Dielectric Waterway

SERIES 47

SBCCI

Clearflow* Dielectric Waterway fittings create a dielectric waterway by insulating the inside of the metal casing, thus inhibiting the internal formation of galvanic local cell corrosion between the dissimilar metals in the presence of water.

By essentially eliminating galvanic local cell and stray current problems, Clearflow Dielectric Waterway fittings continuously provide the most effective corrosion protection possible in any waterway system connection.

Clearflow fittings use materials which meet the requirements of ASTM F-1545-97. Clearflow fittings are designed for continuous use at temperatures up to 230°F (110°C) and pressures up to 300 psi/2065 kPa.

Style 47-GT and 47-TT are NSF Listed in accordance with ANSI/NSF 61, up to 180°F (82°C) for potable water service. Style 47-GG is UL Classified in accordance with ANSI/NSF 61, up to 180°F (82°C) for potable water service.

Varied Styles
Clearflow Dielectric Waterways provide a transition from carbon steel or galvanized carbon steel (IPS) pipe to copper (CTS) pipe with varied end preparations.

Style 47-GT connects a threaded (IPS) copper adapter to a grooved carbon steel or galvanized carbon steel system. The threaded by threaded Style 47-TT connects the threaded copper adapter to a FPT component.

The new Style 47-GG provides a direct transition from grooved copper (CTS) to grooved end carbon steel or galvanized carbon steel (IPS) without any other adapters. This allows easy integration of Victaulic grooved end copper systems into carbon steel or galvanized carbon steel systems. This is significant for retrofit, expansion or direct connection to dissimilar metals equipment. The Style 47 should not be used as a transition from stainless steel(IPS) pipe to copper (CTS) pipe.

*Clearflow is a registered trademark of Perfection Corp.

Style 47-GT
Grooved End X Threaded

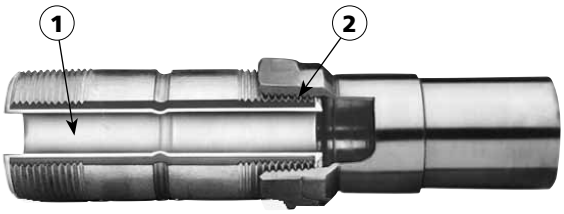
Style 47-TT
Threaded X Threaded

2-4"/50-80 mm

5-8"/100-200 mm

Style 47-GG
Grooved End carbon steel or galvanized carbon steel (IPS) to Grooved Copper (CTS) Transition Fitting

MATERIAL SPECIFICATIONS



1. Inert, non-corrosive thermoplastic lining (NSF/FDA listed)

2. Zinc electroplated casing, threaded in accordance with American National Pipe Thread – Tapered ANSI A1.20.1

Optional Coating: TNEMEC N-140 Pota-Pox Plus (ANSI/NSF-61 Compliant)

Body (Styles GT and TT): Carbon Steel pipe to ASTM A-53, zinc electroplated.

Body (Style GG):

2-4"/50-80 mm Sizes: Ductile iron conforming to ASTM A-536, grade 65-45-12, and ASTM A-395, grade 65-45-15, zinc electroplated

5-8"/114.3-219.1 mm Sizes: Carbon Steel pipe to ASTM A-53, zinc electroplated.

Liner: LTHS high temperature stabilized polyolefin polymer (virgin polypropylene)

JOB/OWNER
System No. _____
Location _____

CONTRACTOR
Submitted By _____
Date _____

ENGINEER
Spec Sect _____ Para _____
Approved _____
Date _____

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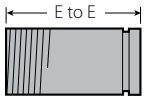
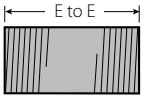
DIMENSIONS

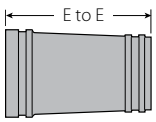


Style 47-GT
Grooved X Threaded



Style 47-TT
Threaded X Threaded

Pipe Size Nominal Dia. Inches/mm	Actual Out. Dia. Inches/mm	Max. Work. Press. PSI/kPa	End to End Inches/mm	Units Per Box	Aprx. Wgt. Each Lbs./kg
Grooved X Threaded					
1 25	1.315 33.7	300 2065	4.00 102	25	0.3 0.2
1 ¼ 32	1.660 42.4	300 2065	4.00 102	10	0.6 0.3
1 ½ 40	1.900 48.3	300 2065	4.00 102	10	0.8 0.3
2 50	2.375 60.3	300 2065	4.00 102	10	1.0 0.5
2 ½ 65	2.875 73.0	300 2065	6.00 152	6	1.6 0.7
3 80	3.500 88.9	300 2065	6.00 152	6	2.0 0.9
3 ½ 90	4.000 101.6	300 2065	6.00 152	6	2.3 1.1
4 100	4.500 114.3	300 2065	6.00 152	6	4.5 2.0
Threaded X Threaded					
½ 15	0.840 21.3	300 2065	3.00 76	25	0.2 0.1
¾ 20	1.050 26.7	300 2065	3.00 76	25	0.2 0.1
1 25	1.315 33.7	300 2065	4.00 102	25	0.3 0.2
1 ¼ 32	1.660 42.4	300 2065	4.00 102	10	0.6 0.3
1 ½ 40	1.900 48.3	300 2065	4.00 102	10	0.8 0.3
2 50	2.375 60.3	300 2065	4.00 102	10	1.0 0.5
2 ½ 65	2.875 73.0	300 2065	6.00 152	6	1.6 0.7
3 80	3.500 88.9	300 2065	6.00 152	6	2.0 0.9
3 ½ 90	4.000 101.6	300 2065	6.00 152	6	2.3 1.1
4 100	4.500 114.3	300 2065	6.00 152	6	4.5 2.0



Style 47-GG
Grooved X Grooved

Grooved X Grooved

Pipe Size Inches/mm Nominal Diameter	Actual Outside Diameter Steel (IPS)	Actual Outside Diameter Copper (CTS)	Max. Work. Press. PSI/kPa	End to End Inches/mm	Units Per Box	Aprx. Wgt. Each Lbs./kg
2 50	2.375 60.3	2.125 54.0	300 2065	4.19 106	10	1.3 0.6
2 ½ 65	2.875 73.0	2.625 66.7	300 2065	6.19 157	6	3.3 1.5
3 80	3.500 88.9	3.125 79.4	300 2065	6.19 157	6	4.5 2.0
4 100	4.500 114.3	4.125 104.8	300 2065	6.19 157	6	5.8 2.6
5 125	5.563 141.3	5.125 130.2	300 2065	6.19 157	1	7.8 3.5
6 150	6.625 168.3	6.125 155.6	300 2065	6.19 157	1	10.1 4.6
8 200	8.625 219.1	8.125 206.4	300 2065	6.19 157	1	15.0 6.8

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PRODUCT TESTING

Pittsburgh Testing Laboratory Certified Tests and Results:
A test was conducted to determine a Clearflow fitting's ability to reduce the current flow that causes internal corrosion in a waterway system.

This current flow exists when dissimilar metals are exposed to an electrolyte (water) and is directly proportional to the rate at which corrosion occurs. The test fittings were installed between a piece of copper tubing and galvanized carbon steel pipe. The current flow across these fittings was measured and recorded by Pittsburgh Testing Laboratory.

After each test sample was assembled, a plastic cap was installed on the copper tubing. Each sample was filled with 70°F tap water. One lead of the multimeter was connected to the copper tubing. The other lead was connected to the galvanized pipe. A current reading was taken for each sample.

The results:
Sample #1: (Clearflow Dielectric Waterway Connectors): 0.066 m

Sample #2: (Galvanized Pipe Nipple): 0.345 ma

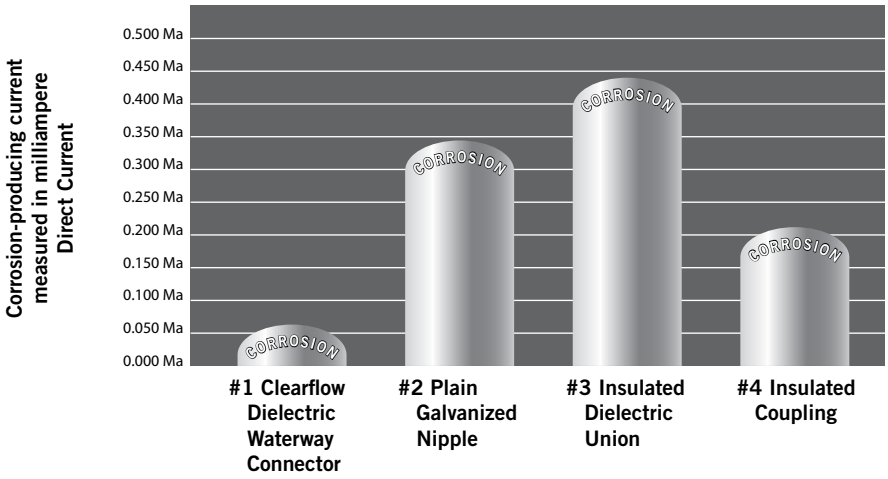
Sample #3: (Insulated Dielectric Union): 0.441 ma

Sample #4: (Insulated Coupling): 0.209 ma

NOTE: Certified results of these tests are available upon request.

Dielectric Waterway Fittings Test Data and Results:
The facts and test data reported in this submittal have been certified by Pittsburgh Testing Laboratory and collected by Perfection Corporation engineers in their own laboratories. Similar testing on Clearflowtype fittings with equal results have been certified by Herron Testing Labs, Inc. For more complete information, contact Victaulic.

PITTSBURGH TESTING LAB CERTIFIED COMPARATIVE DIELECTRIC FITTING TEST RATINGS*



* The results presented in this graph are specially for ¾" size fittings and Madison, Ohio tap water at 70°F. Other size fittings, temperatures and water will yield proportional results.

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WARRANTY

Refer to the Warranty section of the current Price List or contact Victaulic for details.

NOTE

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

WARNING

⚠ WARNING

- **This product must be installed by an experienced, trained installer, in accordance with the instructions provided with instructions provided. These instructions contain important information.**

Failure to follow these instructions may result in serious personal injury, property damage, or valve leakage.

If you need additional copies of this product literature or the valve installation instructions, or if you have any questions about the safe installation and use of this device, contact Victaulic Company, P.O. Box 31, Easton, PA 18044-0031 USA, Telephone: 001-610-559-3300.

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