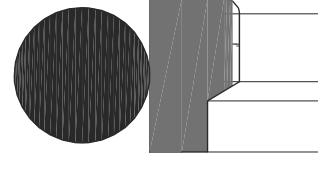


SHREENATHJI & CO.

SEALS FOR HYDRAULICS & PNEUMATICS

ROD SEAL

RS018



Features:

Rod seal profile RS018 consists of two piece seal set for sealing rod with one seal ring and one energizer O-ring.

Composition:

SEAL COMBINATION		RS018-N	RS018-F
Seal ring	Material	PTFE+ Bronze +MoS2	PTFE+ Bronze +MoS2
	Code	TB40M	TB40M
O Ring	Material	Nitrile Butadiene rubber (NBR)	Fluoro Carbon Rubber (FPM)
	Code	NBR70	FPM80

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.

Application:

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

General Technical Data:

Seal Profile	RS018-N	RS018-F
Temperature range	-20°C to 100°C	-20°C to +200°C
Working Pressure(max.)	400 bar	400 bar
Surface Speed(max.)	4 m/s	4 m/s.

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-pressurized side of the seal is decisive for sealing function. Figures show the maximum permissible gap all on one side using the maximum clearance Ø and min rod Ø.

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Profile dimension	Maximum permissible gap (S)			
H	160 bar	260 bar	320 bar	400 bar
2,2	0,35	0,3	-	-
3,2	0,4	0,35	-	-
4,2	0,5	0,4	0,3	-
6,3	0,6	0,5	0,45	0,45
8,1	0,7	0,6	0,55	0,5

Installation:

RS018 is very easy to fit. Insert the O 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 mention SHREENATHJI order code in your order. Example: Size 6 X 10.9 X 2.2

For Temp range: -20°C to +100°C. (O ring material is NBR70) Order code is RS018-N-0060-0109-022

For Temp range: -20°C to +200°C. (O ring material is FPM80) Order code is RS018-F-0060-0109-022

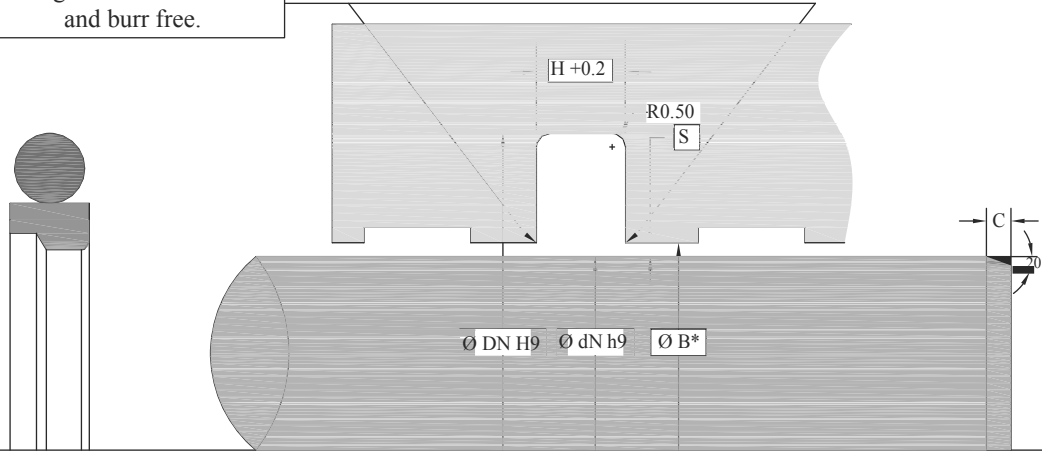
We have given all metric(mm) sizes here. For Imperial (inch) sizes please contact SHREENATHJI at info@shreenathjiandco.com

SHREENATHJI & CO.

SEALS FOR HYDRAULICS & PNEUMATICS

All edges should be smooth and burr free.

HOUSING DESIGN RS018



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

OUR STANDARD SIZE LIST

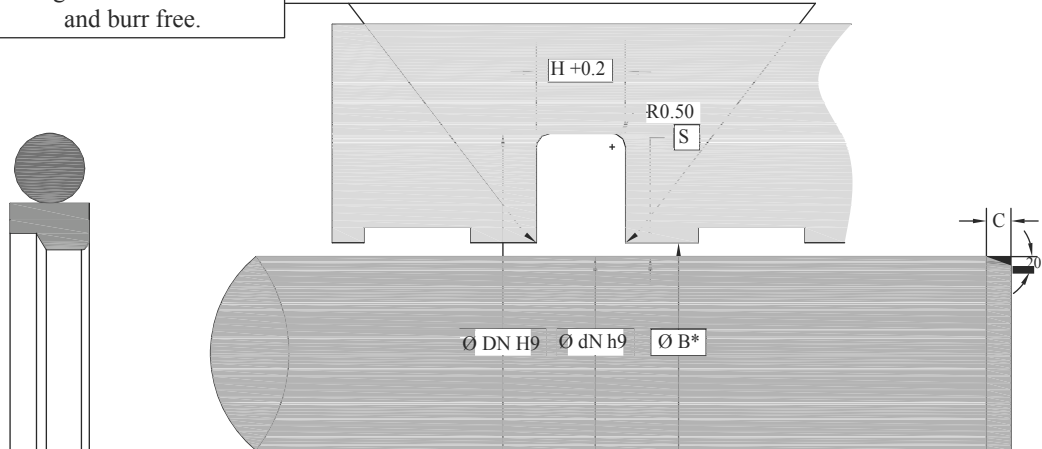
dN	TOL.h9	DN	TOL.H9	H+0.2	C	O Ring Size	ORDER CODE For temp. range -20°C to +100°C use RS018-N -20°C to +200°C use RS018-F
6	-0.010 -0.028	10.9	+0.000 +0.043	2.2	2.5	7.65 X 1.78	RS018-N / F-0060-0109-022
8	-0.013 -0.035	12.9	+0.000 +0.043	2.2	2.5	9.50 X 1.80	RS018-N / F-0080-0129-022
10	-0.013 -0.035	17.3	+0.000 +0.043	3.2	2.5	10.77 X 2.62	RS018-N / F-0100-0173-032
12	-0.016 -0.043	16.9	+0.000 +0.052	2.2	2.5	12.42 X 1.78	RS018-N / F-0120-0169-022
12	-0.016 -0.043	19.3	+0.000 +0.052	3.2	2.5	13.94 X 2.62	RS018-N / F-0120-0193-032
14	-0.016 -0.043	21.3	+0.000 +0.052	3.2	2.5	17.12 X 2.62	RS018-N / F-0140-0213-032
16	-0.016 -0.043	23.3	+0.000 +0.052	3.2	2.5	18.72 X 2.62	RS018-N / F-0160-0233-032
18	-0.016 -0.043	25.3	+0.000 +0.052	3.2	2.5	20.29 X 2.62	RS018-N / F-0180-0253-032
18	-0.016 -0.043	28.7	+0.000 +0.052	4.2	3.5	21.89 x 3.53	RS018-N / F-0180-0287-042
20	-0.020 -0.053	27.3	+0.000 +0.052	3.2	2.5	21.89 X 2.62	RS018-N / F-0200-0273-032
20	-0.020 -0.053	30.7	+0.000 +0.062	4.2	3.5	23.40 X 3.53	RS018-N / F-0200-0307-042
22	-0.020 -0.053	32.7	+0.000 +0.062	4.2	3.5	26.58 X 3.53	RS018-N / F-0220-0327-042
25	-0.020 -0.053	35.7	+0.000 +0.062	4.2	3.5	29.75 X 3.53	RS018-N / F-0250-0357-042
28	-0.020 -0.053	35.3	+0.000 +0.062	3.2	2.5	29.82 X 2.62	RS018-N / F-0280-0353-032
28	-0.020 -0.053	38.7	+0.000 +0.062	4.2	3.5	32.92 X 3.53	RS018-N / F-0280-0387-042
30	-0.020 -0.053	40.7	+0.000 +0.062	4.2	3.5	34.52 X 3.53	RS018-N / F-0300-0407-042

SHREENATHJI & CO.

SEALS FOR HYDRAULICS & PNEUMATICS

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OUR STANDARD SIZE LIST

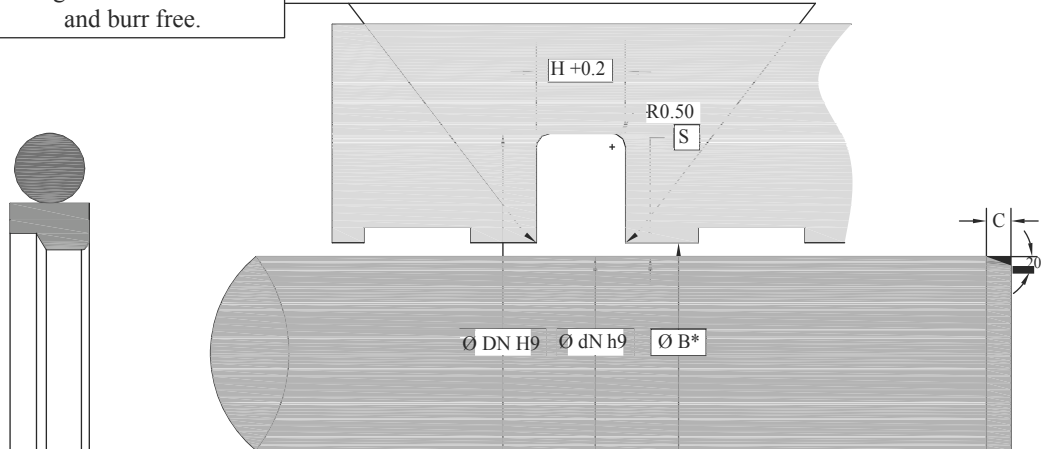
dN	TOL.h9	DN	TOL.H9	H+0.2	C	O Ring Size	ORDER CODE For temp. range -20°C to +100°C use RS018-N -20°C to +200°C use RS018-F
32	-0.025 -0.064	42.7	+0.000 +0.062	4.2	3.5	36.09 X 3.53	RS018-N / F-0320-0427-042
35	-0.025 -0.064	45.7	+0.000 +0.062	4.2	3.5	37.69 X 3.53	RS018-N / F-0350-0457-042
36	-0.025 -0.064	46.7	+0.000 +0.062	4.2	3.5	40.87 X 3.53	RS018-N / F-0360-0467-042
38	-0.025 -0.064	48.7	+0.000 +0.062	4.2	3.5	42.08 X 3.53	RS018-N / F-0380-0487-042
38	-0.025 -0.064	53.1	+0.000 +0.074	6.3	5.5	43.82 X 5.33	RS018-N / F-0380-0531-063
40	-0.025 -0.064	50.7	+0.000 +0.074	4.2	3.5	44.04 X 3.53	RS018-N / F-0400-0507-042
40	-0.025 -0.064	55.1	+0.000 +0.074	6.3	5.5	45.7 X 5.33	RS018-N / F-0400-0551-063
42	-0.025 -0.064	52.7	+0.000 +0.074	4.2	3.5	44.04 X 3.53	RS018-N / F-0420-0527-042
42	-0.025 -0.064	57.1	+0.000 +0.074	6.3	5.5	46.99 X 5.33	RS018-N / F-0420-0571-063
45	-0.025 -0.064	55.7	+0.000 +0.074	4.2	3.5	48.7 X 3.53	RS018-N / F-0450-0557-042
45	-0.025 -0.064	60.1	+0.000 +0.074	6.3	5.5	50.17 X 5.33	RS018-N / F-0450-0601-063
50	-0.025 -0.064	60.7	+0.000 +0.074	4.2	3.5	53.57 X 3.53	RS018-N / F-0500-0607-042
50	-0.025 -0.064	65.1	+0.000 +0.074	6.3	5.5	56.52 X 5.33	RS018-N / F-0500-0651-063
55	-0.025 -0.064	65.7	+0.000 +0.074	4.2	3.5	59.92 X 3.53	RS018-N / F-0550-0657-042
55	-0.030 -0.076	70.1	+0.000 +0.074	6.3	5.5	59.69 X 5.33	RS018-N / F-0550-0701-063
56	-0.025 -0.064	66.7	+0.000 +0.074	4.2	3.5	59.92 X 3.53	RS018-N / F-0560-0667-042

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

OUR STANDARD SIZE LIST

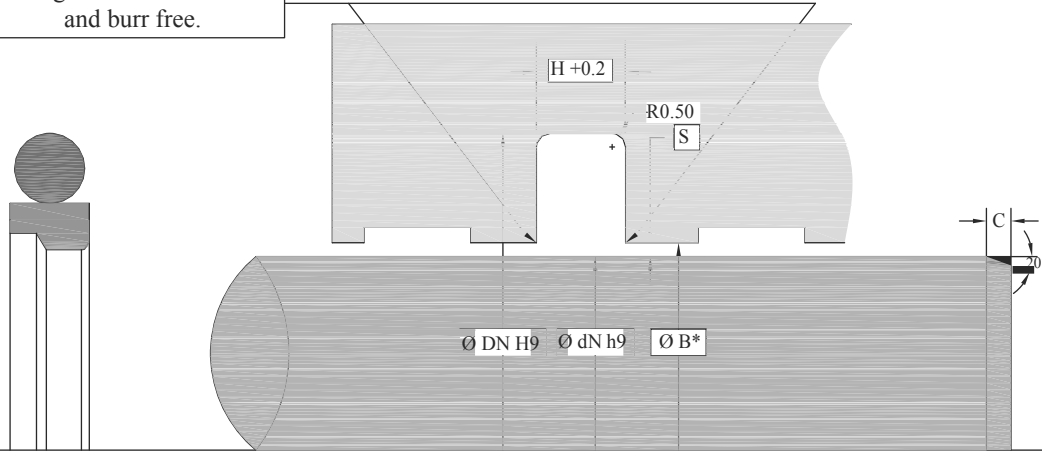
dN	TOL.h9	DN	TOL.H9	H+0.2	C	O Ring Size	ORDER CODE For temp. range -20°C to +100°C use RS018-N -20°C to +200°C use RS018-F
56	-0.030 -0.076	71.1	+0.000 +0.074	6.3	5.5	62.87 X 5.33	RS018-N / F-0560-0711-063
60	-0.025 -0.064	70.7	+0.000 +0.074	4.2	3.5	63.09 X 3.53	RS018-N / F-0600-0707-042
60	-0.030 -0.076	75.1	+0.000 +0.074	6.3	5.5	66.04 X 5.33	RS018-N / F-0600-0751-063
63	-0.030 -0.076	78.1	+0.000 +0.074	6.3	5.5	69.22 X 5.33	RS018-N / F-0630-0781-063
65	-0.025 -0.064	75.7	+0.000 +0.074	4.2	3.5	69.44 X 3.53	RS018-N / F-0650-0757-042
65	-0.030 -0.076	80.1	+0.000 +0.087	6.3	5.5	69.22 X 5.33	RS018-N / F-0650-0801-063
68	-0.030 -0.076	83.1	+0.000 +0.087	6.3	5.5	72.39 X 5.33	RS018-N / F-0680-0831-063
70	-0.030 -0.076	85.1	+0.000 +0.087	6.3	5.5	75.57 X 5.33	RS018-N / F-0700-0851-063
75	-0.030 -0.076	90.1	+0.000 +0.087	6.3	5.5	81.92 X 5.33	RS018-N / F-0750-0901-063
78	-0.030 -0.076	93.1	+0.000 +0.087	6.3	5.5	85.09 X 5.33	RS018-N / F-0780-0931-063
80	-0.030 -0.076	95.1	+0.000 +0.087	6.3	5.5	85.09 X 5.33	RS018-N / F-0800-0951-063
85	-0.036 -0.090	100.1	+0.000 +0.087	6.3	6.0	91.44 X 5.33	RS018-N / F-0850-1001-063
88	-0.030 -0.076	103.1	+0.000 +0.087	6.3	6.0	94.62 X 5.33	RS018-N / F-0880-1031-063
90	-0.036 -0.090	105.1	+0.000 +0.087	6.3	6.0	94.62 X 5.33	RS018-N / F-0900-1051-063
95	-0.036 -0.090	110.1	+0.000 +0.087	6.3	6.0	100.97 X 5.33	RS018-N / F-0950-1101-063
98	-0.030 -0.076	113.1	+0.000 +0.087	6.3	6.0	104.17 X 5.33	RS018-N / F-0980-1131-063

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HOUSING DESIGN RS018



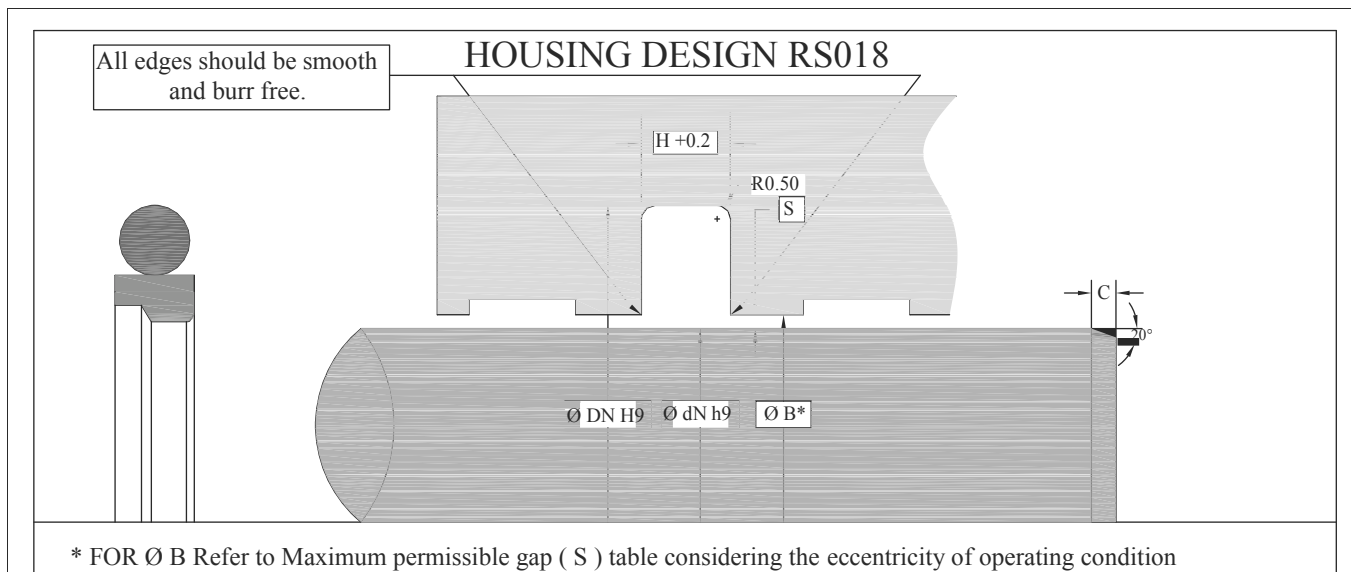
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OUR STANDARD SIZE LIST

dN	TOL.h9	DN	TOL.H9	H+0.2	C	O Ring Size	ORDER CODE For temp. range -20°C to +100°C use RS018-N -20°C to +200°C use RS018-F
100	-0.036 -0.090	115.1	+0.000 +0.087	6.3	6.0	104.14 X 5.33	RS018-N / F-1000-1151-063
105	-0.036 -0.090	120.1	+0.000 +0.100	6.3	6.0	110.49 X 5.33	RS018-N / F-1050-1201-063
108	-0.030 -0.076	123.1	+0.000 +0.087	6.3	6.0	113.67 X 5.33	RS018-N / F-1080-1231-063
110	-0.036 -0.090	125.1	+0.000 +0.100	6.3	6.0	116.84 X 5.33	RS018-N / F-1100-1251-063
110	-0.036 -0.090	130.5	+0.000 +0.100	8.1	8.0	116.84 X 6.99	RS018-N / F-1100-1305-081
115	-0.036 -0.090	130.1	+0.000 +0.100	6.3	6.0	120.02 X 5.33	RS018-N / F-1150-1301-063
118	-0.030 -0.076	133.1	+0.000 +0.087	6.3	6.0	123.19 X 5.33	RS018-N / F-1180-1331-063
120	-0.036 -0.090	135.1	+0.000 +0.100	6.3	6.0	126.37 X 5.33	RS018-N / F-1200-1351-063
120	-0.036 -0.090	140.5	+0.000 +0.100	8.1	8.0	126.37 X 6.99	RS018-N / F-1200-1405-081
125	-0.043 -0.106	140.1	+0.000 +0.100	6.3	6.0	129.54 X 5.33	RS018-N / F-1250-1401-063
125	-0.043 -0.106	145.5	+0.000 +0.100	8.1	8.0	132.72 X 6.99	RS018-N / F-1250-1455-081
128	-0.030 -0.076	143.1	+0.000 +0.087	6.3	6.0	132.72 X 5.33	RS018-N / F-1280-1431-063
130	-0.043 -0.106	145.1	+0.000 +0.100	6.3	6.0	135.89 X 5.33	RS018-N / F-1300-1451-063
130	-0.043 -0.106	150.5	+0.000 +0.100	8.1	8.0	135.89 X 6.99	RS018-N / F-1300-1505-081
135	-0.043 -0.106	150.1	+0.000 +0.100	6.3	6.0	139.07 X 5.33	RS018-N / F-1350-1501-063
136	-0.030 -0.076	151.1	+0.000 +0.087	6.3	6.0	142.24 X 5.33	RS018-N / F-1360-01511-063

SHREENATHJI & CO.

SEALS FOR HYDRAULICS & PNEUMATICS



OUR STANDARD SIZE LIST

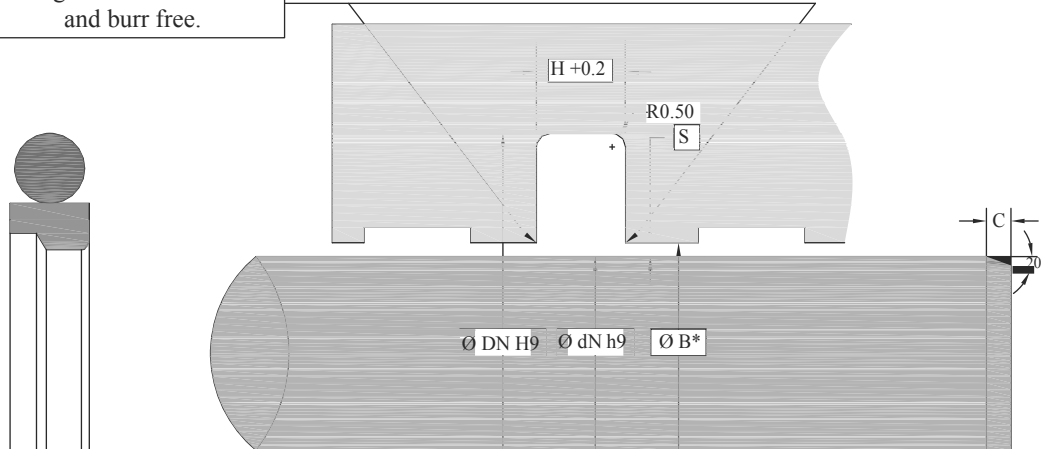
dN	TOL.h9	DN	TOL.H9	H+0.2	C	O Ring Size	ORDER CODE For temp. range -20°C to +100°C use RS018-N -20°C to +200°C use RS018-F
138	-0.030 -0.076	153.1	+0.000 +0.087	6.3	6.0	142.24 X 5.33	RS018-N / F-1380-1531-063
140	-0.043 -0.106	155.1	+0.000 +0.100	6.3	6.0	145.42 X 5.33	RS018-N / F-1400-1551-063
140	-0.043 -0.106	160.5	+0.000 +0.100	8.1	8.0	145.42 X 6.99	RS018-N / F-1400-1605-081
145	-0.043 -0.106	160.1	+0.000 +0.100	6.3	6.0	151.77 X 5.33	RS018-N / F-1450-1601-063
150	-0.043 -0.106	165.1	+0.000 +0.100	6.3	6.0	154.50 X 5.33	RS018-N / F-1500-1651-063
150	-0.043 -0.106	170.5	+0.000 +0.100	8.1	8.0	158.12 X 6.99	RS018-N / F-1500-1705-081
155	-0.043 -0.106	170.1	+0.000 +0.100	6.3	8.0	158.12 X 5.33	RS018-N / F-1550-1701-063
160	-0.043 -0.106	175.1	+0.000 +0.100	6.3	6.0	164.47 X 5.33	RS018-N / F-1600-1751-063
170	-0.043 -0.106	185.1	+0.000 +0.115	6.3	6.0	175.02 X 5.33	RS018-N / F-1700-1851-063
175	-0.043 -0.106	190.1	+0.000 +0.115	6.3	6.0	179.30 X 5.33	RS018-N / F-1750-1901-063
180	-0.043 -0.106	195.1	+0.000 +0.115	6.3	6.0	183.52 X 5.33	RS018-N / F-1800-1951-063
180	-0.043 -0.106	200.5	+0.000 +0.115	8.1	8.0	189.87 X 6.99	RS018-N / F-1800-2005-081
190	-0.050 -0.122	205.5	+0.000 +0.115	6.3	6.0	196.22 X 5.33	RS018-N / F-1900-2055-063
200	-0.050 -0.122	215.1	+0.000 +0.115	6.3	8.0	202.57 X 5.33	RS018-N / F-2000-2151-063
200	-0.050 -0.122	220.5	+0.000 +0.115	8.1	8.0	208.50 X 6.99	RS018-N / F-2000-2205-081
210	-0.050 -0.122	230.5	+0.000 +0.115	8.1	8.0	215.27 X 6.99	RS018-N / F-2100-2305-081

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HOUSING DESIGN RS018



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OUR STANDARD SIZE LIST

dN	TOL.h9	DN	TOL.H9	H+0.2	C	O Ring Size	ORDER CODE For temp. range -20°C to +100°C use RS018-N -20°C to +200°C use RS018-F
215	-0.050 -0.122	235.5	+0.000 +0.115	8.1	8.0	221.86 X 6.99	RS018-N / F-2150-2355-081
220	-0.050 0.122	240.5	+0.000 +0.115	8.1	8.0	227.97 X 6.99	RS018-N / F-2200-2405-081
225	-0.050 -0.122	245.5	+0.000 +0.115	8.1	8.0	234.32 X 6.99	RS018-N / F-2250-2455-081
230	-0.050 -0.122	250.5	+0.000 +0.115	8.1	8.0	236 X 6.99	RS018-N / F-2300-2505-081
240	-0.050 -0.122	260.5	+0.000 +0.115	8.1	8.0	247 X 6.99	RS018-N / F-2400-2605-081
250	-0.050 -0.122	270.5	+0.000 +0.115	8.1	8.0	253.37 X 6.99	RS018-N / F-2500-2705-081
260	-0.056 -0.137	284.0	+0.000 +0.115	8.1	8.0	266.07 X 6.99	RS018-N / F-2600-2840-081
270	-0.056 -0.137	294.0	+0.000 +0.115	8.1	8.0	278.77 X 6.99	RS018-N / F-2700-2940-081
280	-0.056 -0.137	304.0	+0.000 +0.115	8.1	8.0	291.47 X 6.99	RS018-N / F-2800-3040-081
300	-0.056 -0.137	324.0	+0.000 +0.140	8.1	8.0	316.87 X 6.99	RS018-N / F-3000-3240-081
303.8	-0.056 -0.137	327.8	+0.000 +0.140	8.1	8.0	316.87 X 6.99	RS018-N / F-3038-3278-081
320	-0.062 -0.151	344.0	+0.000 +0.140	8.1	8.0	329.57 X 6.99	RS018-N / F-3200-3440-081
340	-0.062 -0.151	364.0	+0.000 +0.140	8.1	8.0	354.97 X 6.99	RS018-N / F-3400-3640-081
350	-0.062 -0.151	374.0	+0.000 +0.140	8.1	8.0	367.17 X 6.99	RS018-N / F-3500-3740-081
360	-0.062 -0.151	384.0	+0.000 +0.140	8.1	8.0	367.17 X 6.99	RS018-N / F-3600-3840-081
400	-0.062 -0.151	424.0	+0.000 +0.140	8.1	8.0	417.96 X 6.99	RS018-N / F-4000-4240-081

SHREENATHJI & CO.

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