

1010FR Flushing Rings

The SOR 1010FR Flushing Rings

are designed to be installed between an instrument and a standard ASME flange and can be used with any flanged, pancake, or inline diaphragm seal. The SOR 1010FR Flushing Rings meet all of your requirements for flushing, calibration, and drip rings.

One or two flushing connections will allow the buildup that accumulates in front of the diaphragm to be flushed out or vented without disconnecting the transmitter. As the name 'drip rings' implies, the flushing connections can be used to drain piping, take samples, or even bleed a valve.

When used as a calibration ring, a known pressure is applied to one of the flushing connections while the attached instrument is cycled through a calibration routine. The SOR 1010FR Flushing Rings can also be installed without flushing connections as a spacer or to provide heat dissipation.



Features

Built to Order

SOR leverages our world class machine shop to provide product that meets your exact requirements with the delivery your application demands. Never again feel trapped by off-the-shelf choices or long lead times.

Material Selection

SOR can provide any material your application requires. Standard construction uses carbon steel or 316/316LSST, but Monel, Hastelloy, and other materials are available. If your valves require a different material than the rings, just let us know. SOR can provide your solution.

Installation Flexibility

Whether your design requires the rings to be clamped between the flange and transmitter seal, or you prefer through-holes for on-stud mounting, SOR can provide exactly what you need.

Flushing Connections

SOR can provide the rings with zero, one, or two lateral ports with the flushing connection type you require. SOR can also provide gate, ball, needle valves, or any other valves you specify which can be welded to the rings to eliminate the need for threads entirely.

Universal Fit

The SOR 1010FR Flushing Rings can be designed for compatibility with any transmitter or device on the market, allowing the instrument to be calibrated without needing to remove it or shut down the process.

Sizing Options

SOR offers flange side and diaphragm side transition sizing. This allows a flange of a larger size to be matched to a diaphragm of a smaller size without added material and installation costs. You only need to purchase the SOR Flushing Rings to meet your unique requirements.

World Class Manufacturing

SOR can manufacture your product to meet any standard you require, including ASME, NACE, and ASTM. Inspection reports are provided to meet your requests.

Tagging

Standard Flushing Ring configurations come with 2 lines (23 characters and spaces per line) included for customer specified tagging information at no additional charge. Options selected may limit the space available for tagging; consult the factory for more information

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How to Order

How to Order

Here is the SOR quick select model number tree that provides you with all the options to configure and order a product for your application. You must select a designator for each component. ***If you do not see what you need, please consult the factory and a special configuration will be engineered.***

Flange Class		7	8	Number Flushing Connections	
Class 150	01	0	0		
Class 300	03	1	1		
Class 600	06	2	2		
Class 900	09				
Class 1500	15				
Class 2500	25				

Process Side Flange Type		6	Flushing Connection Type	
Raised Face	R		NF	NPT
Ring Type Joint	J		BT	BSPT
Flat	F		BP	BSPP
			CP	CPI
			AL	A-LOK
			SW	Socket Weld
			BW	Butt Weld

Process Side Flange Size		5	Flushing Connection Size	
.5 inch	08		004	0.25 inch
.75 inch	12		006	0.5 inch
1 inch	16		008	0.75 inch
1.5 inches	24		016	1 inch
2 inches	32		M06	M6 x 1.0
3 inches	48		M10	M10 x 1.0
4 inches	64		M12	M12 x 1.5
			M16	M16 x 1.5

Instrument Side Flange Type		4	Valve Type*	
Raised Face	R		G	Gate
Ring Type Joint	J		B	Ball
Flat	F		N	Needle
			0	No Valve

Instrument Side Flange Size		3	Valve Material	
.5 inch	08		C	Carbon Steel
.75 inch	12		S	316/316LSS
1 inch	16		M	Monel
1.5 inches	24		H	Hastelloy
2 inches	32		0	No Valve
3 inches	48			
4 inches	64			

Ring Material		2	Options	
Carbon Steel	C		NC	NACE
316/316LSS	S		CT	Captive Studs
Monel	M		C4	Certificate of Compliance
Hastelloy	H		TR	Inspection and Testing Certificates**

Model		1
Flushing Ring	1010	
	1010FR	

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Example Model No.

*Options may change specifications and dimensions, contact Customer Service for more information.

** If TR option is selected, please fill out Inspection and Testing Certifications form on page 4.

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Application Data Sheet

Date _____	
Name _____	Phone _____
Company/Location _____	Email _____
Customer PO _____	Sales Order No. _____
Design / Construction	
Design Pressure _____	Design Temperature _____
Process Media _____	
Ring material of construction	<input type="checkbox"/> Carbon steel <input type="checkbox"/> 316/316LSS <input type="checkbox"/> Monel 400 <input type="checkbox"/> Hastelloy C276 <input type="checkbox"/> Other _____ (please specify)
Ring Connections	
Instrument side flange size	<input type="checkbox"/> 0.5 inch <input type="checkbox"/> 0.75 inch <input type="checkbox"/> 1 inch <input type="checkbox"/> 1.5 inches <input type="checkbox"/> 2 inches <input type="checkbox"/> 3 inches <input type="checkbox"/> 4 inches <input type="checkbox"/> Other _____ <input type="checkbox"/> Metric _____
Instrument side flange configuration	<input type="checkbox"/> Raised Face <input type="checkbox"/> Ring Type Joint <input type="checkbox"/> Flat <input type="checkbox"/> Other _____
Process side flange size	<input type="checkbox"/> 0.5 inch <input type="checkbox"/> 0.75 inch <input type="checkbox"/> 1 inch <input type="checkbox"/> 1.5 inches <input type="checkbox"/> 2 inches <input type="checkbox"/> 3 inches <input type="checkbox"/> 4 inches <input type="checkbox"/> Other _____ <input type="checkbox"/> Metric _____
Process side flange configuration	<input type="checkbox"/> Raised Face <input type="checkbox"/> Ring Type Joint <input type="checkbox"/> Flat <input type="checkbox"/> Other _____
Flange class	<input type="checkbox"/> 150 <input type="checkbox"/> 300 <input type="checkbox"/> 600 <input type="checkbox"/> 900 <input type="checkbox"/> 1500 <input type="checkbox"/> 2500 <input type="checkbox"/> Other _____ <input type="checkbox"/> Metric _____
Flange Finish (min)	<input type="checkbox"/> 125-250 (Standard) <input type="checkbox"/> 250-500 AARH <input type="checkbox"/> Other _____
Flushing Ports	
Number of flushing connections	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> Other _____
Orientation of ports	<input type="checkbox"/> Standard (symmetrical) <input type="checkbox"/> Custom _____
Flushing connection type	<input type="checkbox"/> NPT <input type="checkbox"/> BSPT <input type="checkbox"/> BSPP <input type="checkbox"/> CPI <input type="checkbox"/> A-LOK <input type="checkbox"/> Socket weld <input type="checkbox"/> Butt weld <input type="checkbox"/> Other _____ (please specify)
Flushing connection size	Inches: <input type="checkbox"/> 0.25 <input type="checkbox"/> 0.5 <input type="checkbox"/> 0.375 <input type="checkbox"/> 1 <input type="checkbox"/> Other _____ Millimeters: <input type="checkbox"/> 6 <input type="checkbox"/> 10 <input type="checkbox"/> 12 <input type="checkbox"/> 16 <input type="checkbox"/> Other _____
Valve	
Valve type	<input type="checkbox"/> Gate <input type="checkbox"/> Ball <input type="checkbox"/> Needle <input type="checkbox"/> None <input type="checkbox"/> Other _____
Valve material	<input type="checkbox"/> Carbon steel <input type="checkbox"/> Stainless Steel <input type="checkbox"/> Other _____
Fire Safe	<input type="checkbox"/> Yes <input type="checkbox"/> No
Options	
Options	<input type="checkbox"/> NACE <input type="checkbox"/> Captive Studs <input type="checkbox"/> Certificate of Compliance <input type="checkbox"/> Inspection and Testing Certificate (If this option is selected, please fill out Inspection and Testing Certifications form on next page.
Customer specified tagging _____	
Additional requirements _____	
<div style="background-color: #cccccc; padding: 5px; margin-bottom: 5px;">SKETCH RINGS or APPLICATION HERE</div>	

*Design and specifications are subject to change without notice.
For latest revision, see SORInc.com.*

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Inspection and Testing Certifications

☐ No testing or test documentation required.

- | | |
|---|---|
| <input type="checkbox"/> PMI Report | <input type="checkbox"/> SOR Standard Alloy verification of wetted parts using x-ray fluorescence (XRF) technology to positively identify the part material used post manufacturing.
<input type="checkbox"/> Customer specified alternate requirements_____ |
| <input type="checkbox"/> Hydrostatic Pressure Test | <input type="checkbox"/> SOR Standard Process conforms to ASME Section V and is conducted per serial number. If valves are used, hydro testing will be done with valve open and ports plugged.
<input type="checkbox"/> Customer specified alternate requirements_____ |
| <input type="checkbox"/> Visual Inspection Report | <input type="checkbox"/> SOR Standard Visual weld inspection by certified weld inspector per sales order line item.
<input type="checkbox"/> Customer specified alternate requirements_____ |
| <input type="checkbox"/> Factory Acceptance Test | <input type="checkbox"/> SOR Standard Summary of testing schedule completed per sales order line item.
<input type="checkbox"/> Customer specified alternate requirements_____ |
| <input type="checkbox"/> Inspection Test Plan | <input type="checkbox"/> SOR Standard Summary of all the testing processes that will be conducted per sales order line item.
<input type="checkbox"/> Customer specified alternate requirements_____ |
| <input type="checkbox"/> Mill Test Report | <input type="checkbox"/> SOR Standard Certifies that the listed serial numbers were manufactured using the materials on the associated Certified Material Test Reports (CMTR).
<input type="checkbox"/> Customer specified alternate requirements_____ |
| <input type="checkbox"/> Dye Penetrant Examination | <input type="checkbox"/> SOR Standard Certifies that the listed serial numbers were examined by visible liquid penetrant in accordance with ASME Section V, Article 6.
<input type="checkbox"/> Customer specified alternate requirements_____ |
| <input type="checkbox"/> NACE Compliance | <input type="checkbox"/> SOR Standard SOR shall provide certification of compliance that the pressure boundary components of the listed serial numbers were manufactured to meet NACE MR0175/ ISO15156.
<input type="checkbox"/> Customer specified alternate requirements_____ |
| <input type="checkbox"/> Ferrite Test | <input type="checkbox"/> SOR Standard Certifies the Ferrite Number (FN) of 20% of the welds per serial number is documented on associated weld map drawings.
<input type="checkbox"/> Customer specified alternate requirements_____ |
| <input type="checkbox"/> Radiographic Examination (X-Ray) | <input type="checkbox"/> SOR Standard Certifies the 3rd party radiographic examination of 5% of welds per sales order line item by sample size in accordance with ASME Section V.
<input type="checkbox"/> Customer specified alternate requirements_____ |
| <input type="checkbox"/> Heat Treat | <input type="checkbox"/> SOR Standard Certifies heat treatment was conducted to ASTM standards per sales order line item.
<input type="checkbox"/> Customer specified alternate requirements_____ |
| <input type="checkbox"/> Mag Particle Examination | <input type="checkbox"/> SOR Standard Certifies that the listed serial numbers were examined by visible mag particle in accordance with ASME Section V.
<input type="checkbox"/> Customer specified alternate requirements_____ |
| <input type="checkbox"/> Ultrasonic Examination | <input type="checkbox"/> SOR Standard Certifies that the listed serial numbers were examined by 3rd party ultrasonic examination in accordance with ASME Section V.
<input type="checkbox"/> Customer specified alternate requirements_____ |



MEASUREMENT AND CONTROL

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