

ROD SEAL

RS171



Features:

Rod seal profile RS171 is a single acting U cup type seal with additional rib commonly in use.

Composition:

SEAL COMBINATION	SEAL RING COMPOUND	TEMP. RANGE	WORKING PRESSURE (Max.)	SURFACE SPEED (Max.)
RS171-01	PU11	-40 to 110°C	400 Bar*	0.5 m/s

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

* Maximum working pressure can be extended up to 400 bar with the use of a back up ring. If this option is required ask ROYAL.

Properties:

- High resistance to abrasion
- Easy installation
- Additional rib prevents ingress of dirt to a large degree

Application:

- Mobile Hydraulics
- Injection molding machines
- Machine tools
- Agricultural equipment
- Standard cylinders

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



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.

Maximum permissible gap (S) for Metric Sizes (mm)			
160 bar	260 bar	320 bar	400 bar
0.15	0.10	0.17	(ask ROYAL)

Minimum chamfer C:

Metric Sizes (mm)						
DN - dN	Up to 8	8.1 to 10	10.1 to 15	15.1 to 20	20.1 to 25	25.1 and above
C	4.0	4.5	6.0	7.5	8.0	10.0

Fitting:

RS171 is very easy to fit. Careful fitting of the seal is a prerequisite for its perfect functioning.

Ordering format:

Please mention ROYAL order code in your order.

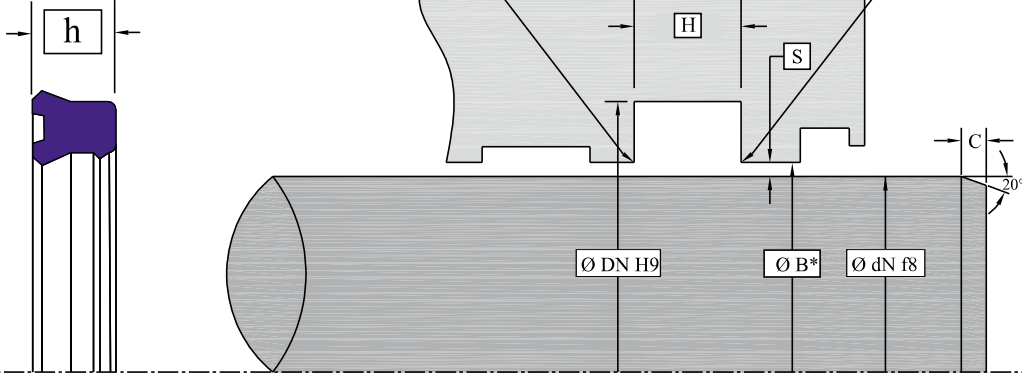
Example: Metric Size 28.00 X 36.00 X 7.20 X 8.00

Order code is **RS171-M-01-028.00 X 036.00 X 07.2/08.0**



All edges should be smooth and burr free.

HOUSING DESIGN RS171



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

ROYAL STANDARD SIZE LIST

dN (f8)	DN (H9)	h	H (+0.20)		PRODUCT CODE
28.00	36.00	7.20	8.00		RS171-M-01-028.00 X 036.00 X 07.2/08.0
30.00	38.00	5.80	6.50		RS171-M-01-030.00 X 038.00 X 05.8/06.5
40.00	48.00	5.70	6.30		RS171-M-01-040.00 X 048.00 X 05.7/06.3
45.00	55.00	7.20	8.00		RS171-M-01-045.00 X 055.00 X 07.2/08.0
50.00	58.00	8.00	9.00		RS171-M-01-050.00 X 058.00 X 08.0/09.0
55.00	63.00	8.00	9.00		RS171-M-01-055.00 X 063.00 X 08.0/09.0
60.00	68.00	8.00	9.00		RS171-M-01-060.00 X 068.00 X 08.0/09.0
60.00	68.00	7.20	8.00		RS171-M-01-060.00 X 068.00 X 07.2/08.0
70.00	78.00	8.00	9.00		RS171-M-01-070.00 X 078.00 X 08.0/09.0
79.00	87.70	7.20	8.00		RS171-M-01-079.00 X 087.70 X 07.2/08.0
90.00	98.00	6.30	7.00		RS171-M-01-090.00 X 098.00 X 06.3/07.0
105.00	113.00	6.30	7.00		RS171-M-01-105.00 X 113.00 X 06.3/07.0