

**TABLE II-3
TOLERANCES, SINTERED ALNICO MAGNETS**

	Dimensions		Tolerances	
	(Inches)	(Millimeters)	(Inches)	(Millimeters)
Size: Unfinished surfaces: (including draft)	0 to 0.125 over 0.125 to 0.625 over 0.625 to 1.25	0 to 3.2 3.2 to 16 16 to 32	±0.005 ±0.010 ±0.015	±0.1 ±0.2 ±0.4
Finished surfaces: Plane ground Center or centerless ground:	0 to 1.5 over 1.5	any 0 to 38 over 38	±0.005 ±0.002 ±0.005	±0.1 ±0.05 ±0.1
Parallelism: Finished parallel surfaces			½ total tolerance between surfaces	
Angles, including squareness: Between two unfinished surfaces			± 1°*	
Between one finished & one unfinished surface			± 1°*	
Between two finished surfaces			±0.005 (±0.1) from true angle as measured on the shorter of the two surfaces in question or ± ½°, whichever is greater	
Concentricity between inside and outside surfaces: Unfinished surfaces	0 to 0.5 OD over 0.5 to 1 OD over 1 to 1.5 OD	0 to 13 13 to 25 25 to 38	0.005 TIR 0.010 TIR 0.015 TIR	0.1 TIR 0.2 TIR 0.4 TIR
Finished surfaces		any	0.003 TIR	0.8 TIR
Surface roughness: Unfinished surfaces			No surface roughness specification	
Finished surfaces			63 microinches (1.6 µm) over at least 95% of the surface	

*Tolerances may be greater for special shapes