

## ROD SEAL

## RS099



### Features:

Rod seal profile RS099 consists of two piece seal set for sealing rod with one seal ring and one energizer Square / Rectangular ring.

### Composition:

SEAL COMBINATION	SEAL RING COMPOUND	SQUARE ENERGIZER	TEMP. RANGE	WORKING PRESSURE (Max.)	SURFACE SPEED (Max.)
RS099-01	PT02	NB03	-35 to 100°C	400 Bar	4 m/s

For compound detail please refer Royal seal compounds. (Section - III)

### Properties:

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

### Application:

- Mobile Hydraulics
- Injection moulding machines
- Machine tools
- Material Handling Equipments.

### Extrusion gap dimension :

The gap dimension on the non-pressurised side of the seal is decisive for sealing function. Figures show the maximum radial clearance on each side using maximum gland bush groove inner dia and minimum rod dia considering respective tolerances.

Profile dimension	Maximum permissible gap (S) for Imperial Sizes (inch)			
	160 bar	260 bar	320 bar	400 bar
H				
0.140	0.008	0.007	-	-
0.220	0.010	0.008	0.006	-
0.250	0.012	0.010	0.009	0.008
0.320	0.014	0.012	0.011	0.010



### Minimum chamfer C:

Imperial Sizes (inch)						
DN - dN	Up to 0.314	0.315 to 0.393	0.394 to 0.590	0.591 to 0.787	0.788 to 0.984	0.985 and above
C	0.157	0.177	0.236	0.295	0.315	0.393

### Installation :

RS099 is very easy to fit. Insert the Square / Rectangular ring. first and then turn the PTFE part in kidney shape and insert in the groove. Gauge the seal by a taper rod type fixture. Careful fitting of the seal is a pre-requisite for it's perfect functioning.

### Ordering format :

Please Follow ROYAL order code to place your order.

Example: for Imperial Size 1.250"X 1.783"X 0.140" Order Code is **RS099-I-01-01.250 X 01.783 X 0.140**

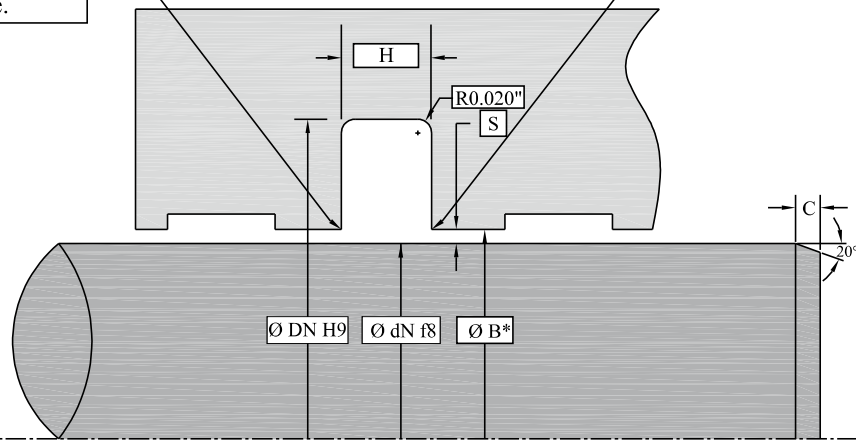


**ROYAL**

SEALS FOR HYDRAULICS & PNEUMATICS

All edges should be smooth and burr free.

**HOUSING DESIGN RS099**



\* FOR Ø B Refer to Maximum permissible gap ( S ) table considering the eccentricity of operating condition

**ROYAL STANDARD SIZE LIST**

**IMPERIAL SIZE**

ØdN (h9)	ØDN (H9)	H (+0.008")	ORDER CODE
1.250	1.783	0.140	RS099-I-01-01.250 X 01.783 X 0.140
1.500	2.033	0.140	RS099-I-01-01.500 X 02.033 X 0.140
1.625	2.158	0.140	RS099-I-01-01.625 X 02.158 X 0.140
1.750	2.283	0.140	RS099-I-01-01.750 X 02.283 X 0.140
1.875	2.252	0.140	RS099-I-01-01.875 X 02.252 X 0.140
2.000	2.533	0.140	RS099-I-01-02.000 X 02.533 X 0.140
2.125	2.627	0.140	RS099-I-01-02.125 X 02.627 X 0.140
2.250	2.891	0.220	RS099-I-01-02.250 X 02.891 X 0.220
2.375	3.016	0.220	RS099-I-01-02.375 X 03.016 X 0.220
2.500	3.141	0.220	RS099-I-01-02.500 X 03.141 X 0.220
2.625	3.266	0.220	RS099-I-01-02.625 X 03.266 X 0.220
2.750	3.391	0.220	RS099-I-01-02.750 X 03.391 X 0.220
3.000	3.641	0.220	RS099-I-01-03.000 X 03.641 X 0.220
3.250	3.891	0.220	RS099-I-01-03.250 X 03.891 X 0.220
3.500	4.141	0.220	RS099-I-01-03.500 X 04.141 X 0.220
3.750	4.391	0.220	RS099-I-01-03.750 X 04.391 X 0.220
4.000	4.641	0.220	RS099-I-01-04.000 X 04.641 X 0.220
4.250	5.225	0.250	RS099-I-01-04.250 X 05.225 X 0.250
4.500	5.475	0.250	RS099-I-01-04.500 X 05.475 X 0.250
4.750	5.725	0.250	RS099-I-01-04.750 X 05.725 X 0.250
5.000	5.960	0.250	RS099-I-01-05.000 X 05.960 X 0.250
5.250	6.210	0.250	RS099-I-01-05.250 X 06.210 X 0.250
5.500	6.116	0.250	RS099-I-01-05.500 X 06.116 X 0.250
5.750	6.725	0.250	RS099-I-01-05.750 X 06.725 X 0.250
6.000	6.619	0.250	RS099-I-01-06.000 X 06.619 X 0.250
6.500	7.502	0.250	RS099-I-01-06.500 X 07.502 X 0.250
6.750	7.695	0.250	RS099-I-01-06.750 X 07.695 X 0.250
7.000	7.945	0.250	RS099-I-01-07.000 X 07.945 X 0.250

