SYMMETRIC SEAL

SS003

Features:

Symmetric seal profile SS003 consist of two piece seal set for sealing rod with one primary sealing ringand a secondary sealing cum back up support ring.

Composition:

SEAL COMBINATION	PRIMARY SEAL COMPOUND	SECONDARY SEAL COMPOUND	TEMP. RANGE	WORKING PRESSURE (Max.)	SURFACE SPEED (Max.)
SS003-01	NB07	HY03	-40 to 110°C	400 Bar	1 m/s
SS003-02	NB07	PU09	-40 to 110°C	400 Bar	1 m/s

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

Properties:

- High resistance to abrasion
- Easy installation
- Good sealing by rubber part
- Polyester elastomer prevent extrusion in high pressure condition.

Application:

- Clamping and Pressure holding cylinders
- Injection molding machines
- Machine tools
- Agricultural equipment
- Hydraulic press
- Material handling equipments

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 Imperial Sizes (inch)		
160 bar	**260 bar**	**320 bar**	**400 bar**
0.010	0.008	0.007	0.006

Minimum chamfer C for :

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:

SS003 is very easy to fit. Careful fitting of the seal is a prerequisite for it's perfect functioning.

Ordering format:

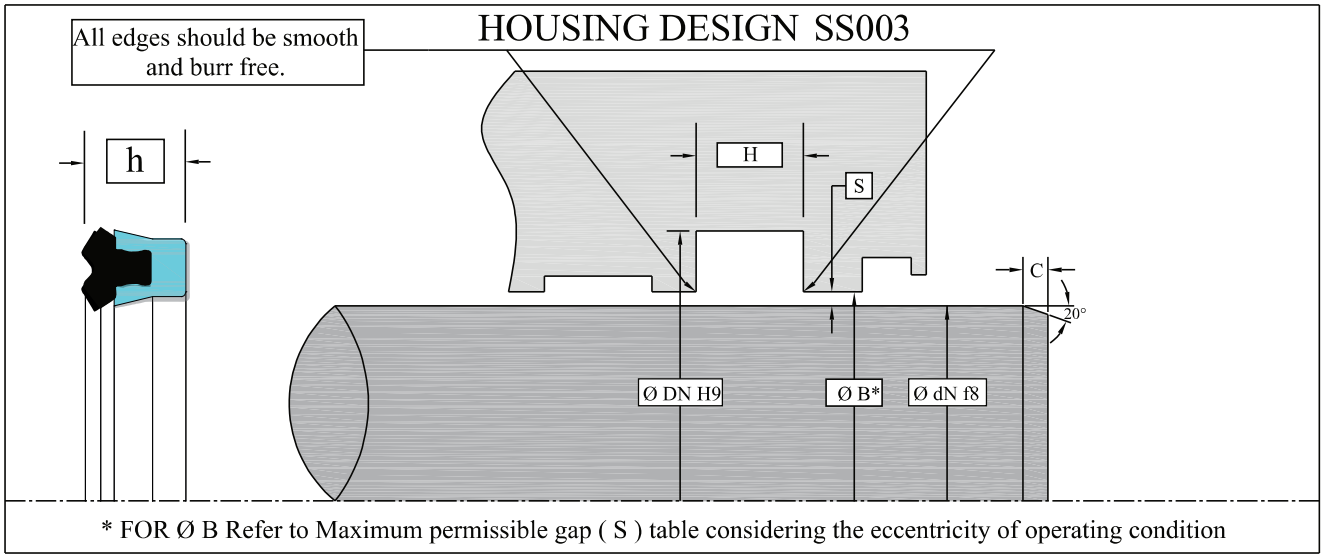
Please mention ROYAL order code in your order.

Example: Imperial Size 0.625"X 0.875"X 0.250"X 0.275"

Order code is SS003-I-01-00.625 X 00.875 X 0.250/0.275

Please contact ROYAL at **info@royalcomposites.co.in / info@royalseals.co.in** if your required size is not mentioned in Royal standard size list

HOUSING DESIGN SS003



* 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
0.625	0.875	0.250	0.275	SS003-I-01-00.625 X 00.875 X 0.250/0.275
0.750	1.000	0.250	0.275	SS003-I-01-00.750 X 01.000 X 0.250/0.275
1.000	1.250	0.200	0.225	SS003-I-01-01.000 X 01.250 X 0.200/0.225
1.000	1.375	0.312	0.343	SS003-I-01-01.000 X 01.375 X 0.312/0.343
1.125	1.375	0.250	0.275	SS003-I-01-01.125 X 01.375 X 0.250/0.275
1.250	1.500	0.250	0.275	SS003-I-01-01.250 X 01.500 X 0.250/0.275
1.250	1.625	0.281	0.312	SS003-I-01-01.250 X 01.625 X 0.281/0.312
1.250	1.625	0.312	0.343	SS003-I-01-01.250 X 01.625 X 0.312/0.343
1.250	1.625	0.343	0.375	SS003-I-01-01.250 X 01.625 X 0.343/0.375
1.375	1.625	0.250	0.275	SS003-I-01-01.375 X 01.625 X 0.250/0.275
1.375	1.750	0.312	0.343	SS003-I-01-01.375 X 01.750 X 0.312/0.343
1.500	1.812	0.312	0.343	SS003-I-01-01.500 X 01.812 X 0.312/0.343
1.500	1.875	0.281	0.312	SS003-I-01-01.500 X 01.875 X 0.281/0.312
1.500	1.875	0.312	0.343	SS003-I-01-01.500 X 01.875 X 0.312/0.343
1.500	1.875	0.343	0.375	SS003-I-01-01.500 X 01.875 X 0.343/0.375
1.500	1.875	0.375	0.413	SS003-I-01-01.500 X 01.875 X 0.375/0.413
1.500	2.000	0.375	0.413	SS003-I-01-01.500 X 02.000 X 0.375/0.413
1.750	2.250	0.375	0.413	SS003-I-01-01.750 X 02.250 X 0.375/0.413
1.875	2.375	0.375	0.413	SS003-I-01-01.875 X 02.375 X 0.375/0.413
2.000	2.375	0.250	0.275	SS003-I-01-02.000 X 02.375 X 0.250/0.275
2.000	2.375	0.281	0.312	SS003-I-01-02.000 X 02.375 X 0.281/0.312
2.000	2.375	0.375	0.413	SS003-I-01-02.000 X 02.375 X 0.375/0.413
2.000	2.500	0.375	0.413	SS003-I-01-02.000 X 02.500 X 0.375/0.413
2.250	2.625	0.250	0.275	SS003-I-01-02.250 X 02.625 X 0.250/0.275
2.250	2.625	0.312	0.343	SS003-I-01-02.250 X 02.625 X 0.312/0.343
2.250	2.625	0.375	0.413	SS003-I-01-02.250 X 02.625 X 0.375/0.413
2.500	3.000	0.375	0.413	SS003-I-01-02.500 X 03.000 X 0.375/0.413
2.625	3.125	0.375	0.413	SS003-I-01-02.625 X 03.125 X 0.375/0.413
2.750	3.250	0.375	0.413	SS003-I-01-02.750 X 03.250 X 0.375/0.413

ROYAL STANDARD SIZE LIST				
dN (f8)	DN (H9)	h	H (+0.008")	ORDER CODE
3.000	3.500	0.375	0.413	SS003-I-01-03.000 X 03.500 X 0.375/0.413
3.000	3.625	0.500	0.550	SS003-I-01-03.000 X 03.625 X 0.500/0.550
3.375	3.875	0.375	0.413	SS003-I-01-03.375 X 03.875 X 0.375/0.413
3.500	4.000	0.375	0.413	SS003-I-01-03.500 X 04.000 X 0.375/0.413
3.500	4.125	0.500	0.550	SS003-I-01-03.500 X 04.125 X 0.500/0.550
3.500	4.250	0.575	0.625	SS003-I-01-03.500 X 04.250 X 0.575/0.625
3.500	4.500	0.625	0.688	SS003-I-01-03.500 X 04.500 X 0.625/0.688
3.750	4.250	0.573	0.625	SS003-I-01-03.750 X 04.250 X 0.573/0.625
3.750	4.375	0.580	0.625	SS003-I-01-03.750 X 04.375 X 0.580/0.625
3.875	4.375	0.375	0.413	SS003-I-01-03.875 X 04.375 X 0.375/0.413
4.000	4.500	0.375	0.413	SS003-I-01-04.000 X 04.500 X 0.375/0.413
4.000	4.750	0.575	0.625	SS003-I-01-04.000 X 04.750 X 0.575/0.625
5.000	5.625	0.580	0.625	SS003-I-01-05.000 X 05.625 X 0.580/0.625
5.250	5.750	0.573	0.625	SS003-I-01-05.250 X 05.750 X 0.573/0.625
5.500	6.000	0.375	0.413	SS003-I-01-05.500 X 06.000 X 0.375/0.413
6.000	6.500	0.562	0.625	SS003-I-01-06.000 X 06.500 X 0.562/0.625
6.500	7.125	0.580	0.625	SS003-I-01-06.500 X 07.125 X 0.580/0.625
6.500	7.500	0.725	0.788	SS003-I-01-06.500 X 07.500 X 0.725/0.788
6.750	7.250	0.573	0.625	SS003-I-01-06.750 X 07.250 X 0.573/0.625
7.000	7.500	0.375	0.413	SS003-I-01-07.000 X 07.500 X 0.375/0.413
7.000	7.500	0.562	0.625	SS003-I-01-07.000 X 07.500 X 0.562/0.625
7.000	8.000	0.725	0.781	SS003-I-01-07.000 X 08.000 X 0.725/0.781
8.500	9.125	0.580	6.250	SS003-I-01-08.500 X 09.125 X 0.580/6.250
10.500	11.125	0.580	0.625	SS003-I-01-10.500 X 11.125 X 0.580/0.625