









LINEAR DIMENSIONS TOLERANCES

Dim. Range (mm)	Tolerance grade		
	D1	D2	D3
	General dimensions	Some functional dimensions	Agreed dimensions
0 up to 6	±0.15	±0.12	±0.10
6 up to 10	±0.18	±0.14	±0.11
10 up to 18	±0.22	±0.17	±0.14
18 up to 30	±0.26	±0.20	±0.17
30 up to 50	±0.40	±0.31	±0.25
50 up to 80	±0.45	±0.37	±0.30
80 up to 120	±0.55	±0.44	±0.35
120 up to 180	±0.80	±0.65	±0.5
180 up to 250	±1.20	±0.95	±0.75
250 up to 315	±1.30	±1.10	±0.8
315 up to 400	±1.80	±1.40	
400 up to 500	±2.00	±1.60	
500 up to 630	±2.70	±2.20	
630 up to 800	±3.10	±2.50	
800 up to 1000	±3.60		

GEOMETRIC TOLERANCES (flatness , parallelism, straightness)

Length (mm)	Tolerance grade		
	D1	D2	D3
	General dimensions	Some functional dimensions	Agreed dimensions
0 up to 25	0.15	0.10	0.10
25 up to 50	0.25	0.20	0.15
over 50	0.60% of the length	0.40% of the length	0.30% of the length

OTHER GEOMETRIC TOLERANCES

Type	Dimension (mm)	Symbol
Circularity	± 0.10 per 20mm	
Cylindricity	± 0.10 per 20mm	
Profile accuracy	± 0.15 per 20mm	
Profile accuracy	± 0.10 per 20mm	
Angular accuracy	$\pm 30'$	
Position accuracy	± 0.10 per 20mm	
Concentricity	0.20 per 20mm	
Symmetry	± 0.15 per 20mm	
Run-out	± 0.10 per 20mm	