

Radial Lip Oil Seals Groove Dimensions & Tolerances



Seal O.D. Tolerance- Metric

Bore Diameter	Press-fit Allowance		Permissible Eccentricity
	Metal Case	Rubber Covered Case	
Up to 50 mm	+0.10 - +0.20	+0.15 - +0.30	0.250
Over 50 to 80 mm	+0.13- +0.23	+0.20- +0.35	0.350
Over 80 to 120 mm	+0.15- +0.25	+0.20- +0.35	0.500
Over 120 to 180 mm	+0.18- +0.28	+0.25- +0.45	0.650
Over 180 to 300 mm	+0.20- +0.30	+0.25- +0.45	0.800
Over 300 to 500 mm	+0.23- +0.35	+0.30- +0.55	1.000

Housing & Shaft Tolerance- Metric

Bore Diameter (mm)	House Tolerance		Shaft Tolerance	
	Bore Tolerance	Shaft Diameter	Tolerance in (mm)	
Over 6 to 10	+0.022/-0.000	Over 3 to 6	0/-0.075	
Over 10 to 18	+0.027/-0.000	Over 6 to 10	0/-0.090	
Over 18 to 30	+0.033/-0.000	Over 10 to 18	0/-0.110	
Over 30 to 50	+0.039/-0.000	Over 18 to 30	0/-0.130	
Over 50 to 80	+0.046/-0.000	Over 30 to 50	0/-0.160	
Over 80 to 120	+0.054/-0.000	Over 50 to 80	0/-0.190	
Over 120 to 180	+0.063/-0.000	Over 80 to 120	0/-0.220	
Over 180 to 250	+0.072/-0.000	Over 120 to 180	0/-0.250	
Over 250 to 315	+0.081/-0.000	Over 180 to 250	0/-0.290	
Over 315 to 400	+0.089/-0.000	Over 250 to 315	0/-0.320	
Over 400 to 500	+0.097/-0.000	Over 315 to 400	0/-0.360	

Housing Tolerances- Inch

Up to and including 4.000	+/-0.003
4.001 to 6.000	+/-0.004
6.001 to 10.000	+/-0.005
10.0001 and larger	+/-0.006

Seal O.D. Tolerance- Inch

Bore Diameter	Press-fit Allowance		Bore Tolerance	
	Metal Case	Rubber Case	Metal Case	Rubber Case
Up to 1.000	+0.004	+0.006	+/-0.002	+/-0.003
1.001 to 2.000	+0.004	+0.007	+/-0.002	+/-0.003
2.001 to 3.000	+0.004	+0.008	+/-0.002	+/-0.003
3.001 to 4.000	+0.005	+0.010	+/-0.002	+/-0.004
4.001 to 6.000	+0.005	+0.010	+0.003/-0.002	+/-0.004
6.001 to 8.000	+0.006	+0.010	+0.003/-0.002	+/-0.004
8.001 to 10.000	+0.008	+0.010	+0.004/-0.002	+/-0.004
10.001 to 20.000	+0.008	+0.010	+0.006/-0.002	+/-0.004
20.001 to 40.000	+0.008	+0.010	+0.008/-0.002	+/-0.004

Seal & Design
Able Division

5533 Steeles Avenue West Unit 11
Toronto, Ontario M9L 1S7
Ph: (416) 741-0750
Gasket@AbleSealAndDesign.com

Seal & Design
Corporate Headquarters

4015 Casilio Parkway
Clarence, NY 14031
Ph: (716) 759-2222
Info@SealAndDesign.com
www.SealAndDesign.com

Seal & Design
Higbee Division

6741 Thompson Rd N
Syracuse, NY 13221
Ph: (315) 432-8021
Sales@Higbee-Inc.com