

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

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™ (O2T conn.)
Added Tolerance:	±0.5% typical
Approvals:	CRN

WETTED COMPONENTS

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

NON-WETTED COMPONENTS

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

MIN/MAX TEMPERATURE LIMITS

Liner	Temperature Limits
Buna-N	-30°F to 225°F (-34°C to 107°C)
Teflon	-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)



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Nominal Size: 2" to 20"

KEY BENEFITS

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

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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												
End Plate Material												
A - Acetal												
K - CPVC												
B - Carbon steel					B							
S - 316L Stainless steel												
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								N				
V - Needle valve												
Q - Safe Quick Release (SQR™)												
Z - Needle valve and SQR (Requires 02T instrument connection)												
Pressure Class												
000 - Wafer design									000			
Options (if choosing option(s) must include an "X")												
Fill Fluid (see table 3 on page 3 for more available fill fluids)										X__		
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												
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 (02T connection only)												

Consult factory for multiple instrument assemblies, welded assembly options, additional process connection sizes and fill fluids. When selecting an instrument, refer to the [Min/Max Guide](#) for compatibility with this isolation ring or scan the QR code to the right.



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TABLE 2 – PROCESS CONNECTION TABLE

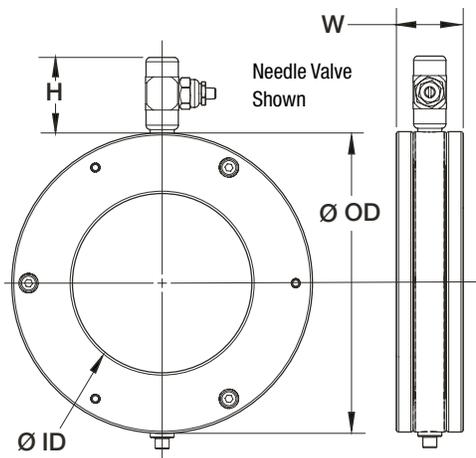
Process Connection Code (Nominal Size)	Type 80 (Ordering Code)
2"	02
3"	03
4"	04
5"	05
6"	06
8"	08
10"	10
12"	12
14"	14
16"	16
18"	18
20"	20

Consult factory for larger sizes

TABLE 3 – FILL FLUID TABLE

Fill Fluid	Temperature Range	Code
Glycerin	0°F to 400°F (-18°C to 204°C)	CG
Silicone 10cSt	-40°F to 500°F (-40°C to 260°C)	DJ
Silicone 50cSt	-40°F to 500°F (-40°C to 260°C)	CK
Halocarbon®	-80°F to 390°F (60°C to 200°C)	CF
50/50 Ethylene Glycol/Water	-25°F to 190°F (-32°C to 88°C)	CT

DIMENSIONS



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

* Widths for all rings ordered with XIR retrofit option, and all K, F, and A endplate materials.