

# ROD SEALS

## BECA 385



### DESCRIPTION

The BECA 385 profile is a U-ring type single acting rod seal with offset rubber lips for low-pressure applications.

### ADVANTAGES

Reliable sealing for "dry air" pneumatic applications when mineral oils or greases may be present  
 Excellent wear resistance  
 Very good sealing

### APPLICATIONS

Shock absorbers  
 Distributor  
 Standard cylinders

### MATERIALS

NBR 80 Shore A

Other grades of materials are available. Please contact our experts.

### TECHNICAL DATA

|             |  |
|-------------|--|
| Temperature | -30°C / +150°C   |
| Pressure    | 1.6 MPa  |
| Speed       | 1 m/s  |
| Media       | Lubricated air<br>Oil-free air<br>Non-aggressive gases |

The figures above indicate the maximum values and may not be cumulated. They may be developed, depending on the materials used.

### EXTRUSION GAPS

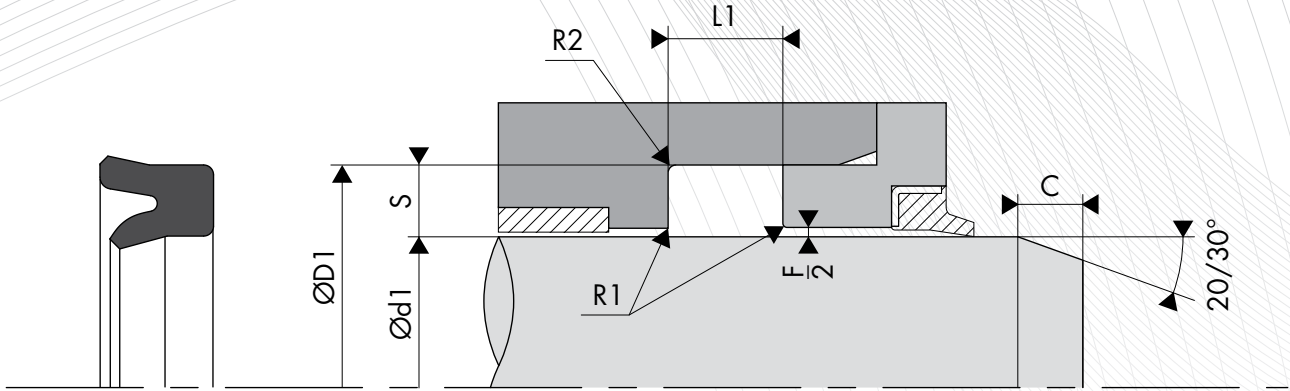
| Pressure MPa | Radial gap F/2 |
|--------------|----------------|
| 1.0 MPa      | 0.25           |
| 1.2 MPa      | 0.20           |
| 6.5 MPa      | 0.10           |
| 8.0 MPa      | 0.05           |

### SURFACE ROUGHNESS

| Roughness | Dynamic surface area | Static surface area | Groove flanks |
|-----------|----------------------|---------------------|---------------|
| Ra        | 0.1 - 0.4 µm         | ≤1.6 µm             | ≤3.2 µm       |
| Rz        | 0.63 - 2.5 µm        | ≤6.3 µm             | ≤10.0 µm      |
| Rmax      | 1.0 - 4.0 µm         | ≤10.0 µm            | ≤16.0 µm      |

### CHAMFERS AND RADIUS

| Radial section S | Radius R1 | Radius R2 | Chamfer C |
|------------------|-----------|-----------|-----------|
| 3.00             | 0.30      | 0.50      | 2.00      |
| 4.00             | 0.30      | 0.50      | 2.00      |
| 5.00             | 0.40      | 0.60      | 2.50      |
| 6.00             | 0.50      | 0.70      | 3.00      |
| 7.50             | 0.80      | 1.00      | 4.00      |
| 10.00            | 0.80      | 1.00      | 5.00      |



**DIMENSIONS**

| Part number | Rod diameter Ød1 f8 | Groove diameter ØD1 H8 | Seal height H1 | Groove width L1 0/+0.25 |
|-------------|---------------------|------------------------|----------------|-------------------------|
| 385.1003008 | 3.17                | 8.75                   | 3.96           | 5.50                    |
| 385.1004011 | 4.76                | 11.11                  | 3.96           | 5.50                    |
| 385.1006012 | 6.00                | 12.00                  | 4.00           | 5.50                    |
| 385.2006012 | 6.35                | 12.70                  | 3.96           | 5.50                    |
| 385.1007014 | 7.93                | 14.28                  | 3.96           | 5.50                    |
| 385.008014E | 8.00                | 14.00                  | 4.00           | 4.80                    |
| 385.08014F6 | 8.00                | 14.00                  | 4.00           | 5.50                    |
| 385.1008014 | 8.00                | 14.00                  | 4.00           | 5.50                    |
| 385.1008016 | 8.00                | 16.00                  | 5.50           | 7.00                    |
| 385.1009016 | 9.52                | 16.50                  | 3.96           | 5.50                    |
| 385.0100184 | 10.00               | 18.00                  | 4.00           | 5.00                    |
| 385.1010018 | 10.00               | 18.00                  | 5.50           | 7.00                    |
| 385.1011019 | 11.11               | 19.05                  | 3.96           | 5.50                    |
| 385.1012020 | 12.00               | 20.00                  | 5.50           | 7.00                    |
| 385.1012021 | 12.70               | 21.00                  | 5.10           | 7.00                    |
| 385.14018K6 | 14.00               | 18.00                  | 2.90           | 3.00                    |
| 385.1014022 | 14.00               | 22.00                  | 5.50           | 7.00                    |
| 385.1014020 | 14.28               | 20.63                  | 4.76           | 6.00                    |
| 385.1015022 | 15.87               | 22.22                  | 4.76           | 6.00                    |
| 385.15224C0 | 15.87               | 22.22                  | 4.76           | 6.00                    |
| 385.1016024 | 16.00               | 24.00                  | 5.50           | 7.00                    |
| 385.1017023 | 17.46               | 23.81                  | 4.60           | 6.00                    |
| 385.1018025 | 18.00               | 25.00                  | 4.50           | 6.00                    |
| 385.1825SP9 | 18.00               | 25.00                  | 4.50           | 6.00                    |
| 385.1018026 | 18.00               | 26.00                  | 5.50           | 6.00                    |
| 385.0180305 | 18.00               | 30.00                  | 5.50           | 6.00                    |
| 385.1019025 | 19.08               | 25.40                  | 4.76           | 6.00                    |
| 385.1020028 | 20.00               | 28.00                  | 5.50           | 7.00                    |
| 385.2020028 | 20.63               | 28.58                  | 4.76           | 6.00                    |
| 385.1022030 | 22.00               | 30.00                  | 5.50           | 6.00                    |
| 385.1022-22 | 22.22               | 31.75                  | 4.76           | 6.00                    |
| 385.1023036 | 23.81               | 36.51                  | 6.35           | 8.00                    |
| 385.1025035 | 25.00               | 35.00                  | 7.00           | 8.50                    |
| 385.1025038 | 25.40               | 38.10                  | 6.35           | 8.00                    |
| 385.1026036 | 26.99               | 36.51                  | 6.35           | 8.00                    |
| 385.1028036 | 28.00               | 36.00                  | 5.50           | 7.00                    |
| 385.1028038 | 28.00               | 38.00                  | 7.00           | 7.50                    |
| 385.1028041 | 28.58               | 41.28                  | 7.93           | 9.50                    |
| 385.1030038 | 30.16               | 38.10                  | 6.35           | 8.00                    |
| 385.1031044 | 31.75               | 44.45                  | 6.35           | 8.00                    |
| 385.32040CA | 32.00               | 40.00                  | 5.00           | 6.00                    |
| 385.1032042 | 32.00               | 42.00                  | 7.00           | 8.50                    |
| 385.1032045 | 32.00               | 45.00                  | 10.00          | 11.00                   |
| 385.0330416 | 33.00               | 40.87                  | 4.50           | 6.00                    |
| 385.1033040 | 33.34               | 40.63                  | 4.60           | 6.00                    |

| Part number | Rod diameter Ød1 f8 | Groove diameter ØD1 H8 | Seal height H1 | Groove width L1 0/+0.25 |
|-------------|---------------------|------------------------|----------------|-------------------------|
| 385.1034050 | 34.93               | 50.80                  | 7.93           | 9.50                    |
| 385.1036046 | 36.00               | 46.00                  | 7.00           | 7.50                    |
| 385.1036050 | 36.51               | 50.80                  | 7.93           | 9.50                    |
| 385.1038050 | 38.10               | 50.80                  | 9.52           | 11.00                   |
| 385.1039055 | 39.69               | 55.96                  | 9.52           | 11.00                   |
| 385.1040046 | 40.00               | 46.00                  | 3.60           | 4.40                    |
| 385.1040050 | 40.00               | 50.00                  | 7.00           | 8.50                    |
| 385.041050G | 41.28               | 50.80                  | 5.55           | 7.00                    |
| 385.1041050 | 41.28               | 50.80                  | 5.55           | 7.00                    |
| 385.1042050 | 42.00               | 50.00                  | 5.50           | 7.00                    |
| 385.1042053 | 42.86               | 53.98                  | 9.52           | 11.00                   |
| 385.1044057 | 44.45               | 57.15                  | 7.93           | 9.50                    |
| 385.1045055 | 45.00               | 55.00                  | 7.00           | 7.50                    |
| 385.1046060 | 46.04               | 60.33                  | 9.52           | 11.00                   |
| 385.1047063 | 47.63               | 63.50                  | 9.52           | 11.00                   |
| 385.1049066 | 49.21               | 66.68                  | 9.52           | 11.00                   |
| 385.1050060 | 50.00               | 60.00                  | 7.00           | 7.50                    |
| 385.1050073 | 50.80               | 73.03                  | 11.11          | 12.50                   |
| 385.1053069 | 53.98               | 69.85                  | 9.52           | 11.00                   |
| 385.1056068 | 56.00               | 68.00                  | 7.00           | 7.50                    |
| 385.2056068 | 56.00               | 68.00                  | 8.50           | 10.00                   |
| 385.1057069 | 57.15               | 69.85                  | 7.93           | 9.50                    |
| 385.1060072 | 60.00               | 72.00                  | 8.50           | 10.00                   |
| 385.1060076 | 60.33               | 76.20                  | 7.93           | 9.50                    |
| 385.1063075 | 63.00               | 75.00                  | 8.50           | 10.00                   |
| 385.1063076 | 63.50               | 76.20                  | 7.93           | 9.50                    |
| 385.1065077 | 65.00               | 77.00                  | 8.50           | 10.00                   |
| 385.1066079 | 66.68               | 79.38                  | 9.52           | 11.00                   |
| 385.1069090 | 69.85               | 90.90                  | 9.52           | 11.00                   |
| 385.1070082 | 70.00               | 82.00                  | 8.50           | 9.50                    |
| 385.1073082 | 73.03               | 82.55                  | 9.52           | 11.00                   |
| 385.1076088 | 76.20               | 88.90                  | 9.52           | 11.00                   |
| 385.1079098 | 79.38               | 98.43                  | 9.52           | 11.00                   |
| 385.1080092 | 80.00               | 92.00                  | 8.50           | 10.00                   |
| 385.1082095 | 82.55               | 95.25                  | 7.93           | 9.50                    |
| 385.1085098 | 85.73               | 98.43                  | 9.52           | 11.00                   |
| 385.1088101 | 88.90               | 101.60                 | 9.52           | 11.00                   |
| 385.1090102 | 90.00               | 102.00                 | 8.50           | 9.50                    |
| 385.1092106 | 92.08               | 106.40                 | 7.93           | 9.50                    |
| 385.1095111 | 95.25               | 111.10                 | 9.52           | 11.00                   |
| 385.1098107 | 98.43               | 107.95                 | 9.52           | 11.00                   |
| 385.1100112 | 100.00              | 112.00                 | 8.50           | 10.00                   |
| 385.1100115 | 100.00              | 115.00                 | 10.00          | 11.50                   |
| 385.1101111 | 101.60              | 111.10                 | 5.75           | 7.00                    |
| 385.1061177 | 106.30              | 117.20                 | 7.20           | 7.60                    |

| Part number | Rod diameter<br>Ød1 f8 | Groove diameter<br>ØD1 H8 | Seal height<br>H1 | Groove width<br>L1 0/+0.25 |
|-------------|------------------------|---------------------------|-------------------|----------------------------|
| 385.1107127 | 107.95                 | 127.00                    | 9.52              | 11.00                      |
| 385.1110130 | 110.00                 | 130.00                    | 14.00             | 15.50                      |
| 385.1114146 | 114.30                 | 146.05                    | 12.70             | 14.00                      |
| 385.1120136 | 120.65                 | 136.50                    | 7.14              | 8.50                       |
| 385.1125145 | 125.00                 | 145.00                    | 14.00             | 15.50                      |
| 385.1127146 | 127.00                 | 146.05                    | 12.70             | 14.00                      |
| 385.1133152 | 133.35                 | 152.40                    | 12.70             | 14.00                      |
| 385.1139157 | 139.70                 | 157.52                    | 7.14              | 8.50                       |
| 385.1140160 | 140.00                 | 160.00                    | 14.00             | 15.50                      |
| 385.1146165 | 146.05                 | 165.10                    | 12.70             | 14.00                      |
| 385.1152171 | 152.40                 | 171.45                    | 9.52              | 11.00                      |
| 385.1158177 | 158.80                 | 177.80                    | 12.70             | 14.00                      |
| 385.1160180 | 160.00                 | 180.00                    | 14.00             | 17.00                      |

| Part number | Rod diameter<br>Ød1 f8 | Groove diameter<br>ØD1 H8 | Seal height<br>H1 | Groove width<br>L1 0/+0.25 |
|-------------|------------------------|---------------------------|-------------------|----------------------------|
| 385.1165184 | 165.10                 | 184.15                    | 12.70             | 14.00                      |
| 385.1171190 | 171.45                 | 190.50                    | 12.70             | 14.00                      |
| 385.1177190 | 177.80                 | 190.50                    | 7.14              | 8.50                       |
| 385.1180200 | 180.00                 | 200.00                    | 14.00             | 17.00                      |
| 385.1184203 | 184.15                 | 203.20                    | 9.52              | 11.00                      |
| 385.1190209 | 190.55                 | 209.55                    | 12.70             | 14.00                      |
| 385.1196215 | 196.90                 | 215.90                    | 12.70             | 14.00                      |
| 385.1203222 | 203.20                 | 222.30                    | 12.70             | 14.00                      |
| 385.1209228 | 209.55                 | 228.60                    | 12.70             | 14.00                      |
| 385.1215235 | 215.90                 | 235.00                    | 12.70             | 14.00                      |
| 385.1222241 | 222.30                 | 241.30                    | 9.52              | 11.00                      |
| 385.1228247 | 228.60                 | 247.70                    | 12.70             | 14.00                      |