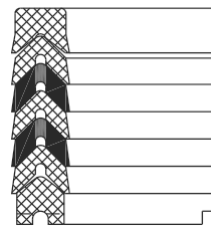


# SHREENATHJI & CO.

## SEALS FOR HYDRAULICS & PNEUMATICS

### ROD SEAL

### RS054



#### Features:

Rod seal profile RS054 is a seal set consist of five chevron ring (3 fabric reinforced and 2 rubber rings) or three chevron ring (2 fabric reinforced and 1 rubber ring) and a header and a pressure ring.

#### Composition:

| Seal Profile         | RS054-N      |        | RS054-F      |             |
|----------------------|--------------|--------|--------------|-------------|
|                      | Material     | Code   | Material     | Code        |
| Header ring          | Fabric + NBR | NBRCF  | Fabric + FPM | FPMCF       |
| Chevron ring(fabric) | Fabric + NBR | NBRCF  | Fabric + FPM | FPCFChevron |
| ring(rubber)         | NBR          | NBR90  | FPM          | FPM80       |
| Pressure ring type-1 | Fabric + NBR | NBRCF  | Fabric + FPM | FPMCF       |
| Pressure ring type-2 | Polyamide    | PA6000 | -            | -           |

#### Properties:

- 1 High resistance to extrusion due to fabric reinforced header ring
- 1 Easy installation
- 1 Excellent sealing function
- Long working life in extreme conditions

#### Application:

- Ø Mobile Hydraulics
- Ø Machine tools
- Ø Agricultural equipment
- Ø standard cylinders
- Ø hydraulic presses
- Ø iron and steel industry
- Ø marine hydraulics

#### General Technical Data :

| Seal Profile           | RS054-N         | RS054-F         |
|------------------------|-----------------|-----------------|
| Working Pressure(max.) | 400 bar         | 400 bar         |
| Temperature range      | -20°C to +100°C | -15°C to +140°C |
| Linear velocity(max.)  | 0.5 m/s.        | 0.5 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       |

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### Gap dimension

The gap dimension on the non-pressurised side of the seal is decisive for sealing function. The gap is dependent on the metal guide and its installation fit. Figures show the maximum permissible gap all on one side using the maximum clearance  $\emptyset$  and minimum rod  $\emptyset$ .

| Maximum permissible gap dimension (s) |         |         |         |
|---------------------------------------|---------|---------|---------|
| 160 bar                               | 260 bar | 320 bar | 400 bar |
| 0.65                                  | 0.45    | 0.40    | 0.35    |

### Minimum chamfer C:

| DN - dN | Up to 12 | 12.1 to 15 | 15.1 to 20 | 20.1 to 25 | 25.1 to 30 | 30.1 and above |
|---------|----------|------------|------------|------------|------------|----------------|
| C       | 4.0      | 5.0        | 6.0        | 7.5        | 8.0        | 10.0           |

### Fitting:

RS054 is very easy to fit. Careful fitting of the seal is a prerequisite for its perfect functioning.

### Ordering format:

Please mention SHREENATHJI order code in your order. Example: Housing Size 25 X 37 X 22.5

For Temp range: -20°C to +100°C Order code is RS054-N-0250-0370-225

For Temp range: -15°C to +140°C Order code is RS054-F-0250-0370-225

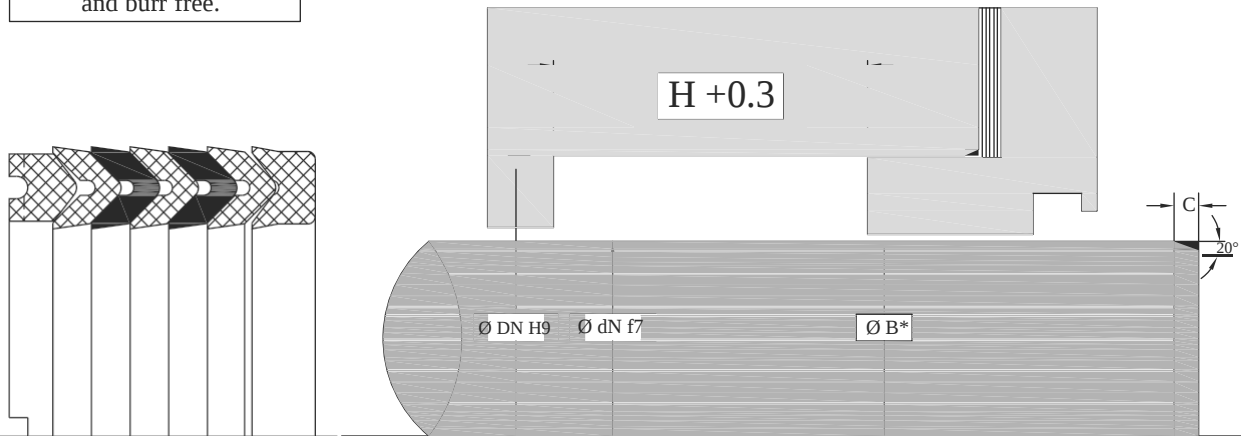
We have given all metric(mm) sizes here. For Imperial (inch) sizes please contact SHREENATHJI at [info@shreenathjiandco.com](mailto:info@shreenathjiandco.com)

# SHREENATHJI & CO.

## SEALS FOR HYDRAULICS & PNEUMATICS

All edges should be smooth and burr free.

### HOUSING DESIGN RS054



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

### OUR STANDARD SIZE LIST

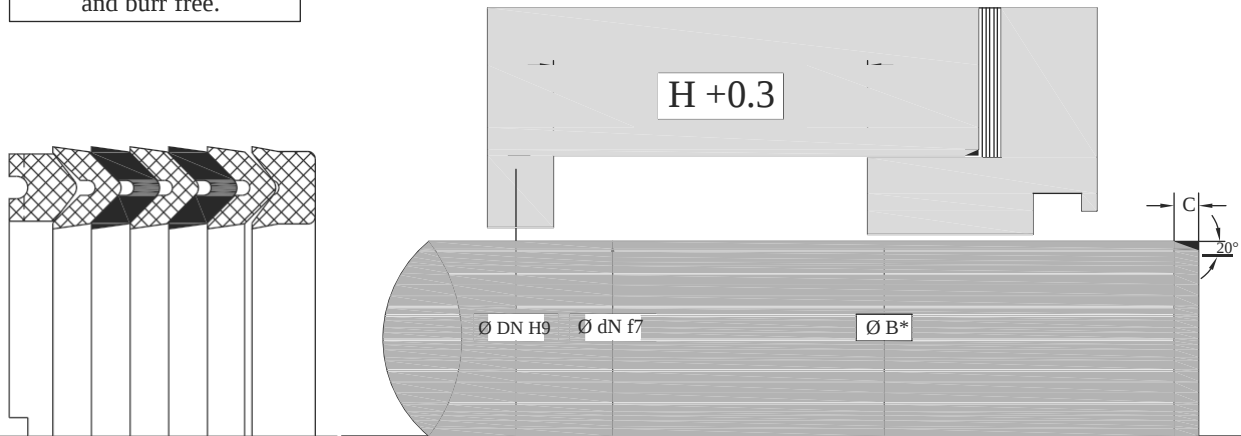
| ØdN | TOL.f7           | ØDN | TOL. H9          | H +0.3 | ORDER CODE<br>For temp. range<br>-20°C to +100°C use RS054-N<br>-15°C to +140°C use RS054-F |
|-----|------------------|-----|------------------|--------|---------------------------------------------------------------------------------------------|
| 25  | -0.020<br>-0.041 | 37  | +0.000<br>+0.062 | 22.5   | RS054-N / F-0250-0370-225                                                                   |
| 28  | -0.020<br>-0.041 | 40  | +0.000<br>+0.062 | 22.5   | RS054-N / F-0280-0400-225                                                                   |
| 32  | -0.025<br>-0.050 | 47  | +0.000<br>+0.062 | 22.5   | RS054-N / F-0320-0470-225                                                                   |
| 35  | -0.025<br>-0.050 | 50  | +0.000<br>+0.062 | 22.5   | RS054-N / F-0350-0500-225                                                                   |
| 36  | -0.025<br>-0.050 | 48  | +0.000<br>+0.062 | 22.5   | RS054-N / F-0360-0480-225                                                                   |
| 36  | -0.025<br>-0.050 | 51  | +0.000<br>+0.074 | 22.5   | RS054-N / F-0360-0510-225                                                                   |
| 40  | -0.025<br>-0.050 | 55  | +0.000<br>+0.074 | 22.5   | RS054-N / F-0400-0550-225                                                                   |
| 45  | -0.025<br>-0.050 | 60  | +0.000<br>+0.074 | 22.5   | RS054-N / F-0450-0600-225                                                                   |
| 45  | -0.025<br>-0.050 | 63  | +0.000<br>+0.074 | 30.0   | RS054-N / F-0450-0630-300                                                                   |
| 50  | -0.025<br>-0.050 | 70  | +0.000<br>+0.074 | 30.0   | RS054-N / F-0500-0700-300                                                                   |
| 56  | -0.030<br>-0.060 | 76  | +0.000<br>+0.074 | 37.0   | RS054-N / F-0560-0760-370                                                                   |
| 60  | -0.030<br>-0.060 | 80  | +0.000<br>+0.074 | 37.0   | RS054-N / F-0600-0800-370                                                                   |
| 63  | -0.030<br>-0.060 | 83  | +0.000<br>+0.087 | 37.0   | RS054-N / F-0630-0830-370                                                                   |
| 63  | -0.030<br>-0.060 | 88  | +0.000<br>+0.087 | 37.0   | RS054-N / F-0630-0880-370                                                                   |
| 70  | -0.030<br>-0.060 | 90  | +0.000<br>+0.087 | 40.0   | RS054-N / F-0700-0900-400                                                                   |
| 75  | -0.030<br>-0.060 | 90  | +0.000<br>+0.087 | 22.5   | RS054-N / F-0750-0900-225                                                                   |

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

### OUR STANDARD SIZE LIST

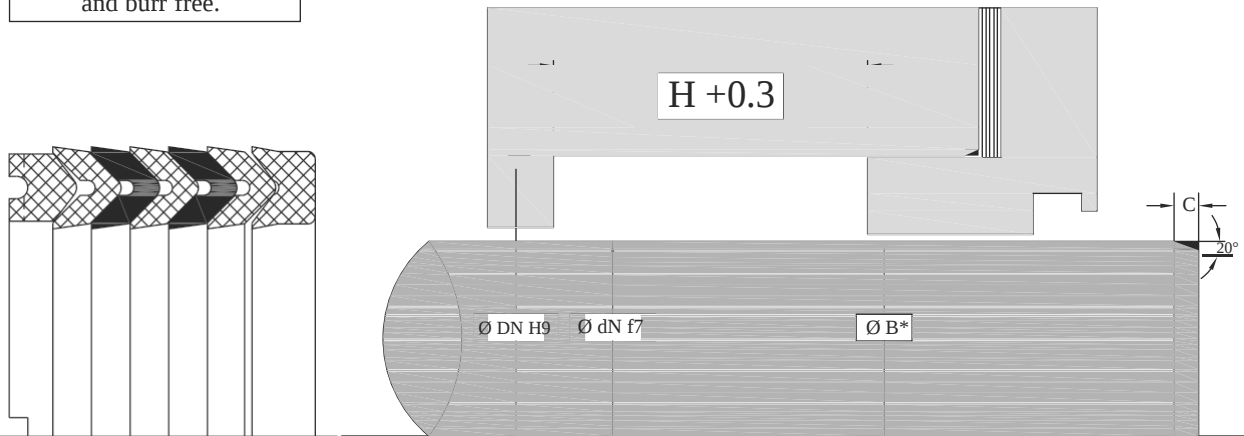
| ØdN | TOL.f7           | ØDN | TOL. H9          | H +0.3 | ORDER CODE<br>For temp. range<br>-20°C to +100°C use RS054-N<br>-15°C to +140°C use RS054-F |
|-----|------------------|-----|------------------|--------|---------------------------------------------------------------------------------------------|
| 75  | -0.030<br>-0.060 | 95  | +0.000<br>+0.087 | 40.0   | RS054-N / F-0750-0950-400                                                                   |
| 80  | -0.030<br>-0.060 | 95  | +0.000<br>+0.087 | 22.5   | RS054-N / F-0800-0950-225                                                                   |
| 80  | -0.030<br>+0.060 | 100 | +0.000<br>+0.087 | 40.0   | RS054-N / F-0800-1000-400                                                                   |
| 85  | -0.036<br>-0.071 | 105 | +0.000<br>+0.087 | 40.0   | RS054-N / F-0850-1050-400                                                                   |
| 90  | -0.036<br>-0.071 | 105 | +0.000<br>+0.087 | 25.0   | RS054-N / F-0900-1050-250                                                                   |
| 90  | -0.036<br>-0.071 | 110 | +0.000<br>+0.087 | 40.0   | RS054-N / F-0900-1100-400                                                                   |
| 95  | -0.036<br>-0.071 | 115 | +0.000<br>+0.087 | 40.0   | RS054-N / F-0950-1150-400                                                                   |
| 100 | -0.036<br>-0.071 | 120 | +0.000<br>+0.087 | 40.0   | RS054-N / F-1000-1200-400                                                                   |
| 110 | -0.036<br>-0.071 | 130 | +0.000<br>+0.100 | 40.0   | RS054-N / F-1100-1300-400                                                                   |
| 110 | -0.036<br>-0.071 | 140 | +0.000<br>+0.100 | 50.0   | RS054-N / F-1100-1400-500                                                                   |
| 115 | -0.036<br>-0.071 | 140 | +0.000<br>+0.100 | 46.0   | RS054-N / F-1150-1400-460                                                                   |
| 120 | -0.036<br>-0.071 | 145 | +0.000<br>+0.100 | 46.0   | RS054-N / F-1200-1450-460                                                                   |
| 125 | -0.043<br>-0.083 | 150 | +0.000<br>+0.100 | 46.0   | RS054-N / F-1250-1500-460                                                                   |
| 140 | -0.043<br>-0.083 | 165 | +0.000<br>+0.100 | 46.0   | RS054-N / F-1400-1650-460                                                                   |
| 150 | -0.043<br>-0.083 | 180 | +0.000<br>+0.100 | 60.0   | RS054-N / F-1500-1800-600                                                                   |
| 160 | -0.043<br>-0.083 | 190 | +0.000<br>+0.115 | 60.0   | RS054-N / F-1600-1900-600                                                                   |

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### OUR STANDARD SIZE LIST

| ØdN | TOL.f7           | ØDN | TOL. H9          | H +0.3 | ORDER CODE<br>For temp. range<br>-20°C to +100°C use RS054-N<br>-15°C to +140°C use RS054-F |
|-----|------------------|-----|------------------|--------|---------------------------------------------------------------------------------------------|
| 170 | -0.043<br>-0.083 | 195 | +0.000<br>+0.115 | 46.0   | RS054-N / F-1700-1950-460                                                                   |
| 180 | -0.043<br>-0.083 | 210 | +0.000<br>+0.115 | 60.0   | RS054-N / F-1800-2100-600                                                                   |
| 190 | -0.050<br>-0.096 | 220 | +0.000<br>+0.115 | 60.0   | RS054-N / F-1900-2200-600                                                                   |
| 200 | -0.050<br>-0.096 | 220 | +0.000<br>+0.115 | 50.0   | RS054-N / F-2000-2200-500                                                                   |
| 200 | -0.050<br>-0.096 | 230 | +0.000<br>+0.115 | 60.0   | RS054-N / F-2000-2300-600                                                                   |
| 220 | -0.050<br>-0.096 | 250 | +0.000<br>+0.115 | 60.0   | RS054-N / F-2200-2500-600                                                                   |
| 225 | -0.050<br>-0.096 | 245 | +0.000<br>+0.115 | 50.0   | RS054-N / F-2250-2450-500                                                                   |
| 225 | -0.050<br>-0.096 | 255 | +0.000<br>+0.130 | 60.0   | RS054-N / F-2250-2550-600                                                                   |
| 240 | -0.050<br>-0.096 | 280 | +0.000<br>+0.130 | 60.0   | RS054-N / F-2400-2800-600                                                                   |
| 250 | -0.050<br>-0.096 | 280 | +0.000<br>+0.130 | 60.0   | RS054-N / F-2500-2800-600                                                                   |
| 250 | -0.050<br>-0.096 | 290 | +0.000<br>+0.130 | 60.0   | RS054-N / F-2500-2900-600                                                                   |
| 260 | -0.056<br>-0.108 | 290 | +0.000<br>+0.130 | 60.0   | RS054-N / F-2600-2900-600                                                                   |
| 270 | -0.056<br>-0.108 | 300 | +0.000<br>+0.130 | 60.0   | RS054-N / F-2700-3000-600                                                                   |
| 280 | -0.056<br>-0.108 | 310 | +0.000<br>+0.130 | 50.0   | RS054-N / F-2800-3100-500                                                                   |
| 300 | -0.056<br>-0.108 | 330 | +0.000<br>+0.140 | 60.0   | RS054-N / F-3000-3300-600                                                                   |
| 320 | -0.062<br>-0.119 | 360 | +0.000<br>+0.140 | 63.0   | RS054-N / F-3200-3600-630                                                                   |