PRECISION GROUND TOLERANCES

Standard Round Bar Tolerances
(h=minus, k=plus, j=symmetrical)

Size mm / Tolerance	6	7	8	9	10	11	12	13
1mm < 3mm	0.006	0.010	0.014	0.025	0.040	0.060	0.100	-
3mm < 6mm	0.008	0.012	0.018	0.030	0.048	0.075	0.120	-
6mm < 10mm	0.009	0.015	0.022	0.036	0.059	0.090	0.150	-
10mm < 18mm	0.011	0.018	0.027	0.043	0.070	0.110	0.180	-
18mm < 30mm	0.013	0.021	0.033	0.052	0.084	0.130	0.210	0.330
30mm < 50mm	0.016	0.025	0.039	0.062	0.100	0.160	0.250	0.390
50mm < 80mm	0.019	0.030	0.046	0.074	0.120	0.190	0.300	0.460
80mm < 120mm	0.022	0.035	0.054	0.087	0.140	0.220	0.350	0.540
120mm < 180mm	-	0.040	0.063	0.100	0.160	0.250	0.400	0.630
180mm < 250mm	-	0.046	0.072	0.115	0.185	0.290	0.460	0.720
250mm < 315mm	-	-	-	0.130	0.210	0.320	0.520	0.810
315mm < 400mm	-	-	-	-	-	0.360	0.570	0.900
400mm < 500mm	-	-	-	-	-	0.400	0.630	-
500mm < 600mm	-	-	-	-	-	0.440	0.700	-

USEFUL CONVERSIONS

Imperial to Metric

From	To	Multiply by
Inches	Millimetres	25.400
Feet	Metres	0.3048
Square Inches	Square Centimetres	6.4516
Square Feet	Square Metres	0.0929
Pounds	Kilograms	0.4536
Pounds per foot	Kilograms Per Metre	1.4882
Tons per Sq. Inch	Kilograms per Sq. mm	1.5749
Tons per Sq. Inch	Newtons Per Sq. mm	15.444
Pounds per Sq. Inch	Newtons Per Sq. mm	0.00689

Metric to Imperial

From	To	Multiply by
Millimetres	Inches	0.03937
Metres	Feet	3.2808
Square Centimetres	Square Inches	0.1550
Square Metres	Square Feet	10.764
Kilograms	Pounds	2.2046
Kilograms Per Metre	Pounds per foot	0.6720
Kilograms per Sq. mm	Tons per Sq. Inch	0.6350
Newtons Per Sq. mm	Tons per Sq. Inch	0.06475
Newtons Per Sq. mm	Pounds per Sq. Inch	145.138

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