



## **Radial Lip Oil Seals- Groove Dimensions**

Seal O.D. Tolerance- Metric							
Press-fit Allowance							
Bore Diameter	Metal Case	Rubber Covered Case	Permissible Eccentricity				
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							
House Tolerance		Shaft Tolerance					
Bore Diameter (mm)	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	+0.033/-0.000 Over 10 to 18					
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

	Press-fit Allowance		Bore Tolerance	
<b>Bore Diameter</b>	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