D_2, 4 D_4, 4 D_7, 4 D_{14}, 6 D_{28}
C57.3	5 C_2, C_3, 2 C_4, 5 C_6, C_7, 4 C_{12}, 3 C_{14}, 2 C_{28}, 13 D_2, 2 D_7, 4 D_{14}	5 C_2, C_3, 2 C_4, 5 C_6, C_7, 2 C_{12}, 3 C_{14}, 2 C_{28}, 13 D_2, 2 D_7, 4 D_{14}	3 C_2, 2 C_4, 3 C_6, 2 C_{12}, 2 C_{14}, 2 C_{28}, 11 D_2, D_7, 3 D_{14}	5 C_2, C_3, C_7, C_{14}, 13 D_2, 2 D_7, 2 D_{14}
Genus 58				
C58.1	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, C_{12}, 3 C_{19}, 3 C_{38}, 6 C_{57}, 3 D_2, D_3, D_4, 3 D_{19}, 3 D_{38}, 6 D_{57}	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, 3 C_{19}, 3 C_{38}, 6 C_{57}, 3 D_2, D_3, D_4, 3 D_{19}, 3 D_{38}, 6 D_{57}	2 **Tet**, **Oct**, 2 C_2, C_4, 2 C_6, 3 C_{38}, 3 D_2, D_3, D_4, 3 D_{19}, 3 D_{38}, 6 D_{57}	2 C_2, C_3, 3 C_{19}, 6 C_{57}, 3 D_2, D_3, 3 D_{19}, 6 D_{57}
C58.2	3 C_2, 3 C_3, 5 C_6, 3 C_{19}, 3 C_{38}, 3 C_{57}, 3 D_2, 2 D_3, D_6, 6 D_{19}, 3 D_{38}, 3 D_{57}	3 C_2, 3 C_3, 5 C_6, 3 C_{19}, 3 C_{38}, 3 C_{57}, 3 D_2, 2 D_3, D_6, 6 D_{19}, 3 D_{38}, 3 D_{57}	3 C_2, 5 C_6, 3 C_{38}, 3 D_2, 2 D_3, D_6, 6 D_{19}, 3 D_{38}, 3 D_{57}	3 C_2, C_3, 3 C_{19}, 3 C_{57}, 3 D_2, 2 D_3, 6 D_{19}, 3 D_{57}
C58.3	3 C_2, 3 C_3, 5 C_6, 3 C_{19}, 3 C_{38}, 6 C_{57}, 6 C_{114}, 3 D_2, 2 D_3, D_6, 6 D_{19}, 3 D_{38}, 12 D_{57}, 6 D_{114}	3 C_2, 3 C_3, 5 C_6, 3 C_{19}, 3 C_{38}, 6 C_{57}, 6 C_{114}, 3 D_2, 2 D_3, D_6, 6 D_{19}, 3 D_{38}, 12 D_{57}, 6 D_{114}	3 C_2, 4 C_6, 3 C_{38}, 6 C_{114}, 3 D_2, 2 D_3, D_6, 6 D_{19}, 3 D_{38}, 12 D_{57}, 6 D_{114}	3 C_2, C_3, 3 C_{19}, 6 C_{57}, 3 D_2, 2 D_3, 6 D_{19}, 12 D_{57}
C58.4	3 C_2, C_3, C_4, 3 C_6, C_{12}, 3 C_{19}, 6 C_{38}, 4 D_2, D_4, 3 D_{19}, 3 D_{38}	3 C_2, C_3, C_4, 3 C_6, 3 C_{19}, 6 C_{38}, 4 D_2, D_4, 3 D_{19}, 3 D_{38}	3 C_2, C_4, 3 C_6, 6 C_{38}, 4 D_2, D_4, 3 D_{19}, 3 D_{38}	3 C_2, 3 C_{19}, 4 D_2, 3 D_{19}
C58.5	3 C_2, C_3, C_4, 3 C_6, C_{12}, 3 C_{19}, 3 C_{38}, 6 C_{76}, 4 D_2, D_4, 6 D_{19}, 6 D_{38}, 6 D_{76}	3 C_2, C_3, C_4, 3 C_6, 3 C_{19}, 3 C_{38}, 6 C_{76}, 4 D_2, D_4, 6 D_{19}, 6 D_{38}, 6 D_{76}	3 C_2, 2 C_6, 3 C_{38}, 4 D_2, D_4, 6 D_{19}, 6 D_{38}, 6 D_{76}	3 C_2, C_4, 3 C_{19}, 4 D_2, D_4, 6 D_{19}
C58.6	C_2, C_3, C_6, 3 C_9, 3 C_{18}, C_{19}, D_{19}	C_2, C_3, C_6, C_{19}, D_{19}	C_2, C_6, D_{19}	C_2, C_{19}, D_{19}
C58.7	C_2, C_3, C_6, 3 C_9, 3 C_{18}, C_{19}, D_{19}	C_2, C_3, C_6, C_{19}, D_{19}	C_2, C_6, D_{19}	C_2, C_{19}, D_{19}
C58.8	C_2, C_3, C_6, 3 C_9, 3 C_{18}, C_{19}, D_{19}	C_2, C_3, C_6, C_{19}, D_{19}	C_2, C_6, D_{19}	C_2, C_{19}, D_{19}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C58.9	C_2, C_3, C_6, 3 C_9, 3 C_{18}, 3 C_{19}, 3 C_{57}, 3 D_{19}	C_2, C_3, C_6, 3 C_{19}, 3 C_{57}, 3 D_{19}	C_2, C_6, 3 D_{19}	C_2, 3 C_{19}, 3 D_{19}
Genus 59				
C59.1	5 C_2, 3 C_4, 2 C_8, 7 C_{29}, 21 C_{58}, 7 C_{116}, 13 D_2, 3 D_4, 28 D_{29}, 49 D_{58}, 7 D_{116}	5 C_2, 3 C_4, C_8, 7 C_{29}, 21 C_{58}, 7 C_{116}, 13 D_2, 3 D_4, 28 D_{29}, 49 D_{58}, 7 D_{116}	3 C_2, 3 C_4, C_8, 7 C_{58}, 7 C_{116}, 13 D_2, 3 D_4, 21 D_{29}, 49 D_{58}, 7 D_{116}	5 C_2, 7 C_{29}, 14 C_{58}, 13 D_2, 28 D_{29}, 28 D_{58}
C59.2	3 C_2, 5 C_4, C_8, 7 C_{29}, 7 C_{58}, 21 C_{116}, 4 D_2, 2 D_4, 21 D_{29}, 21 D_{58}, 21 D_{116}	3 C_2, 5 C_4, 7 C_{29}, 7 C_{58}, 21 C_{116}, 4 D_2, 2 D_4, 21 D_{29}, 21 D_{58}, 21 D_{116}	3 C_2, 4 C_4, 7 C_{58}, 21 C_{116}, 4 D_2, 2 D_4, 21 D_{29}, 21 D_{58}, 21 D_{116}	3 C_2, 7 C_{29}, 4 D_2, 21 D_{29}
C59.3	3 C_2, C_3, 2 C_4, C_6, C_{12}, 7 C_{29}, 7 C_{58}, 7 C_{87}, 3 D_2, 2 D_3, D_6, 14 D_{29}, 7 D_{58}, 7 D_{87}	3 C_2, C_3, 2 C_4, C_6, 7 C_{29}, 7 C_{58}, 7 C_{87}, 3 D_2, 2 D_3, D_6, 14 D_{29}, 7 D_{58}, 7 D_{87}	2 C_2, 2 C_4, C_6, 3 D_2, D_3, D_6, 14 D_{29}, 7 D_{58}, 7 D_{87}	3 C_2, C_3, 7 C_{29}, 7 C_{58}, 3 D_2, D_3, 14 D_{29}, 7 D_{58}
C59.4	C_2, 3 C_7, 3 C_{14}, 2 C_{29}, 2 D_{29}	C_2, 2 C_{29}, 2 D_{29}	C_2, 2 D_{29}	C_2, 2 C_{29}, 2 D_{29}
C59.5	C_2, 3 C_7, 3 C_{14}, 2 C_{29}, 2 D_{29}	C_2, 2 C_{29}, 2 D_{29}	C_2, 2 D_{29}	C_2, 2 C_{29}, 2 D_{29}
C59.6	C_2, 3 C_7, 3 C_{14}, 2 C_{29}, 2 D_{29}	C_2, 2 C_{29}, 2 D_{29}	C_2, 2 D_{29}	C_2, 2 C_{29}, 2 D_{29}
C59.7	3 C_2, 2 C_4, 4 C_8, 7 C_{29}, 7 C_{58}, 7 C_{116}, 3 D_2, 14 D_{29}, 7 D_{58}	3 C_2, 2 C_4, 2 C_8, 7 C_{29}, 7 C_{58}, 7 C_{116}, 3 D_2, 14 D_{29}, 7 D_{58}	2 C_2, 2 C_4, 2 C_8, 7 C_{58}, 7 C_{116}, 3 D_2, 7 D_{29}, 7 D_{58}	3 C_2, 7 C_{29}, 3 D_2, 14 D_{29}
C59.8	2 C_2, 2 C_4, 2 C_8, 7 C_{29}, 7 C_{58}, 7 C_{116}, 2 D_2, 14 D_{29}, 7 D_{58}	2 C_2, 2 C_4, 7 C_{29}, 7 C_{58}, 7 C_{116}, 2 D_2, 14 D_{29}, 7 D_{58}	2 C_2, 2 C_4, 7 C_{58}, 7 C_{116}, 2 D_2, 14 D_{29}, 7 D_{58}	2 C_2, 7 C_{29}, 2 D_2, 14 D_{29}
C59.9	C_2, C_3, C_4, C_6, 2 C_{12}, 7 C_{29}, 7 C_{87}, 7 D_{29}	C_2, C_3, C_4, C_6, 7 C_{29}, 7 C_{87}, 7 D_{29}	C_2, C_4, C_6, 7 D_{29}	C_2, C_3, 7 C_{29}, 7 D_{29}
Genus 60				
	None			
Genus 61				
C61.1	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, 2 C_8, C_{10}, 7 D_2, 2 D_3, 5 D_4, 2 D_5, D_6, 2 D_8, D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, C_3, 3 C_4, C_5, C_6, 2 C_8, C_{10}, 7 D_2, 2 D_3, 5 D_4, 2 D_5, D_6, 2 D_8, D_{10}	**Tet**, 2 **Oct**, **Ico**, 3 C_2, 3 C_4, C_6, 2 C_8, C_{10}, 7 D_2, 2 D_3, 5 D_4, 2 D_5, D_6, 2 D_8, D_{10}	**Tet**, 3 C_2, C_3, C_5, 7 D_2, 2 D_3, 2 D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C61.2	5 C_2, 2 C_3, 2 C_4, C_5, 4 C_6, 3 C_{10}, C_{12}, 3 C_{15}, 2 C_{30}, 13 D_2, 6 D_3, 4 D_5, 7 D_6, 6 D_{10}, 5 D_{15}, 2 D_{30}	5 C_2, 2 C_3, 2 C_4, C_5, 4 C_6, 3 C_{10}, 3 C_{15}, 2 C_{30}, 13 D_2, 6 D_3, 4 D_5, 7 D_6, 6 D_{10}, 5 D_{15}, 2 D_{30}	3 C_2, 2 C_4, 3 C_6, 11 D_2, 3 D_3, 4 D_5, 6 D_6, 6 D_{10}, 5 D_{15}, 2 D_{30}	5 C_2, 2 C_3, C_5, C_6, 3 C_{10}, 2 C_{15}, 2 C_{30}, 13 D_2, 5 D_3, 4 D_5, 2 D_6, 6 D_{10}, 4 D_{15}, 2 D_{30}
C61.3	6 C_2, 6 C_4, C_5, 4 C_8, 3 C_{10}, 4 C_{16}, 6 C_{20}, 4 C_{40}, 19 D_2, 4 D_4, 4 D_5, 2 D_8, 10 D_{10}, 14 D_{20}, 8 D_{40}	6 C_2, 6 C_4, C_5, 3 C_8, 3 C_{10}, C_{16}, 6 C_{20}, 4 C_{40}, 19 D_2, 4 D_4, 4 D_5, 2 D_8, 10 D_{10}, 14 D_{20}, 8 D_{40}	3 C_2, 4 C_4, C_{10}, C_{20}, 17 D_2, 4 D_4, 3 D_5, 2 D_8, 9 D_{10}, 14 D_{20}, 8 D_{40}	6 C_2, 2 C_4, C_5, 2 C_{10}, 4 C_{20}, 19 D_2, 3 D_4, 4 D_5, 7 D_{10}, 8 D_{20}
C61.4	4 C_2, 6 C_4, C_5, 2 C_8, 3 C_{10}, 2 C_{16}, 6 C_{20}, 4 C_{40}, 12 D_2, 4 D_4, 3 D_5, 2 D_8, 9 D_{10}, 14 D_{20}, 8 D_{40}	4 C_2, 6 C_4, C_5, C_8, 3 C_{10}, 6 C_{20}, 4 C_{40}, 12 D_2, 4 D_4, 3 D_5, 2 D_8, 9 D_{10}, 14 D_{20}, 8 D_{40}	3 C_2, 4 C_4, C_{10}, C_{20}, 12 D_2, 4 D_4, 3 D_5, 2 D_8, 9 D_{10}, 14 D_{20}, 8 D_{40}	4 C_2, 2 C_4, C_5, 2 C_{10}, 4 C_{20}, 12 D_2, 3 D_4, 3 D_5, 6 D_{10}, 8 D_{20}
C61.5	5 C_2, 2 C_4, C_5, 3 C_7, 3 C_{10}, 9 C_{14}, 6 C_{28}, 3 C_{35}, 3 C_{70}, 13 D_2, 4 D_5, 6 D_7, 6 D_{10}, 12 D_{14}, 6 D_{35}, 3 D_{70}	5 C_2, 2 C_4, C_5, C_7, 3 C_{10}, 3 C_{14}, C_{28}, C_{35}, C_{70}, 13 D_2, 4 D_5, 2 D_7, 6 D_{10}, 4 D_{14}, 2 D_{35}, D_{70}	3 C_2, 2 C_4, C_{14}, 11 D_2, 4 D_5, D_7, 6 D_{10}, 3 D_{14}, 2 D_{35}, D_{70}	5 C_2, C_5, C_7, 3 C_{10}, 13 D_2, 4 D_5, 2 D_7, 6 D_{10}
C61.6	3 C_2, 2 C_4, C_5, C_{10}, 6 C_{13}, 6 C_{26}, 6 C_{52}, 6 C_{65}, 3 D_2, 2 D_5, D_{10}, 12 D_{13}, 6 D_{26}, 6 D_{65}	3 C_2, 2 C_4, C_5, C_{10}, C_{13}, C_{26}, C_{65}, 3 D_2, 2 D_5, D_{10}, 2 D_{13}, D_{26}, D_{65}	2 C_2, 2 C_4, C_{26}, 3 D_2, 2 D_5, D_{10}, D_{13}, D_{26}, D_{65}	3 C_2, C_5, C_{10}, C_{13}, 3 D_2, 2 D_5, D_{10}, D_{13}
C61.7	2 **Tet**, 4 **Oct**, 2 **Ico**, 3 C_2, 2 C_3, 2 C_4, C_5, 2 C_6, 9 D_2, 4 D_3, 4 D_4, D_5, 2 D_6	2 **Tet**, 4 **Oct**, 2 **Ico**, 3 C_2, 2 C_3, 2 C_4, C_5, 2 C_6, 9 D_2, 4 D_3, 4 D_4, D_5, 2 D_6	2 **Tet**, 4 **Oct**, 2 **Ico**, 3 C_2, 2 C_4, 2 C_6, 9 D_2, 4 D_3, 4 D_4, D_5, 2 D_6	2 **Tet**, 3 C_2, 2 C_3, C_5, 9 D_2, 4 D_3, D_5
C61.8	**Tet**, 7 C_2, 2 C_3, 6 C_6, 2 C_9, 8 C_{18}, 37 D_2, 4 D_3, 10 D_6, 8 D_9, 28 D_{18}	**Tet**, 7 C_2, 2 C_3, 6 C_6, C_9, 7 C_{18}, 37 D_2, 4 D_3, 10 D_6, 8 D_9, 28 D_{18}	3 C_2, 2 C_6, 27 D_2, 2 D_3, 8 D_6, 4 D_9, 22 D_{18}	7 C_2, C_3, C_6, 37 D_2, 4 D_3, 2 D_6
C61.9	C_2, 2 C_3, C_6, 3 C_7, 2 C_9, 9 C_{21}, 12 C_{63}, D_3, 3 D_7, D_9, 6 D_{21}, 6 D_{63}	C_2, 2 C_3, C_6, C_7, C_9, 2 C_{21}, C_{63}, D_3, D_7, D_9, D_{21}, D_{63}	C_2, C_6, D_3, D_7, D_9, D_{21}, D_{63}	C_2, C_3, C_7, C_{21}, D_3, D_7, D_{21}
C61.10	3 C_2, 3 C_3, 2 C_4, C_5, 3 C_6, C_{10}, 2 C_{12}, 4 C_{15}, 3 D_2, 6 D_3, 2 D_5, 3 D_6, D_{10}, 4 D_{15}	3 C_2, 3 C_3, 2 C_4, C_5, 3 C_6, C_{10}, 4 C_{15}, 3 D_2, 6 D_3, 2 D_5, 3 D_6, D_{10}, 4 D_{15}	2 C_2, 2 C_4, 3 C_6, 3 D_2, 3 D_3, 2 D_5, 3 D_6, D_{10}, 4 D_{15}	3 C_2, 3 C_3, C_5, C_{10}, 2 C_{15}, 3 D_2, 4 D_3, 2 D_5, D_{10}, 2 D_{15}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C61.11	3 C_2, 3 C_3, 2 C_4, C_5, 5 C_6, C_{10}, 7 C_{12}, 3 C_{15}, C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}	3 C_2, 3 C_3, 2 C_4, C_5, 5 C_6, C_{10}, 5 C_{12}, 3 C_{15}, C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, D_{15}	2 C_2, 2 C_4, 4 C_6, 3 C_{12}, 3 D_2, D_3, 2 D_5, D_6, D_{10}, D_{15}	3 C_2, C_3, C_5, C_{10}, C_{15}, 3 D_2, 2 D_3, 2 D_5, D_{10}, D_{15}
C61.12	3 C_2, 3 C_4, C_5, 4 C_8, 2 C_{10}, 6 C_{16}, 2 C_{20}, 2 C_{40}, 4 D_2, 2 D_4, 2 D_5, 2 D_{10}, D_{20}	3 C_2, 3 C_4, C_5, 2 C_8, 2 C_{10}, 2 C_{20}, 2 C_{40}, 4 D_2, 2 D_4, 2 D_5, 2 D_{10}, D_{20}	2 C_2, 2 C_4, C_{10}, C_{20}, 4 D_2, 2 D_4, 2 D_5, 2 D_{10}, D_{20}	3 C_2, C_5, C_{10}, 4 D_2, 2 D_5
C61.13	3 C_2, 3 C_4, C_5, 3 C_8, 3 C_{10}, 4 C_{16}, 2 C_{20}, 4 C_{40}, 7 D_2, 2 D_5, 4 D_{10}	3 C_2, 3 C_4, C_5, C_8, 3 C_{10}, 2 C_{20}, 4 C_{40}, 7 D_2, 2 D_5, 4 D_{10}	2 C_2, 2 C_4, C_{10}, C_{20}, 7 D_2, 2 D_5, 4 D_{10}	3 C_2, C_4, C_5, 2 C_{10}, 7 D_2, 2 D_5, 2 D_{10}
C61.14	5 C_2, 3 C_4, C_5, 6 C_8, 3 C_{10}, 8 C_{16}, 2 C_{20}, 4 C_{40}, 13 D_2, 4 D_5, 6 D_{10}	5 C_2, 3 C_4, C_5, 4 C_8, 3 C_{10}, 2 C_{16}, 2 C_{20}, 4 C_{40}, 13 D_2, 4 D_5, 6 D_{10}	2 C_2, 2 C_4, C_{10}, C_{20}, 11 D_2, 2 D_5, 5 D_{10}	5 C_2, C_4, C_5, 2 C_{10}, 13 D_2, 4 D_5, 4 D_{10}
C61.15	3 C_2, 2 C_4, C_5, 3 C_7, C_{10}, 9 C_{14}, 12 C_{28}, 3 C_{35}, 3 C_{70}, 3 D_2, 2 D_5, D_{10}	3 C_2, 2 C_4, C_5, C_7, C_{10}, 3 C_{14}, 2 C_{28}, C_{35}, C_{70}, 3 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_{14}, 3 D_2, 2 D_5, D_{10}	3 C_2, C_5, C_7, C_{10}, 3 D_2, 2 D_5, D_{10}
C61.16	C_2, 2 C_3, 2 C_5, C_6, 2 C_9, 2 C_{10}, 6 C_{15}, 4 C_{30}, 6 C_{45}, D_3, D_9	C_2, 2 C_3, C_5, C_6, C_9, C_{10}, C_{15}, C_{30}, D_3, D_9	C_2, C_6, C_{10}, C_{30}, D_3, D_9	C_2, C_3, D_3
C61.17	C_2, C_4, C_5, 6 C_{13}, 6 C_{26}, 12 C_{52}, 6 C_{65}, D_5	C_2, C_4, C_5, C_{13}, C_{26}, C_{65}, D_5	C_2, C_4, C_{26}, D_5	C_2, C_5, C_{13}, D_5
Genus 62				
C62.1	C_2, 2 C_5, 2 C_{10}, 6 C_{61}, 6 D_{61}	C_2, 6 C_{61}, 6 D_{61}	C_2, 6 D_{61}	C_2, 6 C_{61}, 6 D_{61}
C62.2	C_2, 2 C_5, 2 C_{10}, 6 C_{61}, 6 D_{61}	C_2, 6 C_{61}, 6 D_{61}	C_2, 6 D_{61}	C_2, 6 C_{61}, 6 D_{61}
C62.3	3 C_2, C_3, 3 C_6, 10 C_{61}, 10 C_{122}, 3 D_2, 20 D_{61}, 10 D_{122}	3 C_2, C_3, 3 C_6, 10 C_{61}, 10 C_{122}, 3 D_2, 20 D_{61}, 10 D_{122}	3 C_2, 2 C_6, 10 C_{122}, 3 D_2, 20 D_{61}, 10 D_{122}	3 C_2, C_3, 10 C_{61}, 3 D_2, 20 D_{61}
Genus 63				
C63.1	2 C_2, C_3, 2 C_4, C_6, 2 C_{12}, 5 C_{31}, 5 C_{62}, 15 C_{124}, 2 D_2, D_4, 15 D_{31}, 15 D_{62}, 15 D_{124}	2 C_2, C_3, 2 C_4, C_6, C_{12}, 5 C_{31}, 5 C_{62}, 15 C_{124}, 2 D_2, D_4, 15 D_{31}, 15 D_{62}, 15 D_{124}	2 C_2, 2 C_4, C_6, C_{12}, 5 C_{62}, 15 C_{124}, 2 D_2, D_4, 15 D_{31}, 15 D_{62}, 15 D_{124}	2 C_2, 5 C_{31}, 2 D_2, 15 D_{31}
C63.2	C_2, 2 C_5, 3 C_7, 2 C_{10}, 12 C_{35}, 3 D_2	C_2, C_5, C_7, C_{10}, C_{35}, 3 D_2	C_2, C_{10}, 3 D_2	C_2, C_5, C_7, 3 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 64				
C64.1	2 **Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 4 C_6, C_7, C_{12}, C_{14}, 8 C_{21}, 2 C_{42}, 3 D_2, 2 D_3, D_4, D_6, D_7, D_{14}, 8 D_{21}, 2 D_{42}	2 **Tet**, **Oct**, 2 C_2, 4 C_3, C_4, 4 C_6, C_7, C_{14}, 8 C_{21}, 2 C_{42}, 3 D_2, 2 D_3, D_4, D_6, D_7, D_{14}, 8 D_{21}, 2 D_{42}	2 **Tet**, **Oct**, 2 C_2, C_4, 4 C_6, C_{14}, 2 C_{42}, 3 D_2, 2 D_3, D_4, D_6, D_7, D_{14}, 8 D_{21}, 2 D_{42}	2 C_2, 2 C_3, C_7, 8 C_{21}, 3 D_2, 2 D_3, D_7, 8 D_{21}
C64.2	C_2, 4 C_3, C_6, C_7, 3 C_9, 3 C_{18}, 9 C_{21}, 2 D_3, D_7, 8 D_{21}	C_2, 4 C_3, C_6, C_7, C_9, C_{18}, 9 C_{21}, 2 D_3, D_7, 8 D_{21}	C_2, C_6, C_{18}, 2 D_3, D_7, 8 D_{21}	C_2, 2 C_3, C_7, 8 C_{21}, 2 D_3, D_7, 8 D_{21}
C64.3	2 C_2, 3 C_3, C_4, 4 C_6, C_7, C_8, C_{12}, C_{14}, 2 C_{21}, 2 C_{24}, C_{28}, 2 C_{42}, 2 D_2, 2 D_3, D_4, D_6, D_7, D_{14}, 4 D_{21}, D_{28}, 2 D_{42}	2 C_2, 3 C_3, C_4, 4 C_6, C_7, C_{14}, 2 C_{21}, C_{28}, 2 C_{42}, 2 D_2, 2 D_3, D_4, D_6, D_7, D_{14}, 4 D_{21}, D_{28}, 2 D_{42}	2 C_2, C_4, 4 C_6, C_{14}, C_{28}, 2 C_{42}, 2 D_2, 2 D_3, D_4, D_6, D_7, D_{14}, 4 D_{21}, D_{28}, 2 D_{42}	2 C_2, C_3, C_7, 2 C_{21}, 2 D_2, 2 D_3, D_7, 4 D_{21}
C64.4	3 C_2, 4 C_3, 6 C_6, C_7, C_{14}, 4 C_{21}, 3 D_2, 4 D_3, 2 D_6, 2 D_7, D_{14}, 4 D_{21}	3 C_2, 4 C_3, 6 C_6, C_7, C_{14}, 4 C_{21}, 3 D_2, 4 D_3, 2 D_6, 2 D_7, D_{14}, 4 D_{21}	3 C_2, 6 C_6, C_{14}, 3 D_2, 4 D_3, 2 D_6, 2 D_7, D_{14}, 4 D_{21}	3 C_2, 2 C_3, C_7, 4 C_{21}, 3 D_2, 4 D_3, 2 D_7, 4 D_{21}
C64.5	3 C_2, 4 C_3, 6 C_6, C_7, C_{14}, 8 C_{21}, 8 C_{42}, 3 D_2, 4 D_3, 2 D_6, 2 D_7, D_{14}, 16 D_{21}, 8 D_{42}	3 C_2, 4 C_3, 6 C_6, C_7, C_{14}, 8 C_{21}, 8 C_{42}, 3 D_2, 4 D_3, 2 D_6, 2 D_7, D_{14}, 16 D_{21}, 8 D_{42}	3 C_2, 5 C_6, C_{14}, 8 C_{42}, 3 D_2, 4 D_3, 2 D_6, 2 D_7, D_{14}, 16 D_{21}, 8 D_{42}	3 C_2, 2 C_3, C_7, 8 C_{21}, 3 D_2, 4 D_3, 2 D_7, 16 D_{21}
C64.6	3 C_2, 7 C_3, 7 C_6, C_7, C_{14}, 5 C_{21}, 2 C_{42}, 3 D_2, 5 D_3, 2 D_6, 2 D_7, D_{14}, 7 D_{21}, 2 D_{42}	3 C_2, 7 C_3, 7 C_6, C_7, C_{14}, 5 C_{21}, 2 C_{42}, 3 D_2, 5 D_3, 2 D_6, 2 D_7, D_{14}, 7 D_{21}, 2 D_{42}	3 C_2, 7 C_6, C_{14}, 2 C_{42}, 3 D_2, 5 D_3, 2 D_6, 2 D_7, D_{14}, 7 D_{21}, 2 D_{42}	3 C_2, 5 C_3, C_7, 5 C_{21}, 3 D_2, 5 D_3, 2 D_7, 7 D_{21}
C64.7	3 C_2, 3 C_3, C_4, 5 C_6, C_7, 5 C_{12}, 2 C_{14}, C_{21}, C_{42}, 4 D_2, 2 D_3, D_4, 2 D_6, D_7, 2 D_{12}, D_{14}, 2 D_{21}, D_{42}	3 C_2, 3 C_3, C_4, 5 C_6, C_7, 4 C_{12}, 2 C_{14}, C_{21}, C_{42}, 4 D_2, 2 D_3, D_4, 2 D_6, D_7, 2 D_{12}, D_{14}, 2 D_{21}, D_{42}	3 C_2, C_4, 5 C_6, 4 C_{12}, 2 C_{14}, C_{42}, 4 D_2, 2 D_3, D_4, 2 D_6, D_7, 2 D_{12}, D_{14}, 2 D_{21}, D_{42}	3 C_2, C_3, C_7, C_{21}, 4 D_2, 2 D_3, D_7, 2 D_{21}
C64.8	3 C_2, 3 C_3, C_4, 5 C_6, C_7, 5 C_{12}, C_{14}, 2 C_{21}, 2 C_{28}, 2 C_{42}, 4 C_{84}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_7, 2 D_{12}, 2 D_{14}, 4 D_{21}, 2 D_{28}, 4 D_{42}, 4 D_{84}	3 C_2, 3 C_3, C_4, 5 C_6, C_7, 4 C_{12}, C_{14}, 2 C_{21}, 2 C_{28}, 2 C_{42}, 4 C_{84}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_7, 2 D_{12}, 2 D_{14}, 4 D_{21}, 2 D_{28}, 4 D_{42}, 4 D_{84}	3 C_2, 4 C_6, C_{14}, 2 C_{42}, 4 D_2, 2 D_3, D_4, 2 D_6, 2 D_7, 2 D_{12}, 2 D_{14}, 4 D_{21}, 2 D_{28}, 4 D_{42}, 4 D_{84}	3 C_2, C_3, C_4, C_7, 2 C_{21}, 4 D_2, 2 D_3, D_4, 2 D_7, 4 D_{21}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C64.9	3 C_2, 3 C_3, C_4, 8 C_6, C_7, C_{12}, 2 C_{14}, 2 C_{21}, 4 C_{42}, 4 D_2, D_3, D_4, D_6, D_7, D_{14}, 2 D_{21}, 2 D_{42}	3 C_2, 3 C_3, C_4, 8 C_6, C_7, 2 C_{14}, 2 C_{21}, 4 C_{42}, 4 D_2, D_3, D_4, D_6, D_7, D_{14}, 2 D_{21}, 2 D_{42}	3 C_2, C_4, 8 C_6, 2 C_{14}, 4 C_{42}, 4 D_2, D_3, D_4, D_6, D_7, D_{14}, 2 D_{21}, 2 D_{42}	3 C_2, C_3, C_7, 2 C_{21}, 4 D_2, D_3, D_7, 2 D_{21}
C64.10	3 C_2, 3 C_3, C_4, 8 C_6, C_7, C_{12}, C_{14}, C_{21}, 2 C_{28}, C_{42}, 4 D_2, D_3, D_4, D_6, 2 D_7, 2 D_{14}, 2 D_{21}, 2 D_{28}, D_{42}	3 C_2, 3 C_3, C_4, 8 C_6, C_7, C_{14}, C_{21}, 2 C_{28}, C_{42}, 4 D_2, D_3, D_4, D_6, 2 D_7, 2 D_{14}, 2 D_{21}, 2 D_{28}, D_{42}	3 C_2, C_4, 7 C_6, C_{14}, 2 C_{28}, C_{42}, 4 D_2, D_3, D_4, D_6, 2 D_7, 2 D_{14}, 2 D_{21}, 2 D_{28}, D_{42}	3 C_2, C_3, C_7, C_{21}, 4 D_2, D_3, 2 D_7, 2 D_{21}
C64.11	3 C_2, C_3, 2 C_5, 3 C_6, C_7, 2 C_{10}, C_{14}, 2 C_{15}, 2 C_{30}, 2 C_{35}, 3 D_2, 4 D_5, 2 D_7, 2 D_{10}, D_{14}, 2 D_{35}	3 C_2, C_3, C_5, 3 C_6, C_7, C_{10}, C_{14}, C_{35}, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, D_{35}	3 C_2, 2 C_6, C_{14}, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, D_{35}	3 C_2, C_5, C_7, 3 D_2, 2 D_5, 2 D_7
C64.12	3 C_2, C_3, 2 C_5, 3 C_6, C_7, 2 C_{10}, C_{14}, 2 C_{15}, 2 C_{30}, 4 C_{35}, 4 C_{70}, 3 D_2, 4 D_5, 2 D_7, 2 D_{10}, D_{14}, 8 D_{35}, 4 D_{70}	3 C_2, C_3, C_5, 3 C_6, C_7, C_{10}, C_{14}, 2 C_{35}, 2 C_{70}, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, 4 D_{35}, 2 D_{70}	3 C_2, 2 C_6, C_{14}, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, 4 D_{35}, 2 D_{70}	3 C_2, C_5, C_7, C_{10}, 3 D_2, 2 D_5, 2 D_7, D_{10}
C64.13	2 C_2, 3 C_3, 2 C_4, 2 C_6, C_8, 2 C_{12}, 2 D_2, 4 D_3, D_4, 2 D_6, D_{12}	2 C_2, 3 C_3, 2 C_4, 2 C_6, C_{12}, 2 D_2, 4 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_4, 2 C_6, 2 D_2, 4 D_3, D_4, 2 D_6, D_{12}	2 C_2, 3 C_3, 2 D_2, 4 D_3
C64.14	2 C_2, 2 C_3, 2 C_4, 2 C_6, C_8, 2 C_{12}, 2 D_2, 3 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_3, 2 C_4, 2 C_6, C_{12}, 2 D_2, 3 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_4, 2 C_6, 2 D_2, 3 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_3, 2 D_2, 3 D_3
C64.15	2 C_2, 2 C_3, 2 C_4, 2 C_6, C_8, 2 C_{12}, 2 D_2, 3 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_3, 2 C_4, 2 C_6, C_{12}, 2 D_2, 3 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_4, 2 C_6, 2 D_2, 3 D_3, D_4, 2 D_6, D_{12}	2 C_2, 2 C_3, 2 D_2, 3 D_3
C64.16	C_2, 3 C_3, C_6, C_7, 6 C_9, 3 C_{18}, 5 C_{21}, D_3, D_7, 2 D_{21}	C_2, 3 C_3, C_6, C_7, 2 C_9, C_{18}, 5 C_{21}, D_3, D_7, 2 D_{21}	C_2, C_6, C_{18}, D_3, D_7, 2 D_{21}	C_2, 2 C_3, C_7, 4 C_{21}, D_3, D_7, 2 D_{21}
C64.17	2 C_2, C_3, 2 C_4, 2 C_6, C_7, C_8, 2 C_{12}, C_{14}, 2 C_{24}, 2 C_{28}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, C_3, 2 C_4, 2 C_6, C_7, C_{14}, 2 C_{28}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, 2 C_4, 2 C_6, C_{14}, 2 C_{28}, 2 D_2, D_4, D_7, D_{14}, D_{28}	2 C_2, C_7, 2 D_2, D_7
C64.18	2 C_2, C_3, 2 C_4, 2 C_6, C_7, C_8, 2 C_{12}, C_{14}, 2 C_{24}, 2 C_{28}, 2 C_{56}, 2 D_2, D_4, D_7, D_{14}, 2 D_{28}	2 C_2, C_3, 2 C_4, 2 C_6, C_7, C_{14}, 2 C_{28}, 2 D_2, D_4, D_7, D_{14}, 2 D_{28}	2 C_2, 2 C_4, 2 C_6, C_{14}, 2 C_{28}, 2 D_2, D_4, D_7, D_{14}, 2 D_{28}	2 C_2, C_7, 2 D_2, D_7
C64.19	3 C_2, 3 C_3, 5 C_6, 8 C_9, 14 C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, 3 C_3, 5 C_6, 4 C_9, 6 C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, 4 C_6, 5 C_{18}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, C_3, 2 C_9, 3 D_2, 2 D_3, 2 D_9
C64.20	C_2, C_3, C_6, 7 C_7, 3 C_{14}, 6 C_{21}, 6 C_{42}, D_7	C_2, C_3, C_6, 4 C_7, D_7	C_2, C_6, D_7	C_2, 4 C_7, D_7

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 65				
C65.1	**Tet**, **Oct**, 5 C_2, C_3, 5 C_4, 2 C_6, 5 C_8, C_{12}, 6 C_{16}, 2 C_{24}, 24 D_2, D_3, 10 D_4, D_6, 11 D_8, 2 D_{12}, 10 D_{16}, 2 D_{24}	**Tet**, **Oct**, 5 C_2, C_3, 5 C_4, 2 C_6, 5 C_8, C_{12}, 6 C_{16}, 2 C_{24}, 24 D_2, D_3, 10 D_4, D_6, 11 D_8, 2 D_{12}, 10 D_{16}, 2 D_{24}	**Oct**, 3 C_2, C_4, C_6, 21 D_2, D_3, 10 D_4, D_6, 11 D_8, 2 D_{12}, 10 D_{16}, 2 D_{24}	**Tet**, **Oct**, 5 C_2, C_3, 4 C_4, 5 C_8, 6 C_{16}, 24 D_2, D_3, 10 D_4, 11 D_8, 10 D_{16}
C65.2	5 C_2, 9 C_4, 7 C_8, 4 C_{16}, 16 D_2, 11 D_4, 14 D_8, 8 D_{16}	5 C_2, 9 C_4, 6 C_8, 4 C_{16}, 16 D_2, 11 D_4, 14 D_8, 8 D_{16}	3 C_2, 3 C_4, C_8, 14 D_2, 11 D_4, 14 D_8, 8 D_{16}	5 C_2, 6 C_4, 5 C_8, 4 C_{16}, 16 D_2, 11 D_4, 14 D_8, 8 D_{16}
C65.3	10 C_2, 10 C_4, 5 C_8, 106 D_2, 48 D_4, 4 D_8	10 C_2, 10 C_4, 4 C_8, 106 D_2, 48 D_4, 4 D_8	3 C_2, 2 C_4, C_8, 57 D_2, 37 D_4, 4 D_8	10 C_2, 8 C_4, 3 C_8, 106 D_2, 48 D_4, 4 D_8
C65.4	**Tet**, **Oct**, 6 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, C_{12}, 22 D_2, 4 D_3, 15 D_4, 7 D_6, 11 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 5 C_4, 3 C_6, 6 C_8, 22 D_2, 4 D_3, 15 D_4, 7 D_6, 11 D_8	**Tet**, **Oct**, 3 C_2, 4 C_4, C_6, 4 C_8, 22 D_2, 3 D_3, 15 D_4, 7 D_6, 11 D_8	**Tet**, 6 C_2, C_3, C_4, 2 C_8, 22 D_2, 4 D_3, 3 D_4, 4 D_8
C65.5	**Tet**, 2 **Oct**, 9 C_2, C_3, 8 C_4, 3 C_6, 2 C_8, 2 C_{12}, 57 D_2, 2 D_3, 22 D_4, 4 D_6, 4 D_8	**Tet**, 2 **Oct**, 9 C_2, C_3, 8 C_4, 3 C_6, 2 C_8, C_{12}, 57 D_2, 2 D_3, 22 D_4, 4 D_6, 4 D_8	**Oct**, 3 C_2, 2 C_4, C_6, C_{12}, 37 D_2, D_3, 13 D_4, 3 D_6, 3 D_8	**Tet**, 2 **Oct**, 9 C_2, C_3, 6 C_4, 2 C_8, 57 D_2, 2 D_3, 22 D_4, 4 D_8
C65.6	**Tet**, **Oct**, 6 C_2, C_3, 7 C_4, C_6, 3 C_8, 2 C_{12}, 36 D_2, D_3, 9 D_4, D_6, 4 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 7 C_4, C_6, 3 C_8, C_{12}, 36 D_2, D_3, 9 D_4, D_6, 4 D_8, D_{12}	**Oct**, 3 C_2, 4 C_4, C_6, C_8, C_{12}, 29 D_2, D_3, 8 D_4, D_6, 4 D_8, D_{12}	**Tet**, **Oct**, 6 C_2, C_3, 3 C_4, 2 C_8, 36 D_2, D_3, 8 D_4, 4 D_8
C65.7	2 **Tet**, **Oct**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 2 C_5, 2 C_6, 10 D_2, D_3, 5 D_4, 2 D_5, D_6	2 **Tet**, **Oct**, **Ico**, 3 C_2, C_3, 2 C_4, C_5, 2 C_6, 10 D_2, D_3, 5 D_4, D_5, D_6	**Tet**, **Oct**, **Ico**, 2 C_2, C_4, C_6, 9 D_2, D_3, 5 D_4, D_5, D_6	2 **Tet**, **Oct**, 3 C_2, C_3, C_4, C_5, 10 D_2, D_3, 2 D_4, D_5
C65.8	**Tet**, 5 C_2, C_3, 4 C_4, 3 C_6, 6 C_8, 19 D_2, 14 D_4, 12 D_8	**Tet**, 5 C_2, C_3, 4 C_4, 3 C_6, 6 C_8, 19 D_2, 14 D_4, 12 D_8	3 C_2, 2 C_6, 16 D_2, 12 D_4, 12 D_8	**Tet**, 5 C_2, C_3, 4 C_4, 6 C_8, 19 D_2, 14 D_4, 12 D_8
C65.9	**Tet**, 5 C_2, C_3, 3 C_4, 3 C_6, 7 C_8, C_{12}, 2 C_{24}, 17 D_2, 8 D_4, 9 D_8	**Tet**, 5 C_2, C_3, 3 C_4, 3 C_6, 7 C_8, C_{12}, 2 C_{24}, 17 D_2, 8 D_4, 9 D_8	3 C_2, 2 C_6, 14 D_2, 8 D_4, 9 D_8	**Tet**, 5 C_2, C_3, 3 C_4, 7 C_8, 17 D_2, 8 D_4, 9 D_8
C65.10	**Tet**, 5 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 19 D_2, 10 D_4, 4 D_8	**Tet**, 5 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 19 D_2, 10 D_4, 4 D_8	3 C_2, 2 C_6, 16 D_2, 10 D_4, 4 D_8	**Tet**, 5 C_2, C_3, 5 C_4, 2 C_8, 19 D_2, 10 D_4, 4 D_8
C65.11	**Tet**, 2 C_2, C_3, C_4, 2 C_5, C_6, 2 C_{15}, 7 D_2, 2 D_4, 2 D_5	**Tet**, 2 C_2, C_3, C_4, C_5, C_6, 7 D_2, 2 D_4, D_5	C_2, C_6, 2 D_2, 2 D_4, D_5	2 C_2, C_4, C_5, 7 D_2, 2 D_4, D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C65.12	5 C_2, 7 C_4, 9 C_8, 15 D_2, 6 D_4, 4 D_8	5 C_2, 7 C_4, 7 C_8, 15 D_2, 6 D_4, 4 D_8	3 C_2, 2 C_4, 2 C_8, 13 D_2, 6 D_4, 4 D_8	5 C_2, 5 C_4, 5 C_8, 15 D_2, 6 D_4, 4 D_8
C65.13	9 C_2, 9 C_4, 4 C_8, 70 D_2, 11 D_4	9 C_2, 9 C_4, 2 C_8, 70 D_2, 11 D_4	3 C_2, 2 C_4, 2 C_8, 32 D_2, 11 D_4	9 C_2, 7 C_4, 70 D_2, 11 D_4
C65.14	7 C_2, 8 C_4, 5 C_8, 42 D_2, 12 D_4	7 C_2, 8 C_4, 3 C_8, 42 D_2, 12 D_4	3 C_2, 2 C_4, 2 C_8, 29 D_2, 10 D_4	7 C_2, 6 C_4, C_8, 42 D_2, 12 D_4
C65.15	**Tet**, 7 C_2, C_3, 6 C_4, 3 C_6, 4 C_{12}, 41 D_2, 8 D_4	**Tet**, 7 C_2, C_3, 6 C_4, 3 C_6, 2 C_{12}, 41 D_2, 8 D_4	2 C_2, 2 C_4, C_6, 2 C_{12}, 24 D_2, 5 D_4	**Tet**, 7 C_2, C_3, 4 C_4, 41 D_2, 8 D_4
C65.16	**Tet**, 5 C_2, C_3, 6 C_4, C_6, 3 C_{12}, 31 D_2, 4 D_4	**Tet**, 5 C_2, C_3, 6 C_4, C_6, C_{12}, 31 D_2, 4 D_4	2 C_2, 3 C_4, C_6, C_{12}, 21 D_2, 3 D_4	**Tet**, 5 C_2, C_3, 3 C_4, 31 D_2, 4 D_4
C65.17	**Tet**, 4 C_2, C_3, 3 C_4, 3 C_6, C_8, C_{12}, 14 D_2, 4 D_4, D_8	**Tet**, 4 C_2, C_3, 3 C_4, 3 C_6, C_8, 14 D_2, 4 D_4, D_8	**Tet**, 2 C_2, 2 C_4, C_6, C_8, 14 D_2, 4 D_4, D_8	**Tet**, 4 C_2, C_3, C_4, 14 D_2, D_4
C65.18	3 C_2, C_3, C_6, 3 C_7, 3 C_{14}, 3 C_{21}, 15 D_2, 2 D_3, 4 D_6	3 C_2, C_3, C_6, 15 D_2, 2 D_3, 4 D_6	2 C_2, 12 D_2, 2 D_3, 4 D_6	3 C_2, C_3, 15 D_2, 2 D_3

Genus 66				
	None			

Genus 67				
C67.1	2 C_2, 2 C_3, 2 C_4, 2 C_6, 2 C_9, 3 C_{12}, 2 C_{18}, 3 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 2 C_3, 2 C_4, 2 C_6, C_9, 2 C_{12}, C_{18}, 3 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 2 C_4, 2 C_6, 2 C_{12}, C_{18}, 3 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, C_3, 2 D_2, D_3
C67.2	C_2, C_3, 2 C_5, C_6, 2 C_{10}, C_{11}, 4 C_{15}, 4 C_{30}, C_{33}, D_{11}	C_2, C_3, C_6, C_{11}, C_{33}, D_{11}	C_2, C_6, D_{11}	C_2, C_{11}, D_{11}
C67.3	C_2, C_3, 2 C_5, C_6, 2 C_{10}, C_{11}, 4 C_{15}, 4 C_{30}, C_{33}, D_{11}	C_2, C_3, C_6, C_{11}, C_{33}, D_{11}	C_2, C_6, D_{11}	C_2, C_{11}, D_{11}

Genus 68				
C68.1	3 C_2, C_3, 3 C_6, 11 C_{67}, 11 C_{134}, 3 D_2, 22 D_{67}, 11 D_{134}	3 C_2, C_3, 3 C_6, 11 C_{67}, 11 C_{134}, 3 D_2, 22 D_{67}, 11 D_{134}	3 C_2, 2 C_6, 11 C_{134}, 3 D_2, 22 D_{67}, 11 D_{134}	3 C_2, C_3, 11 C_{67}, 3 D_2, 22 D_{67}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 69				
C69.1	6 C_2, 5 C_4, 2 C_8, 4 C_{17}, 12 C_{34}, 24 C_{68}, 19 D_2, 3 D_4, 16 D_{17}, 40 D_{34}, 48 D_{68}	6 C_2, 5 C_4, C_8, 4 C_{17}, 12 C_{34}, 24 C_{68}, 19 D_2, 3 D_4, 16 D_{17}, 40 D_{34}, 48 D_{68}	3 C_2, 4 C_4, C_8, 4 C_{34}, 8 C_{68}, 17 D_2, 3 D_4, 12 D_{17}, 36 D_{34}, 48 D_{68}	6 C_2, C_4, 4 C_{17}, 8 C_{34}, 16 C_{68}, 19 D_2, 2 D_4, 16 D_{17}, 28 D_{34}, 32 D_{68}
C69.2	6 C_2, 3 C_4, C_8, 4 C_{17}, 20 C_{34}, 16 C_{68}, 33 D_2, 3 D_4, 20 D_{17}, 76 D_{34}, 32 D_{68}	6 C_2, 3 C_4, 4 C_{17}, 20 C_{34}, 16 C_{68}, 33 D_2, 3 D_4, 20 D_{17}, 76 D_{34}, 32 D_{68}	3 C_2, 2 C_4, 4 C_{34}, 25 D_2, 3 D_4, 12 D_{17}, 60 D_{34}, 32 D_{68}	6 C_2, C_4, 4 C_{17}, 16 C_{34}, 16 C_{68}, 33 D_2, 2 D_4, 20 D_{17}, 64 D_{34}, 32 D_{68}
C69.3	5 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, 4 C_{17}, 12 C_{34}, 4 C_{51}, 4 C_{102}, 13 D_2, 2 D_3, 4 D_6, 16 D_{17}, 24 D_{34}, 8 D_{51}, 4 D_{102}	5 C_2, C_3, 2 C_4, 3 C_6, C_{12}, 4 C_{17}, 12 C_{34}, 4 C_{51}, 4 C_{102}, 13 D_2, 2 D_3, 4 D_6, 16 D_{17}, 24 D_{34}, 8 D_{51}, 4 D_{102}	3 C_2, 2 C_4, C_6, 11 D_2, D_3, 3 D_6, 16 D_{17}, 24 D_{34}, 8 D_{51}, 4 D_{102}	5 C_2, C_3, 4 C_{17}, 12 C_{34}, 13 D_2, 2 D_3, 16 D_{17}, 24 D_{34}
C69.4	3 C_2, 2 C_4, 2 C_5, 2 C_{10}, 4 C_{17}, 2 C_{20}, 4 C_{34}, 8 C_{85}, 3 D_2, 4 D_5, 2 D_{10}, 8 D_{17}, 4 D_{34}, 8 D_{85}	3 C_2, 2 C_4, C_5, C_{10}, 4 C_{17}, 4 C_{34}, 4 C_{85}, 3 D_2, 2 D_5, D_{10}, 8 D_{17}, 4 D_{34}, 4 D_{85}	2 C_2, 2 C_4, C_{10}, 3 D_2, D_5, D_{10}, 8 D_{17}, 4 D_{34}, 4 D_{85}	3 C_2, C_5, 4 C_{17}, 4 C_{34}, 3 D_2, D_5, 8 D_{17}, 4 D_{34}
C69.5	5 C_2, 3 C_4, 4 C_8, 4 C_{17}, 12 C_{34}, 8 C_{68}, 13 D_2, 16 D_{17}, 24 D_{34}	5 C_2, 3 C_4, 2 C_8, 4 C_{17}, 12 C_{34}, 8 C_{68}, 13 D_2, 16 D_{17}, 24 D_{34}	2 C_2, 3 C_4, 2 C_8, 4 C_{34}, 8 C_{68}, 11 D_2, 8 D_{17}, 20 D_{34}	5 C_2, 4 C_{17}, 8 C_{34}, 13 D_2, 16 D_{17}, 16 D_{34}
C69.6	4 C_2, 2 C_4, 2 C_8, 4 C_{17}, 20 C_{34}, 12 D_2, 2 D_4, 8 D_{17}, 16 D_{34}	4 C_2, 2 C_4, 4 C_{17}, 20 C_{34}, 12 D_2, 2 D_4, 8 D_{17}, 16 D_{34}	2 C_2, 2 C_4, 4 C_{34}, 9 D_2, 2 D_4, 8 D_{17}, 16 D_{34}	4 C_2, 4 C_{17}, 16 C_{34}, 12 D_2, 8 D_{17}, 8 D_{34}
C69.7	5 C_2, 3 C_4, 4 C_8, 2 C_{17}, 6 C_{34}, 13 D_2, 8 D_{17}, 12 D_{34}	5 C_2, 3 C_4, 2 C_8, 2 C_{17}, 6 C_{34}, 13 D_2, 8 D_{17}, 12 D_{34}	2 C_2, 3 C_4, 2 C_8, 11 D_2, 6 D_{17}, 12 D_{34}	5 C_2, 2 C_{17}, 6 C_{34}, 13 D_2, 8 D_{17}, 12 D_{34}
C69.8	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_{12}, 4 C_{17}, 4 C_{34}, 4 C_{51}, 4 C_{102}, 3 D_2, 8 D_{17}, 4 D_{34}	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, 4 C_{17}, 4 C_{34}, 4 C_{51}, 4 C_{102}, 3 D_2, 8 D_{17}, 4 D_{34}	2 C_2, 2 C_4, C_6, 3 D_2, 8 D_{17}, 4 D_{34}	3 C_2, C_3, 4 C_{17}, 4 C_{34}, 3 D_2, 8 D_{17}, 4 D_{34}
C69.9	C_2, C_4, 2 C_5, 2 C_{10}, 4 C_{17}, 4 C_{20}, 8 C_{85}, 4 D_{17}	C_2, C_4, C_5, C_{10}, 4 C_{17}, 4 C_{85}, 4 D_{17}	C_2, C_4, C_{10}, 4 D_{17}	C_2, C_5, 4 C_{17}, 4 D_{17}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 70				
C70.1	3 C_2, 2 C_3, C_4, 4 C_6, 2 C_8, 2 C_9, 3 C_{12}, 2 C_{18}, 6 C_{24}, 4 C_{36}, 8 C_{72}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, 2 D_8, 2 D_9, 4 D_{12}, 2 D_{18}, 4 D_{24}, 4 D_{36}, 4 D_{72}	3 C_2, 2 C_3, C_4, 4 C_6, C_8, C_9, 2 C_{12}, C_{18}, 2 C_{24}, C_{36}, C_{72}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_9, 2 D_{12}, 2 D_{18}, D_{24}, 2 D_{36}, D_{72}	3 C_2, 2 C_6, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_9, 2 D_{12}, 2 D_{18}, D_{24}, 2 D_{36}, D_{72}	3 C_2, C_3, C_4, C_6, C_8, C_{12}, C_{24}, 4 D_2, 2 D_3, 2 D_4, 2 D_6, D_8, 2 D_{12}, D_{24}
Genus 71				
C71.1	5 C_2, 3 C_4, C_5, 4 C_8, 3 C_{10}, 8 C_{16}, C_{20}, 8 C_{32}, 2 C_{40}, 4 C_{80}, 13 D_2, 3 D_4, 4 D_5, 6 D_8, 7 D_{10}, 12 D_{16}, 2 D_{20}, 4 D_{40}, 4 D_{80}	5 C_2, 3 C_4, C_5, 3 C_8, 3 C_{10}, 3 C_{16}, C_{20}, C_{32}, C_{40}, 2 C_{80}, 13 D_2, 3 D_4, 4 D_5, 4 D_8, 7 D_{10}, 5 D_{16}, 2 D_{20}, 2 D_{40}, 2 D_{80}	3 C_2, 2 C_4, C_{10}, 13 D_2, 2 D_4, 3 D_5, 3 D_8, 7 D_{10}, 3 D_{16}, 2 D_{20}, 2 D_{40}, 2 D_{80}	5 C_2, C_4, C_5, C_8, 2 C_{10}, 13 D_2, 2 D_4, 4 D_5, 2 D_8, 4 D_{10}
C71.2	3 C_2, 4 C_4, C_5, 3 C_8, C_{10}, 4 C_{16}, 3 C_{20}, 4 C_{32}, 2 C_{40}, 4 C_{80}, 4 D_2, 2 D_4, 3 D_5, 2 D_8, 3 D_{10}, 2 D_{16}, 4 D_{20}, 4 D_{40}, 4 D_{80}	3 C_2, 4 C_4, C_5, 2 C_8, C_{10}, C_{16}, 3 C_{20}, C_{40}, 2 C_{80}, 4 D_2, 2 D_4, 3 D_5, D_8, 3 D_{10}, D_{16}, 4 D_{20}, 2 D_{40}, 2 D_{80}	3 C_2, 3 C_4, C_{10}, 2 C_{20}, 4 D_2, 2 D_4, 3 D_5, D_8, 3 D_{10}, D_{16}, 4 D_{20}, 2 D_{40}, 2 D_{80}	3 C_2, C_4, C_5, C_8, 4 D_2, D_4, 3 D_5, D_8
C71.3	3 C_2, C_3, 2 C_4, 5 C_5, C_6, 3 C_{10}, C_{12}, 9 C_{15}, 2 C_{20}, 4 C_{30}, 4 C_{60}, 3 D_2, 2 D_3, 8 D_5, D_6, 3 D_{10}, 13 D_{15}, 4 D_{30}	3 C_2, C_3, 2 C_4, 4 C_5, C_6, 2 C_{10}, 6 C_{15}, C_{30}, 3 D_2, 2 D_3, 6 D_5, D_6, 2 D_{10}, 7 D_{15}, D_{30}	2 C_2, 2 C_4, C_6, C_{10}, C_{30}, 3 D_2, D_3, 5 D_5, D_6, 2 D_{10}, 6 D_{15}, D_{30}	3 C_2, C_3, 4 C_5, C_{10}, C_{15}, 3 D_2, D_3, 5 D_5, D_{10}, D_{15}
C71.4	C_2, C_3, C_6, C_7, 5 C_{11}, 5 C_{33}, 10 C_{77}, D_7, 5 D_{11}, 10 D_{77}	C_2, C_3, C_6, C_7, C_{11}, 2 C_{77}, D_7, D_{11}, 2 D_{77}	C_2, C_6, D_7, D_{11}, 2 D_{77}	C_2, C_7, C_{11}, D_7, D_{11}
C71.5	5 C_2, C_3, 3 C_4, C_5, 3 C_6, 2 C_8, 3 C_{10}, 4 C_{12}, C_{15}, C_{20}, C_{30}, 2 C_{60}, 13 D_2, 2 D_3, 3 D_4, 4 D_5, 4 D_6, 7 D_{10}, 4 D_{12}, 2 D_{15}, D_{20}, 2 D_{30}, 2 D_{60}	5 C_2, C_3, 3 C_4, C_5, 3 C_6, C_8, 3 C_{10}, 3 C_{12}, C_{15}, C_{20}, C_{30}, 2 C_{60}, 13 D_2, 2 D_3, 3 D_4, 4 D_5, 4 D_6, 7 D_{10}, 4 D_{12}, 2 D_{15}, D_{20}, 2 D_{30}, 2 D_{60}	3 C_2, 3 C_4, C_6, C_8, C_{10}, 2 C_{12}, C_{20}, C_{30}, 2 C_{60}, 13 D_2, D_3, 3 D_4, 3 D_5, 4 D_6, 7 D_{10}, 4 D_{12}, 2 D_{15}, D_{20}, 2 D_{30}, 2 D_{60}	5 C_2, C_3, C_5, 2 C_{10}, 13 D_2, 2 D_3, 4 D_5, 4 D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C71.6	3 C_2, C_3, 5 C_4, C_5, 2 C_6, C_8, C_{10}, 7 C_{12}, C_{15}, 3 C_{20}, C_{30}, 2 C_{60}, 4 D_2, D_3, 2 D_4, 3 D_5, D_6, 3 D_{10}, 2 D_{12}, 2 D_{15}, 3 D_{20}, 2 D_{30}, 2 D_{60}	3 C_2, C_3, 5 C_4, C_5, 2 C_6, C_{10}, 6 C_{12}, C_{15}, 3 C_{20}, C_{30}, 2 C_{60}, 4 D_2, D_3, 2 D_4, 3 D_5, D_6, 3 D_{10}, 2 D_{12}, 2 D_{15}, 3 D_{20}, 2 D_{30}, 2 D_{60}	3 C_2, 4 C_4, C_6, C_{10}, 3 C_{12}, 3 C_{20}, C_{30}, 2 C_{60}, 4 D_2, D_3, 2 D_4, 3 D_5, D_6, 3 D_{10}, 2 D_{12}, 2 D_{15}, 3 D_{20}, 2 D_{30}, 2 D_{60}	3 C_2, C_3, C_5, 4 D_2, D_3, 3 D_5
C71.7	3 C_2, 2 C_4, 5 C_5, 4 C_8, 5 C_{10}, 3 C_{20}, 4 C_{40}, 3 D_2, 10 D_5, 5 D_{10}	3 C_2, 2 C_4, 4 C_5, 2 C_8, 4 C_{10}, C_{20}, 3 D_2, 8 D_5, 4 D_{10}	2 C_2, 2 C_4, 2 C_8, 4 C_{10}, C_{20}, 3 D_2, 4 D_5, 4 D_{10}	3 C_2, 4 C_5, 3 D_2, 7 D_5
C71.8	2 C_2, 2 C_4, 5 C_5, 2 C_8, 5 C_{10}, 3 C_{20}, 4 C_{40}, 2 D_2, 8 D_5, 5 D_{10}	2 C_2, 2 C_4, 4 C_5, 4 C_{10}, C_{20}, 2 D_2, 7 D_5, 4 D_{10}	2 C_2, 2 C_4, 4 C_{10}, C_{20}, 2 D_2, 7 D_5, 4 D_{10}	2 C_2, 4 C_5, 2 D_2, 7 D_5
C71.9	3 C_2, C_3, 2 C_4, 3 C_6, C_7, 4 C_8, 4 C_{12}, C_{14}, 8 C_{24}, C_{28}, 2 C_{56}, 3 D_2, 2 D_7, D_{14}	3 C_2, C_3, 2 C_4, 3 C_6, C_7, 2 C_8, 3 C_{12}, C_{14}, 2 C_{24}, C_{28}, C_{56}, 3 D_2, 2 D_7, D_{14}	2 C_2, C_4, 2 C_6, 2 C_{12}, C_{14}, 3 D_2, D_7, D_{14}	3 C_2, C_3, C_4, C_7, 3 D_2, 2 D_7
C71.10	2 C_2, C_3, 2 C_4, 2 C_6, C_7, 2 C_8, 3 C_{12}, C_{14}, 4 C_{24}, C_{28}, 2 C_{56}, 2 D_2, D_7, D_{14}	2 C_2, C_3, 2 C_4, 2 C_6, C_7, C_{12}, C_{14}, C_{28}, 2 D_2, D_7, D_{14}	2 C_2, C_4, 2 C_6, C_{12}, C_{14}, 2 D_2, D_7, D_{14}	2 C_2, C_3, C_7, 2 D_2, D_7
C71.11	3 C_2, 2 C_4, C_5, 4 C_8, C_{10}, 8 C_{16}, C_{20}, 16 C_{32}, 2 C_{40}, 4 C_{80}, 3 D_2, 2 D_5, D_{10}	3 C_2, 2 C_4, C_5, 3 C_8, C_{10}, 3 C_{16}, C_{20}, 2 C_{32}, C_{40}, 2 C_{80}, 3 D_2, 2 D_5, D_{10}	2 C_2, C_4, C_{10}, 3 D_2, D_5, D_{10}	3 C_2, C_4, C_5, C_8, 3 D_2, 2 D_5
C71.12	2 C_2, 2 C_4, C_5, 3 C_8, C_{10}, 6 C_{16}, C_{20}, 8 C_{32}, 2 C_{40}, 4 C_{80}, 2 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_5, 2 C_8, C_{10}, C_{16}, C_{20}, C_{40}, 2 C_{80}, 2 D_2, 2 D_5, D_{10}	2 C_2, C_4, C_{10}, 2 D_2, 2 D_5, D_{10}	2 C_2, C_4, C_5, C_8, 2 D_2, 2 D_5
C71.13	C_2, C_3, C_4, 5 C_5, C_6, 2 C_{10}, 2 C_{12}, 9 C_{15}, 4 C_{20}, 4 C_{30}, 8 C_{60}, D_5	C_2, C_3, C_4, 4 C_5, C_6, C_{10}, 6 C_{15}, C_{30}, D_5	C_2, C_4, C_6, C_{10}, C_{30}, D_5	C_2, C_3, 4 C_5, C_{15}, D_5
Genus 72				
C72.1	C_2, 2 C_5, 2 C_{10}, 7 C_{71}, 7 D_{71}	C_2, 7 C_{71}, 7 D_{71}	C_2, 7 D_{71}	C_2, 7 C_{71}, 7 D_{71}
C72.2	C_2, 2 C_5, 2 C_{10}, 7 C_{71}, 7 D_{71}	C_2, 7 C_{71}, 7 D_{71}	C_2, 7 D_{71}	C_2, 7 C_{71}, 7 D_{71}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 73				
C73.1	2 **Tet**, **Oct**, 2 **Ico**, 2 C_2, 2 C_3, C_4, 2 C_5, C_6, 2 C_8, 2 C_{10}, C_{12}, 2 C_{15}, 3 D_2, 2 D_3, 2 D_4, 4 D_5, D_6, 2 D_8, 2 D_{10}, D_{12}, 2 D_{15}	2 **Tet**, **Oct**, **Ico**, 2 C_2, 2 C_3, C_4, C_5, C_6, 2 C_8, C_{10}, C_{12}, C_{15}, 3 D_2, 2 D_3, 2 D_4, 2 D_5, D_6, 2 D_8, D_{10}, D_{12}, D_{15}	C_2, C_{10}, 2 D_2, D_3, D_4, D_5, D_6, 2 D_8, D_{10}, D_{12}, D_{15}	2 **Tet**, 2 C_2, 2 C_3, C_4, C_5, C_6, 2 C_8, C_{12}, 3 D_2, D_3, 2 D_4, D_5, D_6, 2 D_8, D_{12}
C73.2	5 **Tet**, 8 **Oct**, 3 C_2, C_3, 3 C_4, C_6, C_7, 16 D_2, 2 D_3, 7 D_4, D_6	5 **Tet**, 8 **Oct**, 3 C_2, C_3, 3 C_4, C_6, 16 D_2, 2 D_3, 7 D_4, D_6	4 **Tet**, 8 **Oct**, 2 C_2, 2 C_4, 15 D_2, 2 D_3, 7 D_4, D_6	5 **Tet**, 2 **Oct**, 3 C_2, C_3, C_4, C_6, 16 D_2, 2 D_3, 3 D_4, D_6
C73.3	**Tet**, 2 **Oct**, 3 C_2, 2 C_3, 4 C_4, 2 C_6, 3 C_8, C_{12}, 7 D_2, 3 D_3, 4 D_4, 2 D_6, D_8, D_{12}	**Tet**, 2 **Oct**, 3 C_2, 2 C_3, 4 C_4, 2 C_6, 2 C_8, C_{12}, 7 D_2, 3 D_3, 4 D_4, 2 D_6, D_8, D_{12}	**Tet**, 2 **Oct**, 2 C_2, 2 C_4, 7 D_2, 3 D_3, 4 D_4, 2 D_6, D_8, D_{12}	**Tet**, **Oct**, 3 C_2, 2 C_3, 2 C_4, 2 C_6, C_8, C_{12}, 7 D_2, 3 D_3, 3 D_4, 2 D_6, D_8, D_{12}
C73.4	9 C_2, C_3, 6 C_4, 7 C_6, 2 C_8, 2 C_{12}, 54 D_2, 8 D_3, 12 D_4, 30 D_6, 4 D_{12}	9 C_2, C_3, 6 C_4, 7 C_6, C_8, 2 C_{12}, 54 D_2, 8 D_3, 12 D_4, 30 D_6, 4 D_{12}	3 C_2, 3 C_4, C_6, C_8, 37 D_2, 4 D_3, 9 D_4, 24 D_6, 4 D_{12}	9 C_2, C_3, 3 C_4, 6 C_6, 2 C_{12}, 54 D_2, 8 D_3, 12 D_4, 26 D_6, 4 D_{12}
C73.5	5 C_2, C_3, 6 C_4, 3 C_6, 6 C_8, C_{12}, 13 D_2, 4 D_3, 3 D_4, 7 D_6, D_{12}	5 C_2, C_3, 6 C_4, 3 C_6, 4 C_8, C_{12}, 13 D_2, 4 D_3, 3 D_4, 7 D_6, D_{12}	3 C_2, 3 C_4, 3 C_8, 11 D_2, 4 D_3, 2 D_4, 7 D_6, D_{12}	5 C_2, C_3, 2 C_4, 3 C_6, C_{12}, 13 D_2, 4 D_3, 3 D_4, 7 D_6, D_{12}
C73.6	7 C_2, C_3, 3 C_4, 7 C_6, 4 C_8, 35 D_2, 8 D_3, 28 D_6	7 C_2, C_3, 3 C_4, 7 C_6, 2 C_8, 35 D_2, 8 D_3, 28 D_6	2 C_2, 2 C_4, 2 C_8, 23 D_2, 5 D_3, 25 D_6	7 C_2, C_3, C_4, 7 C_6, 35 D_2, 8 D_3, 28 D_6
C73.7	5 C_2, C_3, 6 C_4, 3 C_6, 6 C_8, 2 C_{12}, 13 D_2, 4 D_3, 3 D_4, 6 D_6	5 C_2, C_3, 6 C_4, 3 C_6, 4 C_8, 2 C_{12}, 13 D_2, 4 D_3, 3 D_4, 6 D_6	3 C_2, 4 C_4, 2 C_6, 4 C_8, 2 C_{12}, 11 D_2, 2 D_3, 2 D_4, 5 D_6	5 C_2, C_3, 2 C_4, C_6, 13 D_2, 4 D_3, 3 D_4, 2 D_6
C73.8	5 C_2, C_3, 5 C_4, 3 C_6, 4 C_8, C_{12}, 15 D_2, 4 D_3, 6 D_4, 7 D_6, D_{12}	5 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, C_{12}, 15 D_2, 4 D_3, 6 D_4, 7 D_6, D_{12}	3 C_2, 3 C_4, 2 C_6, C_8, C_{12}, 13 D_2, 2 D_3, 5 D_4, 6 D_6, D_{12}	5 C_2, C_3, 2 C_4, C_6, 15 D_2, 4 D_3, 3 D_4, 2 D_6
C73.9	3 C_2, 3 C_3, 2 C_4, 2 C_6, 4 C_8, C_{12}, 2 C_{24}, 3 D_2, 5 D_3, 2 D_6	3 C_2, 3 C_3, 2 C_4, 2 C_6, 2 C_8, 3 D_2, 5 D_3, 2 D_6	2 C_2, C_4, C_6, 3 D_2, 4 D_3, 2 D_6	3 C_2, 3 C_3, C_6, 3 D_2, 4 D_3, D_6
C73.10	3 C_2, C_3, 3 C_6, 3 C_7, 3 C_{14}, 6 C_{21}, 6 C_{42}, 15 D_2	3 C_2, C_3, 3 C_6, 15 D_2	2 C_2, C_6, 12 D_2	3 C_2, 15 D_2

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 74				
C74.1	3 C_2, C_3, 3 C_6, 12 C_{73}, 12 C_{146}, 3 D_2, 24 D_{73}, 12 D_{146}	3 C_2, C_3, 3 C_6, 12 C_{73}, 12 C_{146}, 3 D_2, 24 D_{73}, 12 D_{146}	3 C_2, 2 C_6, 12 C_{146}, 3 D_2, 24 D_{73}, 12 D_{146}	3 C_2, C_3, 12 C_{73}, 3 D_2, 24 D_{73}
C74.2	C_2, C_4, 2 C_8, 9 C_{73}, 9 D_{73}	C_2, C_4, 9 C_{73}, 9 D_{73}	C_2, C_4, 9 D_{73}	C_2, 9 C_{73}, 9 D_{73}
Genus 75				
C75.1	2 C_2, C_3, 2 C_4, C_6, 2 C_{12}, 6 C_{37}, 6 C_{74}, 18 C_{148}, 2 D_2, D_4, 18 D_{37}, 18 D_{74}, 18 D_{148}	2 C_2, C_3, 2 C_4, C_6, C_{12}, 6 C_{37}, 6 C_{74}, 18 C_{148}, 2 D_2, D_4, 18 D_{37}, 18 D_{74}, 18 D_{148}	2 C_2, 2 C_4, C_6, C_{12}, 6 C_{74}, 18 C_{148}, 2 D_2, D_4, 18 D_{37}, 18 D_{74}, 18 D_{148}	2 C_2, 6 C_{37}, 2 D_2, 18 D_{37}
C75.2	5 C_2, 3 C_4, 2 C_8, 9 C_{37}, 27 C_{74}, 9 C_{148}, 13 D_2, 3 D_4, 36 D_{37}, 63 D_{74}, 9 D_{148}	5 C_2, 3 C_4, C_8, 9 C_{37}, 27 C_{74}, 9 C_{148}, 13 D_2, 3 D_4, 36 D_{37}, 63 D_{74}, 9 D_{148}	3 C_2, 3 C_4, C_8, 9 C_{74}, 9 C_{148}, 13 D_2, 3 D_4, 27 D_{37}, 63 D_{74}, 9 D_{148}	5 C_2, 9 C_{37}, 18 C_{74}, 13 D_2, 36 D_{37}, 36 D_{74}
C75.3	3 C_2, 5 C_4, C_8, 9 C_{37}, 9 C_{74}, 27 C_{148}, 4 D_2, 2 D_4, 27 D_{37}, 27 D_{74}, 27 D_{148}	3 C_2, 5 C_4, 9 C_{37}, 9 C_{74}, 27 C_{148}, 4 D_2, 2 D_4, 27 D_{37}, 27 D_{74}, 27 D_{148}	3 C_2, 4 C_4, 9 C_{74}, 27 C_{148}, 4 D_2, 2 D_4, 27 D_{37}, 27 D_{74}, 27 D_{148}	3 C_2, 9 C_{37}, 4 D_2, 27 D_{37}
C75.4	3 C_2, C_3, 2 C_4, C_6, C_{12}, 9 C_{37}, 9 C_{74}, 9 C_{111}, 3 D_2, 2 D_3, D_6, 18 D_{37}, 9 D_{74}, 9 D_{111}	3 C_2, C_3, 2 C_4, C_6, 9 C_{37}, 9 C_{74}, 9 C_{111}, 3 D_2, 2 D_3, D_6, 18 D_{37}, 9 D_{74}, 9 D_{111}	2 C_2, 2 C_4, C_6, 3 D_2, D_3, D_6, 18 D_{37}, 9 D_{74}, 9 D_{111}	3 C_2, C_3, 9 C_{37}, 9 C_{74}, 3 D_2, D_3, 18 D_{37}, 9 D_{74}
C75.5	3 C_2, 2 C_4, 4 C_8, 9 C_{37}, 9 C_{74}, 9 C_{148}, 3 D_2, 18 D_{37}, 9 D_{74}	3 C_2, 2 C_4, 2 C_8, 9 C_{37}, 9 C_{74}, 9 C_{148}, 3 D_2, 18 D_{37}, 9 D_{74}	2 C_2, 2 C_4, 2 C_8, 9 C_{74}, 9 C_{148}, 3 D_2, 9 D_{37}, 9 D_{74}	3 C_2, 9 C_{37}, 3 D_2, 18 D_{37}
C75.6	2 C_2, 2 C_4, 2 C_8, 9 C_{37}, 9 C_{74}, 9 C_{148}, 2 D_2, 18 D_{37}, 9 D_{74}	2 C_2, 2 C_4, 9 C_{37}, 9 C_{74}, 9 C_{148}, 2 D_2, 18 D_{37}, 9 D_{74}	2 C_2, 2 C_4, 9 C_{74}, 9 C_{148}, 2 D_2, 18 D_{37}, 9 D_{74}	2 C_2, 9 C_{37}, 2 D_2, 18 D_{37}
C75.7	C_2, C_3, C_4, C_6, 2 C_{12}, 9 C_{37}, 9 C_{111}, 9 D_{37}	C_2, C_3, C_4, C_6, 9 C_{37}, 9 C_{111}, 9 D_{37}	C_2, C_4, C_6, 9 D_{37}	C_2, C_3, 9 C_{37}, 9 D_{37}
C75.8	C_2, C_3, C_4, C_6, 2 C_{12}, 3 C_{37}, 3 D_{37}	C_2, C_3, C_4, C_6, 3 C_{37}, 3 D_{37}	C_2, C_4, C_6, 3 D_{37}	C_2, C_3, 3 C_{37}, 3 D_{37}
Genus 76				
C76.1	2 C_2, 2 C_3, C_4, 3 C_6, C_8, 2 C_9, 3 C_{12}, 2 C_{18}, 2 C_{24}, 2 D_2, D_3, D_4, D_6, 2 D_9, D_{12}, D_{18}	2 C_2, 2 C_3, C_4, 3 C_6, C_9, 2 C_{12}, C_{18}, 2 D_2, D_3, D_4, D_6, 2 D_9, D_{12}, D_{18}	2 C_2, C_4, 3 C_6, 2 C_{12}, C_{18}, 2 D_2, D_3, D_4, D_6, 2 D_9, D_{12}, D_{18}	2 C_2, C_3, 2 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 77				
C77.1	**Tet**, 7 C_2, C_3, 3 C_6, 3 C_{19}, 21 C_{38}, 37 D_2, 24 D_{19}, 84 D_{38}	**Tet**, 7 C_2, C_3, 3 C_6, 3 C_{19}, 21 C_{38}, 37 D_2, 24 D_{19}, 84 D_{38}	3 C_2, 2 C_6, 3 C_{38}, 27 D_2, 12 D_{19}, 66 D_{38}	**Tet**, 7 C_2, C_3, 3 C_{19}, 18 C_{38}, 37 D_2, 24 D_{19}, 72 D_{38}
C77.2	C_2, C_3, 2 C_5, C_6, 2 C_{15}, 3 C_{19}, 12 C_{95}, 2 D_5, 3 D_{19}, 12 D_{95}	C_2, C_3, C_5, C_6, 3 C_{19}, 6 C_{95}, D_5, 3 D_{19}, 6 D_{95}	C_2, C_6, D_5, 3 D_{19}, 6 D_{95}	C_2, C_5, 3 C_{19}, D_5, 3 D_{19}
C77.3	3 C_2, C_3, 2 C_4, 3 C_6, 4 C_{12}, 3 C_{19}, 3 C_{38}, 3 C_{76}, 3 D_2, 6 D_{19}, 3 D_{38}	3 C_2, C_3, 2 C_4, 3 C_6, 2 C_{12}, 3 C_{19}, 3 C_{38}, 3 C_{76}, 3 D_2, 6 D_{19}, 3 D_{38}	2 C_2, 2 C_4, 2 C_6, 2 C_{12}, 3 C_{38}, 3 C_{76}, 3 D_2, 3 D_{19}, 3 D_{38}	3 C_2, C_3, 3 C_{19}, 3 D_2, 6 D_{19}
C77.4	3 C_2, C_3, 3 C_6, 3 C_7, 3 C_{14}, 6 C_{21}, 6 C_{42}, 15 D_2	3 C_2, C_3, 3 C_6, C_7, C_{14}, C_{21}, C_{42}, 15 D_2	2 C_2, C_6, C_{14}, 15 D_2	3 C_2, C_3, C_6, C_7, 15 D_2
Genus 78				
C78.1	3 C_2, C_4, 2 C_5, 6 C_{10}, C_{11}, 2 C_{20}, 2 C_{22}, 4 D_2, D_4, D_{11}, D_{22}	3 C_2, C_4, C_{11}, 2 C_{22}, 4 D_2, D_4, D_{11}, D_{22}	3 C_2, C_4, 2 C_{22}, 4 D_2, D_4, D_{11}, D_{22}	3 C_2, C_{11}, 4 D_2, D_{11}
C78.2	3 C_2, C_4, 2 C_5, 6 C_{10}, C_{11}, 2 C_{20}, 2 C_{22}, 4 D_2, D_4, D_{11}, D_{22}	3 C_2, C_4, C_{11}, 2 C_{22}, 4 D_2, D_4, D_{11}, D_{22}	3 C_2, C_4, 2 C_{22}, 4 D_2, D_4, D_{11}, D_{22}	3 C_2, C_{11}, 4 D_2, D_{11}
C78.3	3 C_2, C_4, 2 C_5, 6 C_{10}, C_{11}, 2 C_{20}, C_{22}, 2 C_{44}, 4 D_2, D_4, 2 D_{11}, 2 D_{22}, 2 D_{44}	3 C_2, C_4, C_{11}, C_{22}, 2 C_{44}, 4 D_2, D_4, 2 D_{11}, 2 D_{22}, 2 D_{44}	3 C_2, C_{22}, 4 D_2, D_4, 2 D_{11}, 2 D_{22}, 2 D_{44}	3 C_2, C_4, C_{11}, 4 D_2, D_4, 2 D_{11}
C78.4	3 C_2, C_4, 2 C_5, 6 C_{10}, C_{11}, 2 C_{20}, C_{22}, 2 C_{44}, 4 D_2, D_4, 2 D_{11}, 2 D_{22}, 2 D_{44}	3 C_2, C_4, C_{11}, C_{22}, 2 C_{44}, 4 D_2, D_4, 2 D_{11}, 2 D_{22}, 2 D_{44}	3 C_2, C_{22}, 4 D_2, D_4, 2 D_{11}, 2 D_{22}, 2 D_{44}	3 C_2, C_4, C_{11}, 4 D_2, D_4, 2 D_{11}
Genus 79				
C79.1	2 C_2, 3 C_3, 2 C_4, 3 C_6, 3 C_{12}, 2 C_{13}, 2 C_{26}, 4 C_{39}, 6 C_{52}, 4 C_{78}, 12 C_{156}, 2 D_2, D_3, D_4, D_6, D_{12}, 6 D_{13}, 6 D_{26}, 12 D_{39}, 6 D_{52}, 12 D_{78}, 12 D_{156}	2 C_2, 3 C_3, 2 C_4, 3 C_6, 2 C_{12}, 2 C_{13}, 2 C_{26}, 4 C_{39}, 6 C_{52}, 4 C_{78}, 12 C_{156}, 2 D_2, D_3, D_4, D_6, D_{12}, 6 D_{13}, 6 D_{26}, 12 D_{39}, 6 D_{52}, 12 D_{78}, 12 D_{156}	2 C_2, 2 C_4, 3 C_6, 2 C_{12}, 2 C_{26}, 6 C_{52}, 4 C_{78}, 12 C_{156}, 2 D_2, D_3, D_4, D_6, D_{12}, 6 D_{13}, 6 D_{26}, 12 D_{39}, 6 D_{52}, 12 D_{78}, 12 D_{156}	2 C_2, C_3, 2 C_{13}, 4 C_{39}, 2 D_2, D_3, 6 D_{13}, 12 D_{39}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C79.2	5 C_2, 3 C_4, 4 C_8, 3 C_{13}, 4 C_{16}, 9 C_{26}, 3 C_{52}, 6 C_{104}, 13 D_2, 3 D_4, 6 D_8, 12 D_{13}, 21 D_{26}, 6 D_{52}, 6 D_{104}	5 C_2, 3 C_4, 3 C_8, 3 C_{13}, C_{16}, 9 C_{26}, 3 C_{52}, 6 C_{104}, 13 D_2, 3 D_4, 5 D_8, 12 D_{13}, 21 D_{26}, 6 D_{52}, 6 D_{104}	3 C_2, 2 C_4, 3 C_{26}, 13 D_2, 2 D_4, 3 D_8, 9 D_{13}, 21 D_{26}, 6 D_{52}, 6 D_{104}	5 C_2, C_4, 3 C_{13}, 6 C_{26}, 13 D_2, 2 D_4, 12 D_{13}, 12 D_{26}
C79.3	3 C_2, 4 C_4, 2 C_8, 3 C_{13}, 2 C_{16}, 3 C_{26}, 9 C_{52}, 6 C_{104}, 4 D_2, 2 D_4, D_8, 9 D_{13}, 9 D_{26}, 12 D_{52}, 6 D_{104}	3 C_2, 4 C_4, C_8, 3 C_{13}, 3 C_{26}, 9 C_{52}, 6 C_{104}, 4 D_2, 2 D_4, D_8, 9 D_{13}, 9 D_{26}, 12 D_{52}, 6 D_{104}	3 C_2, 3 C_4, 3 C_{26}, 6 C_{52}, 4 D_2, 2 D_4, D_8, 9 D_{13}, 9 D_{26}, 12 D_{52}, 6 D_{104}	3 C_2, C_4, 3 C_{13}, 4 D_2, D_4, 9 D_{13}
C79.4	3 C_2, 2 C_4, 3 C_7, 3 C_{13}, 3 C_{14}, 3 C_{26}, 3 C_{28}, 9 C_{91}, 3 D_2, 6 D_7, 6 D_{13}, 3 D_{14}, 3 D_{26}, 9 D_{91}	3 C_2, 2 C_4, C_7, 3 C_{13}, C_{14}, 3 C_{26}, 3 C_{91}, 3 D_2, 2 D_7, 6 D_{13}, D_{14}, 3 D_{26}, 3 D_{91}	2 C_2, 2 C_4, C_{14}, 3 D_2, D_7, 6 D_{13}, D_{14}, 3 D_{26}, 3 D_{91}	3 C_2, C_7, 3 C_{13}, 3 C_{26}, 3 D_2, D_7, 6 D_{13}, 3 D_{26}
C79.5	C_2, 3 C_3, C_6, 6 C_9, 2 C_{13}, 4 C_{39}, 12 C_{117}, D_3, 3 D_9, 2 D_{13}, 4 D_{39}, 12 D_{117}	C_2, 3 C_3, C_6, 4 C_9, 2 C_{13}, 4 C_{39}, 12 C_{117}, D_3, 3 D_9, 2 D_{13}, 4 D_{39}, 12 D_{117}	C_2, C_6, D_3, 3 D_9, 2 D_{13}, 4 D_{39}, 12 D_{117}	C_2, 2 C_3, 2 C_{13}, D_3, 2 D_{13}
C79.6	C_2, 2 C_3, C_6, 2 C_9, 2 C_{13}, 4 C_{39}, 12 C_{117}, D_3, D_9, 2 D_{13}, 4 D_{39}, 12 D_{117}	C_2, 2 C_3, C_6, C_9, 2 C_{13}, 4 C_{39}, 12 C_{117}, D_3, D_9, 2 D_{13}, 4 D_{39}, 12 D_{117}	C_2, C_6, D_3, D_9, 2 D_{13}, 4 D_{39}, 12 D_{117}	C_2, C_3, 2 C_{13}, D_3, 2 D_{13}
C79.7	C_2, 2 C_3, C_6, 2 C_9, 2 C_{13}, 4 C_{39}, 12 C_{117}, D_3, D_9, 2 D_{13}, 4 D_{39}, 12 D_{117}	C_2, 2 C_3, C_6, C_9, 2 C_{13}, 4 C_{39}, 12 C_{117}, D_3, D_9, 2 D_{13}, 4 D_{39}, 12 D_{117}	C_2, C_6, D_3, D_9, 2 D_{13}, 4 D_{39}, 12 D_{117}	C_2, C_3, 2 C_{13}, D_3, 2 D_{13}
C79.8	2 C_2, C_3, 2 C_4, C_6, 2 C_{12}, 2 C_{13}, 2 C_{26}, 6 C_{52}, 2 D_2, D_4, 6 D_{13}, 6 D_{26}, 6 D_{52}	2 C_2, C_3, 2 C_4, C_6, C_{12}, 2 C_{13}, 2 C_{26}, 6 C_{52}, 2 D_2, D_4, 6 D_{13}, 6 D_{26}, 6 D_{52}	2 C_2, 2 C_4, C_6, C_{12}, 2 C_{26}, 6 C_{52}, 2 D_2, D_4, 6 D_{13}, 6 D_{26}, 6 D_{52}	2 C_2, 2 C_{13}, 2 D_2, 6 D_{13}
C79.9	C_2, C_3, C_6, 3 C_7, 2 C_{13}, 3 C_{21}, 12 C_{91}, 3 D_7, 2 D_{13}, 12 D_{91}	C_2, C_3, C_6, C_7, 2 C_{13}, 4 C_{91}, D_7, 2 D_{13}, 4 D_{91}	C_2, C_6, D_7, 2 D_{13}, 4 D_{91}	C_2, C_7, 2 C_{13}, D_7, 2 D_{13}
C79.10	C_2, 2 C_3, C_6, 4 C_9, 12 C_{27}, 18 C_{81}, D_3, 3 D_9, 9 D_{27}, 9 D_{81}	C_2, 2 C_3, C_6, 2 C_9, 2 C_{27}, C_{81}, D_3, D_9, D_{27}, D_{81}	C_2, C_6, D_3, D_9, D_{27}, D_{81}	C_2, C_3, C_9, C_{27}, D_3, D_9, D_{27}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C79.11	2 C_2, 2 C_3, 2 C_4, 2 C_6, 2 C_9, 3 C_{12}, 2 C_{18}, 3 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 2 C_3, 2 C_4, 2 C_6, C_9, 2 C_{12}, C_{18}, 3 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, 2 C_4, 2 C_6, 2 C_{12}, C_{18}, 3 C_{36}, 2 D_2, D_3, D_4, D_6, 3 D_9, D_{12}, 3 D_{18}, 3 D_{36}	2 C_2, C_3, 2 D_2, D_3
C79.12	5 C_2, 2 C_3, 2 C_4, 10 C_6, 2 C_9, 2 C_{12}, 2 C_{18}, 16 D_2, 2 D_3, 4 D_4, 4 D_6, 2 D_9, D_{18}	5 C_2, 2 C_3, 2 C_4, 10 C_6, C_9, C_{12}, C_{18}, 16 D_2, 2 D_3, 4 D_4, 4 D_6, 2 D_9, D_{18}	3 C_2, 2 C_4, 4 C_6, 16 D_2, D_3, 4 D_4, 4 D_6, D_9, D_{18}	5 C_2, C_3, C_6, 16 D_2, 2 D_3, D_6
C79.13	C_2, C_3, 2 C_5, C_6, 2 C_{10}, 2 C_{13}, 4 C_{15}, 4 C_{30}, 4 C_{65}, 2 D_{13}	C_2, C_3, C_6, 2 C_{13}, 2 D_{13}	C_2, C_6, 2 D_{13}	C_2, 2 C_{13}, 2 D_{13}
C79.14	3 C_2, 2 C_4, 4 C_8, 3 C_{13}, 8 C_{16}, 3 C_{26}, 3 C_{52}, 6 C_{104}, 3 D_2, 6 D_{13}, 3 D_{26}	3 C_2, 2 C_4, 3 C_8, 3 C_{13}, 2 C_{16}, 3 C_{26}, 3 C_{52}, 6 C_{104}, 3 D_2, 6 D_{13}, 3 D_{26}	2 C_2, C_4, 3 C_{26}, 3 D_2, 3 D_{13}, 3 D_{26}	3 C_2, C_4, 3 C_{13}, 3 D_2, 6 D_{13}
C79.15	2 C_2, 2 C_4, 3 C_8, 3 C_{13}, 4 C_{16}, 3 C_{26}, 3 C_{52}, 6 C_{104}, 2 D_2, 6 D_{13}, 3 D_{26}	2 C_2, 2 C_4, C_8, 3 C_{13}, 3 C_{26}, 3 C_{52}, 6 C_{104}, 2 D_2, 6 D_{13}, 3 D_{26}	2 C_2, C_4, 3 C_{26}, 2 D_2, 6 D_{13}, 3 D_{26}	2 C_2, C_4, 3 C_{13}, 2 D_2, 6 D_{13}
C79.16	C_2, C_4, 3 C_7, 3 C_{13}, 3 C_{14}, 6 C_{28}, 9 C_{91}, 3 D_{13}	C_2, C_4, C_7, 3 C_{13}, C_{14}, 3 C_{91}, 3 D_{13}	C_2, C_4, C_{14}, 3 D_{13}	C_2, C_7, 3 C_{13}, 3 D_{13}
Genus 80				
C80.1	3 C_2, C_3, 3 C_6, 13 C_{79}, 13 C_{158}, 3 D_2, 26 D_{79}, 13 D_{158}	3 C_2, C_3, 3 C_6, 13 C_{79}, 13 C_{158}, 3 D_2, 26 D_{79}, 13 D_{158}	3 C_2, 2 C_6, 13 C_{158}, 3 D_2, 26 D_{79}, 13 D_{158}	3 C_2, C_3, 13 C_{79}, 3 D_2, 26 D_{79}
Genus 81				
C81.1	6 C_2, 6 C_4, C_5, 4 C_8, 3 C_{10}, 26 D_2, 6 D_4, 4 D_5, 4 D_8, 6 D_{10}	6 C_2, 6 C_4, C_5, 3 C_8, 3 C_{10}, 26 D_2, 6 D_4, 4 D_5, 4 D_8, 6 D_{10}	3 C_2, 4 C_4, C_8, 22 D_2, 5 D_4, 4 D_5, 4 D_8, 6 D_{10}	6 C_2, 2 C_4, C_5, 2 C_8, 3 C_{10}, 26 D_2, 6 D_4, 4 D_5, 4 D_8, 6 D_{10}
C81.2	7 C_2, 6 C_4, C_5, 6 C_8, 3 C_{10}, 30 D_2, 6 D_4, 4 D_5, 4 D_8, 6 D_{10}	7 C_2, 6 C_4, C_5, 5 C_8, 3 C_{10}, 30 D_2, 6 D_4, 4 D_5, 4 D_8, 6 D_{10}	3 C_2, 4 C_4, 3 C_8, 25 D_2, 5 D_4, 4 D_5, 4 D_8, 6 D_{10}	7 C_2, 2 C_4, C_5, 2 C_8, 3 C_{10}, 30 D_2, 6 D_4, 4 D_5, 4 D_8, 6 D_{10}
C81.3	12 C_2, 9 C_4, C_5, 2 C_8, 3 C_{10}, 189 D_2, 48 D_4, 4 D_5, 6 D_{10}	12 C_2, 9 C_4, C_5, C_8, 3 C_{10}, 189 D_2, 48 D_4, 4 D_5, 6 D_{10}	3 C_2, 4 C_4, C_8, 84 D_2, 41 D_4, 3 D_5, 6 D_{10}	12 C_2, 5 C_4, C_5, 3 C_{10}, 189 D_2, 32 D_4, 4 D_5, 6 D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C81.4	10 C_2, 7 C_4, C_5, 2 C_8, 9 C_{10}, 12 C_{20}, 93 D_2, 13 D_4, 6 D_5, 48 D_{10}, 36 D_{20}	10 C_2, 7 C_4, C_5, C_8, 9 C_{10}, 12 C_{20}, 93 D_2, 13 D_4, 6 D_5, 48 D_{10}, 36 D_{20}	3 C_2, 2 C_4, C_8, C_{10}, 49 D_2, 13 D_4, 3 D_5, 29 D_{10}, 36 D_{20}	10 C_2, 5 C_4, C_5, 8 C_{10}, 12 C_{20}, 93 D_2, 13 D_4, 6 D_5, 44 D_{10}, 36 D_{20}
C81.5	9 C_2, 7 C_4, C_5, 6 C_8, 7 C_{10}, 16 C_{20}, 16 C_{40}, 54 D_2, 17 D_4, 6 D_5, 16 D_8, 30 D_{10}, 68 D_{20}, 64 D_{40}	9 C_2, 7 C_4, C_5, 5 C_8, 7 C_{10}, 16 C_{20}, 16 C_{40}, 54 D_2, 17 D_4, 6 D_5, 16 D_8, 30 D_{10}, 68 D_{20}, 64 D_{40}	3 C_2, 3 C_4, C_8, C_{10}, 37 D_2, 12 D_4, 3 D_5, 12 D_8, 21 D_{10}, 48 D_{20}, 48 D_{40}	9 C_2, 4 C_4, C_5, 4 C_8, 6 C_{10}, 16 C_{20}, 16 C_{40}, 54 D_2, 17 D_4, 6 D_5, 16 D_8, 27 D_{10}, 68 D_{20}, 64 D_{40}
C81.6	8 C_2, 8 C_4, C_5, 6 C_8, 5 C_{10}, 8 C_{20}, 8 C_{40}, 36 D_2, 8 D_4, 4 D_5, 4 D_8, 16 D_{10}, 22 D_{20}, 16 D_{40}	8 C_2, 8 C_4, C_5, 5 C_8, 5 C_{10}, 8 C_{20}, 8 C_{40}, 36 D_2, 8 D_4, 4 D_5, 4 D_8, 16 D_{10}, 22 D_{20}, 16 D_{40}	3 C_2, 4 C_4, 3 C_8, C_{10}, 27 D_2, 7 D_4, 3 D_5, 4 D_8, 13 D_{10}, 18 D_{20}, 16 D_{40}	8 C_2, 4 C_4, C_5, 2 C_8, 4 C_{10}, 8 C_{20}, 8 C_{40}, 36 D_2, 8 D_4, 4 D_5, 4 D_8, 14 D_{10}, 22 D_{20}, 16 D_{40}
C81.7	4 C_2, 5 C_4, C_5, 7 C_8, 3 C_{10}, 12 C_{20}, 24 C_{40}, 12 D_2, 9 D_4, 3 D_5, 12 D_8, 9 D_{10}, 36 D_{20}, 48 D_{40}	4 C_2, 5 C_4, C_5, 6 C_8, 3 C_{10}, 12 C_{20}, 24 C_{40}, 12 D_2, 9 D_4, 3 D_5, 12 D_8, 9 D_{10}, 36 D_{20}, 48 D_{40}	3 C_2, 3 C_4, 2 C_8, C_{10}, 4 C_{20}, 8 C_{40}, 12 D_2, 9 D_4, 3 D_5, 12 D_8, 9 D_{10}, 36 D_{20}, 48 D_{40}	4 C_2, 2 C_4, C_5, 4 C_8, 2 C_{10}, 8 C_{20}, 16 C_{40}, 12 D_2, 6 D_4, 3 D_5, 8 D_8, 6 D_{10}, 24 D_{20}, 32 D_{40}
C81.8	**Tet**, 2 **Oct**, 9 C_2, C_3, 6 C_4, C_5, 3 C_6, 5 C_{10}, 2 C_{12}, C_{15}, 2 C_{20}, C_{30}, 55 D_2, 2 D_3, 8 D_4, 6 D_5, 4 D_6, 21 D_{10}, 2 D_{15}, 4 D_{20}, D_{30}	**Tet**, 2 **Oct**, 9 C_2, C_3, 6 C_4, C_5, 3 C_6, 5 C_{10}, C_{12}, C_{15}, 2 C_{20}, C_{30}, 55 D_2, 2 D_3, 8 D_4, 6 D_5, 4 D_6, 21 D_{10}, 2 D_{15}, 4 D_{20}, D_{30}	**Oct**, 3 C_2, 3 C_4, C_6, C_{12}, 38 D_2, D_3, 5 D_4, 4 D_5, 3 D_6, 19 D_{10}, 2 D_{15}, 4 D_{20}, D_{30}	**Tet**, 2 **Oct**, 9 C_2, C_3, 3 C_4, C_5, 5 C_{10}, 2 C_{20}, 55 D_2, 2 D_3, 8 D_4, 6 D_5, 21 D_{10}, 4 D_{20}
C81.9	5 C_2, C_3, 5 C_4, C_5, 4 C_6, 3 C_{10}, 3 C_{12}, C_{15}, 12 C_{20}, 3 C_{30}, 4 C_{60}, 16 D_2, D_3, 6 D_4, 4 D_5, 3 D_6, 12 D_{10}, 2 D_{12}, 4 D_{15}, 24 D_{20}, 8 D_{30}, 8 D_{60}	5 C_2, C_3, 5 C_4, C_5, 4 C_6, 3 C_{10}, 2 C_{12}, C_{15}, 12 C_{20}, 3 C_{30}, 4 C_{60}, 16 D_2, D_3, 6 D_4, 4 D_5, 3 D_6, 12 D_{10}, 2 D_{12}, 4 D_{15}, 24 D_{20}, 8 D_{30}, 8 D_{60}	3 C_2, 2 C_4, C_6, 14 D_2, D_3, 6 D_4, 4 D_5, 3 D_6, 12 D_{10}, 2 D_{12}, 4 D_{15}, 24 D_{20}, 8 D_{30}, 8 D_{60}	5 C_2, C_3, 3 C_4, C_5, 3 C_{10}, 12 C_{20}, 16 D_2, D_3, 6 D_4, 4 D_5, 12 D_{10}, 24 D_{20}
C81.10	5 C_2, 3 C_4, 5 C_5, 17 C_{10}, 8 C_{20}, 14 D_2, 2 D_4, 14 D_5, 24 D_{10}, 8 D_{20}	5 C_2, 3 C_4, 4 C_5, 13 C_{10}, 5 C_{20}, 14 D_2, 2 D_4, 13 D_5, 22 D_{10}, 8 D_{20}	3 C_2, 2 C_4, C_{10}, 12 D_2, 2 D_4, 13 D_5, 22 D_{10}, 8 D_{20}	5 C_2, C_4, 4 C_5, 9 C_{10}, 4 C_{20}, 14 D_2, 2 D_4, 13 D_5, 20 D_{10}, 8 D_{20}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C81.11	5 C_2, C_3, 2 C_4, C_5, 3 C_6, 3 C_9, 3 C_{10}, 2 C_{12}, C_{15}, 9 C_{18}, C_{30}, 6 C_{36}, 3 C_{45}, 3 C_{90}, 13 D_2, 2 D_3, 4 D_5, 4 D_6, 6 D_9, 6 D_{10}, 2 D_{15}, 12 D_{18}, D_{30}, 6 D_{45}, 3 D_{90}	5 C_2, C_3, 2 C_4, C_5, 3 C_6, C_9, 3 C_{10}, C_{12}, C_{15}, 3 C_{18}, C_{30}, C_{36}, C_{45}, C_{90}, 13 D_2, 2 D_3, 4 D_5, 4 D_6, 2 D_9, 6 D_{10}, 2 D_{15}, 4 D_{18}, D_{30}, 2 D_{45}, D_{90}	3 C_2, 2 C_4, C_6, C_{18}, 11 D_2, D_3, 4 D_5, 3 D_6, D_9, 6 D_{10}, 2 D_{15}, 3 D_{18}, D_{30}, 2 D_{45}, D_{90}	5 C_2, C_3, C_5, C_9, 3 C_{10}, 13 D_2, 2 D_3, 4 D_5, 2 D_9, 6 D_{10}
C81.12	3 C_2, 2 C_4, C_5, C_{10}, 8 C_{17}, 8 C_{34}, 8 C_{68}, 8 C_{85}, 3 D_2, 2 D_5, D_{10}, 16 D_{17}, 8 D_{34}, 8 D_{85}	3 C_2, 2 C_4, C_5, C_{10}, C_{17}, C_{34}, C_{85}, 3 D_2, 2 D_5, D_{10}, 2 D_{17}, D_{34}, D_{85}	2 C_2, 2 C_4, C_{34}, 3 D_2, 2 D_5, D_{10}, D_{17}, D_{34}, D_{85}	3 C_2, C_5, C_{10}, C_{17}, 3 D_2, 2 D_5, D_{10}, D_{17}
C81.13	5 C_2, C_3, 6 C_4, 3 C_6, 6 C_8, C_{12}, 13 D_2, 4 D_3, 11 D_4, 7 D_6, 3 D_8, D_{12}	5 C_2, C_3, 6 C_4, 3 C_6, 5 C_8, C_{12}, 13 D_2, 4 D_3, 11 D_4, 7 D_6, 3 D_8, D_{12}	3 C_2, 4 C_4, 2 C_6, 4 C_8, C_{12}, 13 D_2, 3 D_3, 11 D_4, 7 D_6, 3 D_8, D_{12}	5 C_2, C_3, 2 C_4, C_8, 13 D_2, 4 D_3, 2 D_4
C81.14	**Tet**, 2 **Oct**, 8 C_2, C_3, 6 C_4, 5 C_6, 2 C_8, 53 D_2, 2 D_3, 14 D_4, 4 D_6	**Tet**, 2 **Oct**, 8 C_2, C_3, 6 C_4, 5 C_6, C_8, 53 D_2, 2 D_3, 14 D_4, 4 D_6	2 **Oct**, 3 C_2, 2 C_4, C_6, 39 D_2, 2 D_3, 14 D_4, 4 D_6	**Tet**, 2 **Oct**, 8 C_2, C_3, 4 C_4, C_8, 53 D_2, 2 D_3, 13 D_4
C81.15	**Tet**, 2 **Oct**, 8 C_2, C_3, 6 C_4, 5 C_6, 2 C_8, 53 D_2, 2 D_3, 14 D_4, 4 D_6	**Tet**, 2 **Oct**, 8 C_2, C_3, 6 C_4, 5 C_6, C_8, 53 D_2, 2 D_3, 14 D_4, 4 D_6	2 **Oct**, 3 C_2, C_4, 2 C_6, 37 D_2, 2 D_3, 14 D_4, 4 D_6	**Tet**, 2 **Oct**, 8 C_2, C_3, 5 C_4, C_8, 53 D_2, 2 D_3, 13 D_4
C81.16	**Tet**, **Oct**, 5 C_2, C_3, 6 C_4, 2 C_6, 5 C_8, C_{12}, 18 D_2, D_3, 8 D_4, D_6, 4 D_8, D_{12}	**Tet**, **Oct**, 5 C_2, C_3, 6 C_4, 2 C_6, 4 C_8, C_{12}, 18 D_2, D_3, 8 D_4, D_6, 4 D_8, D_{12}	**Oct**, 3 C_2, 2 C_4, 2 C_6, 3 C_8, C_{12}, 15 D_2, D_3, 8 D_4, D_6, 4 D_8, D_{12}	**Tet**, **Oct**, 5 C_2, C_3, 4 C_4, C_8, 18 D_2, D_3, 4 D_4
C81.17	**Tet**, **Oct**, 5 C_2, C_3, 6 C_4, 2 C_6, 4 C_8, C_{12}, 18 D_2, D_3, 8 D_4, D_6, 4 D_8, D_{12}	**Tet**, **Oct**, 5 C_2, C_3, 6 C_4, 2 C_6, 3 C_8, C_{12}, 18 D_2, D_3, 8 D_4, D_6, 4 D_8, D_{12}	**Tet**, **Oct**, 3 C_2, 3 C_4, C_6, 18 D_2, D_3, 8 D_4, D_6, 4 D_8, D_{12}	**Tet**, 5 C_2, C_3, 3 C_4, 3 C_8, 18 D_2, D_3, 4 D_4, 4 D_8
C81.18	2 **Tet**, 3 **Oct**, 7 C_2, C_3, 6 C_4, 2 C_6, 4 C_8, C_{12}, 52 D_2, D_3, 20 D_4, D_6, 4 D_8, D_{12}	2 **Tet**, 3 **Oct**, 7 C_2, C_3, 6 C_4, 2 C_6, 3 C_8, C_{12}, 52 D_2, D_3, 20 D_4, D_6, 4 D_8, D_{12}	3 **Oct**, 3 C_2, C_4, C_6, C_8, 30 D_2, D_3, 20 D_4, D_6, 4 D_8, D_{12}	2 **Tet**, 3 **Oct**, 7 C_2, C_3, 5 C_4, 2 C_8, 52 D_2, D_3, 19 D_4, 4 D_8
C81.19	3 C_2, 3 C_4, C_5, 3 C_8, C_{10}, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}	3 C_2, 3 C_4, C_5, 2 C_8, C_{10}, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}	2 C_2, 2 C_4, C_8, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}	3 C_2, C_4, C_5, C_8, C_{10}, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}
C81.20	7 C_2, 6 C_4, C_5, 2 C_8, C_{10}, 51 D_2, 12 D_4, 2 D_5, D_{10}	7 C_2, 6 C_4, C_5, C_{10}, 51 D_2, 12 D_4, 2 D_5, D_{10}	2 C_2, 2 C_4, 31 D_2, 9 D_4, D_5, D_{10}	7 C_2, 4 C_4, C_5, C_{10}, 51 D_2, 8 D_4, 2 D_5, D_{10}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C81.21	3 C_2, 3 C_4, C_5, 3 C_8, C_{10}, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}	3 C_2, 3 C_4, C_5, C_8, C_{10}, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}	2 C_2, 2 C_4, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}	3 C_2, C_4, C_5, C_8, C_{10}, 6 D_2, 2 D_4, 2 D_5, D_8, D_{10}
C81.22	7 C_2, 6 C_4, C_5, 4 C_8, 7 C_{10}, 16 C_{20}, 37 D_2, 4 D_4, 4 D_5, 20 D_{10}, 16 D_{20}	7 C_2, 6 C_4, C_5, 2 C_8, 7 C_{10}, 16 C_{20}, 37 D_2, 4 D_4, 4 D_5, 20 D_{10}, 16 D_{20}	2 C_2, 2 C_4, 2 C_8, C_{10}, 24 D_2, 3 D_4, 2 D_5, 14 D_{10}, 12 D_{20}	7 C_2, 4 C_4, C_5, 6 C_{10}, 16 C_{20}, 37 D_2, 4 D_4, 4 D_5, 18 D_{10}, 16 D_{20}
C81.23	11 C_2, 3 C_4, C_5, 4 C_8, 11 C_{10}, 4 C_{20}, 127 D_2, 8 D_5, 64 D_{10}	11 C_2, 3 C_4, C_5, 2 C_8, 11 C_{10}, 4 C_{20}, 127 D_2, 8 D_5, 64 D_{10}	3 C_2, 2 C_4, 2 C_8, 2 C_{10}, 62 D_2, 2 D_5, 32 D_{10}	11 C_2, C_4, C_5, 9 C_{10}, 4 C_{20}, 127 D_2, 8 D_5, 56 D_{10}
C81.24	9 C_2, 7 C_4, C_5, 8 C_8, 7 C_{10}, 8 C_{20}, 45 D_2, 4 D_4, 4 D_5, 20 D_{10}, 16 D_{20}	9 C_2, 7 C_4, C_5, 6 C_8, 7 C_{10}, 8 C_{20}, 45 D_2, 4 D_4, 4 D_5, 20 D_{10}, 16 D_{20}	3 C_2, 4 C_4, 6 C_8, 2 C_{10}, 33 D_2, 3 D_4, 2 D_5, 14 D_{10}, 12 D_{20}	9 C_2, 3 C_4, C_5, 5 C_{10}, 8 C_{20}, 45 D_2, 4 D_4, 4 D_5, 16 D_{10}, 16 D_{20}
C81.25	7 C_2, 5 C_4, C_5, 4 C_8, 7 C_{10}, 8 C_{20}, 37 D_2, 4 D_4, 4 D_5, 20 D_{10}, 16 D_{20}	7 C_2, 5 C_4, C_5, 2 C_8, 7 C_{10}, 8 C_{20}, 37 D_2, 4 D_4, 4 D_5, 20 D_{10}, 16 D_{20}	3 C_2, 4 C_4, 2 C_8, 2 C_{10}, 4 C_{20}, 30 D_2, 4 D_4, 2 D_5, 16 D_{10}, 16 D_{20}	7 C_2, C_4, C_5, 5 C_{10}, 4 C_{20}, 37 D_2, 4 D_5, 14 D_{10}
C81.26	4 C_2, 4 C_4, C_5, 4 C_8, 4 C_{10}, 2 C_{20}, 4 C_{40}, 11 D_2, 5 D_4, 2 D_5, 4 D_{10}, 2 D_{20}	4 C_2, 4 C_4, C_5, 2 C_8, 4 C_{10}, 2 C_{20}, 4 C_{40}, 11 D_2, 5 D_4, 2 D_5, 4 D_{10}, 2 D_{20}	3 C_2, 4 C_4, 2 C_8, 2 C_{10}, 2 C_{20}, 4 C_{40}, 11 D_2, 5 D_4, 2 D_5, 4 D_{10}, 2 D_{20}	4 C_2, C_5, 2 C_{10}, 11 D_2, 2 D_5, 2 D_{10}
C81.27	3 C_2, 6 C_4, C_5, 4 C_8, 2 C_{10}, 4 C_{20}, 4 C_{40}, 4 D_2, 3 D_4, 2 D_5, 2 D_{10}, 4 D_{20}	3 C_2, 6 C_4, C_5, 2 C_8, 2 C_{10}, 4 C_{20}, 4 C_{40}, 4 D_2, 3 D_4, 2 D_5, 2 D_{10}, 4 D_{20}	3 C_2, 6 C_4, 2 C_8, 2 C_{10}, 4 C_{20}, 4 C_{40}, 4 D_2, 3 D_4, 2 D_5, 2 D_{10}, 4 D_{20}	3 C_2, C_5, 4 D_2, 2 D_5
C81.28	3 C_2, 5 C_4, C_5, 4 C_8, 3 C_{10}, 12 C_{20}, 8 C_{40}, 8 D_2, 4 D_4, 2 D_5, 6 D_{10}, 16 D_{20}	3 C_2, 5 C_4, C_5, 2 C_8, 3 C_{10}, 12 C_{20}, 8 C_{40}, 8 D_2, 4 D_4, 2 D_5, 6 D_{10}, 16 D_{20}	2 C_2, 3 C_4, 2 C_8, C_{10}, 4 C_{20}, 8 C_{40}, 8 D_2, 4 D_4, 2 D_5, 6 D_{10}, 16 D_{20}	3 C_2, 2 C_4, C_5, 2 C_{10}, 8 C_{20}, 8 D_2, 2 D_4, 2 D_5, 4 D_{10}, 8 D_{20}
C81.29	5 C_2, 10 C_4, 6 C_8, 4 C_{16}, 15 D_2, 4 D_4	5 C_2, 10 C_4, 4 C_8, C_{16}, 15 D_2, 4 D_4	3 C_2, 4 C_4, 3 C_8, C_{16}, 15 D_2, 4 D_4	5 C_2, 6 C_4, C_8, 15 D_2, 2 D_4
C81.30	7 C_2, 9 C_4, 6 C_8, 4 C_{16}, 37 D_2, 7 D_4	7 C_2, 9 C_4, 4 C_8, 37 D_2, 7 D_4	3 C_2, 3 C_4, 2 C_8, 30 D_2, 5 D_4	7 C_2, 6 C_4, 2 C_8, 37 D_2, 7 D_4
C81.31	5 C_2, 13 C_4, 6 C_8, 2 C_{16}, 18 D_2, 12 D_4	5 C_2, 13 C_4, 4 C_8, 18 D_2, 12 D_4	3 C_2, 4 C_4, 2 C_8, 14 D_2, 10 D_4	5 C_2, 8 C_4, C_8, 18 D_2, 11 D_4
C81.32	4 C_2, 12 C_4, 7 C_8, 2 C_{16}, 12 D_2, 3 D_4	4 C_2, 12 C_4, 5 C_8, 12 D_2, 3 D_4	3 C_2, 5 C_4, 3 C_8, 12 D_2, 3 D_4	4 C_2, 6 C_4, 2 C_8, 12 D_2, 3 D_4
C81.33	6 C_2, 7 C_4, 6 C_8, 4 C_{16}, 27 D_2, 7 D_4	6 C_2, 7 C_4, 4 C_8, 27 D_2, 7 D_4	3 C_2, 3 C_4, 2 C_8, 24 D_2, 7 D_4	6 C_2, 4 C_4, 2 C_8, 27 D_2, 7 D_4

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C81.34	5 C_2, C_3, 3 C_4, C_5, 3 C_6, 4 C_8, 3 C_{10}, 2 C_{12}, C_{15}, 2 C_{20}, 4 C_{24}, 3 C_{30}, 13 D_2, 2 D_3, 4 D_5, 4 D_6, 6 D_{10}, 4 D_{15}, 6 D_{30}	5 C_2, C_3, 3 C_4, C_5, 3 C_6, 2 C_8, 3 C_{10}, C_{12}, C_{15}, 2 C_{20}, 3 C_{30}, 13 D_2, 2 D_3, 4 D_5, 4 D_6, 6 D_{10}, 4 D_{15}, 6 D_{30}	2 C_2, 3 C_4, C_6, 2 C_8, C_{10}, C_{12}, 2 C_{20}, C_{30}, 11 D_2, D_3, 2 D_5, 3 D_6, 5 D_{10}, 2 D_{15}, 5 D_{30}	5 C_2, C_3, C_5, 2 C_{10}, 13 D_2, 2 D_3, 4 D_5, 4 D_{10}
C81.35	4 C_2, C_3, 2 C_4, C_5, 2 C_6, 2 C_8, 5 C_{10}, 3 C_{12}, C_{15}, 2 C_{24}, 3 C_{30}, 12 D_2, 2 D_3, 2 D_4, 2 D_5, 4 D_6, 4 D_{10}, 4 D_{12}, 4 D_{15}, 6 D_{30}	4 C_2, C_3, 2 C_4, C_5, 2 C_6, 5 C_{10}, 2 C_{12}, C_{15}, 3 C_{30}, 12 D_2, 2 D_3, 2 D_4, 2 D_5, 4 D_6, 4 D_{10}, 3 D_{12}, 4 D_{15}, 6 D_{30}	2 C_2, 2 C_4, C_6, C_{10}, 2 C_{12}, C_{30}, 9 D_2, D_3, 2 D_4, 2 D_5, 3 D_6, 4 D_{10}, 3 D_{12}, 4 D_{15}, 6 D_{30}	4 C_2, C_3, C_5, 4 C_{10}, 12 D_2, 2 D_3, 2 D_5, 2 D_{10}
C81.36	**Tet**, 7 C_2, C_3, 4 C_4, C_5, 3 C_6, 3 C_{10}, 4 C_{12}, C_{15}, C_{30}, 37 D_2, 4 D_5, 10 D_{10}	**Tet**, 7 C_2, C_3, 4 C_4, C_5, 3 C_6, 3 C_{10}, 2 C_{12}, C_{15}, C_{30}, 37 D_2, 4 D_5, 10 D_{10}	2 C_2, 4 C_4, C_6, 2 C_{12}, 24 D_2, 2 D_5, 8 D_{10}	**Tet**, 7 C_2, C_3, C_5, 3 C_{10}, 37 D_2, 4 D_5, 10 D_{10}
C81.37	5 C_2, C_3, 3 C_4, C_5, 5 C_6, 3 C_{10}, 5 C_{12}, C_{15}, 4 C_{20}, 3 C_{30}, 4 C_{60}, 14 D_2, 2 D_4, 4 D_5, 8 D_{10}, 8 D_{20}	5 C_2, C_3, 3 C_4, C_5, 5 C_6, 3 C_{10}, 3 C_{12}, C_{15}, 4 C_{20}, 3 C_{30}, 4 C_{60}, 14 D_2, 2 D_4, 4 D_5, 8 D_{10}, 8 D_{20}	3 C_2, 2 C_4, C_6, 12 D_2, 2 D_4, 4 D_5, 8 D_{10}, 8 D_{20}	5 C_2, C_3, C_4, C_5, 3 C_{10}, 4 C_{20}, 14 D_2, 2 D_4, 4 D_5, 8 D_{10}, 8 D_{20}
C81.38	3 C_2, C_3, 4 C_4, 2 C_6, 2 C_8, 5 C_{12}, 4 C_{16}, 3 C_{24}, 4 C_{48}, 8 D_2, D_3, 4 D_4, 3 D_6, 8 D_{12}	3 C_2, C_3, 4 C_4, 2 C_6, 4 C_{12}, 8 D_2, D_3, 4 D_4, 3 D_6, 7 D_{12}	2 C_2, 2 C_4, C_6, C_{12}, 8 D_2, D_3, 4 D_4, 3 D_6, 7 D_{12}	3 C_2, C_3, 2 C_4, 8 D_2, D_3, 2 D_4
C81.39	5 C_2, 2 C_4, 5 C_5, 19 C_{10}, 8 C_{20}, 13 D_2, 4 D_5, 6 D_{10}	5 C_2, 2 C_4, 4 C_5, 14 C_{10}, 2 C_{20}, 13 D_2, 4 D_5, 6 D_{10}	3 C_2, 2 C_4, C_{10}, 11 D_2, 4 D_5, 6 D_{10}	5 C_2, 4 C_5, 9 C_{10}, 13 D_2, 4 D_5, 6 D_{10}
C81.40	3 C_2, C_3, 2 C_4, C_5, 3 C_6, 3 C_9, C_{10}, 4 C_{12}, C_{15}, 9 C_{18}, C_{30}, 12 C_{36}, 3 C_{45}, 3 C_{90}, 3 D_2, 2 D_5, D_{10}	3 C_2, C_3, 2 C_4, C_5, 3 C_6, C_9, C_{10}, 2 C_{12}, C_{15}, 3 C_{18}, C_{30}, 2 C_{36}, C_{45}, C_{90}, 3 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_6, C_{18}, 3 D_2, 2 D_5, D_{10}	3 C_2, C_3, C_5, C_9, C_{10}, 3 D_2, 2 D_5, D_{10}
C81.41	C_2, C_4, C_5, 8 C_{17}, 8 C_{34}, 16 C_{68}, 8 C_{85}, D_5	C_2, C_4, C_5, C_{17}, C_{34}, C_{85}, D_5	C_2, C_4, C_{34}, D_5	C_2, C_5, C_{17}, D_5
Genus 82				
C82.1	2 C_2, 3 C_3, C_4, 2 C_6, C_8, 3 C_9, 3 C_{18}, 2 D_2, 5 D_3, D_4, 2 D_6, 6 D_9, 3 D_{18}	2 C_2, 3 C_3, C_4, 2 C_6, 3 C_9, 3 C_{18}, 2 D_2, 5 D_3, D_4, 2 D_6, 6 D_9, 3 D_{18}	2 C_2, C_4, 2 C_6, 3 C_{18}, 2 D_2, 5 D_3, D_4, 2 D_6, 6 D_9, 3 D_{18}	2 C_2, 3 C_3, 3 C_9, 2 D_2, 5 D_3, 6 D_9
C82.2	2 C_2, 7 C_3, C_4, 6 C_6, C_8, C_{12}, 2 C_{24}, 2 D_2, 5 D_3, D_4, 2 D_6	2 C_2, 7 C_3, C_4, 6 C_6, 2 D_2, 5 D_3, D_4, 2 D_6	2 C_2, C_4, 5 C_6, 2 D_2, 5 D_3, D_4, 2 D_6	2 C_2, 5 C_3, 2 D_2, 5 D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C82.3	2 C_2, C_3, 2 C_4, C_6, C_8, 6 C_9, 3 C_{18}, 2 D_2, 2 D_3, D_4, D_6, 9 D_9, 3 D_{18}	2 C_2, C_3, 2 C_4, C_6, 6 C_9, 3 C_{18}, 2 D_2, 2 D_3, D_4, D_6, 9 D_9, 3 D_{18}	2 C_2, 2 C_4, C_6, 3 C_{18}, 2 D_2, 2 D_3, D_4, D_6, 9 D_9, 3 D_{18}	2 C_2, C_3, 6 C_9, 2 D_2, 2 D_3, 9 D_9
C82.4	C_2, 3 C_3, C_4, C_6, 6 C_9, 2 C_{12}, 2 D_3, 6 D_9	C_2, 3 C_3, C_4, C_6, 6 C_9, C_{12}, 2 D_3, 6 D_9	C_2, C_4, C_6, C_{12}, 2 D_3, 6 D_9	C_2, 2 C_3, 6 C_9, 2 D_3, 6 D_9
C82.5	C_2, 3 C_3, C_4, C_6, 6 C_9, 2 C_{12}, 2 D_3, 6 D_9	C_2, 3 C_3, C_4, C_6, 6 C_9, C_{12}, 2 D_3, 6 D_9	C_2, C_4, C_6, C_{12}, 2 D_3, 6 D_9	C_2, 2 C_3, 6 C_9, 2 D_3, 6 D_9
C82.6	C_2, 3 C_3, C_4, C_6, 6 C_9, 2 C_{12}, 2 D_3, 6 D_9	C_2, 3 C_3, C_4, C_6, 6 C_9, C_{12}, 2 D_3, 6 D_9	C_2, C_4, C_6, C_{12}, 2 D_3, 6 D_9	C_2, 2 C_3, 6 C_9, 2 D_3, 6 D_9
C82.7	2 C_2, C_3, 2 C_4, 2 C_5, C_6, C_8, 2 C_{10}, 2 C_{15}, 4 C_{20}, 4 C_{40}, 2 D_2, 2 D_3, D_4, 2 D_5, D_6, 2 D_{10}, 2 D_{15}, 4 D_{20}	2 C_2, C_3, 2 C_4, C_5, C_6, C_{10}, C_{15}, C_{20}, 2 D_2, 2 D_3, D_4, D_5, D_6, D_{10}, D_{15}, D_{20}	2 C_2, 2 C_4, C_6, C_{10}, C_{20}, 2 D_2, 2 D_3, D_4, D_5, D_6, D_{10}, D_{15}, D_{20}	2 C_2, C_3, C_5, 2 D_2, 2 D_3, D_5
C82.8	3 C_2, 8 C_3, 10 C_6, 2 C_9, 3 D_2, 8 D_3, 4 D_6, D_9	3 C_2, 8 C_3, 10 C_6, 2 C_9, 3 D_2, 8 D_3, 4 D_6, D_9	3 C_2, 10 C_6, 3 D_2, 8 D_3, 4 D_6, D_9	3 C_2, 6 C_3, 2 C_9, 3 D_2, 8 D_3, D_9
C82.9	C_2, C_3, C_4, 2 C_8, 9 C_9, D_3, 9 D_9	C_2, C_3, C_4, 9 C_9, D_3, 9 D_9	C_2, C_4, D_3, 9 D_9	C_2, C_3, 9 C_9, D_3, 9 D_9
C82.10	C_2, 3 C_3, C_6, 5 C_9, 3 C_{18}, 2 D_3, D_9	C_2, 3 C_3, C_6, 2 C_9, C_{18}, 2 D_3, D_9	C_2, C_6, C_{18}, 2 D_3, D_9	C_2, 2 C_3, 2 D_3
C82.11	C_2, 2 C_3, C_6, 6 C_9, 3 C_{18}, D_3, 2 D_9	C_2, 2 C_3, C_6, 3 C_9, C_{18}, D_3, 2 D_9	C_2, C_6, C_{18}, D_3, 2 D_9	C_2, C_3, D_3
C82.12	C_2, 2 C_3, C_6, 11 C_9, 3 C_{18}, D_3, 4 D_9	C_2, 2 C_3, C_6, 8 C_9, C_{18}, D_3, 4 D_9	C_2, C_6, C_{18}, D_3, 4 D_9	C_2, C_3, D_3
C82.13	2 C_2, 3 C_3, 2 C_4, 4 C_6, C_8, 2 C_{12}, 2 C_{24}, 2 D_2, 2 D_3, D_4, D_6	2 C_2, 3 C_3, 2 C_4, 4 C_6, 2 D_2, 2 D_3, D_4, D_6	2 C_2, 2 C_4, 3 C_6, 2 D_2, 2 D_3, D_4, D_6	2 C_2, 2 C_3, 2 D_2, 2 D_3
C82.14	C_2, C_3, C_4, 2 C_5, 2 C_8, 2 C_{10}, 2 C_{15}, 4 C_{20}, 8 C_{40}, D_3	C_2, C_3, C_4, C_5, C_{10}, C_{15}, C_{20}, D_3	C_2, C_4, C_{10}, C_{20}, D_3	C_2, C_3, C_5, D_3
Genus 83				
C83.1	5 C_2, 3 C_4, 2 C_8, 10 C_{41}, 30 C_{82}, 10 C_{164}, 13 D_2, 3 D_4, 40 D_{41}, 70 D_{82}, 10 D_{164}	5 C_2, 3 C_4, C_8, 10 C_{41}, 30 C_{82}, 10 C_{164}, 13 D_2, 3 D_4, 40 D_{41}, 70 D_{82}, 10 D_{164}	3 C_2, 3 C_4, C_8, 10 C_{82}, 10 C_{164}, 13 D_2, 3 D_4, 30 D_{41}, 70 D_{82}, 10 D_{164}	5 C_2, 10 C_{41}, 20 C_{82}, 13 D_2, 40 D_{41}, 40 D_{82}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C83.2	3 C_2, 5 C_4, C_8, 10 C_{41}, 10 C_{82}, 30 C_{164}, 4 D_2, 2 D_4, 30 D_{41}, 30 D_{82}, 30 D_{164}	3 C_2, 5 C_4, 10 C_{41}, 10 C_{82}, 30 C_{164}, 4 D_2, 2 D_4, 30 D_{41}, 30 D_{82}, 30 D_{164}	3 C_2, 4 C_4, 10 C_{82}, 30 C_{164}, 4 D_2, 2 D_4, 30 D_{41}, 30 D_{82}, 30 D_{164}	3 C_2, 10 C_{41}, 4 D_2, 30 D_{41}
C83.3	3 C_2, C_3, 2 C_4, C_6, C_{12}, 10 C_{41}, 10 C_{82}, 10 C_{123}, 3 D_2, 2 D_3, D_6, 20 D_{41}, 10 D_{82}, 10 D_{123}	3 C_2, C_3, 2 C_4, C_6, 10 C_{41}, 10 C_{82}, 10 C_{123}, 3 D_2, 2 D_3, D_6, 20 D_{41}, 10 D_{82}, 10 D_{123}	2 C_2, 2 C_4, C_6, 3 D_2, D_3, D_6, 20 D_{41}, 10 D_{82}, 10 D_{123}	3 C_2, C_3, 10 C_{41}, 10 C_{82}, 3 D_2, D_3, 20 D_{41}, 10 D_{82}
C83.4	3 C_2, 2 C_4, 4 C_8, 10 C_{41}, 10 C_{82}, 10 C_{164}, 3 D_2, 20 D_{41}, 10 D_{82}	3 C_2, 2 C_4, 2 C_8, 10 C_{41}, 10 C_{82}, 10 C_{164}, 3 D_2, 20 D_{41}, 10 D_{82}	2 C_2, 2 C_4, 2 C_8, 10 C_{82}, 10 C_{164}, 3 D_2, 10 D_{41}, 10 D_{82}	3 C_2, 10 C_{41}, 3 D_2, 20 D_{41}
C83.5	2 C_2, 2 C_4, 2 C_8, 10 C_{41}, 10 C_{82}, 10 C_{164}, 2 D_2, 20 D_{41}, 10 D_{82}	2 C_2, 2 C_4, 10 C_{41}, 10 C_{82}, 10 C_{164}, 2 D_2, 20 D_{41}, 10 D_{82}	2 C_2, 2 C_4, 10 C_{82}, 10 C_{164}, 2 D_2, 20 D_{41}, 10 D_{82}	2 C_2, 10 C_{41}, 2 D_2, 20 D_{41}
C83.6	3 C_2, 2 C_4, 4 C_8, 5 C_{41}, 5 C_{82}, 3 D_2, 10 D_{41}, 5 D_{82}	3 C_2, 2 C_4, 2 C_8, 5 C_{41}, 5 C_{82}, 3 D_2, 10 D_{41}, 5 D_{82}	2 C_2, C_4, 3 D_2, 10 D_{41}, 5 D_{82}	3 C_2, C_4, 5 C_{41}, 5 C_{82}, 3 D_2, 10 D_{41}, 5 D_{82}
C83.7	C_2, C_3, C_4, C_6, 2 C_{12}, 10 C_{41}, 10 C_{123}, 10 D_{41}	C_2, C_3, C_4, C_6, 10 C_{41}, 10 C_{123}, 10 D_{41}	C_2, C_4, C_6, 10 D_{41}	C_2, C_3, 10 C_{41}, 10 D_{41}

Genus 84

None

Genus 85

C85.1	5 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 2 C_4, 3 C_6, C_7, C_{12}, 7 C_{14}, 2 C_{21}, 6 C_{42}, 27 D_2, 2 D_3, 6 D_4, 2 D_6, 4 D_7, 16 D_{14}, 8 D_{21}, 12 D_{42}	5 **Tet**, 2 **Oct**, 5 C_2, 3 C_3, 2 C_4, 3 C_6, C_7, 7 C_{14}, 2 C_{21}, 6 C_{42}, 27 D_2, 2 D_3, 6 D_4, 2 D_6, 4 D_7, 16 D_{14}, 8 D_{21}, 12 D_{42}	2 **Tet**, 2 **Oct**, 2 C_2, 2 C_4, C_6, C_{14}, 22 D_2, D_3, 6 D_4, 2 D_6, 3 D_7, 16 D_{14}, 6 D_{21}, 12 D_{42}	**Tet**, 5 C_2, C_3, C_6, C_7, 6 C_{14}, 2 C_{21}, 6 C_{42}, 27 D_2, 2 D_3, 2 D_6, 4 D_7, 12 D_{14}, 8 D_{21}, 12 D_{42}
C85.2	2 **Tet**, 7 C_2, 3 C_3, 7 C_6, C_7, 7 C_{14}, C_{21}, 3 C_{42}, 37 D_2, 4 D_3, 10 D_6, 8 D_7, 28 D_{14}, 4 D_{21}, 6 D_{42}	2 **Tet**, 7 C_2, 3 C_3, 7 C_6, C_7, 7 C_{14}, C_{21}, 3 C_{42}, 37 D_2, 4 D_3, 10 D_6, 8 D_7, 28 D_{14}, 4 D_{21}, 6 D_{42}	3 C_2, 4 C_6, C_{14}, 27 D_2, 2 D_3, 8 D_6, 4 D_7, 22 D_{14}, 3 D_{21}, 6 D_{42}	7 C_2, C_3, 2 C_6, C_7, 6 C_{14}, C_{21}, 3 C_{42}, 37 D_2, 4 D_3, 8 D_6, 8 D_7, 24 D_{14}, 4 D_{21}, 6 D_{42}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C85.3	2 **Tet**, 7 C_2, 3 C_3, 7 C_6, C_7, 7 C_{14}, 2 C_{21}, 14 C_{42}, 37 D_2, 4 D_3, 10 D_6, 8 D_7, 28 D_{14}, 16 D_{21}, 56 D_{42}	2 **Tet**, 7 C_2, 3 C_3, 7 C_6, C_7, 7 C_{14}, 2 C_{21}, 14 C_{42}, 37 D_2, 4 D_3, 10 D_6, 8 D_7, 28 D_{14}, 16 D_{21}, 56 D_{42}	3 C_2, 4 C_6, C_{14}, 2 C_{42}, 27 D_2, 2 D_3, 8 D_6, 4 D_7, 22 D_{14}, 8 D_{21}, 44 D_{42}	7 C_2, C_3, 2 C_6, C_7, 6 C_{14}, 2 C_{21}, 12 C_{42}, 37 D_2, 4 D_3, 8 D_6, 8 D_7, 24 D_{14}, 16 D_{21}, 48 D_{42}
C85.4	5 C_2, C_3, 4 C_4, 3 C_6, C_7, 4 C_{12}, 3 C_{14}, 6 C_{28}, 13 D_2, 4 D_4, 6 D_7, 12 D_{14}, 12 D_{28}	5 C_2, C_3, 4 C_4, 3 C_6, C_7, 3 C_{12}, 3 C_{14}, 6 C_{28}, 13 D_2, 4 D_4, 6 D_7, 12 D_{14}, 12 D_{28}	3 C_2, 4 C_4, 2 C_6, 3 C_{12}, 2 C_{14}, 6 C_{28}, 13 D_2, 4 D_4, 3 D_7, 12 D_{14}, 12 D_{28}	5 C_2, C_7, C_{14}, 13 D_2, 6 D_7, 3 D_{14}
C85.5	**Tet**, 7 C_2, C_3, 2 C_4, 3 C_6, C_7, C_{12}, 11 C_{14}, 39 D_2, 6 D_4, 4 D_7, 16 D_{14}	**Tet**, 7 C_2, C_3, 2 C_4, 3 C_6, C_7, 11 C_{14}, 39 D_2, 6 D_4, 4 D_7, 16 D_{14}	3 C_2, 2 C_4, 2 C_6, 2 C_{14}, 29 D_2, 6 D_4, 3 D_7, 16 D_{14}	7 C_2, C_7, 9 C_{14}, 39 D_2, 4 D_7, 12 D_{14}
C85.6	5 C_2, C_3, 4 C_4, 3 C_6, C_7, 4 C_{12}, 4 C_{14}, 4 C_{28}, 13 D_2, 4 D_4, 5 D_7, 10 D_{14}, 3 D_{28}	5 C_2, C_3, 4 C_4, 3 C_6, C_7, 3 C_{12}, 4 C_{14}, 4 C_{28}, 13 D_2, 4 D_4, 5 D_7, 10 D_{14}, 3 D_{28}	3 C_2, 3 C_4, 2 C_6, 2 C_{12}, C_{14}, 3 C_{28}, 13 D_2, 4 D_4, 4 D_7, 10 D_{14}, 3 D_{28}	5 C_2, C_7, 3 C_{14}, 13 D_2, 5 D_7, 6 D_{14}
C85.7	**Tet**, 7 C_2, C_3, 2 C_4, 3 C_6, C_7, C_{12}, 7 C_{14}, 8 C_{28}, 39 D_2, 6 D_4, 8 D_7, 32 D_{14}, 32 D_{28}	**Tet**, 7 C_2, C_3, 2 C_4, 3 C_6, C_7, 7 C_{14}, 8 C_{28}, 39 D_2, 6 D_4, 8 D_7, 32 D_{14}, 32 D_{28}	3 C_2, C_4, 2 C_6, C_{14}, 6 C_{28}, 29 D_2, 6 D_4, 4 D_7, 26 D_{14}, 32 D_{28}	7 C_2, C_4, C_7, 6 C_{14}, 39 D_2, 2 D_4, 8 D_7, 24 D_{14}
C85.8	C_2, 3 C_3, 2 C_5, C_6, C_7, 10 C_{15}, 2 C_{21}, 4 C_{35}, 8 C_{105}, D_3, 2 D_5, D_7, 4 D_{15}, 2 D_{21}, 4 D_{35}, 8 D_{105}	C_2, 3 C_3, C_5, C_6, C_7, 4 C_{15}, 2 C_{21}, 2 C_{35}, 4 C_{105}, D_3, D_5, D_7, 2 D_{15}, 2 D_{21}, 2 D_{35}, 4 D_{105}	C_2, C_6, D_3, D_5, D_7, 2 D_{15}, 2 D_{21}, 2 D_{35}, 4 D_{105}	C_2, C_3, C_5, C_7, 2 C_{21}, D_3, D_5, D_7, 2 D_{21}
C85.9	C_2, C_3, C_6, C_7, 6 C_{13}, 6 C_{39}, 12 C_{91}, D_7, 6 D_{13}, 12 D_{91}	C_2, C_3, C_6, C_7, C_{13}, 2 C_{91}, D_7, D_{13}, 2 D_{91}	C_2, C_6, D_7, D_{13}, 2 D_{91}	C_2, C_7, C_{13}, D_7, D_{13}
C85.10	3 C_2, C_3, 3 C_6, C_7, 3 C_9, 3 C_{14}, 3 C_{18}, C_{21}, 3 C_{42}, 7 D_2, 4 D_7, 6 D_{14}	3 C_2, C_3, 3 C_6, C_7, 3 C_{14}, C_{21}, 3 C_{42}, 7 D_2, 4 D_7, 6 D_{14}	2 C_2, C_6, 6 D_2, 4 D_7, 6 D_{14}	3 C_2, C_7, 3 C_{14}, 7 D_2, 4 D_7, 6 D_{14}
C85.11	3 C_2, 3 C_3, 2 C_4, 5 C_6, C_7, 7 C_{12}, C_{14}, 2 C_{21}, C_{28}, 2 C_{42}, 2 C_{84}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 4 D_{21}, 2 D_{42}	3 C_2, 3 C_3, 2 C_4, 5 C_6, C_7, 5 C_{12}, C_{14}, 2 C_{21}, C_{28}, 2 C_{42}, 2 C_{84}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 4 D_{21}, 2 D_{42}	2 C_2, 2 C_4, 4 C_6, 5 C_{12}, C_{14}, C_{28}, 2 C_{42}, 2 C_{84}, 3 D_2, D_3, D_6, D_7, D_{14}, 2 D_{21}, 2 D_{42}	3 C_2, C_3, C_7, 2 C_{21}, 3 D_2, 2 D_3, 2 D_7, 4 D_{21}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C85.12	3 C_2, 3 C_3, 2 C_4, 5 C_6, C_7, 7 C_{12}, C_{14}, C_{21}, C_{28}, C_{42}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 2 D_{21}, D_{42}	3 C_2, 3 C_3, 2 C_4, 5 C_6, C_7, 5 C_{12}, C_{14}, C_{21}, C_{28}, C_{42}, 3 D_2, 2 D_3, D_6, 2 D_7, D_{14}, 2 D_{21}, D_{42}	2 C_2, 2 C_4, 4 C_6, 5 C_{12}, C_{14}, C_{28}, C_{42}, 3 D_2, D_3, D_6, D_7, D_{14}, D_{21}, D_{42}	3 C_2, C_3, C_7, C_{21}, 3 D_2, 2 D_3, 2 D_7, 2 D_{21}
C85.13	5 C_2, 2 C_3, 2 C_4, 8 C_6, 2 C_9, 6 C_{12}, 6 C_{18}, 6 C_{36}, 13 D_2, 2 D_3, 4 D_6, 2 D_9, 4 D_{18}	5 C_2, 2 C_3, 2 C_4, 8 C_6, C_9, 4 C_{12}, 3 C_{18}, C_{36}, 13 D_2, 2 D_3, 4 D_6, 2 D_9, 4 D_{18}	3 C_2, 2 C_4, 4 C_6, 3 C_{12}, C_{18}, 11 D_2, D_3, 3 D_6, D_9, 3 D_{18}	5 C_2, C_3, C_6, 13 D_2, 2 D_3, D_6
C85.14	C_2, C_3, C_6, C_7, 3 C_9, 3 C_{18}, C_{21}, 9 C_{27}, 9 C_{54}, 3 C_{63}, D_7	C_2, C_3, C_6, C_7, C_{21}, D_7	C_2, C_6, D_7	C_2, C_7, D_7
Genus 86				
C86.1	C_2, C_3, C_4, C_6, 2 C_8, 2 C_{12}, 2 C_{17}, 4 C_{24}, 2 C_{51}, 2 D_{17}	C_2, C_3, C_4, C_6, C_{12}, 2 C_{17}, 2 C_{51}, 2 D_{17}	C_2, C_4, C_6, C_{12}, 2 D_{17}	C_2, C_3, 2 C_{17}, 2 D_{17}
Genus 87				
C87.1	2 C_2, C_3, 2 C_4, C_6, 2 C_{12}, 7 C_{43}, 7 C_{86}, 21 C_{172}, 2 D_2, D_4, 21 D_{43}, 21 D_{86}, 21 D_{172}	2 C_2, C_3, 2 C_4, C_6, C_{12}, 7 C_{43}, 7 C_{86}, 21 C_{172}, 2 D_2, D_4, 21 D_{43}, 21 D_{86}, 21 D_{172}	2 C_2, 2 C_4, C_6, C_{12}, 7 C_{86}, 21 C_{172}, 2 D_2, D_4, 21 D_{43}, 21 D_{86}, 21 D_{172}	2 C_2, 7 C_{43}, 2 D_2, 21 D_{43}
C87.2	C_2, 3 C_7, 3 C_{14}, 3 C_{43}, 3 D_{43}	C_2, 3 C_{43}, 3 D_{43}	C_2, 3 D_{43}	C_2, 3 C_{43}, 3 D_{43}
C87.3	C_2, 3 C_7, 3 C_{14}, 3 C_{43}, 3 D_{43}	C_2, 3 C_{43}, 3 D_{43}	C_2, 3 D_{43}	C_2, 3 C_{43}, 3 D_{43}
C87.4	C_2, 3 C_7, 3 C_{14}, 3 C_{43}, 3 D_{43}	C_2, 3 C_{43}, 3 D_{43}	C_2, 3 D_{43}	C_2, 3 C_{43}, 3 D_{43}
Genus 88				
C88.1	3 C_2, 2 C_3, 2 C_5, 4 C_6, 2 C_9, 2 C_{10}, 6 C_{15}, 2 C_{18}, 6 C_{30}, 8 C_{45}, 8 C_{90}, 3 D_2, 2 D_3, 4 D_5, D_6, 2 D_9, 2 D_{10}, 8 D_{15}, D_{18}, 4 D_{30}, 8 D_{45}, 4 D_{90}	3 C_2, 2 C_3, C_5, 4 C_6, C_9, C_{10}, 2 C_{15}, C_{18}, 2 C_{30}, C_{45}, C_{90}, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_9, D_{10}, 2 D_{15}, D_{18}, D_{30}, 2 D_{45}, D_{90}	3 C_2, 2 C_6, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_9, D_{10}, 2 D_{15}, D_{18}, D_{30}, 2 D_{45}, D_{90}	3 C_2, C_3, C_5, C_6, C_{10}, C_{15}, C_{30}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C88.2	2 C_2, 2 C_3, 2 C_4, 3 C_6, C_8, 2 C_9, 4 C_{12}, 2 C_{18}, 4 C_{24}, 4 C_{36}, 6 C_{72}, 2 D_2, D_3, D_4, D_6, D_9, 2 D_{12}, D_{18}, 2 D_{36}	2 C_2, 2 C_3, 2 C_4, 3 C_6, C_9, 2 C_{12}, C_{18}, C_{36}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{36}	2 C_2, 2 C_4, 3 C_6, 2 C_{12}, C_{18}, C_{36}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{36}	2 C_2, C_3, 2 D_2, D_3
C88.3	3 C_2, 2 C_3, C_4, 5 C_6, 2 C_8, 2 C_9, 2 C_{12}, 5 C_{18}, 2 C_{24}, 2 C_{36}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8, D_9, D_{12}, D_{18}, D_{36}	3 C_2, 2 C_3, C_4, 5 C_6, C_8, C_9, C_{12}, 2 C_{18}, C_{36}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_9, D_{12}, D_{18}, D_{36}	3 C_2, 4 C_6, C_{18}, 4 D_2, D_3, 2 D_4, D_6, D_8, D_9, D_{12}, D_{18}, D_{36}	3 C_2, C_3, C_4, 4 D_2, D_3, 2 D_4
C88.4	2 C_2, 2 C_3, C_4, 3 C_6, C_8, 2 C_9, 3 C_{12}, 2 C_{18}, 2 C_{24}, 2 D_2, D_3, D_4, D_6, 2 D_9, D_{12}, D_{18}	2 C_2, 2 C_3, C_4, 3 C_6, C_9, 2 C_{12}, C_{18}, 2 D_2, D_3, D_4, D_6, 2 D_9, D_{12}, D_{18}	2 C_2, C_4, 3 C_6, 2 C_{12}, C_{18}, 2 D_2, D_3, D_4, D_6, 2 D_9, D_{12}, D_{18}	2 C_2, C_3, 2 D_2, D_3
C88.5	C_2, 2 C_3, C_6, 3 C_7, 2 C_9, 3 C_{14}, 9 C_{21}, 6 C_{42}, 9 C_{63}, D_3, D_9	C_2, 2 C_3, C_6, C_9, D_3, D_9	C_2, C_6, D_3, D_9	C_2, C_3, D_3
Genus 89				
C89.1	4 C_2, C_3, 5 C_4, 3 C_6, 3 C_8, 3 C_{12}, 2 C_{16}, 2 C_{24}, 4 C_{48}, 12 D_2, D_3, 5 D_4, 3 D_6, 4 D_8, 3 D_{12}	4 C_2, C_3, 5 C_4, 3 C_6, 2 C_8, 2 C_{12}, 12 D_2, D_3, 5 D_4, 3 D_6, 4 D_8, 3 D_{12}	3 C_2, 2 C_4, C_6, 12 D_2, D_3, 5 D_4, 3 D_6, 4 D_8, 3 D_{12}	4 C_2, C_3, 3 C_4, C_6, 2 C_8, 12 D_2, D_3, 4 D_4, D_6, 4 D_8
C89.2	7 C_2, 2 C_4, 3 C_7, 9 C_{14}, 3 C_{28}, 71 D_2, 10 D_4	7 C_2, 2 C_4, 71 D_2, 10 D_4	3 C_2, C_4, 41 D_2, 10 D_4	7 C_2, C_4, 71 D_2, 2 D_4
C89.3	3 C_2, 2 C_4, 2 C_5, 6 C_{10}, C_{11}, 8 C_{20}, C_{22}, C_{44}, 3 D_2, 2 D_{11}, D_{22}	3 C_2, 2 C_4, C_5, 3 C_{10}, C_{11}, 2 C_{20}, C_{22}, C_{44}, 3 D_2, 2 D_{11}, D_{22}	2 C_2, 2 C_4, 2 C_{10}, 2 C_{20}, C_{22}, C_{44}, 3 D_2, D_{11}, D_{22}	3 C_2, C_5, C_{11}, 3 D_2, 2 D_{11}
C89.4	3 C_2, 2 C_4, 2 C_5, 6 C_{10}, C_{11}, 8 C_{20}, C_{22}, C_{44}, 3 D_2, 2 D_{11}, D_{22}	3 C_2, 2 C_4, C_5, 3 C_{10}, C_{11}, 2 C_{20}, C_{22}, C_{44}, 3 D_2, 2 D_{11}, D_{22}	2 C_2, 2 C_4, 2 C_{10}, 2 C_{20}, C_{22}, C_{44}, 3 D_2, D_{11}, D_{22}	3 C_2, C_5, C_{11}, 3 D_2, 2 D_{11}
C89.5	3 C_2, C_3, 4 C_4, 3 C_6, 2 C_8, 4 C_{12}, 4 C_{16}, 4 C_{24}, 8 C_{48}, 8 D_2, 4 D_4	3 C_2, C_3, 4 C_4, 3 C_6, 2 C_{12}, 8 D_2, 4 D_4	2 C_2, 2 C_4, C_6, 8 D_2, 4 D_4	3 C_2, C_3, 2 C_4, C_6, 8 D_2, 2 D_4
Genus 90				
C90.1	C_2, C_4, 2 C_8, 11 C_{89}, 11 D_{89}	C_2, C_4, 11 C_{89}, 11 D_{89}	C_2, C_4, 11 D_{89}	C_2, 11 C_{89}, 11 D_{89}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 91				
C91.1	5 C_2, C_3, 3 C_4, C_5, 3 C_6, 2 C_8, 3 C_{10}, 2 C_{15}, C_{20}, 2 C_{30}, 13 D_2, 4 D_3, 3 D_4, 4 D_5, 6 D_6, 7 D_{10}, 4 D_{15}, D_{20}, 2 D_{30}	5 C_2, C_3, 3 C_4, C_5, 3 C_6, C_8, 3 C_{10}, 2 C_{15}, C_{20}, 2 C_{30}, 13 D_2, 4 D_3, 3 D_4, 4 D_5, 6 D_6, 7 D_{10}, 4 D_{15}, D_{20}, 2 D_{30}	3 C_2, 3 C_4, C_6, C_8, C_{10}, C_{20}, 13 D_2, 3 D_3, 3 D_4, 3 D_5, 6 D_6, 7 D_{10}, 4 D_{15}, D_{20}, 2 D_{30}	5 C_2, C_3, C_5, 2 C_6, 2 C_{10}, 2 C_{15}, 2 C_{30}, 13 D_2, 4 D_3, 4 D_5, 4 D_6, 4 D_{10}, 4 D_{15}, 2 D_{30}
C91.2	5 C_2, C_3, 3 C_4, C_5, 3 C_6, 2 C_8, 3 C_{10}, 2 C_{15}, C_{20}, 2 C_{30}, 13 D_2, 4 D_3, 3 D_4, 4 D_5, 6 D_6, 7 D_{10}, 4 D_{15}, D_{20}, 2 D_{30}	5 C_2, C_3, 3 C_4, C_5, 3 C_6, C_8, 3 C_{10}, 2 C_{15}, C_{20}, 2 C_{30}, 13 D_2, 4 D_3, 3 D_4, 4 D_5, 6 D_6, 7 D_{10}, 4 D_{15}, D_{20}, 2 D_{30}	3 C_2, 3 C_4, C_6, C_8, C_{10}, C_{20}, 13 D_2, 3 D_3, 3 D_4, 3 D_5, 6 D_6, 7 D_{10}, 4 D_{15}, D_{20}, 2 D_{30}	5 C_2, C_3, C_5, 2 C_6, 2 C_{10}, 2 C_{15}, 2 C_{30}, 13 D_2, 4 D_3, 4 D_5, 4 D_6, 4 D_{10}, 4 D_{15}, 2 D_{30}
C91.3	3 C_2, 2 C_3, 5 C_4, C_5, 2 C_6, C_8, C_{10}, 6 C_{12}, 8 C_{15}, 3 C_{20}, 8 C_{30}, 24 C_{60}, 4 D_2, 6 D_3, 2 D_4, 3 D_5, 6 D_6, 3 D_{10}, 6 D_{12}, 24 D_{15}, 3 D_{20}, 24 D_{30}, 24 D_{60}	3 C_2, 2 C_3, 5 C_4, C_5, 2 C_6, C_{10}, 6 C_{12}, 8 C_{15}, 3 C_{20}, 8 C_{30}, 24 C_{60}, 4 D_2, 6 D_3, 2 D_4, 3 D_5, 6 D_6, 3 D_{10}, 6 D_{12}, 24 D_{15}, 3 D_{20}, 24 D_{30}, 24 D_{60}	3 C_2, 4 C_4, 2 C_6, C_{10}, 6 C_{12}, 3 C_{20}, 8 C_{30}, 24 C_{60}, 4 D_2, 6 D_3, 2 D_4, 3 D_5, 6 D_6, 3 D_{10}, 6 D_{12}, 24 D_{15}, 3 D_{20}, 24 D_{30}, 24 D_{60}	3 C_2, 2 C_3, C_5, 8 C_{15}, 4 D_2, 6 D_3, 3 D_5, 24 D_{15}
C91.4	5 C_2, 2 C_3, 3 C_4, C_5, 6 C_6, 2 C_8, 3 C_{10}, 2 C_{12}, 8 C_{15}, C_{20}, 24 C_{30}, 8 C_{60}, 13 D_2, 8 D_3, 3 D_4, 4 D_5, 14 D_6, 7 D_{10}, 2 D_{12}, 32 D_{15}, D_{20}, 56 D_{30}, 8 D_{60}	5 C_2, 2 C_3, 3 C_4, C_5, 6 C_6, C_8, 3 C_{10}, 2 C_{12}, 8 C_{15}, C_{20}, 24 C_{30}, 8 C_{60}, 13 D_2, 8 D_3, 3 D_4, 4 D_5, 14 D_6, 7 D_{10}, 2 D_{12}, 32 D_{15}, D_{20}, 56 D_{30}, 8 D_{60}	3 C_2, 3 C_4, 2 C_6, C_8, C_{10}, 2 C_{12}, C_{20}, 8 C_{30}, 8 C_{60}, 13 D_2, 6 D_3, 3 D_4, 3 D_5, 14 D_6, 7 D_{10}, 2 D_{12}, 24 D_{15}, D_{20}, 56 D_{30}, 8 D_{60}	5 C_2, 2 C_3, C_5, 4 C_6, 2 C_{10}, 8 C_{15}, 16 C_{30}, 13 D_2, 8 D_3, 4 D_5, 8 D_6, 4 D_{10}, 32 D_{15}, 32 D_{30}
C91.5	3 C_2, 3 C_3, 2 C_4, C_5, 5 C_6, C_{10}, 4 C_{12}, 9 C_{15}, 9 C_{30}, 3 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 16 D_{15}, 8 D_{30}	3 C_2, 3 C_3, 2 C_4, C_5, 5 C_6, C_{10}, 3 C_{12}, 9 C_{15}, 9 C_{30}, 3 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 16 D_{15}, 8 D_{30}	2 C_2, 2 C_4, 2 C_6, C_{12}, 3 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 16 D_{15}, 8 D_{30}	3 C_2, 2 C_3, C_5, 2 C_6, C_{10}, 8 C_{15}, 8 C_{30}, 3 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 16 D_{15}, 8 D_{30}
C91.6	3 C_2, 5 C_3, 2 C_4, C_5, 3 C_6, C_{10}, C_{12}, 17 C_{15}, 8 C_{30}, 3 D_2, 8 D_3, 2 D_5, 3 D_6, D_{10}, 25 D_{15}, 8 D_{30}	3 C_2, 5 C_3, 2 C_4, C_5, 3 C_6, C_{10}, 17 C_{15}, 8 C_{30}, 3 D_2, 8 D_3, 2 D_5, 3 D_6, D_{10}, 25 D_{15}, 8 D_{30}	2 C_2, 2 C_4, C_6, 3 D_2, 7 D_3, 2 D_5, 3 D_6, D_{10}, 25 D_{15}, 8 D_{30}	3 C_2, 5 C_3, C_5, 2 C_6, C_{10}, 16 C_{15}, 8 C_{30}, 3 D_2, 7 D_3, 2 D_5, 2 D_6, D_{10}, 24 D_{15}, 8 D_{30}
C91.7	5 C_2, 3 C_3, 3 C_4, 7 C_6, 2 C_8, 4 C_{12}, 4 C_{24}, 13 D_2, 8 D_3, 3 D_4, 11 D_6, 6 D_{12}	5 C_2, 3 C_3, 3 C_4, 7 C_6, C_8, 3 C_{12}, C_{24}, 13 D_2, 8 D_3, 3 D_4, 11 D_6, 5 D_{12}	3 C_2, 2 C_4, 2 C_6, 13 D_2, 5 D_3, 3 D_4, 10 D_6, 3 D_{12}	5 C_2, 3 C_3, C_4, 3 C_6, 13 D_2, 8 D_3, D_4, 5 D_6

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C91.8	3 C_2, 5 C_4, 5 C_5, C_8, 7 C_{10}, 11 C_{20}, 4 C_{40}, 4 D_2, 2 D_4, 9 D_5, 9 D_{10}, 9 D_{20}	3 C_2, 5 C_4, 4 C_5, 5 C_{10}, 8 C_{20}, 4 D_2, 2 D_4, 8 D_5, 8 D_{10}, 8 D_{20}	3 C_2, 5 C_4, 4 C_{10}, 7 C_{20}, 4 D_2, 2 D_4, 8 D_5, 8 D_{10}, 8 D_{20}	3 C_2, 4 C_5, C_{10}, 4 D_2, 8 D_5, D_{10}
C91.9	5 C_2, 3 C_4, 5 C_5, 2 C_8, 11 C_{10}, 13 C_{20}, 8 C_{40}, 13 D_2, 3 D_4, 12 D_5, 19 D_{10}, 17 D_{20}	5 C_2, 3 C_4, 4 C_5, C_8, 8 C_{10}, 8 C_{20}, C_{40}, 13 D_2, 3 D_4, 10 D_5, 15 D_{10}, 10 D_{20}	3 C_2, 3 C_4, C_8, 4 C_{10}, 5 C_{20}, 13 D_2, 3 D_4, 8 D_5, 14 D_{10}, 8 D_{20}	5 C_2, 4 C_5, 3 C_{10}, 13 D_2, 10 D_5, 6 D_{10}
C91.10	3 C_2, 2 C_4, C_5, C_{10}, 9 C_{19}, 9 C_{38}, 9 C_{76}, 9 C_{95}, 3 D_2, 2 D_5, D_{10}, 18 D_{19}, 9 D_{38}, 9 D_{95}	3 C_2, 2 C_4, C_5, C_{10}, C_{19}, C_{38}, C_{95}, 3 D_2, 2 D_5, D_{10}, 2 D_{19}, D_{38}, D_{95}	2 C_2, 2 C_4, C_{38}, 3 D_2, 2 D_5, D_{10}, D_{19}, D_{38}, D_{95}	3 C_2, C_5, C_{10}, C_{19}, 3 D_2, 2 D_5, D_{10}, D_{19}
C91.11	5 C_2, 3 C_3, 2 C_4, 7 C_6, 2 C_8, 13 D_2, 10 D_3, 3 D_4, 13 D_6	5 C_2, 3 C_3, 2 C_4, 7 C_6, C_8, 13 D_2, 10 D_3, 3 D_4, 13 D_6	3 C_2, 2 C_4, 5 C_6, C_8, 13 D_2, 5 D_3, 3 D_4, 13 D_6	5 C_2, 3 C_3, 2 C_6, 13 D_2, 9 D_3, 4 D_6
C91.12	5 C_2, 3 C_3, 2 C_4, 7 C_6, 2 C_8, 13 D_2, 10 D_3, 3 D_4, 13 D_6	5 C_2, 3 C_3, 2 C_4, 7 C_6, C_8, 13 D_2, 10 D_3, 3 D_4, 13 D_6	3 C_2, 2 C_4, 3 C_6, C_8, 13 D_2, 6 D_3, 3 D_4, 13 D_6	5 C_2, 3 C_3, 3 C_6, 13 D_2, 10 D_3, 5 D_6
C91.13	3 C_2, C_3, 2 C_4, C_5, C_6, 4 C_8, C_{10}, 2 C_{15}, C_{20}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}	3 C_2, C_3, 2 C_4, C_5, C_6, 2 C_8, C_{10}, 2 C_{15}, C_{20}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}	2 C_2, 2 C_4, 2 C_8, C_{10}, C_{20}, 3 D_2, 2 D_3, D_5, D_6, D_{10}, 2 D_{15}	3 C_2, C_3, C_5, C_6, 2 C_{15}, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_{15}
C91.14	3 C_2, C_3, 2 C_4, C_5, C_6, 4 C_8, C_{10}, 2 C_{15}, C_{20}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}	3 C_2, C_3, 2 C_4, C_5, C_6, 2 C_8, C_{10}, 2 C_{15}, C_{20}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}	2 C_2, 2 C_4, 2 C_8, C_{10}, C_{20}, 3 D_2, 2 D_3, D_5, D_6, D_{10}, 2 D_{15}	3 C_2, C_3, C_5, C_6, 2 C_{15}, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_{15}
C91.15	3 C_2, 2 C_3, 2 C_4, C_5, 2 C_6, 4 C_8, C_{10}, 2 C_{12}, 8 C_{15}, C_{20}, 8 C_{30}, 8 C_{60}, 3 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 16 D_{15}, 8 D_{30}	3 C_2, 2 C_3, 2 C_4, C_5, 2 C_6, 2 C_8, C_{10}, 2 C_{12}, 8 C_{15}, C_{20}, 8 C_{30}, 8 C_{60}, 3 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 16 D_{15}, 8 D_{30}	2 C_2, 2 C_4, 2 C_6, 2 C_8, C_{10}, 2 C_{12}, C_{20}, 8 C_{30}, 8 C_{60}, 3 D_2, 2 D_3, D_5, 2 D_6, D_{10}, 8 D_{15}, 8 D_{30}	3 C_2, 2 C_3, C_5, 8 C_{15}, 3 D_2, 4 D_3, 2 D_5, 16 D_{15}
C91.16	2 C_2, 2 C_3, 2 C_4, C_5, 2 C_6, 2 C_8, C_{10}, 2 C_{12}, 8 C_{15}, C_{20}, 8 C_{30}, 8 C_{60}, 2 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 16 D_{15}, 8 D_{30}	2 C_2, 2 C_3, 2 C_4, C_5, 2 C_6, C_{10}, 2 C_{12}, 8 C_{15}, C_{20}, 8 C_{30}, 8 C_{60}, 2 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 16 D_{15}, 8 D_{30}	2 C_2, 2 C_4, 2 C_6, C_{10}, 2 C_{12}, C_{20}, 8 C_{30}, 8 C_{60}, 2 D_2, 4 D_3, 2 D_5, 2 D_6, D_{10}, 16 D_{15}, 8 D_{30}	2 C_2, 2 C_3, C_5, 8 C_{15}, 2 D_2, 4 D_3, 2 D_5, 16 D_{15}
C91.17	3 C_2, C_3, 3 C_4, 3 C_6, 4 C_8, C_{12}, 4 C_{16}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8	3 C_2, C_3, 3 C_4, 3 C_6, 2 C_8, C_{12}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8	2 C_2, 3 C_4, 2 C_6, 2 C_8, C_{12}, 4 D_2, D_3, 2 D_4, D_6, 2 D_8	3 C_2, C_3, C_6, 4 D_2, D_3

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C91.18	4 C_2, C_3, 2 C_4, 5 C_6, 4 C_8, 2 C_{16}, 12 D_2, 2 D_3, 3 D_4, 4 D_6, 4 D_8	4 C_2, C_3, 2 C_4, 5 C_6, 2 C_8, 12 D_2, 2 D_3, 3 D_4, 4 D_6, 3 D_8	2 C_2, 2 C_4, 2 C_6, 2 C_8, 12 D_2, D_3, 3 D_4, 4 D_6, 3 D_8	4 C_2, C_3, 3 C_6, 12 D_2, 2 D_3, 2 D_6
C91.19	C_2, 5 C_3, C_4, C_5, C_6, 2 C_{12}, 17 C_{15}, 2 D_3, D_5, 8 D_{15}	C_2, 5 C_3, C_4, C_5, C_6, 17 C_{15}, 2 D_3, D_5, 8 D_{15}	C_2, C_4, C_6, 2 D_3, D_5, 8 D_{15}	C_2, 5 C_3, C_5, 16 C_{15}, 2 D_3, D_5, 8 D_{15}
C91.20	C_2, 3 C_3, C_4, C_5, C_6, 2 C_{12}, 9 C_{15}, 2 D_3, D_5, 8 D_{15}	C_2, 3 C_3, C_4, C_5, C_6, C_{12}, 9 C_{15}, 2 D_3, D_5, 8 D_{15}	C_2, C_4, C_6, C_{12}, 2 D_3, D_5, 8 D_{15}	C_2, 2 C_3, C_5, 8 C_{15}, 2 D_3, D_5, 8 D_{15}
C91.21	5 C_2, C_3, 3 C_4, C_5, 5 C_6, 2 C_8, 3 C_{10}, 4 C_{12}, C_{15}, C_{20}, 4 C_{24}, 3 C_{30}, C_{60}, 13 D_2, 3 D_4, 4 D_5, 7 D_{10}, D_{20}	5 C_2, C_3, 3 C_4, C_5, 5 C_6, C_8, 3 C_{10}, 2 C_{12}, C_{15}, C_{20}, 3 C_{30}, C_{60}, 13 D_2, 3 D_4, 4 D_5, 7 D_{10}, D_{20}	3 C_2, 3 C_4, C_6, C_8, C_{10}, C_{20}, 13 D_2, 3 D_4, 3 D_5, 7 D_{10}, D_{20}	5 C_2, C_5, 2 C_{10}, 13 D_2, 4 D_5, 4 D_{10}
C91.22	3 C_2, C_3, 5 C_4, C_5, 3 C_6, C_8, C_{10}, 8 C_{12}, C_{15}, 3 C_{20}, 2 C_{24}, C_{30}, 3 C_{60}, 4 D_2, 2 D_4, 3 D_5, 3 D_{10}, 3 D_{20}	3 C_2, C_3, 5 C_4, C_5, 3 C_6, C_{10}, 6 C_{12}, C_{15}, 3 C_{20}, C_{30}, 3 C_{60}, 4 D_2, 2 D_4, 3 D_5, 3 D_{10}, 3 D_{20}	3 C_2, 4 C_4, C_6, C_{10}, 3 C_{20}, 4 D_2, 2 D_4, 3 D_5, 3 D_{10}, 3 D_{20}	3 C_2, C_5, 4 D_2, 3 D_5
C91.23	3 C_2, 3 C_3, 2 C_4, 5 C_6, 4 C_8, 4 C_{12}, 8 C_{24}, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, 2 C_4, 5 C_6, 2 C_8, 3 C_{12}, 2 C_{24}, 3 D_2, 2 D_3, D_6	2 C_2, C_4, C_6, 3 D_2, 2 D_3, D_6	3 C_2, 3 C_3, C_4, 2 C_6, 3 D_2, 2 D_3, D_6
C91.24	3 C_2, 2 C_4, 5 C_5, 4 C_8, 9 C_{10}, 13 C_{20}, 16 C_{40}, 3 D_2, 2 D_5, D_{10}	3 C_2, 2 C_4, 4 C_5, 2 C_8, 6 C_{10}, 8 C_{20}, 2 C_{40}, 3 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, 2 C_8, 4 C_{10}, 5 C_{20}, 3 D_2, D_5, D_{10}	3 C_2, 4 C_5, C_{10}, 3 D_2, 2 D_5
C91.25	2 C_2, 2 C_4, 5 C_5, 2 C_8, 7 C_{10}, 11 C_{20}, 8 C_{40}, 2 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, 4 C_5, 5 C_{10}, 6 C_{20}, 2 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, 4 C_{10}, 5 C_{20}, 2 D_2, 2 D_5, D_{10}	2 C_2, 4 C_5, C_{10}, 2 D_2, 2 D_5
C91.26	C_2, 3 C_7, 3 C_{14}, 21 C_{49}, 3 D_2	C_2, C_7, C_{14}, C_{49}, 3 D_2	C_2, C_{14}, 3 D_2	C_2, C_7, 3 D_2
C91.27	C_2, C_4, C_5, 9 C_{19}, 9 C_{38}, 18 C_{76}, 9 C_{95}, D_5	C_2, C_4, C_5, C_{19}, C_{38}, C_{95}, D_5	C_2, C_4, C_{38}, D_5	C_2, C_5, C_{19}, D_5
Genus 92				
C92.1	3 C_2, C_3, 3 C_6, C_7, 2 C_{13}, C_{14}, 2 C_{26}, 6 C_{91}, 3 D_2, 2 D_7, 4 D_{13}, D_{14}, 2 D_{26}, 6 D_{91}	3 C_2, C_3, 3 C_6, C_7, 2 C_{13}, C_{14}, 2 C_{26}, 6 C_{91}, 3 D_2, 2 D_7, 4 D_{13}, D_{14}, 2 D_{26}, 6 D_{91}	3 C_2, 3 C_6, C_{14}, 2 C_{26}, 3 D_2, 2 D_7, 4 D_{13}, D_{14}, 2 D_{26}, 6 D_{91}	3 C_2, C_3, C_7, 2 C_{13}, 6 C_{91}, 3 D_2, 2 D_7, 4 D_{13}, 6 D_{91}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C92.2	3 C_2, C_3, 3 C_6, C_7, 2 C_{13}, C_{14}, 2 C_{26}, 6 C_{91}, 3 D_2, 2 D_7, 4 D_{13}, D_{14}, 2 D_{26}, 6 D_{91}	3 C_2, C_3, 3 C_6, C_7, 2 C_{13}, C_{14}, 2 C_{26}, 6 C_{91}, 3 D_2, 2 D_7, 4 D_{13}, D_{14}, 2 D_{26}, 6 D_{91}	3 C_2, 3 C_6, C_{14}, 2 C_{26}, 3 D_2, 2 D_7, 4 D_{13}, D_{14}, 2 D_{26}, 6 D_{91}	3 C_2, C_3, C_7, 2 C_{13}, 6 C_{91}, 3 D_2, 2 D_7, 4 D_{13}, 6 D_{91}
C92.3	3 C_2, C_3, 3 C_6, C_7, 2 C_{13}, C_{14}, 2 C_{26}, 12 C_{91}, 12 C_{182}, 3 D_2, 2 D_7, 4 D_{13}, D_{14}, 2 D_{26}, 24 D_{91}, 12 D_{182}	3 C_2, C_3, 3 C_6, C_7, 2 C_{13}, C_{14}, 2 C_{26}, 12 C_{91}, 12 C_{182}, 3 D_2, 2 D_7, 4 D_{13}, D_{14}, 2 D_{26}, 24 D_{91}, 12 D_{182}	3 C_2, 2 C_6, C_{14}, 2 C_{26}, 12 C_{182}, 3 D_2, 2 D_7, 4 D_{13}, D_{14}, 2 D_{26}, 24 D_{91}, 12 D_{182}	3 C_2, C_3, C_7, 2 C_{13}, 12 C_{91}, 3 D_2, 2 D_7, 4 D_{13}, 24 D_{91}
C92.4	3 C_2, C_3, 3 C_6, C_7, 2 C_{13}, C_{14}, 2 C_{26}, 12 C_{91}, 12 C_{182}, 3 D_2, 2 D_7, 4 D_{13}, D_{14}, 2 D_{26}, 24 D_{91}, 12 D_{182}	3 C_2, C_3, 3 C_6, C_7, 2 C_{13}, C_{14}, 2 C_{26}, 12 C_{91}, 12 C_{182}, 3 D_2, 2 D_7, 4 D_{13}, D_{14}, 2 D_{26}, 24 D_{91}, 12 D_{182}	3 C_2, 2 C_6, C_{14}, 2 C_{26}, 12 C_{182}, 3 D_2, 2 D_7, 4 D_{13}, D_{14}, 2 D_{26}, 24 D_{91}, 12 D_{182}	3 C_2, C_3, C_7, 2 C_{13}, 12 C_{91}, 3 D_2, 2 D_7, 4 D_{13}, 24 D_{91}
C92.5	3 C_2, C_3, C_4, 3 C_6, 2 C_8, C_{12}, 2 C_{13}, 2 C_{24}, 4 C_{26}, 2 C_{52}, 4 D_2, 2 D_4, 2 D_8, 2 D_{13}, 2 D_{26}, 2 D_{52}	3 C_2, C_3, C_4, 3 C_6, C_8, 2 C_{13}, 4 C_{26}, 2 C_{52}, 4 D_2, 2 D_4, D_8, 2 D_{13}, 2 D_{26}, 2 D_{52}	3 C_2, 3 C_6, 4 C_{26}, 4 D_2, 2 D_4, D_8, 2 D_{13}, 2 D_{26}, 2 D_{52}	3 C_2, C_4, 2 C_{13}, 4 D_2, 2 D_4, 2 D_{13}
C92.6	3 C_2, C_3, C_4, 3 C_6, 2 C_8, C_{12}, 2 C_{13}, 2 C_{24}, 2 C_{26}, 4 C_{52}, 8 C_{104}, 4 D_2, 2 D_4, 2 D_8, 4 D_{13}, 4 D_{26}, 8 D_{52}, 8 D_{104}	3 C_2, C_3, C_4, 3 C_6, C_8, 2 C_{13}, 2 C_{26}, 4 C_{52}, 4 C_{104}, 4 D_2, 2 D_4, D_8, 4 D_{13}, 4 D_{26}, 8 D_{52}, 4 D_{104}	3 C_2, 2 C_6, 2 C_{26}, 4 D_2, 2 D_4, D_8, 4 D_{13}, 4 D_{26}, 8 D_{52}, 4 D_{104}	3 C_2, C_4, C_8, 2 C_{13}, 4 D_2, 2 D_4, D_8, 4 D_{13}
C92.7	3 C_2, C_3, 3 C_6, 10 C_7, 10 C_{14}, 3 C_{21}, 3 C_{42}, 3 D_2, 20 D_7, 10 D_{14}	3 C_2, C_3, 3 C_6, 8 C_7, 8 C_{14}, 3 D_2, 16 D_7, 8 D_{14}	3 C_2, 2 C_6, 7 C_{14}, 3 D_2, 16 D_7, 8 D_{14}	3 C_2, 8 C_7, C_{14}, 3 D_2, 16 D_7, D_{14}
C92.8	3 C_2, C_3, 3 C_6, 7 C_7, 4 C_{14}, 3 C_{21}, 3 C_{42}, 3 D_2, 11 D_7, 4 D_{14}	3 C_2, C_3, 3 C_6, 5 C_7, 2 C_{14}, 3 D_2, 7 D_7, 2 D_{14}	3 C_2, 2 C_6, C_{14}, 3 D_2, 7 D_7, 2 D_{14}	3 C_2, 5 C_7, 3 D_2, 7 D_7
C92.9	3 C_2, C_3, 3 C_6, 3 C_9, 2 C_{13}, 9 C_{18}, 2 C_{26}, 2 C_{39}, 2 C_{78}, 3 D_2, 4 D_{13}, 2 D_{26}	3 C_2, C_3, 3 C_6, C_9, 2 C_{13}, 3 C_{18}, 2 C_{26}, 2 C_{39}, 2 C_{78}, 3 D_2, 4 D_{13}, 2 D_{26}	3 C_2, C_6, C_{18}, 2 C_{26}, 3 D_2, 4 D_{13}, 2 D_{26}	3 C_2, C_3, 2 C_{13}, 3 D_2, 4 D_{13}
C92.10	3 C_2, C_3, 2 C_5, 3 C_6, C_7, 6 C_{10}, C_{14}, 4 C_{15}, 12 C_{30}, 2 C_{35}, 2 C_{70}, 3 D_2, 2 D_7, D_{14}	3 C_2, C_3, C_5, 3 C_6, C_7, 3 C_{10}, C_{14}, C_{15}, 3 C_{30}, C_{35}, C_{70}, 3 D_2, 2 D_7, D_{14}	3 C_2, 2 C_6, C_{10}, C_{14}, C_{30}, 3 D_2, 2 D_7, D_{14}	3 C_2, C_3, C_5, C_7, 3 D_2, 2 D_7

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
Genus 93				
C93.1	3 C_2, 4 C_4, 7 C_8, 5 C_{16}, 8 C_{32}, 8 C_{64}, 4 D_2, 2 D_4, 2 D_8, 4 D_{16}, 2 D_{32}	3 C_2, 4 C_4, 5 C_8, 2 C_{16}, 2 C_{32}, 4 D_2, 2 D_4, D_8, 2 D_{16}, D_{32}	3 C_2, 3 C_4, 3 C_8, 4 D_2, 2 D_4, D_8, 2 D_{16}, D_{32}	3 C_2, C_4, C_8, 4 D_2, D_4, D_8
C93.2	C_2, 5 C_{11}, 5 C_{22}, C_{23}, D_{23}	C_2, C_{23}, D_{23}	C_2, D_{23}	C_2, C_{23}, D_{23}
C93.3	C_2, 5 C_{11}, 5 C_{22}, C_{23}, D_{23}	C_2, C_{23}, D_{23}	C_2, D_{23}	C_2, C_{23}, D_{23}
C93.4	C_2, 5 C_{11}, 5 C_{22}, C_{23}, D_{23}	C_2, C_{23}, D_{23}	C_2, D_{23}	C_2, C_{23}, D_{23}
C93.5	C_2, 5 C_{11}, 5 C_{22}, C_{23}, D_{23}	C_2, C_{23}, D_{23}	C_2, D_{23}	C_2, C_{23}, D_{23}
C93.6	C_2, 5 C_{11}, 5 C_{22}, C_{23}, D_{23}	C_2, C_{23}, D_{23}	C_2, D_{23}	C_2, C_{23}, D_{23}
Genus 94				
C94.1	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, C_{12}, 5 C_{31}, 5 C_{62}, 10 C_{93}, 3 D_2, D_3, D_4, 5 D_{31}, 5 D_{62}, 10 D_{93}	2 **Tet**, **Oct**, 2 C_2, 3 C_3, C_4, 2 C_6, 5 C_{31}, 5 C_{62}, 10 C_{93}, 3 D_2, D_3, D_4, 5 D_{31}, 5 D_{62}, 10 D_{93}	2 **Tet**, **Oct**, 2 C_2, C_4, 2 C_6, 5 C_{62}, 3 D_2, D_3, D_4, 5 D_{31}, 5 D_{62}, 10 D_{93}	2 C_2, C_3, 5 C_{31}, 10 C_{93}, 3 D_2, D_3, 5 D_{31}, 10 D_{93}
C94.2	3 C_2, 3 C_3, 5 C_6, 5 C_{31}, 5 C_{62}, 5 C_{93}, 3 D_2, 2 D_3, D_6, 10 D_{31}, 5 D_{62}, 5 D_{93}	3 C_2, 3 C_3, 5 C_6, 5 C_{31}, 5 C_{62}, 5 C_{93}, 3 D_2, 2 D_3, D_6, 10 D_{31}, 5 D_{62}, 5 D_{93}	3 C_2, 5 C_6, 5 C_{62}, 3 D_2, 2 D_3, D_6, 10 D_{31}, 5 D_{62}, 5 D_{93}	3 C_2, C_3, 5 C_{31}, 5 C_{93}, 3 D_2, 2 D_3, 10 D_{31}, 5 D_{93}
C94.3	3 C_2, 3 C_3, 5 C_6, 5 C_{31}, 5 C_{62}, 10 C_{93}, 10 C_{186}, 3 D_2, 2 D_3, D_6, 10 D_{31}, 5 D_{62}, 20 D_{93}, 10 D_{186}	3 C_2, 3 C_3, 5 C_6, 5 C_{31}, 5 C_{62}, 10 C_{93}, 10 C_{186}, 3 D_2, 2 D_3, D_6, 10 D_{31}, 5 D_{62}, 20 D_{93}, 10 D_{186}	3 C_2, 4 C_6, 5 C_{62}, 10 C_{186}, 3 D_2, 2 D_3, D_6, 10 D_{31}, 5 D_{62}, 20 D_{93}, 10 D_{186}	3 C_2, C_3, 5 C_{31}, 10 C_{93}, 3 D_2, 2 D_3, 10 D_{31}, 20 D_{93}
C94.4	3 C_2, C_3, C_4, 3 C_6, C_{12}, 5 C_{31}, 10 C_{62}, 4 D_2, D_4, 5 D_{31}, 5 D_{62}	3 C_2, C_3, C_4, 3 C_6, 5 C_{31}, 10 C_{62}, 4 D_2, D_4, 5 D_{31}, 5 D_{62}	3 C_2, C_4, 3 C_6, 10 C_{62}, 4 D_2, D_4, 5 D_{31}, 5 D_{62}	3 C_2, 5 C_{31}, 4 D_2, 5 D_{31}
C94.5	3 C_2, C_3, C_4, 3 C_6, C_{12}, 5 C_{31}, 5 C_{62}, 10 C_{124}, 4 D_2, D_4, 10 D_{31}, 10 D_{62}, 10 D_{124}	3 C_2, C_3, C_4, 3 C_6, 5 C_{31}, 5 C_{62}, 10 C_{124}, 4 D_2, D_4, 10 D_{31}, 10 D_{62}, 10 D_{124}	3 C_2, 2 C_6, 5 C_{62}, 4 D_2, D_4, 10 D_{31}, 10 D_{62}, 10 D_{124}	3 C_2, C_4, 5 C_{31}, 4 D_2, D_4, 10 D_{31}
C94.6	C_2, C_3, C_6, 3 C_9, 3 C_{18}, 5 C_{31}, 5 C_{93}, 5 D_{31}	C_2, C_3, C_6, 5 C_{31}, 5 C_{93}, 5 D_{31}	C_2, C_6, 5 D_{31}	C_2, 5 C_{31}, 5 D_{31}
C94.7	3 C_2, 2 C_5, 6 C_{10}, 3 C_{31}, 3 C_{62}, 3 D_2, 6 D_{31}, 3 D_{62}	3 C_2, C_5, 3 C_{10}, 3 C_{31}, 3 C_{62}, 3 D_2, 6 D_{31}, 3 D_{62}	3 C_2, 2 C_{10}, 3 C_{62}, 3 D_2, 6 D_{31}, 3 D_{62}	3 C_2, C_5, 3 C_{31}, 3 D_2, 6 D_{31}
C94.8	3 C_2, 2 C_5, 6 C_{10}, 3 C_{31}, 3 C_{62}, 3 D_2, 6 D_{31}, 3 D_{62}	3 C_2, C_5, 3 C_{10}, 3 C_{31}, 3 C_{62}, 3 D_2, 6 D_{31}, 3 D_{62}	3 C_2, 2 C_{10}, 3 C_{62}, 3 D_2, 6 D_{31}, 3 D_{62}	3 C_2, C_5, 3 C_{31}, 3 D_2, 6 D_{31}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C94.9	2 C_2, 2 C_3, 2 C_4, 3 C_6, C_8, 2 C_9, 4 C_{12}, 2 C_{18}, 2 C_{24}, 5 C_{36}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{36}	2 C_2, 2 C_3, 2 C_4, 3 C_6, C_9, 2 C_{12}, C_{18}, C_{36}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{36}	2 C_2, 2 C_4, 3 C_6, C_{12}, C_{18}, 2 D_2, D_3, D_4, D_6, D_9, D_{12}, D_{18}, D_{36}	2 C_2, C_3, 2 D_2, D_3
Genus 95				
	None			
Genus 96				
C96.1	3 C_2, 4 C_5, 8 C_{10}, 6 C_{25}, 6 C_{50}, 3 D_2, 4 D_5, 2 D_{10}, 4 D_{25}, 2 D_{50}	3 C_2, 2 C_5, 4 C_{10}, 2 C_{25}, 2 C_{50}, 3 D_2, 2 D_5, D_{10}, 2 D_{25}, D_{50}	3 C_2, 2 C_{10}, 3 D_2, 2 D_5, D_{10}, 2 D_{25}, D_{50}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}
C96.2	3 C_2, 4 C_5, 8 C_{10}, 6 C_{25}, 6 C_{50}, 3 D_2, 4 D_5, 2 D_{10}, 4 D_{25}, 2 D_{50}	3 C_2, 2 C_5, 4 C_{10}, 2 C_{25}, 2 C_{50}, 3 D_2, 2 D_5, D_{10}, 2 D_{25}, D_{50}	3 C_2, 2 C_{10}, 3 D_2, 2 D_5, D_{10}, 2 D_{25}, D_{50}	3 C_2, C_5, C_{10}, 3 D_2, 2 D_5, D_{10}
Genus 97				
C97.1	2 **Tet**, 3 C_2, 3 C_3, 4 C_4, 4 C_6, 2 C_8, 5 C_{12}, 4 C_{24}, 9 D_2, D_3, 7 D_4, 3 D_6, 4 D_8, 10 D_{12}, 8 D_{24}	2 **Tet**, 3 C_2, 3 C_3, 4 C_4, 4 C_6, 2 C_8, 4 C_{12}, 4 C_{24}, 9 D_2, D_3, 7 D_4, 3 D_6, 4 D_8, 10 D_{12}, 8 D_{24}	2 C_2, C_4, 3 C_6, C_{12}, 8 D_2, D_3, 7 D_4, 3 D_6, 4 D_8, 10 D_{12}, 8 D_{24}	3 C_2, C_3, 3 C_4, C_6, 2 C_8, 3 C_{12}, 4 C_{24}, 9 D_2, D_3, 7 D_4, 3 D_6, 4 D_8, 10 D_{12}, 8 D_{24}
C97.2	**Tet**, 4 C_2, C_3, 5 C_4, C_6, 6 C_8, 2 C_{12}, 4 C_{24}, 21 D_2, 10 D_4, 16 D_8	**Tet**, 4 C_2, C_3, 5 C_4, C_6, 5 C_8, C_{12}, C_{24}, 21 D_2, 10 D_4, 16 D_8	2 C_2, C_4, C_6, C_8, C_{12}, C_{24}, 17 D_2, 10 D_4, 16 D_8	4 C_2, 4 C_4, 4 C_8, 21 D_2, 10 D_4, 16 D_8
C97.3	**Tet**, **Oct**, **Ico**, 4 C_2, C_3, 4 C_4, C_5, 2 C_6, 5 C_8, C_{10}, 2 C_{12}, 2 C_{24}, 15 D_2, 3 D_3, 11 D_4, 2 D_5, 5 D_6, 10 D_8, D_{10}, 3 D_{12}, 2 D_{24}	**Tet**, **Oct**, 4 C_2, C_3, 4 C_4, 2 C_6, 5 C_8, 2 C_{12}, 2 C_{24}, 15 D_2, 3 D_3, 11 D_4, 5 D_6, 10 D_8, 3 D_{12}, 2 D_{24}	**Tet**, 2 C_2, C_4, 13 D_2, 3 D_3, 10 D_4, 5 D_6, 10 D_8, 3 D_{12}, 2 D_{24}	**Tet**, 4 C_2, C_3, 3 C_4, 2 C_6, 5 C_8, 2 C_{12}, 2 C_{24}, 15 D_2, 3 D_3, 9 D_4, 5 D_6, 10 D_8, 3 D_{12}, 2 D_{24}
C97.4	**Tet**, 4 **Oct**, 6 C_2, 2 C_3, 6 C_4, 4 C_6, 6 C_8, 2 C_{12}, 2 C_{24}, 30 D_2, 6 D_3, 19 D_4, 8 D_6, 12 D_8, 3 D_{12}, 2 D_{24}	**Tet**, 4 **Oct**, 6 C_2, 2 C_3, 6 C_4, 4 C_6, 6 C_8, 2 C_{12}, 2 C_{24}, 30 D_2, 6 D_3, 19 D_4, 8 D_6, 12 D_8, 3 D_{12}, 2 D_{24}	3 **Oct**, 3 C_2, C_4, C_6, 25 D_2, 5 D_3, 16 D_4, 8 D_6, 12 D_8, 3 D_{12}, 2 D_{24}	**Tet**, 4 **Oct**, 6 C_2, 2 C_3, 5 C_4, C_6, 6 C_8, 2 C_{12}, 2 C_{24}, 30 D_2, 6 D_3, 17 D_4, 2 D_6, 12 D_8, 3 D_{12}, 2 D_{24}
C97.5	6 C_2, 8 C_4, 6 C_8, 2 C_{16}, 34 D_2, 17 D_4, 12 D_8	6 C_2, 8 C_4, 5 C_8, 34 D_2, 17 D_4, 12 D_8	3 C_2, 4 C_4, 3 C_8, 27 D_2, 17 D_4, 12 D_8	6 C_2, 4 C_4, 2 C_8, 34 D_2, 11 D_4, 4 D_8

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C97.6	6 C_2, 8 C_4, 7 C_8, 10 C_{16}, 29 D_2, 15 D_4, 22 D_8, 16 D_{16}	6 C_2, 8 C_4, 6 C_8, 8 C_{16}, 29 D_2, 15 D_4, 22 D_8, 16 D_{16}	3 C_2, 4 C_4, 4 C_8, 8 C_{16}, 25 D_2, 14 D_4, 22 D_8, 16 D_{16}	6 C_2, 4 C_4, 2 C_8, 29 D_2, 10 D_4, 4 D_8
C97.7	**Tet**, 2 **Ico**, 3 C_2, C_3, 2 C_4, 2 C_5, 2 C_6, C_8, 2 C_{10}, C_{12}, 12 D_2, D_3, 3 D_4, 4 D_5, D_6, D_8, 2 D_{10}, D_{12}	**Tet**, 3 C_2, C_3, 2 C_4, 2 C_6, C_8, C_{12}, 12 D_2, D_3, 3 D_4, D_6, D_8, D_{12}	**Tet**, C_2, 10 D_2, D_3, 2 D_4, D_6, D_8, D_{12}	**Tet**, 3 C_2, C_3, 2 C_4, 2 C_6, C_8, C_{12}, 12 D_2, D_3, 3 D_4, D_6, D_8, D_{12}
C97.8	6 **Tet**, 3 C_2, 3 C_3, C_4, 3 C_6, 2 C_8, 7 D_2, 2 D_3, 3 D_4, 2 D_6, 4 D_8	6 **Tet**, 3 C_2, 3 C_3, C_4, 3 C_6, 2 C_8, 7 D_2, 2 D_3, 3 D_4, 2 D_6, 4 D_8	4 **Tet**, 2 C_2, 2 C_6, 6 D_2, 2 D_3, 3 D_4, 2 D_6, 4 D_8	**Tet**, 3 C_2, C_3, C_4, C_6, 2 C_8, 7 D_2, 2 D_3, 3 D_4, 2 D_6, 4 D_8
C97.9	2 **Tet**, 7 C_2, 3 C_3, 6 C_4, 10 C_6, 5 C_{12}, 43 D_2, 3 D_3, 14 D_4, 13 D_6, 16 D_{12}	2 **Tet**, 7 C_2, 3 C_3, 6 C_4, 10 C_6, 5 C_{12}, 43 D_2, 3 D_3, 14 D_4, 13 D_6, 16 D_{12}	3 C_2, 5 C_6, 30 D_2, 2 D_3, 13 D_4, 10 D_6, 14 D_{12}	7 C_2, C_3, 6 C_4, 3 C_6, 4 C_{12}, 43 D_2, 3 D_3, 14 D_4, 13 D_6, 16 D_{12}
C97.10	2 **Tet**, 8 **Oct**, 7 C_2, 3 C_3, 5 C_4, 7 C_6, C_8, C_{12}, 42 D_2, 9 D_3, 18 D_4, 13 D_6, D_8, D_{12}	2 **Tet**, 8 **Oct**, 7 C_2, 3 C_3, 5 C_4, 7 C_6, C_8, C_{12}, 42 D_2, 9 D_3, 18 D_4, 13 D_6, D_8, D_{12}	6 **Oct**, 3 C_2, 2 C_6, 34 D_2, 7 D_3, 14 D_4, 13 D_6, D_8, D_{12}	2 **Tet**, 8 **Oct**, 7 C_2, 3 C_3, 5 C_4, C_6, C_8, C_{12}, 42 D_2, 9 D_3, 18 D_4, D_6, D_8, D_{12}
C97.11	**Tet**, 3 C_2, 2 C_3, 2 C_4, 2 C_6, 2 C_9, 4 C_{12}, 3 C_{18}, 12 C_{36}, 9 D_2, 2 D_3, 4 D_4, 4 D_6, 4 D_9, 8 D_{12}, 12 D_{18}, 24 D_{36}	**Tet**, 3 C_2, 2 C_3, 2 C_4, 2 C_6, C_9, 4 C_{12}, 3 C_{18}, 12 C_{36}, 9 D_2, 2 D_3, 4 D_4, 4 D_6, 4 D_9, 8 D_{12}, 12 D_{18}, 24 D_{36}	2 C_2, C_6, 8 D_2, 2 D_3, 4 D_4, 4 D_6, 4 D_9, 8 D_{12}, 12 D_{18}, 24 D_{36}	3 C_2, C_3, 2 C_4, 9 D_2, 2 D_3, 4 D_4
C97.12	**Tet**, 4 C_2, C_3, 4 C_4, 2 C_6, 6 C_8, 2 C_{12}, 2 C_{24}, 12 D_2, 6 D_4, 3 D_8	**Tet**, 4 C_2, C_3, 4 C_4, 2 C_6, 6 C_8, C_{12}, 2 C_{24}, 12 D_2, 6 D_4, 3 D_8	3 C_2, 4 C_4, 2 C_6, 6 C_8, C_{12}, 2 C_{24}, 11 D_2, 6 D_4, 3 D_8	4 C_2, 12 D_2
C97.13	**Tet**, 11 C_2, C_3, 8 C_4, 5 C_6, 4 C_{12}, 113 D_2, 32 D_4	**Tet**, 11 C_2, C_3, 8 C_4, 5 C_6, 3 C_{12}, 113 D_2, 32 D_4	3 C_2, C_4, 2 C_6, C_{12}, 67 D_2, 24 D_4	11 C_2, 7 C_4, 113 D_2, 32 D_4
C97.14	**Tet**, 3 C_2, C_3, 4 C_4, C_6, 2 C_8, 2 C_{12}, 9 D_2, 7 D_4, 4 D_8	**Tet**, 3 C_2, C_3, 4 C_4, C_6, 2 C_8, C_{12}, 9 D_2, 7 D_4, 4 D_8	2 C_2, C_4, C_6, C_{12}, 8 D_2, 7 D_4, 4 D_8	3 C_2, 3 C_4, 2 C_8, 9 D_2, 7 D_4, 4 D_8
C97.15	**Tet**, 3 C_2, 2 C_3, 2 C_6, 4 C_9, 3 C_{18}, 6 C_{27}, 9 C_{54}, 7 D_2, 2 D_3, 2 D_6, 6 D_9, 6 D_{18}, 12 D_{27}, 18 D_{54}	**Tet**, 3 C_2, 2 C_3, 2 C_6, 2 C_9, C_{18}, C_{27}, 3 C_{54}, 7 D_2, 2 D_3, 2 D_6, 2 D_9, 2 D_{18}, 4 D_{27}, 6 D_{54}	2 C_2, C_6, 6 D_2, 2 D_3, 2 D_6, 2 D_9, 2 D_{18}, 4 D_{27}, 6 D_{54}	3 C_2, C_3, C_9, 7 D_2, 2 D_3, 2 D_9

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C97.16	C_2, 2 C_3, C_6, 2 C_9, 5 C_{11}, 15 C_{33}, 20 C_{99}, D_3, D_9, 5 D_{11}, 10 D_{33}, 10 D_{99}	C_2, 2 C_3, C_6, C_9, C_{11}, 2 C_{33}, C_{99}, D_3, D_9, D_{11}, D_{33}, D_{99}	C_2, C_6, D_3, D_9, D_{11}, D_{33}, D_{99}	C_2, C_3, C_{11}, C_{33}, D_3, D_{11}, D_{33}
C97.17	**Tet**, 3 C_2, C_3, 2 C_5, C_6, 2 C_{10}, 4 C_{15}, 4 C_{30}, 31 D_2	**Tet**, 3 C_2, C_3, C_6, 31 D_2	2 C_2, C_6, 24 D_2	3 C_2, 31 D_2
C97.18	5 C_2, 6 C_4, 8 C_8, 4 C_{16}, 31 D_2, 14 D_4, 16 D_8	5 C_2, 6 C_4, 6 C_8, 31 D_2, 14 D_4, 16 D_8	2 C_2, 3 C_4, 4 C_8, 24 D_2, 12 D_4, 16 D_8	5 C_2, 3 C_4, 2 C_8, 31 D_2, 8 D_4
C97.19	5 C_2, 8 C_4, 4 C_8, 4 C_{16}, 25 D_2, 5 D_4	5 C_2, 8 C_4, 2 C_8, 25 D_2, 5 D_4	2 C_2, 4 C_4, 2 C_8, 15 D_2, 5 D_4	5 C_2, 4 C_4, 25 D_2, D_4
C97.20	6 C_2, 8 C_4, 2 C_8, 4 C_{16}, 40 D_2, 12 D_4	6 C_2, 8 C_4, 40 D_2, 12 D_4	2 C_2, 3 C_4, 26 D_2, 9 D_4	6 C_2, 5 C_4, 40 D_2, 8 D_4
C97.21	4 C_2, 6 C_4, 5 C_8, 6 C_{16}, 12 D_2, 6 D_4, 2 D_8	4 C_2, 6 C_4, 3 C_8, 12 D_2, 6 D_4, 2 D_8	2 C_2, 3 C_4, 2 C_8, 10 D_2, 6 D_4, 2 D_8	4 C_2, 3 C_4, C_8, 12 D_2, 4 D_4
C97.22	3 C_2, 2 C_3, 2 C_4, 4 C_6, 4 C_8, 2 C_9, 5 C_{12}, 2 C_{18}, 10 C_{24}, 3 C_{36}, 6 C_{72}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	3 C_2, 2 C_3, 2 C_4, 4 C_6, 2 C_8, C_9, 3 C_{12}, C_{18}, 2 C_{24}, 3 D_2, 2 D_3, D_6, 2 D_9, D_{18}	2 C_2, C_4, 3 C_6, 2 C_{12}, C_{18}, 3 D_2, D_3, D_6, D_9, D_{18}	3 C_2, C_3, 3 D_2, D_3
C97.23	2 C_2, 2 C_3, 2 C_4, 3 C_6, 2 C_8, 2 C_9, 4 C_{12}, 2 C_{18}, 6 C_{24}, 3 C_{36}, 6 C_{72}, 2 D_2, D_3, D_6, D_9, D_{18}	2 C_2, 2 C_3, 2 C_4, 3 C_6, C_9, 2 C_{12}, C_{18}, 2 D_2, D_3, D_6, D_9, D_{18}	2 C_2, C_4, 3 C_6, C_{12}, C_{18}, 2 D_2, D_3, D_6, D_9, D_{18}	2 C_2, C_3, 2 D_2, D_3
C97.24	7 C_2, 4 C_4, 3 C_7, 9 C_{14}, 12 C_{28}, 69 D_2	7 C_2, 4 C_4, C_7, 3 C_{14}, 2 C_{28}, 69 D_2	2 C_2, 4 C_4, C_{14}, 2 C_{28}, 42 D_2	7 C_2, C_7, 69 D_2
Genus 98				
C98.1	3 C_2, C_3, 3 C_6, 16 C_{97}, 16 C_{194}, 3 D_2, 32 D_{97}, 16 D_{194}	3 C_2, C_3, 3 C_6, 16 C_{97}, 16 C_{194}, 3 D_2, 32 D_{97}, 16 D_{194}	3 C_2, 2 C_6, 16 C_{194}, 3 D_2, 32 D_{97}, 16 D_{194}	3 C_2, C_3, 16 C_{97}, 3 D_2, 32 D_{97}
C98.2	C_2, C_4, 2 C_8, 12 C_{97}, 12 D_{97}	C_2, C_4, 12 C_{97}, 12 D_{97}	C_2, C_4, 12 D_{97}	C_2, 12 C_{97}, 12 D_{97}
Genus 99				
C99.1	2 C_2, C_3, 2 C_4, C_6, C_7, 2 C_{12}, C_{14}, 3 C_{28}, 7 C_{49}, 7 C_{98}, 21 C_{196}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 3 D_{28}, 21 D_{49}, 21 D_{98}, 21 D_{196}	2 C_2, C_3, 2 C_4, C_6, C_7, C_{12}, C_{14}, 3 C_{28}, 7 C_{49}, 7 C_{98}, 21 C_{196}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 3 D_{28}, 21 D_{49}, 21 D_{98}, 21 D_{196}	2 C_2, 2 C_4, C_6, C_{12}, C_{14}, 3 C_{28}, 7 C_{98}, 21 C_{196}, 2 D_2, D_4, 3 D_7, 3 D_{14}, 3 D_{28}, 21 D_{49}, 21 D_{98}, 21 D_{196}	2 C_2, C_7, 7 C_{49}, 2 D_2, 3 D_7, 21 D_{49}
C99.2	C_2, C_3, C_4, C_6, 4 C_7, 2 C_{12}, 4 D_7	C_2, C_3, C_4, C_6, 4 C_7, 4 D_7	C_2, C_4, C_6, 4 D_7	C_2, C_3, 4 C_7, 4 D_7

	Mapping	Immersion		Embedding
	necessary and sufficient	necessary	sufficient	necessary
Genus 100				
C100.1	3 C_2, 5 C_3, C_4, 10 C_6, 4 C_9, 3 C_{12}, 4 C_{18}, 4 C_{36}, 4 D_2, 5 D_3, D_4, 4 D_6, 4 D_9, 2 D_{12}, 3 D_{18}, 2 D_{36}	3 C_2, 5 C_3, C_4, 10 C_6, 3 C_9, 2 C_{12}, 3 C_{18}, C_{36}, 4 D_2, 5 D_3, D_4, 4 D_6, 4 D_9, D_{12}, 3 D_{18}, D_{36}	3 C_2, C_4, 8 C_6, C_{12}, 4 D_2, 5 D_3, D_4, 4 D_6, 4 D_9, D_{12}, 3 D_{18}, D_{36}	3 C_2, 4 C_3, C_6, 4 D_2, 5 D_3, 2 D_6
C100.2	C_2, 3 C_3, C_6, 12 C_9, 3 C_{18}, 15 C_{27}, D_3, 3 D_9, 3 D_{27}	C_2, 3 C_3, C_6, 8 C_9, C_{18}, 8 C_{27}, D_3, 3 D_9, 3 D_{27}	C_2, C_6, C_{18}, D_3, 3 D_9, 3 D_{27}	C_2, 2 C_3, 3 C_9, D_3
C100.3	C_2, 2 C_3, C_6, 5 C_9, 3 C_{18}, 5 C_{27}, D_3, D_9, D_{27}	C_2, 2 C_3, C_6, 2 C_9, C_{18}, 2 C_{27}, D_3, D_9, D_{27}	C_2, C_6, C_{18}, D_3, D_9, D_{27}	C_2, C_3, D_3
C100.4	C_2, 2 C_3, C_6, 5 C_9, 3 C_{18}, 5 C_{27}, D_3, D_9, D_{27}	C_2, 2 C_3, C_6, 2 C_9, C_{18}, 2 C_{27}, D_3, D_9, D_{27}	C_2, C_6, C_{18}, D_3, D_9, D_{27}	C_2, C_3, D_3
C100.5	C_2, 2 C_3, C_6, 5 C_9, 3 C_{18}, 5 C_{27}, D_3, D_9, D_{27}	C_2, 2 C_3, C_6, 2 C_9, C_{18}, 2 C_{27}, D_3, D_9, D_{27}	C_2, C_6, C_{18}, D_3, D_9, D_{27}	C_2, C_3, D_3
Genus 101				
C101.1	6 C_2, 5 C_4, C_5, 2 C_8, 3 C_{10}, 6 C_{20}, 5 C_{25}, 15 C_{50}, 30 C_{100}, 19 D_2, 3 D_4, 4 D_5, 10 D_{10}, 12 D_{20}, 20 D_{25}, 50 D_{50}, 60 D_{100}	6 C_2, 5 C_4, C_5, C_8, 3 C_{10}, 6 C_{20}, 5 C_{25}, 15 C_{50}, 30 C_{100}, 19 D_2, 3 D_4, 4 D_5, 10 D_{10}, 12 D_{20}, 20 D_{25}, 50 D_{50}, 60 D_{100}	3 C_2, 4 C_4, C_8, C_{10}, 2 C_{20}, 5 C_{50}, 10 C_{100}, 17 D_2, 3 D_4, 3 D_5, 9 D_{10}, 12 D_{20}, 15 D_{25}, 45 D_{50}, 60 D_{100}	6 C_2, C_4, C_5, 2 C_{10}, 4 C_{20}, 5 C_{25}, 10 C_{50}, 20 C_{100}, 19 D_2, 2 D_4, 4 D_5, 7 D_{10}, 8 D_{20}, 20 D_{25}, 35 D_{50}, 40 D_{100}
C101.2	6 C_2, 3 C_4, C_5, C_8, 5 C_{10}, 4 C_{20}, 5 C_{25}, 25 C_{50}, 20 C_{100}, 33 D_2, 3 D_4, 5 D_5, 19 D_{10}, 8 D_{20}, 25 D_{25}, 95 D_{50}, 40 D_{100}	6 C_2, 3 C_4, C_5, 5 C_{10}, 4 C_{20}, 5 C_{25}, 25 C_{50}, 20 C_{100}, 33 D_2, 3 D_4, 5 D_5, 19 D_{10}, 8 D_{20}, 25 D_{25}, 95 D_{50}, 40 D_{100}	3 C_2, 2 C_4, C_{10}, 5 C_{50}, 25 D_2, 3 D_4, 3 D_5, 15 D_{10}, 8 D_{20}, 15 D_{25}, 75 D_{50}, 40 D_{100}	6 C_2, C_4, C_5, 4 C_{10}, 4 C_{20}, 5 C_{25}, 20 C_{50}, 20 C_{100}, 33 D_2, 2 D_4, 5 D_5, 16 D_{10}, 8 D_{20}, 25 D_{25}, 80 D_{50}, 40 D_{100}
C101.3	3 C_2, 3 C_4, 6 C_5, C_8, 3 C_{10}, 12 D_2, 3 D_4, 6 D_5, 3 D_{10}	3 C_2, 3 C_4, 6 C_5, 3 C_{10}, 12 D_2, 3 D_4, 6 D_5, 3 D_{10}	2 C_2, 2 C_4, C_{10}, 10 D_2, 3 D_4, 6 D_5, 3 D_{10}	3 C_2, C_4, 6 C_5, 2 C_{10}, 12 D_2, 2 D_4, 6 D_5, 2 D_{10}
C101.4	3 C_2, 3 C_4, C_5, C_8, 3 C_{10}, 5 C_{25}, 12 D_2, 3 D_4, D_5, 3 D_{10}, 5 D_{25}	3 C_2, 3 C_4, C_5, 3 C_{10}, 5 C_{25}, 12 D_2, 3 D_4, D_5, 3 D_{10}, 5 D_{25}	2 C_2, 2 C_4, C_{10}, 10 D_2, 3 D_4, D_5, 3 D_{10}, 5 D_{25}	3 C_2, C_4, C_5, 2 C_{10}, 5 C_{25}, 12 D_2, 2 D_4, D_5, 2 D_{10}, 5 D_{25}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C101.5	6 C_2, 5 C_4, 2 C_5, 2 C_8, 6 C_{10}, 2 C_{20}, 19 D_2, 3 D_4, 8 D_5, 12 D_{10}	6 C_2, 5 C_4, 2 C_5, C_8, 6 C_{10}, 2 C_{20}, 19 D_2, 3 D_4, 8 D_5, 12 D_{10}	3 C_2, 4 C_4, C_8, 3 C_{10}, 2 C_{20}, 17 D_2, 3 D_4, 5 D_5, 11 D_{10}	6 C_2, C_4, 2 C_5, 3 C_{10}, 19 D_2, 2 D_4, 8 D_5, 6 D_{10}
C101.6	5 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 6 C_{10}, 2 C_{12}, 13 D_2, 2 D_3, 8 D_5, 4 D_6, 12 D_{10}	5 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 6 C_{10}, C_{12}, 13 D_2, 2 D_3, 8 D_5, 4 D_6, 12 D_{10}	3 C_2, 2 C_4, C_6, 2 C_{10}, 11 D_2, D_3, 6 D_5, 3 D_6, 11 D_{10}	5 C_2, C_3, 2 C_5, C_6, 4 C_{10}, 13 D_2, 2 D_3, 8 D_5, D_6, 8 D_{10}
C101.7	5 C_2, C_3, 2 C_4, C_5, 3 C_6, 3 C_{10}, 2 C_{12}, C_{15}, 5 C_{25}, C_{30}, 15 C_{50}, 5 C_{75}, 5 C_{150}, 13 D_2, 2 D_3, 4 D_5, 4 D_6, 6 D_{10}, 2 D_{15}, 20 D_{25}, D_{30}, 30 D_{50}, 10 D_{75}, 5 D_{150}	5 C_2, C_3, 2 C_4, C_5, 3 C_6, 3 C_{10}, C_{12}, C_{15}, 5 C_{25}, C_{30}, 15 C_{50}, 5 C_{75}, 5 C_{150}, 13 D_2, 2 D_3, 4 D_5, 4 D_6, 6 D_{10}, 2 D_{15}, 20 D_{25}, D_{30}, 30 D_{50}, 10 D_{75}, 5 D_{150}	3 C_2, 2 C_4, C_6, 11 D_2, D_3, 4 D_5, 3 D_6, 6 D_{10}, 2 D_{15}, 20 D_{25}, D_{30}, 30 D_{50}, 10 D_{75}, 5 D_{150}	5 C_2, C_3, C_5, 3 C_{10}, 5 C_{25}, 15 C_{50}, 13 D_2, 2 D_3, 4 D_5, 6 D_{10}, 20 D_{25}, 30 D_{50}
C101.8	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, 4 C_5, C_6, 2 C_{10}, C_{12}, C_{15}, 6 D_2, 2 D_3, 6 D_5, D_6, 3 D_{10}, D_{15}	**Tet**, **Ico**, 3 C_2, C_3, 2 C_4, 4 C_5, C_6, 2 C_{10}, C_{15}, 6 D_2, 2 D_3, 6 D_5, D_6, 3 D_{10}, D_{15}	2 C_2, 2 C_4, C_6, C_{10}, 5 D_2, D_3, 5 D_5, D_6, 3 D_{10}, D_{15}	**Tet**, 3 C_2, C_3, 4 C_5, C_{10}, 6 D_2, D_3, 6 D_5, 2 D_{10}
C101.9	3 C_2, 2 C_4, 5 C_5, 3 C_{10}, 2 C_{20}, 15 C_{25}, 5 C_{50}, 3 D_2, 8 D_5, 3 D_{10}, 20 D_{25}, 5 D_{50}	3 C_2, 2 C_4, 4 C_5, 2 C_{10}, 15 C_{25}, 5 C_{50}, 3 D_2, 6 D_5, 2 D_{10}, 20 D_{25}, 5 D_{50}	2 C_2, 2 C_4, C_{10}, 3 D_2, 5 D_5, 2 D_{10}, 20 D_{25}, 5 D_{50}	3 C_2, 4 C_5, C_{10}, 15 C_{25}, 5 C_{50}, 3 D_2, 5 D_5, D_{10}, 20 D_{25}, 5 D_{50}
C101.10	3 C_2, 2 C_4, 6 C_5, 4 C_{10}, 2 C_{20}, 3 D_2, 10 D_5, 4 D_{10}	3 C_2, 2 C_4, 5 C_5, 3 C_{10}, 3 D_2, 8 D_5, 3 D_{10}	2 C_2, 2 C_4, 2 C_{10}, 3 D_2, 6 D_5, 3 D_{10}	3 C_2, 5 C_5, C_{10}, 3 D_2, 7 D_5, D_{10}
C101.11	3 C_2, C_3, 4 C_4, C_5, C_6, 5 C_8, C_{10}, C_{12}, C_{15}, 2 C_{20}, 2 C_{24}, C_{30}, 2 C_{40}, 4 D_2, D_3, 3 D_4, 2 D_5, D_6, D_8, 2 D_{10}, 2 D_{15}, 3 D_{20}, D_{30}, 2 D_{40}	3 C_2, C_3, 4 C_4, C_5, C_6, 4 C_8, C_{10}, C_{15}, 2 C_{20}, C_{30}, 2 C_{40}, 4 D_2, D_3, 3 D_4, 2 D_5, D_6, D_8, 2 D_{10}, 2 D_{15}, 3 D_{20}, D_{30}, 2 D_{40}	3 C_2, 4 C_4, C_6, 4 C_8, C_{10}, 2 C_{20}, C_{30}, 2 C_{40}, 4 D_2, D_3, 3 D_4, 2 D_5, D_6, D_8, 2 D_{10}, 2 D_{15}, 3 D_{20}, D_{30}, 2 D_{40}	3 C_2, C_3, C_5, 4 D_2, D_3, 2 D_5
C101.12	3 C_2, C_3, 5 C_4, C_5, C_6, 7 C_8, C_{10}, C_{12}, C_{15}, 2 C_{20}, 2 C_{24}, C_{30}, 2 C_{40}, 4 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, 2 D_8, 2 D_{10}, 2 D_{15}, 3 D_{20}, D_{30}, 2 D_{40}	3 C_2, C_3, 5 C_4, C_5, C_6, 6 C_8, C_{10}, C_{15}, 2 C_{20}, C_{30}, 2 C_{40}, 4 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, 2 D_8, 2 D_{10}, 2 D_{15}, 3 D_{20}, D_{30}, 2 D_{40}	3 C_2, 4 C_4, C_6, 6 C_8, C_{10}, 2 C_{20}, C_{30}, 2 C_{40}, 4 D_2, 2 D_3, 3 D_4, 2 D_5, D_6, 2 D_8, 2 D_{10}, 2 D_{15}, 3 D_{20}, D_{30}, 2 D_{40}	3 C_2, C_3, C_5, 4 D_2, 2 D_3, 2 D_5

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C101.13	6 C_2, C_3, 5 C_4, C_5, 5 C_6, 2 C_8, 3 C_{10}, 4 C_{12}, C_{15}, 6 C_{20}, 4 C_{24}, 3 C_{30}, 4 C_{60}, 19 D_2, D_3, 3 D_4, 4 D_5, 3 D_6, 10 D_{10}, 2 D_{12}, 4 D_{15}, 12 D_{20}, 8 D_{30}, 8 D_{60}	6 C_2, C_3, 5 C_4, C_5, 5 C_6, C_8, 3 C_{10}, 3 C_{12}, C_{15}, 6 C_{20}, C_{24}, 3 C_{30}, 4 C_{60}, 19 D_2, D_3, 3 D_4, 4 D_5, 3 D_6, 10 D_{10}, 2 D_{12}, 4 D_{15}, 12 D_{20}, 8 D_{30}, 8 D_{60}	3 C_2, 4 C_4, C_6, C_8, C_{10}, 2 C_{20}, 17 D_2, D_3, 3 D_4, 3 D_5, 3 D_6, 9 D_{10}, 2 D_{12}, 4 D_{15}, 12 D_{20}, 8 D_{30}, 8 D_{60}	6 C_2, C_3, C_4, C_5, C_6, 2 C_{10}, 4 C_{20}, 19 D_2, D_3, 2 D_4, 4 D_5, D_6, 7 D_{10}, 8 D_{20}
C101.14	6 C_2, C_3, 3 C_4, C_5, 4 C_6, C_8, 5 C_{10}, C_{12}, C_{15}, 4 C_{20}, 2 C_{24}, 7 C_{30}, 33 D_2, 2 D_3, 3 D_4, 5 D_5, 8 D_6, 19 D_{10}, 8 D_{15}, 8 D_{20}, 28 D_{30}	6 C_2, C_3, 3 C_4, C_5, 4 C_6, 5 C_{10}, C_{15}, 4 C_{20}, 7 C_{30}, 33 D_2, 2 D_3, 3 D_4, 5 D_5, 8 D_6, 19 D_{10}, 8 D_{15}, 8 D_{20}, 28 D_{30}	3 C_2, 2 C_4, C_6, C_{10}, 25 D_2, D_3, 3 D_4, 3 D_5, 6 D_6, 15 D_{10}, 4 D_{15}, 8 D_{20}, 22 D_{30}	6 C_2, C_3, C_4, C_5, C_6, 4 C_{10}, 4 C_{20}, 33 D_2, 2 D_3, 2 D_4, 5 D_5, D_6, 16 D_{10}, 8 D_{20}
C101.15	5 C_2, 2 C_4, C_5, 3 C_{10}, 5 C_{11}, 15 C_{22}, 10 C_{44}, 5 C_{55}, 5 C_{110}, 13 D_2, 4 D_5, 6 D_{10}, 10 D_{11}, 20 D_{22}, 10 D_{55}, 5 D_{110}	5 C_2, 2 C_4, C_5, 3 C_{10}, C_{11}, 3 C_{22}, C_{44}, C_{55}, C_{110}, 13 D_2, 4 D_5, 6 D_{10}, 2 D_{11}, 4 D_{22}, 2 D_{55}, D_{110}	3 C_2, 2 C_4, C_{22}, 11 D_2, 4 D_5, 6 D_{10}, D_{11}, 3 D_{22}, 2 D_{55}, D_{110}	5 C_2, C_5, 3 C_{10}, C_{11}, 13 D_2, 4 D_5, 6 D_{10}, 2 D_{11}
C101.16	3 C_2, C_3, 2 C_4, C_5, C_6, 3 C_7, C_{10}, C_{12}, 3 C_{14}, C_{15}, 6 C_{21}, 3 C_{28}, 3 C_{35}, 6 C_{42}, 6 C_{84}, 6 C_{105}, 3 D_2, 2 D_3, 2 D_5, D_6, 6 D_7, D_{10}, 3 D_{14}, D_{15}, 12 D_{21}, 3 D_{35}, 6 D_{42}, 6 D_{105}	3 C_2, C_3, 2 C_4, C_5, C_6, C_7, C_{10}, C_{14}, C_{15}, C_{21}, C_{35}, C_{42}, C_{105}, 3 D_2, 2 D_3, 2 D_5, D_6, 2 D_7, D_{10}, D_{14}, D_{15}, 2 D_{21}, D_{35}, D_{42}, D_{105}	2 C_2, 2 C_4, C_6, C_{14}, C_{42}, 3 D_2, D_3, 2 D_5, D_6, D_7, D_{10}, D_{14}, D_{15}, D_{21}, D_{35}, D_{42}, D_{105}	3 C_2, C_3, C_5, C_7, C_{10}, C_{21}, 3 D_2, D_3, 2 D_5, D_7, D_{10}, D_{21}
C101.17	5 C_2, 3 C_4, 3 C_5, 4 C_8, 9 C_{10}, 13 D_2, 12 D_5, 18 D_{10}	5 C_2, 3 C_4, 3 C_5, 2 C_8, 9 C_{10}, 13 D_2, 12 D_5, 18 D_{10}	2 C_2, 3 C_4, 2 C_8, 11 D_2, 9 D_5, 18 D_{10}	5 C_2, 3 C_5, 9 C_{10}, 13 D_2, 12 D_5, 18 D_{10}
C101.18	5 C_2, 3 C_4, 2 C_5, 4 C_8, 4 C_{10}, 13 D_2, 6 D_5, 7 D_{10}	5 C_2, 3 C_4, 2 C_5, 2 C_8, 4 C_{10}, 13 D_2, 6 D_5, 7 D_{10}	2 C_2, 3 C_4, 2 C_8, C_{10}, 11 D_2, 3 D_5, 6 D_{10}	5 C_2, 2 C_5, 3 C_{10}, 13 D_2, 6 D_5, 5 D_{10}
C101.19	5 C_2, 3 C_4, C_5, 4 C_8, 3 C_{10}, 2 C_{20}, 5 C_{25}, 15 C_{50}, 10 C_{100}, 13 D_2, 4 D_5, 6 D_{10}, 20 D_{25}, 30 D_{50}	5 C_2, 3 C_4, C_5, 2 C_8, 3 C_{10}, 2 C_{20}, 5 C_{25}, 15 C_{50}, 10 C_{100}, 13 D_2, 4 D_5, 6 D_{10}, 20 D_{25}, 30 D_{50}	2 C_2, 3 C_4, 2 C_8, C_{10}, 2 C_{20}, 5 C_{50}, 10 C_{100}, 11 D_2, 2 D_5, 5 D_{10}, 10 D_{25}, 25 D_{50}	5 C_2, C_5, 2 C_{10}, 5 C_{25}, 10 C_{50}, 13 D_2, 4 D_5, 4 D_{10}, 20 D_{25}, 20 D_{50}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C101.20	4 C_2, 2 C_4, C_5, 2 C_8, 5 C_{10}, 5 C_{25}, 25 C_{50}, 12 D_2, 2 D_4, 2 D_5, 4 D_{10}, 10 D_{25}, 20 D_{50}	4 C_2, 2 C_4, C_5, 5 C_{10}, 5 C_{25}, 25 C_{50}, 12 D_2, 2 D_4, 2 D_5, 4 D_{10}, 10 D_{25}, 20 D_{50}	2 C_2, 2 C_4, C_{10}, 5 C_{50}, 9 D_2, 2 D_4, 2 D_5, 4 D_{10}, 10 D_{25}, 20 D_{50}	4 C_2, C_5, 4 C_{10}, 5 C_{25}, 20 C_{50}, 12 D_2, 2 D_5, 2 D_{10}, 10 D_{25}, 10 D_{50}
C101.21	3 C_2, 5 C_4, C_5, 15 C_8, 2 C_{10}, 2 C_{16}, 2 C_{20}, 5 C_{40}, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, 2 D_{20}, 2 D_{40}	3 C_2, 5 C_4, C_5, 13 C_8, 2 C_{10}, 2 C_{20}, 5 C_{40}, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, 2 D_{20}, 2 D_{40}	3 C_2, 4 C_4, 10 C_8, 2 C_{10}, C_{20}, 3 C_{40}, 4 D_2, 2 D_4, 2 D_5, 2 D_8, 2 D_{10}, 2 D_{20}, 2 D_{40}	3 C_2, C_5, 4 D_2, 2 D_5
C101.22	3 C_2, 5 C_4, C_5, 9 C_8, 2 C_{10}, 2 C_{16}, 2 C_{20}, 5 C_{40}, 4 D_2, 2 D_4, 2 D_5, D_8, 2 D_{10}, 2 D_{20}, 2 D_{40}	3 C_2, 5 C_4, C_5, 7 C_8, 2 C_{10}, 2 C_{20}, 5 C_{40}, 4 D_2, 2 D_4, 2 D_5, D_8, 2 D_{10}, 2 D_{20}, 2 D_{40}	3 C_2, 4 C_4, 5 C_8, 2 C_{10}, C_{20}, 3 C_{40}, 4 D_2, 2 D_4, 2 D_5, D_8, 2 D_{10}, 2 D_{20}, 2 D_{40}	3 C_2, C_5, 4 D_2, 2 D_5
C101.23	5 C_2, 6 C_4, C_5, 8 C_8, 3 C_{10}, 8 C_{16}, 4 C_{20}, 4 C_{40}, 13 D_2, 3 D_4, 4 D_5, 6 D_8, 8 D_{10}, 6 D_{20}, 8 D_{40}	5 C_2, 6 C_4, C_5, 6 C_8, 3 C_{10}, 3 C_{16}, 4 C_{20}, 4 C_{40}, 13 D_2, 3 D_4, 4 D_5, 6 D_8, 8 D_{10}, 6 D_{20}, 8 D_{40}	3 C_2, 4 C_4, 5 C_8, 2 C_{10}, 3 C_{20}, 4 C_{40}, 13 D_2, 3 D_4, 2 D_5, 6 D_8, 8 D_{10}, 6 D_{20}, 8 D_{40}	5 C_2, 2 C_4, C_5, C_{10}, 13 D_2, D_4, 4 D_5, 2 D_{10}
C101.24	5 C_2, 5 C_4, C_5, 6 C_8, 3 C_{10}, 4 C_{16}, 4 C_{20}, 4 C_{40}, 13 D_2, 3 D_4, 4 D_5, 4 D_8, 8 D_{10}, 6 D_{20}, 8 D_{40}	5 C_2, 5 C_4, C_5, 4 C_8, 3 C_{10}, C_{16}, 4 C_{20}, 4 C_{40}, 13 D_2, 3 D_4, 4 D_5, 4 D_8, 8 D_{10}, 6 D_{20}, 8 D_{40}	3 C_2, 2 C_4, 3 C_8, 2 C_{10}, C_{20}, 4 C_{40}, 13 D_2, 3 D_4, 2 D_5, 4 D_8, 8 D_{10}, 6 D_{20}, 8 D_{40}	5 C_2, 3 C_4, C_5, C_{10}, 2 C_{20}, 13 D_2, D_4, 4 D_5, 2 D_{10}
C101.25	4 C_2, 5 C_4, C_5, 6 C_8, 3 C_{10}, 4 C_{16}, 4 C_{20}, 4 C_{40}, 9 D_2, 2 D_4, 2 D_5, 2 D_8, 6 D_{10}, 6 D_{20}, 8 D_{40}	4 C_2, 5 C_4, C_5, 4 C_8, 3 C_{10}, 4 C_{20}, 4 C_{40}, 9 D_2, 2 D_4, 2 D_5, 2 D_8, 6 D_{10}, 6 D_{20}, 8 D_{40}	3 C_2, 3 C_4, 3 C_8, 2 C_{10}, 3 C_{20}, 4 C_{40}, 9 D_2, 2 D_4, 2 D_5, 2 D_8, 6 D_{10}, 6 D_{20}, 8 D_{40}	4 C_2, 2 C_4, C_5, C_{10}, 9 D_2, D_4, 2 D_5, 2 D_{10}
C101.26	5 C_2, 5 C_4, C_5, 8 C_8, 5 C_{10}, 4 C_{16}, 2 C_{20}, 4 C_{40}, 15 D_2, 8 D_4, 2 D_5, 8 D_8, 6 D_{10}, 6 D_{20}, 8 D_{40}	5 C_2, 5 C_4, C_5, 6 C_8, 5 C_{10}, C_{16}, 2 C_{20}, 4 C_{40}, 15 D_2, 8 D_4, 2 D_5, 7 D_8, 6 D_{10}, 6 D_{20}, 8 D_{40}	3 C_2, 3 C_4, 3 C_8, 2 C_{10}, C_{20}, 4 C_{40}, 13 D_2, 7 D_4, 2 D_5, 7 D_8, 6 D_{10}, 6 D_{20}, 8 D_{40}	5 C_2, 2 C_4, C_5, 3 C_{10}, 15 D_2, 4 D_4, 2 D_5, 2 D_{10}
C101.27	5 C_2, 4 C_4, C_5, 6 C_8, 3 C_{10}, 4 C_{16}, 6 C_{20}, 4 C_{40}, 15 D_2, 4 D_4, 4 D_5, 2 D_8, 10 D_{10}, 14 D_{20}, 8 D_{40}	5 C_2, 4 C_4, C_5, 4 C_8, 3 C_{10}, C_{16}, 6 C_{20}, 4 C_{40}, 15 D_2, 4 D_4, 4 D_5, 2 D_8, 10 D_{10}, 14 D_{20}, 8 D_{40}	2 C_2, 3 C_4, 4 C_8, C_{10}, C_{16}, 2 C_{20}, 4 C_{40}, 11 D_2, 4 D_4, 2 D_5, 2 D_8, 7 D_{10}, 14 D_{20}, 8 D_{40}	5 C_2, C_4, C_5, 2 C_{10}, 4 C_{20}, 15 D_2, 2 D_4, 4 D_5, 7 D_{10}, 8 D_{20}

	Mapping necessary and sufficient	Immersion necessary	Immersion sufficient	Embedding necessary
C101.28	4 C_2, 4 C_4, C_5, 4 C_8, 3 C_{10}, 2 C_{16}, 6 C_{20}, 4 C_{40}, 12 D_2, 4 D_4, 3 D_5, 2 D_8, 9 D_{10}, 14 D_{20}, 8 D_{40}	4 C_2, 4 C_4, C_5, 2 C_8, 3 C_{10}, 6 C_{20}, 4 C_{40}, 12 D_2, 4 D_4, 3 D_5, 2 D_8, 9 D_{10}, 14 D_{20}, 8 D_{40}	2 C_2, 3 C_4, 2 C_8, C_{10}, 2 C_{20}, 4 C_{40}, 10 D_2, 4 D_4, 2 D_5, 2 D_8, 7 D_{10}, 14 D_{20}, 8 D_{40}	4 C_2, C_4, C_5, 2 C_{10}, 4 C_{20}, 12 D_2, 2 D_4, 3 D_5, 6 D_{10}, 8 D_{20}
C101.29	3 C_2, 2 C_4, C_5, 3 C_7, 4 C_8, C_{10}, 3 C_{14}, C_{20}, 3 C_{28}, 3 C_{35}, 6 C_{56}, 3 C_{70}, 3 D_2, 2 D_5, 6 D_7, D_{10}, 3 D_{14}, 6 D_{35}, 3 D_{70}	3 C_2, 2 C_4, C_5, C_7, 2 C_8, C_{10}, C_{14}, C_{20}, C_{35}, C_{70}, 3 D_2, 2 D_5, 2 D_7, D_{10}, D_{14}, 2 D_{35}, D_{70}	2 C_2, 2 C_4, 2 C_8, C_{10}, C_{14}, C_{20}, C_{70}, 3 D_2, D_5, D_7, D_{10}, D_{14}, D_{35}, D_{70}	3 C_2, C_5, C_7, 3 D_2, 2 D_5, D_7
C101.30	2 C_2, 2 C_4, C_5, 3 C_7, 2 C_8, C_{10}, 3 C_{14}, C_{20}, 3 C_{28}, 3 C_{35}, 6 C_{56}, 3 C_{70}, 2 D_2, 2 D_5, 3 D_7, D_{10}, 3 D_{14}, 6 D_{35}, 3 D_{70}	2 C_2, 2 C_4, C_5, C_7, C_{10}, C_{14}, C_{20}, C_{35}, C_{70}, 2 D_2, 2 D_5, D_7, D_{10}, D_{14}, 2 D_{35}, D_{70}	2 C_2, 2 C_4, C_{10}, C_{14}, C_{20}, C_{70}, 2 D_2, 2 D_5, D_7, D_{10}, D_{14}, 2 D_{35}, D_{70}	2 C_2, C_5, C_7, 2 D_2, 2 D_5, D_7
C101.31	3 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 2 C_{10}, 4 C_{12}, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_3, 2 C_4, 2 C_5, 3 C_6, 2 C_{10}, 2 C_{12}, 3 D_2, 4 D_5, 2 D_{10}	2 C_2, 2 C_4, C_6, 3 D_2, 4 D_5, 2 D_{10}	3 C_2, C_3, 2 C_5, C_6, 2 C_{10}, 3 D_2, 4 D_5, 2 D_{10}
C101.32	3 C_2, C_3, 2 C_4, C_5, 3 C_6, C_{10}, 4 C_{12}, C_{15}, 5 C_{25}, C_{30}, 5 C_{50}, 5 C_{75}, 5 C_{150}, 3 D_2, 2 D_5, D_{10}, 10 D_{25}, 5 D_{50}	3 C_2, C_3, 2 C_4, C_5, 3 C_6, C_{10}, 2 C_{12}, C_{15}, 5 C_{25}, C_{30}, 5 C_{50}, 5 C_{75}, 5 C_{150}, 3 D_2, 2 D_5, D_{10}, 10 D_{25}, 5 D_{50}	2 C_2, 2 C_4, C_6, 3 D_2, 2 D_5, D_{10}, 10 D_{25}, 5 D_{50}	3 C_2, C_3, C_5, C_{10}, 5 C_{25}, 5 C_{50}, 3 D_2, 2 D_5, D_{10}, 10 D_{25}, 5 D_{50}
C101.33	3 C_2, C_3, 2 C_4, C_5, C_6, 4 C_8, C_{10}, C_{12}, C_{15}, 8 C_{16}, C_{20}, 2 C_{24}, C_{30}, 2 C_{40}, 4 C_{48}, C_{60}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	3 C_2, C_3, 2 C_4, C_5, C_6, 2 C_8, C_{10}, C_{15}, C_{20}, C_{30}, 2 C_{40}, 3 D_2, 2 D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	2 C_2, C_4, C_6, C_{10}, C_{30}, 3 D_2, D_3, D_5, D_6, D_{10}, D_{15}, D_{30}	3 C_2, C_3, C_5, 3 D_2, D_3, 2 D_5
C101.34	2 C_2, C_3, 2 C_4, C_5, C_6, 3 C_8, C_{10}, C_{12}, C_{15}, 4 C_{16}, C_{20}, 2 C_{24}, C_{30}, 2 C_{40}, 4 C_{48}, C_{60}, 2 D_2, D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	2 C_2, C_3, 2 C_4, C_5, C_6, 2 C_8, C_{10}, C_{15}, C_{20}, C_{30}, 2 C_{40}, 2 D_2, D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	2 C_2, C_4, C_6, C_{10}, C_{30}, 2 D_2, D_3, 2 D_5, D_6, D_{10}, 2 D_{15}, D_{30}	2 C_2, C_3, C_5, 2 D_2, D_3, 2 D_5
C101.35	C_2, C_4, 5 C_5, 2 C_{10}, 4 C_{20}, 15 C_{25}, D_5, 5 D_{25}	C_2, C_4, 4 C_5, C_{10}, 15 C_{25}, D_5, 5 D_{25}	C_2, C_4, C_{10}, D_5, 5 D_{25}	C_2, 4 C_5, 15 C_{25}, D_5, 5 D_{25}
C101.36	C_2, C_4, 3 C_5, 2 C_{10}, 4 C_{20}, 3 C_{25}, D_5, D_{25}	C_2, C_4, 2 C_5, C_{10}, 3 C_{25}, D_5, D_{25}	C_2, C_4, C_{10}, D_5, D_{25}	C_2, 2 C_5, 3 C_{25}, D_5, D_{25}
C101.37	C_2, C_4, 3 C_5, 2 C_{10}, 4 C_{20}, 3 C_{25}, D_5, D_{25}	C_2, C_4, 2 C_5, C_{10}, 3 C_{25}, D_5, D_{25}	C_2, C_4, C_{10}, D_5, D_{25}	C_2, 2 C_5, 3 C_{25}, D_5, D_{25}
C101.38	C_2, C_4, 6 C_5, 2 C_{10}, 4 C_{20}, 2 D_5	C_2, C_4, 5 C_5, C_{10}, 2 D_5	C_2, C_4, C_{10}, 2 D_5	C_2, 5 C_5, 2 D_5

	Mapping	Immersion		Embedding
	necessary and sufficient	necessary	sufficient	necessary
C101.39	2 C_2, C_3, 2 C_4, C_5, C_6, 3 C_8, C_{10}, 2 C_{12}, C_{15}, C_{20}, 4 C_{24}, C_{30}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, C_3, 2 C_4, C_5, C_6, C_8, C_{10}, C_{15}, C_{20}, C_{30}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, 2 C_4, C_6, C_8, C_{10}, C_{20}, C_{30}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, C_3, C_5, 2 D_2, D_5
C101.40	2 C_2, C_3, 2 C_4, C_5, C_6, 3 C_8, C_{10}, 2 C_{12}, C_{15}, C_{20}, 4 C_{24}, C_{30}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, C_3, 2 C_4, C_5, C_6, 2 C_8, C_{10}, C_{15}, C_{20}, C_{30}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, 2 C_4, C_6, 2 C_8, C_{10}, C_{20}, C_{30}, 2 D_2, D_4, D_5, D_{10}, D_{20}	2 C_2, C_3, C_5, 2 D_2, D_5
C101.41	5 C_2, C_3, 3 C_4, C_5, 5 C_6, 4 C_8, 3 C_{10}, 6 C_{12}, C_{15}, 2 C_{20}, 8 C_{24}, 3 C_{30}, 4 C_{60}, 13 D_2, 4 D_5, 6 D_{10}	5 C_2, C_3, 3 C_4, C_5, 5 C_6, 2 C_8, 3 C_{10}, 4 C_{12}, C_{15}, 2 C_{20}, 2 C_{24}, 3 C_{30}, 4 C_{60}, 13 D_2, 4 D_5, 6 D_{10}	2 C_2, 3 C_4, C_6, 2 C_8, C_{10}, 2 C_{20}, 11 D_2, 2 D_5, 5 D_{10}	5 C_2, C_3, C_5, C_6, 2 C_{10}, 13 D_2, 4 D_5, 4 D_{10}
C101.42	4 C_2, C_3, 2 C_4, C_5, 4 C_6, 2 C_8, 5 C_{10}, 2 C_{12}, C_{15}, 4 C_{24}, 7 C_{30}, 12 D_2, 2 D_4, 2 D_5, 4 D_{10}	4 C_2, C_3, 2 C_4, C_5, 4 C_6, 5 C_{10}, C_{15}, 7 C_{30}, 12 D_2, 2 D_4, 2 D_5, 4 D_{10}	2 C_2, 2 C_4, C_6, C_{10}, 9 D_2, 2 D_4, 2 D_5, 4 D_{10}	4 C_2, C_3, C_5, C_6, 4 C_{10}, 12 D_2, 2 D_5, 2 D_{10}
C101.43	3 C_2, 2 C_4, C_5, C_{10}, 5 C_{11}, 15 C_{22}, 20 C_{44}, 5 C_{55}, 5 C_{110}, 3 D_2, 2 D_5, D_{10}	3 C_2, 2 C_4, C_5, C_{10}, C_{11}, 3 C_{22}, 2 C_{44}, C_{55}, C_{110}, 3 D_2, 2 D_5, D_{10}	2 C_2, 2 C_4, C_{22}, 3 D_2, 2 D_5, D_{10}	3 C_2, C_5, C_{10}, C_{11}, 3 D_2, 2 D_5, D_{10}
C101.44	C_2, C_3, C_4, C_5, C_6, 3 C_7, 2 C_{12}, 3 C_{14}, C_{15}, 6 C_{21}, 6 C_{28}, 3 C_{35}, 6 C_{42}, 12 C_{84}, 6 C_{105}, D_5	C_2, C_3, C_4, C_5, C_6, C_7, C_{14}, C_{15}, C_{21}, C_{35}, C_{42}, C_{105}, D_5	C_2, C_4, C_6, C_{14}, C_{42}, D_5	C_2, C_3, C_5, C_7, C_{21}, D_5