

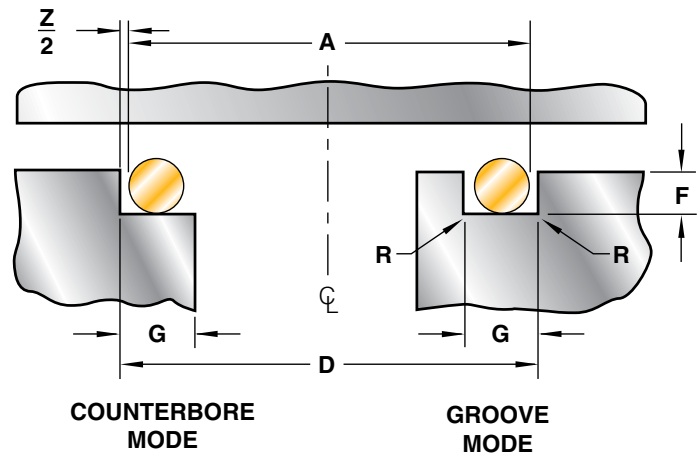
EWI Metal Wire Ring Internal Pressure Face Seal

Applications:

- Low cost, high load 'crush' sealing.
- Contiguous sealing surface permits use within triple-surface, chamfered joints and non-rectangular section grooves.
- Best with rigid mating surfaces with minimum relative movement.
- Small process valves.
- Fits standard metal O-ring grooves.

Features:

- Wide variety of material options.
- High pressure rating.
- Many other custom cross sections are available.



Cavity Dimensions

Nominal Cross Section	D	F	G	R
	O.D. Range Tolerance H10	Depth Range	Minimum Width	Maximum Radius
1/32	0.250 – 1.000	0.025 – 0.027	0.055	0.010
1/16	0.500 – 8.000	0.045 – 0.050	0.090	0.015
3/32	1.000 – 16.000	0.074 – 0.079	0.150	0.020
1/8	1.500 – 24.000	0.100 – 0.105	0.160	0.030

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:

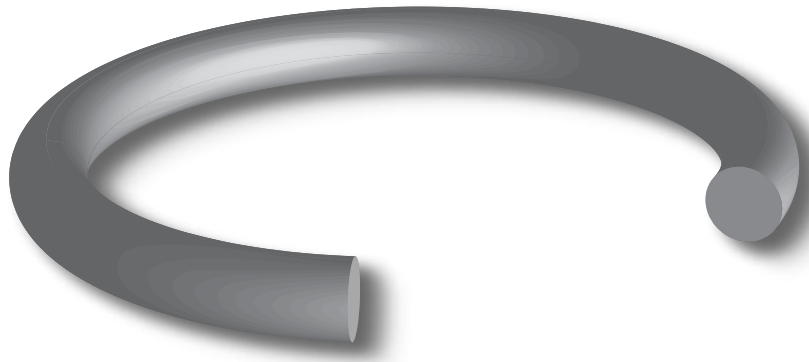
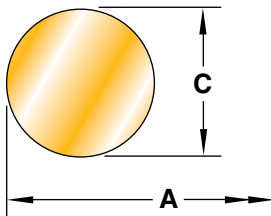
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Seal O.D. (dimension A) to three decimal places. (Example: A 3.000 inch seal is specified as 003000)

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 ± 0.005)

Where: D = Minimum cavity O.D.

Z = Diametral clearance between cavity and seal

Section C
Metal Seal Size Selection

Seal Dimensions			
Nominal Cross Section	Z	C	Cross Section Code
	Diametral Clearance	Free Height	
1/32	0.008	0.035 ^{+0.003} / _{-0.001}	03
1/16	0.011	0.062 ^{+0.003} / _{-0.001}	05
3/32	0.013	0.094 ^{+0.003} / _{-0.001}	06
1/8	0.017	0.125 ^{+0.003} / _{-0.001}	07

Performance		
Seating Load (pounds per inch circumference)	Springback (inches)	Working Pressure Rating (psi)
4200	0	20000
6000	0.0005	20000
6000	0.001	20000
6000	0.002	20000

All dimensions are in inches. Performance data is based on annealed 304 Stainless Steel. Seal performance is discussed in Section E.