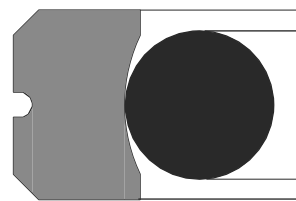


SHREENATHJI & CO.

SEALS FOR HYDRAULICS & PNEUMATICS

ROTARY SEAL

ROP001



Features:

Rotary piston seal profile ROP001 consists of two piece seal set for sealing bore with one seal ring and one energizer O-ring.

Composition:

SEAL PROFILE		ROR002-N	ROR002-F
Seal ring	Material	PTFE+ Bronze +MoS2	PTFE+ Bronze +MoS2
	Code	TB40M	TB40M
O Ring	Material	Nitrile Butadiene rubber (NBR)	Fluoro Carbon Rubber (FPM)
	Code	NBR70	FPM80

Properties:

- 1 Low friction, free of stick slip
- 1 High abrasion resistance
- 1 Wide temperature Range
- 1 Good thermal conductivity
- 1 Low wear and high extrusion resistance
- 1 Wide fluid application range
- 1 Resistance against cold flow
- 1 Minimum installation space required

Application:

- Ø Rotary joints
- Ø Mobile Hydraulics
- Ø Machine tools
- Ø Material Handling Equipments
- Ø Control and regulating apparatus

General Technical Data :

Seal Profile	ROP001-N	ROP001-F
Temperature range	-20°C to +100°C	-20 °C to +200 °C
Working Pressure(max.)	400 bar	400 bar
Surface Speed	4 m/s	4 m/s

Surface finish:

Roughness depth	R(max)	Ra
Sliding surface	£ 2.5 µm	0.05-0.3 µm
Bottom of groove	£ 6.3 µm	£ 1.6 µm
Side of groove	£ 15 µm	£ 3µm

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Extrusion Gap dimension:

The gap dimension on the non-pressurised side of the seal is decisive for sealing function. Figures show the maximum permissible gap all on one side using the minimum clearance Ø and max bore Ø.

Profile dimension	Maximum permissible gap (S)			
H	160 bar	260 bar	320 bar	400 bar
2,2	0,35	0,3	-	-
3,2	0,4	0,35	-	-
4,2	0,5	0,4	0,3	-
6,3	0,6	0,5	0,45	0,45
8,1	0,7	0,6	0,55	0,5

Installation:

ROP001 rotary piston seals can be fitted on single-piece pistons. First insert the rubber 'O' Ring into the housing carefully to avoid twisting of O Ring Chord. The PTFE ring is then carefully pushed over the piston into place above the O Ring. An assembly tool eases installation of small, PTFE rings. The PTFE seal normally returns to its original size after installation. In some cases where the lead-in chamfer on the piston is inadequate, it is advisable to calibrate the PTFE ring by mounting it on a steel tube (duly machined and polished), having outer diameter equal to piston outer diameter. Immediately after calibration, the seal should be installed over the piston.

Ordering format:

Please mention SHREENATHJI order code in your order. Example: Size 16 X 11.1 X 2.2

For Temp range: -20°C to +100°C. (O ring material is NBR70) Order code is ROP001-N-0160-0111-022

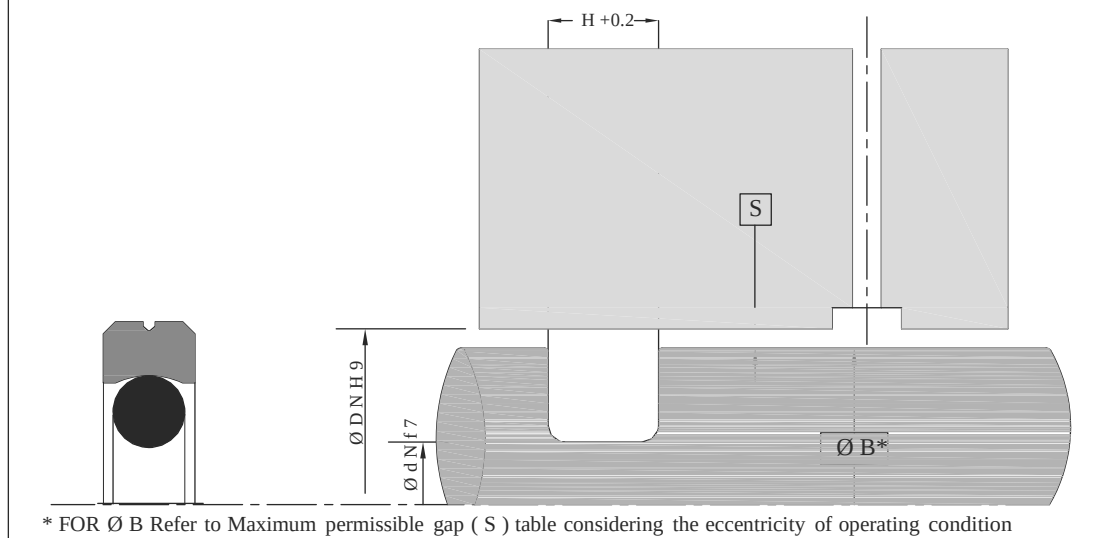
For Temp range: -20°C to +200°C. (O ring material is FPM80) Order code is ROP001-F-0160-0111-022

We have given all metric(mm) sizes here. For Imperial (inch) sizes please contact SHREENATHJI at info@shreenathjiandco.com

SHREENATHJI & CO.

SEALS FOR HYDRAULICS & PNEUMATICS

HOUSING DESIGN ROP001



OUR STANDARD SIZE LIST

ØDN	TOL. (H9)	ØdN	TOL. (f7)	H(+0.2)	O RING SIZE	ORDER CODE For temp. range -20°C to +100°C use ROP001-N -10°C to +200°C use ROP001-F
16.00	+0.000 +0.043	11.10	-0.016 -0.034	2.2	10.82 X 1.78	ROP001-N / F-0160-0111-022
20.00	+0.000 +0.052	15.10	-0.020 -0.041	2.2	14.00 X 1.78	ROP001-N / F-0200-0151-022
25.00	+0.000 +0.052	20.10	-0.020 -0.041	2.2	18.77 X 1.78	ROP001-N / F-0250-0201-022
32.00	+0.000 +0.062	27.10	-0.025 -0.050	2.2	26.70 X 1.78	ROP001-N / F-0320-0271-022
40.00	+0.000 +0.062	32.50	-0.025 -0.050	3.2	31.42 X 2.62	ROP001-N / F-0400-0325-032
50.00	+0.000 +0.062	42.50	-0.025 -0.050	3.2	40.94 X 2.62	ROP001-N / F-0500-0425-042
63.00	+0.000 +0.074	55.50	-0.030 -0.060	3.2	53.64 X 2.62	ROP001-N / F-0630-0555-032
80.00	+0.000 +0.074	69.00	-0.030 -0.060	4.2	66.27 X 3.53	ROP001-N / F-0800-0690-042
100.00	+0.000 +0.087	89.00	-0.036 -0.071	4.2	85.32 X 3.53	ROP001-N / F-1000-0890-042
125.00	+0.000 +0.100	114.00	-0.043 -0.083	4.2	110.72 X 3.53	ROP001-N / F-1250-1140-042
160.00	+0.000 +0.100	144.50	-0.043 -0.083	6.3	142.24 X 5.33	ROP001-N / F-1600-1445-063
200.00	+0.000 +0.115	184.50	-0.050 -0.096	6.3	183.52 X 5.33	ROP001-N / F-2000-1845-063
250.00	+0.000 +0.115	234.5	-0.050 -0.096	6.3	234.32 X 5.33	ROP001-N / F-2500-2345-063