

E X P E R I E N C E C O U N T S



ElectroStopTM



***Monolithic
Isolation
Fittings***

The ElectroStop™ monolithic isolation fittings will serve as a positive leak proof, long lasting block against the flow of electric current in all piping systems. When you bury the ElectroStop™ isolation fitting you bury maintenance costs forever - an especially important feature for system operators and engineers.

Eliminates Short Circuits

Bolts, sleeves and washers - the major source of short circuits in most isolation assemblies - are eliminated with the ElectroStop™ isolation fitting.

Eliminates Field Assembly

The ElectroStop™ isolation fitting is completely factory assembled and tested. There are no flanges, gaskets, nuts, bolts, sleeves or washers to handle and consequently no fluid leaks due to improper field assembly.

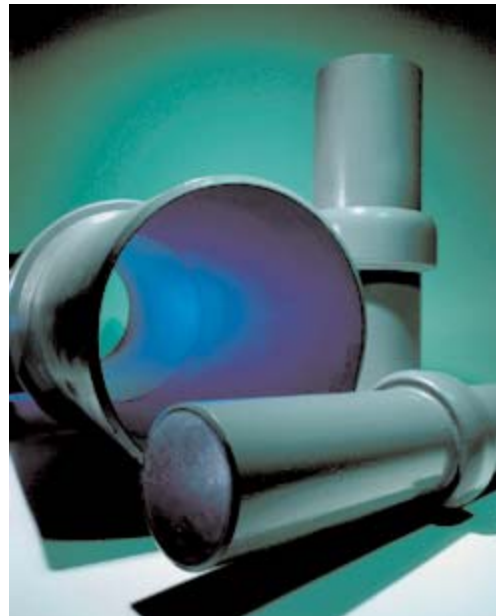
Is Less Expensive

Purchase the ElectroStop™ isolation fitting for less than the cost of the component parts of insulated flange assemblies in most pipe sizes. Install the ElectroStop™ isolation fitting for less than the labor costs of installing an insulated flange assembly.

Is Coated Both Internally and Externally

A two part epoxy is sprayed to a thickness of .010-.012" (.25 to .30mm) to within 2" (50.8mm) of each weld end.

The ElectroStop™



Is 100% Hydrostatically Tested

All ElectroStop™ fittings undergo hydrostatic and cyclic pressure tests at 1.5 times rated operating pressure in accordance with the latest ANSI standards. Testing is conducted between plates or end caps to ensure the most arduous conditions.

Is 100% Electrically Tested

All ElectroStop™ fittings undergo a electrical resistance and voltage test prior to shipping.

Is Completely Weld Inspected

All ElectroStop™ fittings undergo a weld inspection with combinations of ultrasonic (UT), magnetic partical (MT) and dye penetrant (LT) on all welds. In addition, X-ray tests can be conducted upon request.

Is Manufactured In Accordance With ISO 9001:2000 Quality Assurance

Control over all stages of production is ensured by close adherence to an in-place and on going ISO 9001:2000 quality assurance program which is constantly monitored and subject to periodic audit.

Steel Pipe (Standard)
(See Grade On Provided Charts)

Internal and External
Epoxy Coating
(Standard)

Buna N Seals
(Standard)

Epoxy Resin Filler
(Standard)

Fiberglass Epoxy
Isolation Rings
(Standard)

Sealant
(Standard)

The ElectroStop™

Monolithic Isolation Fitting Specification

Monolithic isolation fittings shall be boltless and completely factory assembled in accordance with the appropriate requirements of ASTM, API, DIN and BS codes. All welds shall be butt weld construction. The dielectric isolation material shall be a thermosetting fiberglass epoxy material. Sealing shall be by two (2) static, self energized "O" ring seals housed in accurately machined grooves, fully protected from cavitation in full compliance with ASME design codes. Interior and exterior coating shall be a two part epoxy with a thickness of 12 to 15 mils to within 2" of each end. Testing shall be Electrical (@5kv, 25 Mohm), Hydraulic (@ 1.5 x O.P.) and Weld (Ultrasonic/Magnetic Particle/Dye Penetrant).

The Monolithic Isolation Fitting shall be the ElectroStop™ Isolation Fitting as manufactured by Pipeline Seal & Insulator, Inc., Houston, Texas.

Quality Assurance

Each monolithic isolation fitting shall be manufactured at a facility that has a Registered ISO 9001:2000 Quality Management System. Copy of current ISO 9001:2000 Registration shall be provided with material submittal.

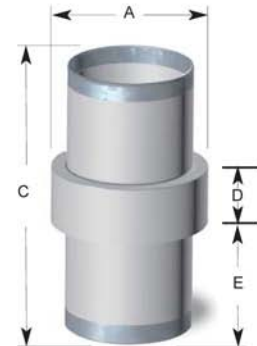
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150# ANSI CLASS (PN or DP 25)

| NOMINAL DIAMETER Inches (mm) | WALL THICKNESS Inches (mm) | PIPE GRADE | DIMENSIONAL DATA - Inches (mm) | | | | WEIGHT Lbs. (Kg) |
|---------------------------------|-------------------------------|------------|--------------------------------|----------------|---------------|---------------|---------------------|
| | | | A | C | D | E | |
| 1 (25.4) | 0.13 (3.3) | B | 2.68 (68.0) | 27.50 (698.5) | 2.99 (76.0) | 11.94 (303.3) | 6.6 (3.0) |
| 2 (50.8) | 0.15 (3.8) | B | 3.86 (98.0) | 27.50 (698.5) | 3.15 (80.0) | 11.66 (296.2) | 11.4 (5.2) |
| 3 (76.2) | 0.22 (5.6) | B | 4.92 (125.0) | 27.50 (698.5) | 3.62 (92.0) | 11.50 (292.1) | 24.2 (11.0) |
| 4 (101.6) | 0.24 (6.1) | B | 6.10 (155.0) | 27.50 (698.5) | 3.84 (100.0) | 11.40 (289.6) | 35.9 (16.3) |
| 6 (152.4) | 0.28 (7.1) | B | 8.50 (216.0) | 27.50 (698.5) | 5.12 (130.0) | 11.10 (282.0) | 65.3 (29.7) |
| 8 (203.2) | 0.32 (8.1) | B | 10.59 (269.0) | 27.50 (698.5) | 5.75 (146.0) | 10.85 (275.6) | 101.2 (46.0) |
| 10 (254.0) | 0.37 (9.5) | B | 12.60 (320.0) | 31.50 (800.0) | 6.22 (158.0) | 12.70 (322.6) | 151.8 (69.0) |
| 12 (304.8) | 0.41 (10.4) | B | 13.54 (344.0) | 39.33 (999.0) | 6.30 (160.0) | 16.52 (419.6) | 242.0 (110.0) |
| 14 (355.6) | 0.31 (7.9) | B | 16.50 (419.0) | 23.62 (600.5) | 7.48 (190.9) | 8.07 (205.0) | 220.0 (99.8) |
| 16 (406.4) | 0.34 (8.7) | B | 18.82 (478.0) | 35.43 (900.0) | 8.27 (210.0) | 13.58 (345.0) | 386.9 (176.0) |
| 18 (457.2) | 0.31 (7.9) | B | 20.83 (529.0) | 31.50 (800.0) | 8.82 (225.0) | 11.34 (288.0) | 338.8 (153.7) |
| 20 (508.0) | 0.37 (9.5) | B | 22.83 (579.9) | 39.37 (1000.0) | 9.21 (234.0) | 15.08 (383.0) | 514.5 (233.4) |
| 24 (609.6) | 0.37 (9.5) | B | 27.36 (695.0) | 39.37 (1000.0) | 10.79 (274.0) | 14.29 (363.6) | 704.0 (319.3) |
| 26 (660.4) | 0.37 (9.5) | B | 28.90 (734.0) | 39.37 (1000.0) | 11.26 (286.0) | 14.05 (356.9) | 719.4 (326.3) |
| 28 (711.2) | 0.37 (9.5) | B | 30.87 (784.0) | 39.37 (1000.0) | 11.65 (295.0) | 13.95 (354.3) | 783.2 (355.3) |
| 30 (762.0) | 0.37 (9.5) | B | 33.07 (840.9) | 39.37 (1000.0) | 11.97 (304.0) | 13.70 (348.8) | 860.2 (390.2) |
| 32 (812.8) | 0.37 (9.5) | B | 35.04 (890.0) | 39.37 (1000.0) | 12.36 (314.0) | 13.50 (343.0) | 939.4 (426.1) |
| 36 (914.4) | 0.37 (9.5) | B | 38.98 (990.0) | 47.24 (1199.9) | 12.99 (330.0) | 17.12 (434.8) | 1174.8 (532.9) |



150# ANSI CLASS (PN or DP 25)

150# ANSI Pressure Rating = 285 psi

ElectroStop Continuous Operating Pressure = 355 psi

Test Pressure = 540 psi

Working Temperature: Range = 14° F. to 212° F.
(-10° C. to 100° C.)

Electrical Resistance (Dry Air) = 25 Mohms @ 1kv D.C.

Breakdown Voltage (Dry Air) = 5kv @ 50Hz for 1 minute.

All data supplied is for standard fittings. Please contact factory for nominal diameters, pressures (up to 2500 ANSI), temperatures (up to 160° C, 320° F.) and electrical characteristics not shown. The information is subject to change at the manufacturer's discretion.

Warranty

All products are warranted against failure caused by manufacturing defects for a period of one year. Any product found to be so defective and returned within one year from date of shipment will be replaced without charge.

The above warranty is made in lieu of, and we disclaim, any and all other warranties, expressed or implied, including the warranties of merchantability and fitness for a particular purpose, and buyer agrees to accept the products without any such warranties.

We hereby disclaim any obligation or liability for consequential damages, labor costs or any other claims or liabilities of any kind whatsoever.

How To Order

To order ElectroStop™ monolithic isolation fittings, please indicate the following:

1. Quantity
2. Nominal Pipe Size
3. ANSI, DIN, API Pressure Class or Actual Working Pressure.
4. Pipe Grade
5. Wall Thickness
6. Temperature Limits
7. Product Conveyed
8. Contact your local distributor or Pipeline Seal and Insulator, Inc.

* Note: 100% X-Ray inspection available upon request.

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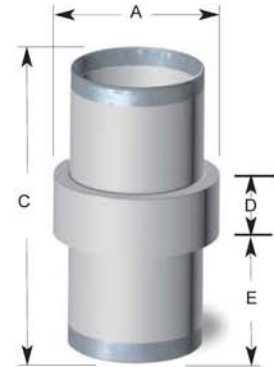


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300-400# ANSI CLASS (PN or DP 64)

| NOMINAL DIAMETER Inches (mm) | WALL THICKNESS Inches (mm) | PIPE GRADE | DIMENSIONAL DATA - Inches (mm) | | | | WEIGHT Lbs. (Kg) |
|------------------------------------|----------------------------------|---------------|--------------------------------|----------------|---------------|---------------|---------------------|
| | | | A | C | D | E | |
| 1 (25.4) | 0.13 (3.3) | B | 2.99 (75.9) | 27.50 (698.5) | 3.62 (92.0) | 11.94 (303.3) | 9.2 (4.2) |
| 2 (50.8) | 0.15 (3.8) | B | 3.78 (96.0) | 27.50 (698.5) | 3.62 (92.0) | 11.63 (295.4) | 13.2 (6.0) |
| 3 (76.2) | 0.22 (5.5) | B | 4.89 (127.0) | 27.50 (698.5) | 3.93 (100.0) | 11.50 (292.1) | 25.5 (11.6) |
| 4 (101.6) | 0.24 (6.1) | B | 6.14 (156.0) | 27.50 (698.5) | 4.41 (112.0) | 11.40 (289.6) | 37.2 (16.9) |
| 6 (152.4) | 0.28 (7.1) | B | 8.50 (216.0) | 27.50 (698.5) | 5.51 (140.0) | 11.00 (279.4) | 68.2 (31.0) |
| 8 (203.2) | 0.32 (8.1) | X52 | 10.63 (270.0) | 27.50 (698.5) | 6.30 (160.0) | 10.60 (269.2) | 127.6 (58.0) |
| 10 (254.0) | 0.37 (9.5) | X52 | 13.86 (352.0) | 31.50 (800.0) | 7.09 (180.0) | 12.20 (309.9) | 202.8 (92.0) |
| 12 (304.8) | 0.41 (10.4) | X52 | 15.91 (404.0) | 39.33 (999.9) | 8.03 (204.0) | 15.67 (398.0) | 319.0 (145.0) |
| 14 (355.6) | 0.37 (9.3) | X52 | 17.64 (448.0) | 31.50 (800.0) | 8.43 (214.0) | 11.54 (293.0) | 338.8 (153.7) |
| 16 (406.4) | 0.44 (11.2) | X52 | 19.49 (495.0) | 39.37 (1000.0) | 9.21 (234.0) | 15.08 (383.0) | 524.7 (238.0) |
| 18 (457.2) | 0.47 (12.0) | X52 | 21.50 (546.0) | 31.50 (800.0) | 10.24 (260.0) | 10.63 (270.0) | 519.2 (235.5) |
| 20 (508.0) | 0.50 (12.7) | X52 | 23.82 (605.0) | 47.24 (1200.0) | 10.79 (274.0) | 18.22 (463.0) | 778.2 (353.0) |
| 24 (609.6) | 0.50 (12.7) | X52 | 27.76 (705.0) | 47.24 (1200.0) | 12.76 (324.0) | 17.24 (438.0) | 998.7 (453.0) |
| 26 (660.4) | 0.56 (14.2) | X52 | 29.76 (756.0) | 39.37 (1000.0) | 13.23 (336.0) | 13.07 (332.0) | 1062.6 (482.0) |
| 30 (762.0) | 0.63 (16.0) | X52 | 34.61 (879.0) | 47.24 (1200.0) | 14.80 (376.0) | 16.22 (412.0) | 1676.4 (760.4) |
| 36 (914.4) | 0.75 (19.0) | X52 | 40.59 (1031.0) | 51.18 (1300.0) | 17.32 (440.0) | 16.92 (429.8) | 2481.6 (1125.7) |



300-400# ANSI CLASS (PN or DP 64)

300# ANSI Pressure Rating = 740 psi

400# ANSI Pressure Rating = 990 psi

ElectroStop Continuous

Operating Pressure = 990 psi

Test Pressure = 1,500 psi

Working Temperature: Range = 14° F. to 212° F.

(-10° C. to 100° C.)

Electrical Resistance (Dry Air)

= 25 Mohms @ 1kv D.C.

Breakdown Voltage (Dry Air)

= 5kv @ 50Hz for 1 minute.

All data supplied is for standard fittings. Please contact factory for nominal diameters, pressures (up to 2500 ANSI), temperatures (up to 160° C, 320° F.) and electrical characteristics not shown. The information is subject to change at the manufacturer's discretion.

Warranty

All products are warranted against failure caused by manufacturing defects for a period of one year. Any product found to be so defective and returned within one year from date of shipment will be replaced without charge.

The above warranty is made in lieu of, and we disclaim, any and all other warranties, expressed or implied, including the warranties of merchantability and fitness for a particular purpose, and buyer agrees to accept the products without any such warranties.

We hereby disclaim any obligation or liability for consequential damages, labor costs or any other claims or liabilities of any kind whatsoever.

How To Order

To order ElectroStop™ monolithic isolation fittings, please indicate the following:

1. Quantity
2. Nominal Pipe Size
3. ANSI, DIN, API Pressure Class or Actual Working Pressure.
4. Pipe Grade
5. Wall Thickness
6. Temperature Limits
7. Product Conveyed
8. Contact your local distributor or Pipeline Seal and Insulator, Inc.

* Note: 100% X-Ray inspection available upon request

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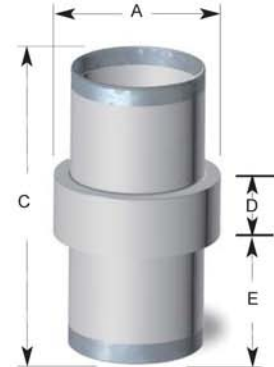


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600# ANSI CLASS (PN or DP 100)

| NOMINAL DIAMETER Inches (mm) | WALL THICKNESS Inches (mm) | PIPE GRADE | DIMENSIONAL DATA - Inches (mm) | | | | WEIGHT Lbs. (Kg) |
|------------------------------------|----------------------------------|---------------|--------------------------------|----------------|---------------|---------------|---------------------|
| | | | A | C | D | E | |
| 1 (25.4) | 0.13 (3.3) | B | 2.99 (75.9) | 27.50 (698.5) | 3.62 (91.9) | 11.94 (303.3) | 9.2 (4.2) |
| 2 (50.8) | 0.15 (3.8) | B | 4.33 (110.0) | 27.50 (698.5) | 4.25 (108.0) | 11.63 (295.4) | 16.7 (7.6) |
| 3 (76.2) | 0.22 (5.6) | B | 5.91 (150.0) | 27.50 (698.5) | 4.57 (116.0) | 11.50 (292.1) | 33.0 (15.0) |
| 4 (101.6) | 0.24 (6.1) | B | 6.89 (175.0) | 27.50 (698.5) | 5.12 (130.0) | 11.20 (284.5) | 44.0 (20.0) |
| 6 (152.4) | 0.28 (7.1) | X52 | 9.45 (240.0) | 27.50 (698.5) | 5.91 (150.0) | 10.80 (274.3) | 81.4 (37.0) |
| 8 (203.2) | 0.32 (8.1) | X52 | 11.57 (294.0) | 27.50 (698.5) | 7.01 (178.0) | 10.25 (260.4) | 138.6 (63.0) |
| 10 (254.0) | 0.36 (9.1) | X52 | 13.86 (352.0) | 31.50 (800.0) | 8.03 (204.0) | 11.70 (297.2) | 220.5 (100.0) |
| 12 (304.8) | 0.41 (10.4) | X52 | 15.91 (404.0) | 39.33 (1000.0) | 8.82 (224.0) | 15.25 (387.4) | 363.0 (165.0) |
| 14 (355.6) | 0.37 (9.4) | X52 | 17.83 (453.0) | 31.50 (800.0) | 9.84 (250.0) | 10.83 (275.0) | 389.4 (176.6) |
| 16 (406.4) | 0.44 (11.2) | X52 | 19.76 (502.0) | 39.53 (1000.0) | 10.79 (274.0) | 14.29 (363.0) | 568.8 (258.0) |
| 18 (457.2) | 0.47 (11.9) | X52 | 21.73 (552.0) | 31.50 (800.0) | 11.81 (300.0) | 9.84 (250.0) | 587.4 (266.4) |
| 20 (508.0) | 0.50 (12.7) | X52 | 23.98 (609.0) | 47.24 (1200.0) | 12.68 (322.0) | 17.28 (438.0) | 864.2 (392.0) |
| 24 (609.6) | 0.50 (12.7) | X52 | 29.34 (745.0) | 47.24 (1200.0) | 14.09 (357.9) | 16.58 (421.0) | 1289.6 (585.0) |
| 26 (660.4) | 0.56 (14.2) | X52 | 30.83 (783.0) | 47.24 (1200.0) | 15.20 (386.0) | 16.00 (407.0) | 1467.4 (665.6) |
| 30 (762.0) | 0.63 (16.0) | X52 | 35.71 (907.0) | 51.18 (1300.0) | 16.77 (426.0) | 17.20 (437.0) | 2151.6 (976.0) |
| 36 (914.4) | 0.75 (19.0) | X52 | 42.52 (1072.0) | 51.18 (1300.0) | 19.37 (492.0) | 15.90 (403.9) | 3306.6 (1500.0) |



600# ANSI CLASS (PN or DP 100)

600# ANSI Pressure Rating = 1,480 psi

ElectroStop Continuous Operating

Pressure = 1,480 psi

Test Pressure = 2,225 psi

Working Temperature Range

= 14° F. to 212° F.

(-10° C. to 100° C.)

Electrical Resistance (Dry Air)

= 25 Mohms @ 1kv D.C.

Breakdown Voltage (Dry Air)

= 5kv @ 50Hz for 1 minute.

All data supplied is for standard fittings. Please contact factory for nominal diameters, pressures (up to 2500 ANSI), temperatures (up to 160° C, 320° F.) and electrical characteristics not shown. The information is subject to change at the manufacturer's discretion.

Warranty

All products are warranted against failure caused by manufacturing defects for a period of one year. Any product found to be so defective and returned within one year from date of shipment will be replaced without charge.

The above warranty is made in lieu of, and we disclaim, any and all other warranties, expressed or implied, including the warranties of merchantability and fitness for a particular purpose, and buyer agrees to accept the products without any such warranties.

We hereby disclaim any obligation or liability for consequential damages, labor costs or any other claims or liabilities of any kind whatsoever.

How To Order

To order ElectroStop™ monolithic isolation fittings, please indicate the following:

1. Quantity
2. Nominal Pipe Size
3. ANSI, DIN, API Pressure Class or Actual Working Pressure.
4. Pipe Grade
5. Wall Thickness
6. Temperature Limits
7. Product Conveyed
8. Contact your local distributor or Pipeline Seal and Insulator, Inc.

* Note: 100% X-Ray inspection available upon request

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