# • GROUNDING RINGS • FOR ELECTROMAGNETIC FLOW METERS





### **DESCRIPTION**

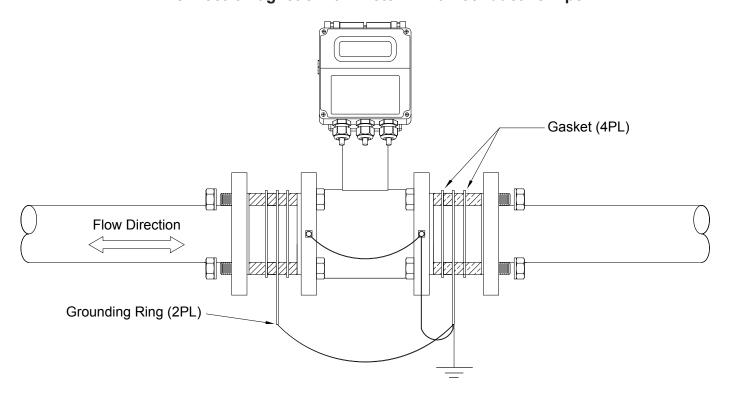
Grounding rings are used to suppress electrical interference at the installation location for electromagnetic flow meters. They are provided in pairs and are installed upstream and downstream of the flow meter. ONICON grounding rings are flat wafer-style rings designed to be installed between an ANSI Class 150 flange and the F-3000 series inline electromagnetic flow meter flange face. The same grounding rings may also be sandwiched between flange pairs located upstream and downstream of F-3500 Insertion Style Electromagnetic Flow Meters.

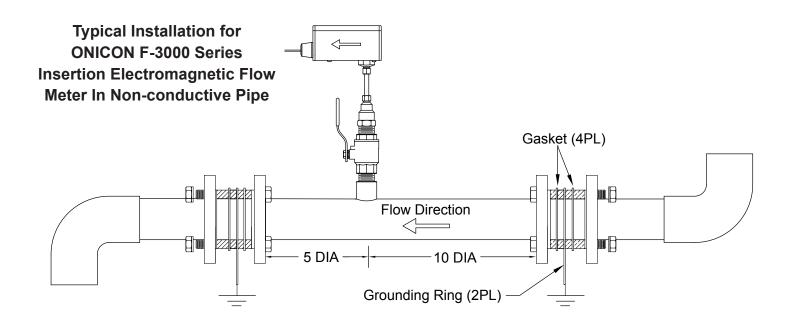
Use of grounding rings significantly reduces electrical noise and may be necessary for proper operation of electromagnetic flow meters installed in lined or non-conductive pipes.

The size of the grounding rings should always match the meter size (as opposed to the original pipe size) for installation with inline meters.

Standard grounding rings are for use with ANSI Class 150 flanges and are made of 316 Stainless Steel. ANSI Class 300 grounding rings and rings made from Monel and Hastelloy are also available for special applications.

# Typical Installation for ONICON F-3000 Series Inline Electromagnetic Flow Meter In Non-conductive Pipe





# DIMENSIONS | 5/8 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4

Grounding Ring Dimensions				
Nominal Size	Bore	A	С	D
1"	1 - 1/16	2 - 5/8	4 - 9/16	1 - 15/16
1.5"	1 – 9/16	3 - 3/8	5 - 5/16	1 - 15/16
2"	2 – 1/16	4 – 1/8	6 - 1/16	1 - 15/16
3"	3 – 1/16	5 – 3/8	7 - 5/16	1 - 15/16
4"	4 – 1/16	6 – 7/8	8 - 13/16	1 - 15/16
6"	6	8 - 3/4	10 - 11/16	1 - 15/16
8"	8	11	12 - 15/16	1 - 15/16
10"	9 - 1/2	13 - 3/8	15 - 5/8	2 - 1/4
12"	11 – 9/16	16 – 1/8	18 - 9/16	2 - 7/16
14"	13 – 1/2	17 - 3/4	20 - 3/8	2 - 5/8
16"	15 – 1/4	20 - 1/4	22 - 7/8	2 - 5/8
18"	17 - 3/8	21 - 5/8	24 - 1/4	2 - 5/8
20"	19	23 - 7/8	26 - 11/16	2 - 13/16
24"	23	28 - 1/4	31 - 1/8	2 - 7/8
30"	29	34 - 3/4	38	3 - 1/2
36"	35	41 – 1/4	45 - 1/4	4
42"	41	48	52 - 1/2	4 - 1/2

## **ORDERING INFORMATION**

ANSI Class 150 316 Stainless Steel Grounding Rings (pair)			
Nominal Size	ONICON Part Number		
1"	19265		
1½"	19266		
2"	19267		
3"	19268		
4"	19269		
6"	19270		
8"	19271		
10"	19272		
12"	19273		
14"	19274		
16"	19275		
18"	19276		
20"	19277		
24"	19278		
30"	19279		
36"	19280		
42"	19281		