

SHREENATHJI & CO.

SEALS FOR HYDRAULICS & PNEUMATICS

**WEAR /
GUIDE RING**

WRPBRG



Features:

Guide ring WRPBRG is a PTFE+ Bronze strip available in long length and cut to the size.

Composition:

Material	PTFE+ Bronze compound	PTFE+ Bronze compound
Code	TB40(Green Colour)	TB40M(Dark Brown)

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** chamfered profile edges prevent pressing of edge in the corner radii of the housing groove

Application:

- Ø Mobile Hydraulics
- Ø Injection molding machines
- Ø Machine tools
- Ø Material Handling Equipments
- Ø Control and regulating apparatus

General Technical Data:

Maximum speed	5 m/s
Load bearing capacity	15 N/mm ² at 20 °C
	10 N/mm ² at 60 °C
	5 N/mm ² at 120 °C
	(permitted specific surface pressing*)

* The permissible load of the guide strip is calculated from the projected area multiplied by the permissible specific surface pressing. The non linear contact pressure distribution, produces by the load with relation to temperature and tolerances, is taken into account in the value of the permissible load.

The material is compatible with hydraulic mineral oil, lubricating oil, water based and synthetic fire resistant fluids and lubricating grease. Although the material is rated at 200°C, the recommended maximum temperature for bearing application is 60°C.

SHREENATHJI & CO.

SEALS FOR HYDRAULICS & PNEUMATICS

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

Gap dimension:

The radial clearance S min controls the minimum metal to metal clearance between the gland and rod or bore and piston. S max control the maximum extrusion gap seen by a seal associated with the guide ring. The radial clearance S and the given tolerances are guidelines. Use of the guide and tolerances are to be designed in accordance with the used seal. The radial clearance S given in the table of dimensions is to be seen exclusively as reference to the guide ring. The corresponding diameter of the seal housing is to be adjusted to the sealing component. The cut gap Z arising after fitting is necessary due to thermal expansion.

Determination of the stretched length L2 of guide strip:

The stretched length is the circumferential length of the centre line of the strip when installed.

Calculation of stretched length $L2 = \pi \times (\varnothing DN - T) - Z$

Guide strip tolerances:

Width L (mm)	Thickness T (mm)
- 0.1 to - 0.6	- 0.02 to - 0.06

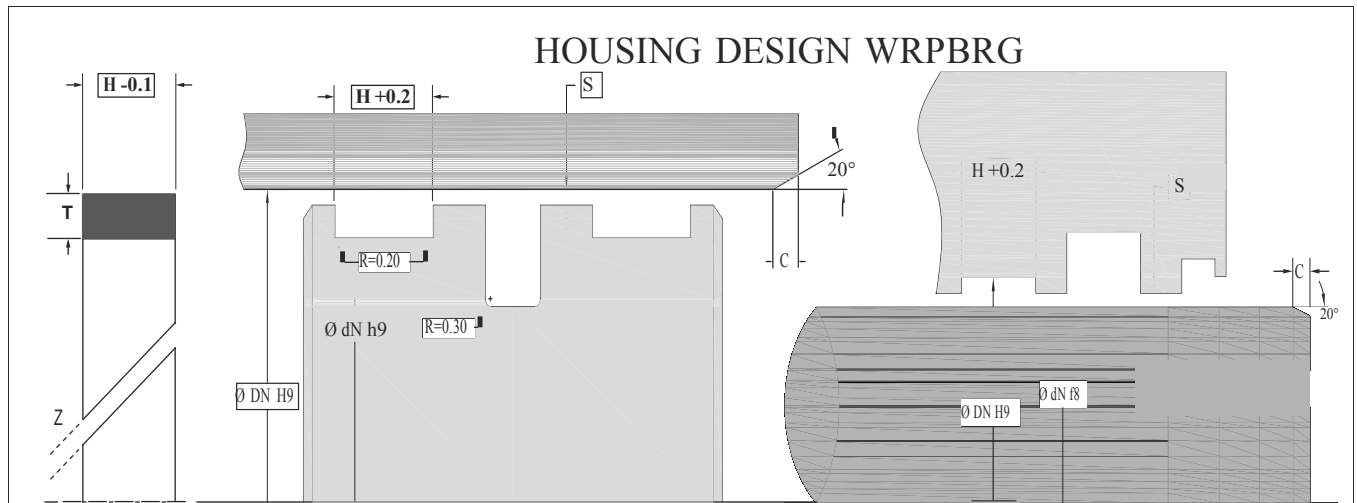
Installation:

Fitting is prerequisite for perfect functioning of the guide ring.

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



OUR STANDARD SIZE LIST

CROSS SECTION (H X T)(MM)	USE UP TO DIA RANGE (MM) ØDN H9	GROOVE DIA(MM) Ødn h8	GROOVE WIDTH(MM) H +0.2	S (Max.)	CUT GAP Z(min)	STD.ROLL LENGTH (MTR.)	ORDER CODE
5.00 X 1.60	10-40	ØDN-3.20	5.00	0.25	0.8-2.0	15	PB040-0500-160
5.60 X 2.50	20-140	ØDN-5.00	5.60	0.40	1.0-3.0	10	PB040-0560-250
6.00 X 2.00	20-60	ØDN-4.00	6.00	0.30	1.0-2.0	12	PB040-0600-200
6.00 X 2.50	25-140	ØDN-5.00	6.00	0.40	1.0-3.0	10	PB040-0600-250
6.00 X 4.00	70-200	ØDN-8.00	6.00	0.50	2.0-3.5	6	PB040-0600-400
6.00 X 4.50	100-200	ØDN-9.00	6.00	0.50	2.5-4.0	5	PB040-0600-450
8.00 X 2.00	25-80	ØDN-4.00	8.00	0.30	1.0-3.0	12	PB040-0800-200
8.00 X 2.50	30-160	ØDN-5.00	8.00	0.40	1.0-3.0	10	PB040-0800-250
8.00 X 4.00	100-400	ØDN-8.00	8.00	0.50	2.0-4.0	6	PB040-0800-400
9.50 X 3.17	60-160	ØDN-6.35	9.50	0.40	2.0-3.5	8	PB040-0950-317
9.50 X 4.00	120-500	ØDN-8.00	9.50	0.50	2.0-4.0	6	PB040-0950-400
9.70 X 2.50	40-160	ØDN-5.00	9.70	0.40	2.0-3.5	10	PB040-0970-250
10.00 X 2.00	40-100	ØDN-4.00	10.00	0.30	2.0-3.5	12	PB040-1000-200
12.50 X 2.50	50-180	ØDN-5.00	12.50	0.40	2.0-3.5	10	PB040-1250-250
12.70 X 3.17	50-200	ØDN-6.35	12.70	0.50	2.0-3.5	8	PB040-1270-317
14.80 X 2.50	60-200	ØDN-5.00	14.80	0.40	2.0-3.5	10	PB040-1480-250
15.00 X 2.50	60-200	ØDN-5.00	15.00	0.40	2.0-3.5	10	PB040-1500-250
15.00 X 4.00	160-900	ØDN-8.00	15.00	0.50	3.0-5.0	6	PB040-1500-400
15.85 X 3.17	60-250	ØDN-6.35	15.85	0.50	2.0-4.0	8	PB040-1585-317
19.05 X 3.17	80-380	ØDN-6.35	19.05	0.50	2.0-4.0	8	PB040-1905-317
20.00 X 2.00	50-180	ØDN-4.00	20.00	0.30	2.0-3.5	12	PB040-2000-200
20.00 X 2.50	80-300	ØDN-5.00	20.00	0.40	2.0-3.5	10	PB040-2000-250
20.00 X 3.20	100-400	ØDN-6.40	20.00	0.50	2.0-4.0	8	PB040-2000-320
25.00 X 2.50	100-400	ØDN-5.00	25.00	0.40	3.0-5.0	10	PB040-2500-250
25.40 X 3.17	100-400	ØDN-6.35	25.40	0.50	3.0-5.0	8	PB040-2540-317
30.00 X 2.00	100-225	ØDN-4.00	30.00	0.30	3.0-5.0	12	PB040-3000-200
30.00 X 2.50	100-400	ØDN-5.00	30.00	0.40	3.0-6.0	10	PB040-3000-250