

Data Sheet

80 Wafer Isolation Ring

FEATURES

- 360° Instrument rotation with SQR™ option
- Selection of 2" through 20" nominal pipe size
- Non-clogging/low maintenance
- Complete instrument protection
- Ensure reliable/accurate pressure readings
- Optional retrofit end plates to replace competitive units
- NSF-61 Compliant (316L Stainless steel/EPDM only)

TYPICAL USES

- Water and wastewater
- Mining

SPECIFICATIONS

Sizes:	2" to 20"
Instrument Connection Size:	¼, ½ NPT
Pressure Rating (MAWP):	Per customer flanges: ASME B16.5 150 or 300 class
Fill:	Glycerin: 0 °F to 400 °F (-18 °C to 204 °C) Silicone (10Cst): -40 °F to 500 °F (-40 °C to 260 °C) Silicone (50Cst): -40 °F to 600 °F (-40 °C to 316 °C) Halocarbon®: -70 °F to 300 °F (-57 °C to 149 °C)
Instrument Options:	Direct-mount, Needle valve, Safe Quick Release (SQR™), Needle valve and SQR™ (02T conn.)
Added Tolerance:	±0.5% typical
Approvals:	CRN, NSF-61 (316L Stainless steel / EPDM only)

WETTED COMPONENTS

End Plate Material	Flexible Liner
Carbon steel, 316L Stainless steel, PVDF, Acetal, CPVC	Buna, PTFE, EPDM, Natural rubber, and Viton™

NON-WETTED COMPONENTS

Body	Instrument Fittings
Carbon Steel, 316L Stainless steel	Adapters: 316L Stainless steel Needle Valve: 316L Stainless steel SQR: Zinc-plated carbon steel

MIN/MAX TEMPERATURE LIMITS

Liner	Temperature Limits
Buna-N	-30 °F to 225 °F (-34 °C to 107 °C)
PTFE	-15 °F to 350 °F (-25 °C to 177 °C)
Viton™	-15 °F to 350 °F (-25 °C to 177 °C)
Natural Rubber	-30 °F to 225 °F (-34 °C to 107 °C)
EPDM	-40 °F to 300 °F (-40 °C to 149 °C)



80 Wafer Isolation Ring

Nominal Size: 2" to 20"



KEY BENEFITS

- Reliable when continuous pressure measurements are needed
- Non-clogging and low maintenance
- Complete instrument protection

80 Wafer Isolation Ring

ORDERING CODE	Example:	80	02	E	B	B	02T	N	000	XCK	H3	NH
Seal Type												
80 - Wafer style isolation ring		80										
Process Connection Size												
02 - 2" (see table 2 on page 3)			02									
Inner Flexible Wall												
E - Buna-N				E								
T - PTFE (available in 2" to 10")												
Y - Viton™												
R - Natural rubber												
P - EPDM (NSF-61 Compliant)												
End Plate Material												
A - Acetal												
K - CPVC												
B - Carbon steel					B							
S - 316L Stainless steel (NSF-61 Compliant)												
F - PVDF												
Body Material												
B - Carbon steel						B						
S - 316L Stainless steel												
Instrument Connection Size												
02T - ¼ NPT Female							02T					
04T - ½ NPT Female (ring body tapped with ¼ NPT connection; 04T connection utilizes ¼-½ NPT adapter)												
Instrument Removal Option												
N - Direct-mount (2" to 8")								N				
V - Needle valve (2" to 8")												
Q - Safe Quick Release (SQR™)												
Z - Needle valve and SQR												
Pressure Class												
000 - Wafer design									000			
Options (if choosing option(s) must include an "X")										X__		
Fill Fluid (see table 3 on page 3 for more available fill fluids)												
CG - Glycerin												
CK - Silicone 50cSt										CK		
CF - Halocarbon®												
CT - 50/50 Ethylene Glycol/water												
Multiple Instrument Assemblies (contact factory for additional arrangements or custom orientations.)												
H3 - ¼ NPT gauge/ ¼ NPT transducer/ 02T isolation ring											H3	
H5 - ½ NPT gauge/ ½ NPT switch/ 04T isolation ring												
H6 - ½ NPT gauge/2 ½ NPT switches/ 02T isolation ring												
H7 - ¼ NPT gauge/ ¼ NPT switch/ 02T isolation ring												
Refer to Assembly Guide for additional assembly options												
Optional Features												
IR - Retrofit end plates (custom end plate widths for drop-in replacements)												
NH - Stainless steel tag wired to ring												NH
Q8 - Elbow for vertical pipe installation												

When selecting an instrument, refer to the [Diaphragm Seal Pressure & Temperature Min/Max Guide](#) for compatibility with this isolation ring or scan the QR code to the right.



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80 Wafer Isolation Ring

TABLE 2 – PROCESS CONNECTION TABLE		TABLE 3 – FILL FLUID TABLE		
Process Connection Code (Nominal Size)	Type 80 (Ordering Code)	Fill Fluid	Temperature Range	Code
2"	02	Glycerin	0 °F to 400 °F (-18 °C to 204 °C)	CG
3"	03	Silicone 10cSt	-40 °F to 500 °F (-40 °C to 260 °C)	DJ
4"	04	Silicone 50cSt	-40 °F to 500 °F (-40 °C to 260 °C)	CK
5"	05	Halocarbon®	-80 °F to 390 °F (-60 °C to 200 °C)	CF
6"	06	50/50 Ethylene Glycol/Water	-25 °F to 190 °F (-32 °C to 88 °C)	CT
8"	08			
10"	10			
12"	12			
14"	14			
16"	16			
18"	18			
20"	20			

Consult factory for larger sizes

DIMENSIONS									
Nominal Pipe Size Inches	Inner Diameter (ID)	Outer Diameter (OD)	Width (W) Metallic Endplates	Width (W) Non Metallic Endplates	Width (W) XIR Endplates	Direct	H		Weight Lbs. (metal end plates)
							Safe Quick Release	Needle Valve	
2	2.07	4.00	2.00	2.13	2.13	1.89	2.04	1.70	4.00
3	3.07	5.25	2.00	2.13	2.13	1.89	2.04	1.70	6.30
4	4.03	6.75	1.50	2.13	2.13	1.89	2.04	1.70	8.00
5	5.05	7.63	1.50	2.25	2.25	1.89	2.04	1.70	9.50
6	6.07	8.63	1.50	2.25	2.25	1.89	2.67	2.32	10.20
8	7.98	10.88	1.50	2.50	2.50	2.39	2.67	2.32	14.90
10	10.02	13.25	1.50	2.75	2.75	2.39	2.67	2.32	21.30
12	12.00	16.00	1.75	3.00	3.00	2.39	2.67	2.32	39.10
14	13.25	17.63	1.75	3.00	3.00	2.89	3.17	2.82	47.80
16	15.25	20.13	1.75	3.00	3.00	2.89	3.17	2.82	58.00
18	17.25	21.50	1.75	3.00	3.00	2.89	3.67	3.32	61.80
20	19.25	23.75	1.75	3.00	3.00	2.89	3.67	3.32	68.80

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