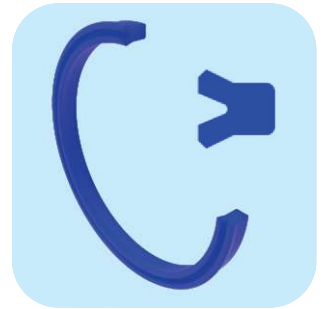


SYMMETRIC SEAL

SS002



Features :

SS002 is a single acting U cup type seal used for both piston and rod seal.

Composition:

SEAL COMBINATION	SEAL RING COMPOUND	TEMP. RANGE	WORKING PRESSURE (Max.)	SURFACE SPEED (Max.)
SS002-01	PU01	-40 to 100°C	400 Bar	0.5 m/s

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

Properties:

- High resistance to abrasion
- Easy installation
- Used as piston seal & rod seal

Application:

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

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 the minimum piston OD and max bore Ø considering respective tolerances as well as maximum gland bush groove inner dia and minimum rod dia considering respective tolerances.

Maximum permissible gap dimension (s) for Metric sizes (mm)			
160 bar	260 bar	320 bar	400 bar
0.2	0.2	0.15	Ask ROYAL

Maximum permissible gap dimension (s) for Imperial sizes (inch)			
160 bar	260 bar	320 bar	400 bar
0.008	0.008	0.006	Ask ROYAL



Minimum chamfer C for :

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

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

Fitting:

SS002 is very easy to fit. Careful fitting of the seal is a prerequisite for its perfect function.

Ordering format:

Please mention ROYAL order code in your order.

Example: for Metric Size 16 X 22 X 5/6

Order code is **SS002-M-01-016.00 X 022.00 X 05.0/06.0**

Example: for Imperial Size 1.25" X 0 1.625" X 0.313"/ 0.343"

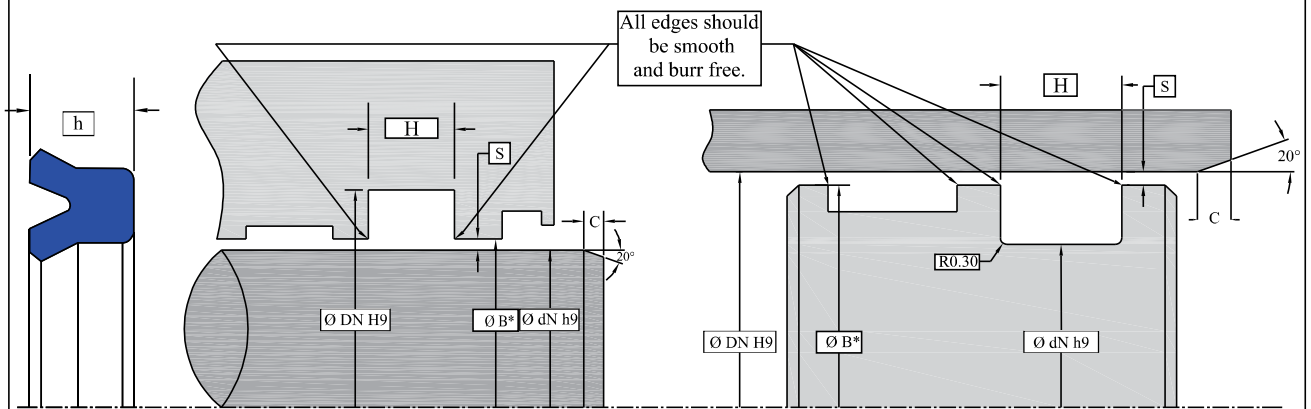
Order code is **SS002-I-01-01.250 X 01.625 X 0.313/0.343**



ROYAL

SEALS FOR HYDRAULICS & PNEUMATICS

SS002 FOR ROD AND PISTON APPLICATION



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

ROYAL STANDARD SIZE LIST

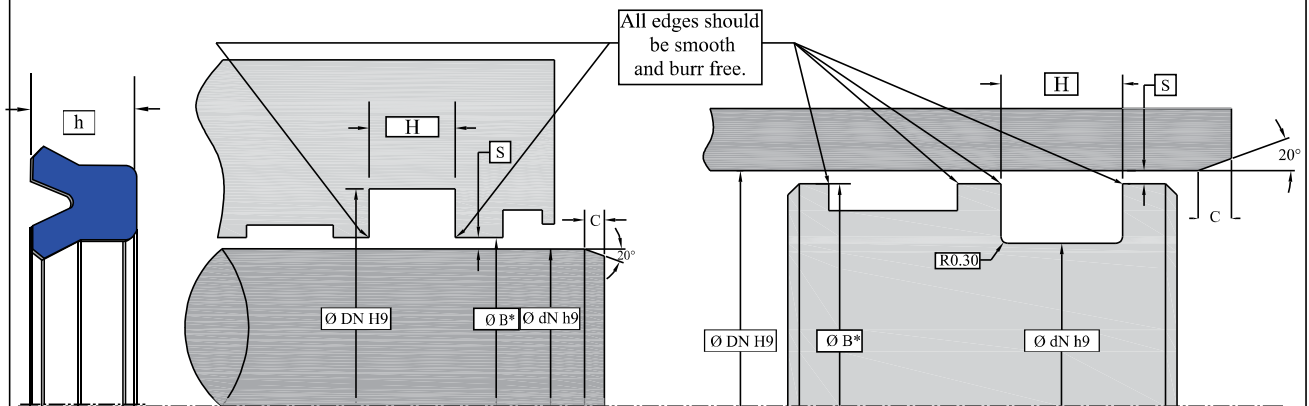
dN (f8)	DN (H9)	h	H (+0.20)	ORDER CODE
16.00	22.00	5.00	6.00	SS002-M-01-016.00 X 022.00 X 05.0/06.0
18.00	24.00	8.00	9.00	SS002-M-01-018.00 X 024.00 X 08.0/09.0
20.00	28.00	5.00	5.50	SS002-M-01-020.00 X 028.00 X 05.0/05.5
20.00	30.00	6.00	7.00	SS002-M-01-020.00 X 030.00 X 06.0/07.0
25.00	33.00	5.00	5.50	SS002-M-01-025.00 X 033.00 X 05.0/05.5
25.00	35.00	6.00	7.00	SS002-M-01-025.00 X 035.00 X 06.0/07.0
30.00	40.00	6.00	7.00	SS002-M-01-030.00 X 040.00 X 06.0/07.0
31.50	41.50	6.00	7.00	SS002-M-01-031.50 X 041.50 X 06.0/07.0
35.00	45.00	6.00	7.00	SS002-M-01-035.00 X 045.00 X 06.0/07.0
35.00	55.00	10.00	11.00	SS002-M-01-035.00 X 055.00 X 10.0/11.0
36.00	44.00	6.00	6.50	SS002-M-01-036.00 X 044.00 X 06.0/06.5
38.00	50.00	9.00	10.00	SS002-M-01-038.00 X 050.00 X 09.0/10.0
40.00	50.00	6.00	7.00	SS002-M-01-040.00 X 050.00 X 06.0/07.0
45.00	55.00	6.00	7.00	SS002-M-01-045.00 X 055.00 X 06.0/07.0
50.00	60.00	6.00	7.00	SS002-M-01-050.00 X 060.00 X 06.0/07.0
53.00	63.00	6.00	7.00	SS002-M-01-053.00 X 063.00 X 06.0/07.0
53.00	63.00	6.30	7.00	SS002-M-01-053.00 X 063.00 X 06.3/07.0
55.00	63.00	5.00	5.50	SS002-M-01-055.00 X 063.00 X 05.0/05.5
55.00	65.00	6.00	7.00	SS002-M-01-055.00 X 065.00 X 06.0/07.0
56.00	66.00	6.00	7.00	SS002-M-01-056.00 X 066.00 X 06.0/07.0
60.00	70.00	6.00	7.00	SS002-M-01-060.00 X 070.00 X 06.0/07.0
65.00	75.00	6.00	7.00	SS002-M-01-065.00 X 075.00 X 06.0/07.0
65.00	80.00	7.30	8.00	SS002-M-01-065.00 X 080.00 X 07.3/08.0
70.00	80.00	6.00	7.00	SS002-M-01-070.00 X 080.00 X 06.0/07.0
70.00	80.00	8.00	8.80	SS002-M-01-070.00 X 080.00 X 08.0/08.8
105.00	130.00	12.00	13.00	SS002-M-01-105.00 X 130.00 X 12.0/13.0
110.00	125.00	11.00	12.00	SS002-M-01-110.00 X 125.00 X 11.0/12.0
115.00	130.00	11.00	12.00	SS002-M-01-115.00 X 130.00 X 11.0/12.0
125.00	140.00	12.00	13.00	SS002-M-01-125.00 X 140.00 X 12.0/13.0
145.00	160.00	8.00	9.00	SS002-M-01-145.00 X 160.00 X 08.0/09.0
180.00	205.00	19.00	21.00	SS002-M-01-180.00 X 205.00 X 19.0/21.0



ROYAL

SEALS FOR HYDRAULICS & PNEUMATICS

SS002 FOR ROD AND PISTON APPLICATION



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

ROYAL STANDARD SIZE LIST

IMPERIAL SIZES

dN (f8)	DN (H9)	h	H (+0.008")	ORDER CODE
0.694	0.876	0.125	0.140	SS002-I-01-00.694 X 00.876 X 0.125/0.140
1.250	1.625	0.313	0.343	SS002-I-01-01.250 X 01.625 X 0.313/0.343
1.250	1.625	0.375	0.413	SS002-I-01-01.250 X 01.625 X 0.375/0.413
1.250	1.750	0.375	0.413	SS002-I-01-01.250 X 01.750 X 0.375/0.413
1.375	1.625	0.250	0.275	SS002-I-01-01.375 X 01.625 X 0.250/0.275
1.375	1.875	0.375	0.413	SS002-I-01-01.375 X 01.875 X 0.375/0.413
1.500	1.875	0.375	0.413	SS002-I-01-01.500 X 01.875 X 0.375/0.413
1.500	2.000	0.250	0.281	SS002-I-01-01.500 X 02.000 X 0.250/0.281
1.500	2.000	0.375	0.413	SS002-I-01-01.500 X 02.000 X 0.375/0.413
1.625	2.125	0.375	0.413	SS002-I-01-01.625 X 02.125 X 0.375/0.413
1.750	2.125	0.375	0.413	SS002-I-01-01.750 X 02.125 X 0.375/0.413
1.750	2.250	0.375	0.413	SS002-I-01-01.750 X 02.250 X 0.375/0.413
1.750	2.375	0.375	0.413	SS002-I-01-01.750 X 02.375 X 0.375/0.413
2.000	2.375	0.375	0.413	SS002-I-01-02.000 X 02.375 X 0.375/0.413
2.000	2.500	0.500	0.550	SS002-I-01-02.000 X 02.500 X 0.500/0.550
2.000	2.625	0.375	0.413	SS002-I-01-02.000 X 02.625 X 0.375/0.413
2.000	2.625	0.500	0.550	SS002-I-01-02.000 X 02.625 X 0.500/0.550
2.250	2.750	0.375	0.413	SS002-I-01-02.250 X 02.750 X 0.375/0.413
2.375	3.125	0.375	0.413	SS002-I-01-02.375 X 03.125 X 0.375/0.413
2.500	2.875	0.375	0.413	SS002-I-01-02.500 X 02.875 X 0.375/0.413
2.500	3.000	0.250	0.288	SS002-I-01-02.500 X 03.000 X 0.250/0.288
2.500	3.250	0.375	0.413	SS002-I-01-02.500 X 03.250 X 0.375/0.413
2.500	3.250	0.500	0.550	SS002-I-01-02.500 X 03.250 X 0.500/0.550
2.625	3.000	0.375	0.413	SS002-I-01-02.625 X 03.000 X 0.375/0.413
2.750	3.125	0.375	0.413	SS002-I-01-02.750 X 03.125 X 0.375/0.413
2.750	3.250	0.375	0.413	SS002-I-01-02.750 X 03.250 X 0.375/0.413
2.750	3.375	0.500	0.550	SS002-I-01-02.750 X 03.375 X 0.500/0.550
2.750	3.500	0.375	0.413	SS002-I-01-02.750 X 03.500 X 0.375/0.413
2.750	3.500	0.500	0.550	SS002-I-01-02.750 X 03.500 X 0.500/0.550



SEALS FOR HYDRAULICS & PNEUMATICS

ROYAL STANDARD SIZE LIST

dN (f8)	DN (H9)	h	H (+0.008")	ORDER CODE
3.000	3.375	0.375	0.413	SS002-I-01-03.000 X 03.375 X 0.375/0.413
3.000	3.500	0.375	0.413	SS002-I-01-03.000 X 03.500 X 0.375/0.413
3.000	3.625	0.375	0.413	SS002-I-01-03.000 X 03.625 X 0.375/0.413
3.000	3.625	0.500	0.550	SS002-I-01-03.000 X 03.625 X 0.500/0.550
3.000	4.000	0.500	0.550	SS002-I-01-03.000 X 04.000 X 0.500/0.550
3.125	3.875	0.625	0.688	SS002-I-01-03.125 X 03.875 X 0.625/0.688
3.250	3.625	0.375	0.413	SS002-I-01-03.250 X 03.625 X 0.375/0.413
3.250	3.750	0.375	0.413	SS002-I-01-03.250 X 03.750 X 0.375/0.413
3.250	4.000	0.375	0.413	SS002-I-01-03.250 X 04.000 X 0.375/0.413
3.375	3.750	0.375	0.413	SS002-I-01-03.375 X 03.750 X 0.375/0.413
3.375	4.000	0.500	0.550	SS002-I-01-03.375 X 04.000 X 0.500/0.550
3.500	3.875	0.375	0.413	SS002-I-01-03.500 X 03.875 X 0.375/0.413
3.500	4.000	0.250	0.280	SS002-I-01-03.500 X 04.000 X 0.250/0.280
3.500	4.000	0.375	0.413	SS002-I-01-03.500 X 04.000 X 0.375/0.413
3.500	4.000	0.500	0.550	SS002-I-01-03.500 X 04.000 X 0.500/0.550
3.500	4.125	0.500	0.550	SS002-I-01-03.500 X 04.125 X 0.500/0.550
3.625	4.000	0.375	0.413	SS002-I-01-03.625 X 04.000 X 0.375/0.413
3.625	4.250	0.375	0.413	SS002-I-01-03.625 X 04.250 X 0.375/0.413
3.750	4.375	0.500	0.550	SS002-I-01-03.750 X 04.375 X 0.500/0.550
3.750	4.375	0.875	0.935	SS002-I-01-03.750 X 04.375 X 0.875/0.935
3.750	4.500	0.500	0.550	SS002-I-01-03.750 X 04.500 X 0.500/0.550
3.750	4.500	0.625	0.688	SS002-I-01-03.750 X 04.500 X 0.625/0.688
4.000	4.500	0.375	0.413	SS002-I-01-04.000 X 04.500 X 0.375/0.413
4.000	4.500	0.500	0.550	SS002-I-01-04.000 X 04.500 X 0.500/0.550
4.000	5.000	0.500	0.550	SS002-I-01-04.000 X 05.000 X 0.500/0.550
4.125	4.500	0.375	0.413	SS002-I-01-04.125 X 04.500 X 0.375/0.413
4.250	5.000	0.375	0.413	SS002-I-01-04.250 X 05.000 X 0.375/0.413
4.375	4.750	0.375	0.413	SS002-I-01-04.375 X 04.750 X 0.375/0.413
4.375	5.000	0.375	0.413	SS002-I-01-04.375 X 05.000 X 0.375/0.413
4.375	5.000	0.500	0.550	SS002-I-01-04.375 X 05.000 X 0.500/0.550
4.500	4.875	0.375	0.413	SS002-I-01-04.500 X 04.875 X 0.375/0.413
4.500	5.000	0.375	0.413	SS002-I-01-04.500 X 05.000 X 0.375/0.413
4.500	5.000	0.562	0.613	SS002-I-01-04.500 X 05.000 X 0.562/0.613
4.500	5.250	0.500	0.550	SS002-I-01-04.500 X 05.250 X 0.500/0.550
4.750	5.125	0.375	0.413	SS002-I-01-04.750 X 05.125 X 0.375/0.413
4.750	5.375	0.500	0.550	SS002-I-01-04.750 X 05.375 X 0.500/0.550
4.750	5.375	0.625	0.688	SS002-I-01-04.750 X 05.375 X 0.625/0.688
4.750	5.375	0.875	0.935	SS002-I-01-04.750 X 05.375 X 0.875/0.935
4.750	5.000	0.500	0.550	SS002-I-01-04.750 X 05.000 X 0.500/0.550
5.000	5.500	0.375	0.413	SS002-I-01-05.000 X 05.500 X 0.375/0.413
5.000	5.500	0.562	0.580	SS002-I-01-05.000 X 05.500 X 0.562/0.580
5.000	5.625	0.500	0.550	SS002-I-01-05.000 X 05.625 X 0.500/0.550
5.000	6.000	0.500	0.550	SS002-I-01-05.000 X 06.000 X 0.500/0.550
5.250	6.000	0.375	0.413	SS002-I-01-05.250 X 06.000 X 0.375/0.413
5.250	6.250	0.562	0.619	SS002-I-01-05.250 X 06.250 X 0.562/0.619
5.500	6.000	0.511	0.562	SS002-I-01-05.500 X 06.000 X 0.511/0.562

