

# 【Dimensional tolerances (mm) • Carbon and Alloy Steel】

Unit:mm

Diameter,side Length or width across flats,thickness and width	Class of tolerances								
	Class 6 (IT6)	Class 7 (IT 7)	Class 8 (IT 8)	Class 9 (IT 9)	Class 10 (IT 10)	Class 11 (IT 11)	Class12 (IT 12)	Class 13 (IT 13)	Class 14 (IT 14)
3max	0 -0.006	0 -0.010	0 -0.014	0 -0.025	0 -0.040	0 -0.060	0 -0.10	0 -0.14	0 -0.25
Over 3 up to and incl.6	0 -0.008	0 -0.012	0 -0.018	0 -0.030	0 -0.048	0 -0.075	0 -0.12	0 -0.18	0 -0.30
Over 6 up to and incl.10	0 -0.009	0 -0.015	0 -0.022	0 -0.036	0 -0.058	0 -0.090	0 -0.15	0 -0.22	0 -0.36
Over 10 up to and incl.18	0 -0.011	0 -0.018	0 -0.027	0 -0.043	0 -0.070	0 -0.110	0 -0.18	0 -0.27	0 -0.43
Over 18 up to and incl.30	0 -0.013	0 -0.021	0 -0.033	0 -0.052	0 -0.084	0 -0.130	0 -0.21	0 -0.33	0 -0.52
Over 30 up to and incl.50	0 -0.016	0 -0.025	0 -0.039	0 -0.062	0 -0.100	0 -0.160	0 -0.25	0 -0.39	0 -0.62
Over 50 up to and incl.80	0 -0.019	0 -0.030	0 -0.046	0 -0.074	0 -0.120	0 -0.190	0 -0.30	0 -0.46	0 -0.74
Over 80 up to and incl.120	0 -0.022	0 -0.035	0 -0.054	0 -0.087	0 -0.140	0 -0.220	0 -0.35	0 -0.54	0 -0.87
Over 120 up to and incl.180	0 -0.025	0 -0.040	0 -0.063	0 -0.100	0 -0.160	0 -0.250	0 -0.40	0 -0.63	0 -1.00
Over 180 up to and incl.250	0 -0.029	0 -0.046	0 -0.072	0 -0.115	0 -0.185	0 -0.290	0 -0.46	0 -0.72	0 -1.15
Over 250 up to and incl.315	0 -0.032	0 -0.052	0 -0.081	0 -0.130	0 -0.210	0 -0.320	0 -0.52	0 -0.81	0 -1.30
Over 315 up to and incl.400	0 -0.036	0 -0.057	0 -0.089	0 -0.140	0 -0.230	0 -0.360	0 -0.57	0 -0.89	0 -1.40
Over 400 up to and incl.500	0 -0.040	0 -0.063	0 -0.097	0 -0.155	0 -0.250	0 -0.400	0 -0.63	0 -0.97	0 -1.55

\*The tolerance values shall conform to JIS B 0401.

## • Manufacturable Classes

	Round			Square	Flat	Hexagon
	Grinding	Drawing	Cutting			
Class of tolerances	Class 8~ Class 9	-	-	Class 11	Class 11~ Class 12	-

\*Tolerance grade of our standard products.

\*Classes indicated with “~” are different depending on the dimensions and specifications.

For more details, please contact us.

\*For other tolerance Class not listed in the above tables, please contact us.