



## CROSS REFERENCE TABLE FOR ALUMINUM ALLOY TOLERANCES BY DIAMETER

ISO 286 - 3 (All Alloys)				EN 754 - 3 (Cold Drawn Round Bars, All Alloys)		EN 754 - 7 (Cold Drawn Tubes, All Alloys)			ISO 6363-6 (Cold Drawn Tubes, All Alloys)		ISO 6363-3 (Cold Drawn Round Bars, All Alloys)		ASTM B211 (ANSI H35.2M) (Cold Drawn Round Bars)		
Diameter (mm)	h9	h10	h11	Diameter (mm)	Tolerances (mm)	Outer or Inner Diameter (mm)	Maximum allowable deviation of mean diameter from OD or ID (mm)	Outer or Inner Diameter (mm)	Maximum allowable deviation of mean diameter from OD or ID (mm)	Outer or Inner Diameter (mm)	Maximum allowable deviation of mean diameter from OD or ID (mm)	Diameter (mm)	Maximum allowable deviation of mean diameter from OD or ID (mm)	Diameter (mm)	Tolerances (mm)
1 - 3 (including 3)	0 / -0.025	0 / -0.040	0 / -0.060	3 - 6	0 / -0.048	3 - 8	±0.04	4 - 12	±0.08	1 - 3	±0.03	10 - 12.5	±0.04		
3 - 6	0 / -0.030	0 / -0.048	0 / -0.075	6 - 10	0 / -0.09	8 - 18	±0.05	12 - 25	±0.10	3 - 6	±0.04	12.5 - 25	±0.05		
6 - 10	0 / -0.036	0 / -0.058	0 / -0.090	10 - 18	0 / -0.110	18 - 30	±0.06	25 - 50	±0.13	6 - 10	±0.05	25 - 40	±0.06		
10 - 18	0 / -0.043	0 / -0.070	0 / -0.110	18 - 30	0 / -0.13	30 - 50	±0.07	50 - 75	±0.15	10 - 18	±0.06	40 - 50	±0.10		
18 - 30	0 / -0.052	0 / -0.084	0 / -0.130	30 - 50	0 / -0.16	50 - 80	±0.09	75 - 125	±0.20	18 - 30	±0.07	50 - 70	±0.15		
30 - 50	0 / -0.062	0 / -0.100	0 / -0.160	50 - 65	0 / -0.19	80 - 120	±0.14	125 - 150	±0.25	30 - 50	±0.10	70 - 90	±0.20		
50 - 80	0 / -0.074	0 / -0.120	0 / -0.190	65 - 80	0 / -0.30	120 - 200	±0.25	150 - 200	±0.38	50 - 65	±0.15	90 - 120	±0.30		
80 - 120	0 / -0.087	0 / -0.140	0 / -0.220	80 - 100	0 / -0.35	200 - 350	±0.38	200 - 250	±0.51	65 - 80	±0.18	120 - 150	±0.50		
120 - 180	0 / -0.100	0 / -0.160	0 / -0.250					250 - 300	±0.64	80 - 100	±0.20	150 - 175	±0.63		
180 - 250	0 / -0.115	0 / -0.185	0 / -0.290					300 - 320	±0.76			175 - 200	±0.80		

  

EN 755 - 3 (Extruded Round Bars, Alloy Group 1 <sup>1</sup> )		EN 755 - 3 (Extruded Round Bars, Alloy Group 2 <sup>2</sup> )		EN 755 - 7 (Extruded Tubes, All Alloys)		ISO 6362-5 (Extruded Round Bars, Alloy Group 3 <sup>3</sup> )		ISO 6362-5 (Extruded Round Bars, Alloy Group 4 <sup>4</sup> )		ISO 6362-6 (Extruded Round Tubes, Alloy Group 5 <sup>5</sup> )			ISO 6362-6 (Extruded Round Tubes, Alloy Group 6 <sup>6</sup> )		ASTM B221 (ANSI H35.2M) (Extruded Round Bars, All Except 5XXX Alloys)		ASTM B241 (ANSI H35.2M) (Extruded Tubes, All Alloys)		ASTM B210 (ANSI H35.2M) (Cold Drawn Tubes, All Alloys)		
Diameter (mm)	Tolerances (mm)	Tolerances (mm)	Maximum allowable deviation of mean diameter from OD or ID (mm)	Tolerances (mm)	Tolerances (mm)	Outer or Inner Diameter (mm)	Maximum allowable deviation of mean diameter from OD or ID (mm)	Maximum allowable deviation of mean diameter from OD or ID (mm)	Outer or Inner Diameter (mm)	Maximum allowable deviation of mean diameter from OD or ID (mm)	Maximum allowable deviation of mean diameter from OD or ID (mm)	Diameter (mm)	Tolerances (mm)	Outer or Inner Diameter (mm)	Maximum allowable deviation of mean diameter from OD or ID (mm)	Outer or Inner Diameter (mm)	Maximum allowable deviation of mean diameter from OD or ID (mm)	Outer or Inner Diameter (mm)	Maximum allowable deviation of mean diameter from OD or ID (mm)	Outer or Inner Diameter (mm)	Maximum allowable deviation of mean diameter from OD or ID (mm)
8 - 18	± 0.22	± 0.30	±0.25	±0.22	±0.30	13 - 25	± 0.25	± 0.38	0 - 3.20	±0.15											
18 - 25	± 0.25	± 0.35	±0.30	±0.25	±0.35	25 - 50	± 0.30	± 0.40	3.20 - 6.30	±0.18											
25 - 40	± 0.30	± 0.40	±0.35	±0.30	±0.40	50 - 100	± 0.38	± 0.58	6.30 - 12.5	±0.20											
40 - 50	± 0.35	± 0.45	±0.40	±0.35	±0.45	100 - 150	± 0.45	± 0.64	12.5 - 19	±0.23											
50 - 65	± 0.40	± 0.50	±0.45	±0.40	±0.50	150 - 200	± 0.50	± 0.97	19 - 25	±0.25											
65 - 80	± 0.45	± 0.70	±0.50	±0.45	±0.70	200 - 250	± 0.55	± 1.35	25 - 40	±0.30											
80 - 100	± 0.55	± 0.90	±0.60	±0.50	±0.90	250 - 300	± 0.60	± 1.73	40 - 50	±0.36											
100 - 120	± 0.65	± 1.10	±0.70	±0.65	±1.10	300 - 350	± 0.65	± 2.11	50 - 100	±0.61											
120 - 150	± 0.80	± 1.2	±0.80	±0.80	±1.20	350 - 400	± 0.70	± 2.49	100 - 150	±0.86											
150 - 180	± 1.0	± 1.4	±0.90	±1.00	±1.40	400 - 450	± 0.80	± 2.87	150 - 200	±1.10											
180 - 220	± 1.15	± 1.7	±1.00	±1.15	±1.70		± 1.15	± 3.25	200 - 250	±1.35											
220 - 270	± 1.3	± 2.0	±1.15	±1.30	±2.00		± 1.30		250 - 300	±1.90											
270 - 320	± 1.6	± 2.5	±1.30	±1.60	±2.50		± 1.60		300 - 350	±2.15											
320 - 350			±1.90	±2.10	±3.00		±2.10		350 - 400	±2.40											

<sup>1</sup> EN AW-1050A, EN AW-1070A, EN AW-1200, EN AW-1350 EN AW-3102, EN AW-3003, EN AW-3103 EN AW-5005, EN AW-5005A, EN AW-5051A, EN AW-5251 EN AW-6101A, EN AW-6101B, EN AW-6005, EN AW-6005A, EN AW-6106, EN AW-6008, EN AW-6010A, EN AW-6012, EN AW-6014, EN AW-6018, EN AW-6023, EN AW-6351, EN AW-6060, EN AW-6360, EN AW-6061, EN AW-6201, EN AW-6262, EN AW-6262A, EN AW-6063, EN AW-6063A, EN AW-6463, EN AW-6065, EN AW-6081, EN AW-6082, EN AW-6182

<sup>2</sup> EN AW-2007, EN AW-2011, EN AW-2011A, EN AW-2014, EN AW-2014A, EN AW-2017A, EN AW-2024, EN AW-2030, EN AW-5019, EN AW-5049, EN AW-5052, EN AW-5154A, EN AW-5454, EN AW-5754, EN AW-5083, EN AW-5086 EN AW-7003, EN AW-7005, EN AW-7108, 6351, 6060, 6360, 6061, 6261, 6262, 6262A, 6063, 6063A, EN AW-7021, EN AW-7022, EN AW-7049A, EN AW-7075

<sup>3</sup> 1070, 1070A, 1060, 1050, 1050A, 1350, 1100, 1200, 3102, 3003, 3103, 5005, 5005A, 5051A, 5251, 6101, 6101A, 6011B, 6005, 6005A, 6005C, 6026, 6110A, 6012, 6018, 6023, 6351, 6060, 6360, 6061, 6261, 6262, 6262A, 6063, 6063A, 6463, 6065, 6081, 6082, 6182

<sup>4</sup> 5019, 5049, 5052, 5154A, 5454, 5754, 5056, 5083, 5086, 2007, 2011, 2011A, 2014, 2014A, 2017, 2017A, 2024, 2030, 2033, 7003, 7204, 7005, 7108, 7108A, 7020, 7021, 7022, 7049A, 7050, 7075

<sup>5</sup> 1070, 1050, 1050A, 1350, 1100, 1200 3102, 3003, 3103, 3203 5005, 5005A 6101, 6101A, 6101B, 6005, 6005A, 6005C, 6008, 6014, 6060, 6360, 6063, 6063A, 6463

<sup>6</sup> 5051, 5049, 5251, 5052, 6110A, 6012, 6018, 6351, 6061, 6082, 6261, 6262, 7003, 7005, 7108, 7108A, 7020

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