

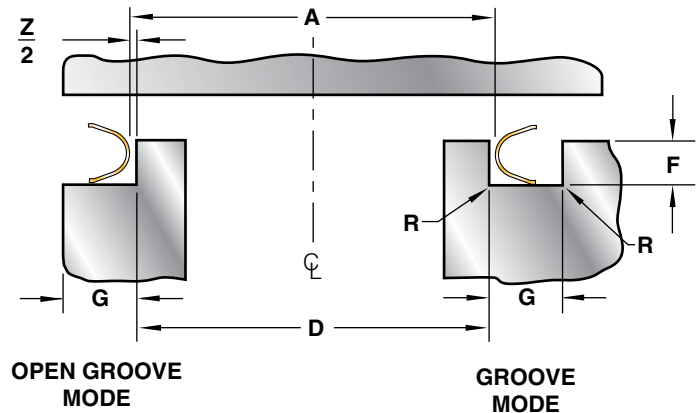
EUE Metal U-Ring External Pressure Face Seal

Applications:

- High temperature joints with significant movement.
- Up to 1600°F.
- Retrofittable in (3/32" cross section and larger) metal O-ring grooves for lower load and greater springback.

Features:

- Compliant low load seal, generally used unplated.
- Strongly pressure energized.
- Four standard sections and any diameter from 1.75" to 48".
- Radiused footprint area protects mating surfaces.
- Well supported heel and sides ensure highest pressure capability.
- Good all round performance, economically priced.



| Cavity Dimensions | | | | |
|-----------------------|-----------------------------|---------------|---------------|----------------|
| | D | F | G | R |
| Nominal Cross Section | I.D. Range Tolerance h10 | Depth Range | Minimum Width | Maximum Radius |
| 3/32 | 2.250 – 16.000 | 0.074 – 0.080 | 0.125 | 0.020 |
| 1/8 | 2.500 – 24.000 | 0.100 – 0.107 | 0.160 | 0.030 |
| 3/16 | 3.375 – 36.000 | 0.150 – 0.157 | 0.250 | 0.050 |
| 1/4 | 6.000 – 48.000 | 0.200 – 0.208 | 0.350 | 0.060 |

All dimensions are in inches.
The tolerance reference table can be found on page E-92.

Part Numbering:

Refer to Section A, page A-9 for part numbering convention. The seal size is specified in the part number as follows:

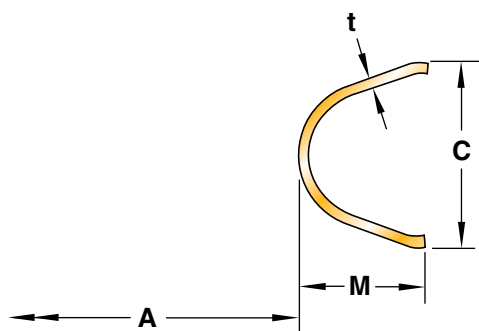
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Seal I.D. (dimension A) to three decimal places. (Example: A 3.000 inch seal is specified as 003000)

Metal Seal Cross Section Code

Material (Section D)

Temper (Section D)



Seal and Cavity Sizing:

Seal free height is based on cavity diameter and depth alone. Seal diameter (dimension A) is derived below.

A = D + Z

(tolerance H11, see page E-92)

Where: D = Maximum cavity I.D.

Z = Diametral clearance between cavity and seal



Section C
Metal Seal Size Selection

| Seal Dimensions | | | | | |
|-----------------------|---------------------|---------------|--------------------|----------------------|--------------------|
| Nominal Cross Section | Z | C | t | M | Cross Section Code |
| | Diametral Clearance | Free Height | Material Thickness | Maximum Radial Width | |
| 3/32 | 0.003 | 0.093 ± 0.004 | 0.010 | 0.098 | 07 |
| 1/8 | 0.005 | 0.125 ± 0.005 | 0.012 | 0.131 | 09 |
| 3/16 | 0.006 | 0.185 ± 0.005 | 0.015 | 0.198 | 13 |
| 1/4 | 0.008 | 0.247 ± 0.006 | 0.020 | 0.262 | 15 |

| Performance | | |
|--|---------------------|-------------------------------|
| Seating Load (pounds per inch circumference) | Springback (inches) | Working Pressure Rating (psi) |
| 45 | 0.010 | 12000 |
| 50 | 0.014 | 12000 |
| 50 | 0.020 | 8000 |
| 70 | 0.026 | 8000 |

All dimensions are in inches. Performance data is based on Alloy 718 material with -6 treatment. Seal performance is discussed in Section E. If working pressures exceed these ratings consult Parker for recommendations.