

GripTight® Reverse Pressure Test Plug

Eliminate concerns over inadequate joint strength when pressure testing welded flange connections

Previous flange weld testing devices have been shown to apply only radial and hoop stresses to the weld location. Use of these devices for pressure testing will not adequately test or verify the axial strength of the flange-to-pipe weld.

EST Group's new GripTight Reverse Pressure (GTRP) test plugs are the solution to the growing concern over the axial strength of flange-to-pipe welds. By isolating the test area between a test flange and our GTRP plug, the flange-to-pipe weld is subjected to the full axial, hoop, and radial stresses equivalent to the stresses that would be produced when using a test blind to pressurize the entire piping system. Pressure testing using EST Group's GTRP can effectively verify the weld integrity providing the user confidence that the flange and weld will properly function when placed into service.

Pressure testing flange-to-pipe welds with EST Group's GTRP eliminates the need to blind, fill, and pressurize the entire piping system, which in turn reduces the need to properly handle and dispose of potentially contaminated test fluids. Testing performed with the GTRP is quick, easy, and safe and meets the requirements of ASME/ANSI B16.5.

Our standard GTRP plugs allow testing to pressures up to 2,250 PsiG (155 BarG), which covers up to ANSI 600# class service. Plugs are available in sizes 3/4" to 12" (DN20 - DN300), additional plug sizes and higher test pressures available upon request.



3/4" - 6" (DN20 - DN150) GTRP



8" - 24" (DN200 - DN600) GTRP

Manufactured under a QA program certified to ISO-9001!

Can be supplied under ANSI N45.2, 10CFR50 Appendix B

| Pipe Size | Part Number | Schedule | Nominal Pipe I.D. inches (mm) | Plug O.D. inches (mm) | I.D. Range inches (mm) | Maximum Test Pressure PsiG (BarG) | L1 inches (mm) | Approximate Plug Weight lbs (kg) |
|-----------|--------------------------|----------|--------------------------------|--------------------------------|--|-----------------------------------|------------------------------------|----------------------------------|
| 3/4" | GTRP-75P80 GTRP 75P40 | 80 40 | 0.74 (18.8) 0.82 (20.8) | 0.65 (16.5) 0.72 (18.3) | 0.72 - 0.75 (18.3 - 19.1) 0.81 - 0.83 (20.6 - 21.1) | 2250 (155) 2250 (155) | 18 3/4 (476.3) 18 3/4 (476.3) | 1.5 (0.7) 1.5 (0.7) |
| 1" | GTRP-1P80 GTRP-1P40 | 80 40 | 0.96 (24.4) 1.05 (26.7) | 0.84 (21.3) 0.93 (23.6) | 0.93 - 1.00 (23.6 - 25.4) 1.01 - 1.09 (25.7 - 27.7) | 2250 (155) 2250 (155) | 18 3/4 (476.3) 18 3/4 (476.3) | 1.5 (0.7) 1.5 (0.7) |
| 1 1/2" | GTRP-15P80 GTRP-15P40 | 80 40 | 1.50 (38.1) 1.61 (40.9) | 1.35 (34.3) 1.46 (37.1) | 1.47 - 1.61 (37.3 - 40.9) 1.58 - 1.66 (40.1 - 42.2) | 2250 (155) 2250 (155) | 18 3/4 (476.3) 18 3/4 (476.3) | 4 (2.0) 4 (2.0) |
| 2" | GTRP-2P80 GTRP-2P40 | 80 40 | 1.94 (49.3) 2.07 (52.6) | 1.69 (42.9) 1.82 (46.2) | 1.91 - 1.99 (48.5 - 50.5) 2.04 - 2.13 (51.8 - 53.8) | 2250 (155) 2250 (155) | 8 7/8" (225.4) 8 7/8" (225.4) | 5 (2.3) 5 (2.3) |
| 2 1/2" | GTRP-25P80 GTRP-25P40 | 80 40 | 2.32 (58.9) 2.47 (62.7) | 2.07 (52.6) 2.22 (56.4) | 2.27 - 2.45 (57.7 - 62.2) 2.44 - 2.54 (62.0 - 64.5) | 2250 (155) 2250 (155) | 10" (254.0) 10" (254.0) | 9 (4.1) 9 (4.1) |
| 3" | GTRP-3P80 GTRP-3P40 | 80 40 | 2.90 (73.7) 3.07 (78.0) | 2.52 (64.0) 2.69 (68.3) | 2.87 - 2.98 (72.9 - 75.7) 3.04 - 3.14 (77.2 - 79.8) | 2250 (155) 2250 (155) | 13 5/8" (346.1) 13 5/8" (346.1) | 12 (5.4) 12 (5.4) |
| 4" | GTRP-4P80 GTRP-4P40 | 80 40 | 3.83 (97.3) 4.03 (102.4) | 3.39 (86.1) 3.59 (91.2) | 3.80 - 3.91 (96.5 - 99.3) 4.00 - 4.11 (101.6 - 104.4) | 2250 (155) 2250 (155) | 13 5/8" (346.1) 13 5/8" (346.1) | 22 (10.0) 22 (10.0) |
| 6" | GTRP-6P80 GTRP-6P40 | 80 40 | 5.76 (146.3) 6.07 (154.2) | 5.26 (133.6) 5.57 (141.5) | 5.73 - 5.87 (145.5 - 149.1) 6.04 - 6.17 (153.4 - 156.7) | 2250 (155) 2250 (155) | 20 5/8" (523.9) 20 5/8" (523.9) | 50 (22.7) 50 (22.7) |
| 8" | GTRP-8P80 GTRP-8P40 | 80 40 | 7.63 (193.8) 7.98 (202.7) | 7.13 (181.1) 7.48 (190.0) | 7.60 - 7.75 (193.0 - 196.9) 7.95 - 8.10 (201.9 - 205.7) | 2250 (155) 2250 (155) | 10 1/2" (266.7) 10 1/2" (266.7) | 50 (22.7) 50 (22.7) |
| 10" | GTRP-10P80 GTRP-10P40 | 80 40 | 9.56 (242.8) 10.02 (254.5) | 9.06 (230.1) 9.52 (241.8) | 9.53 - 9.80 (242.1 - 248.9) 9.99 - 10.21 (253.7 - 295.3) | 2250 (155) 2250 (155) | 11 5/8" (295.3) 11 5/8" (295.3) | 75 (34.0) 75 (34.0) |
| 12" | GTRP-12P80 GTRP-12P40 | 80 40 | 11.38 (289.1) 11.94 (303.3) | 10.87 (276.1) 11.50 (292.1) | 11.34 - 11.64 (288.0 - 295.7) 11.91 - 12.19 (302.5 - 309.6) | 2250 (155) 2250 (155) | 12 1/4" (311.2) 12 1/4" (311.2) | 100 (45.4) 100 (45.4) |

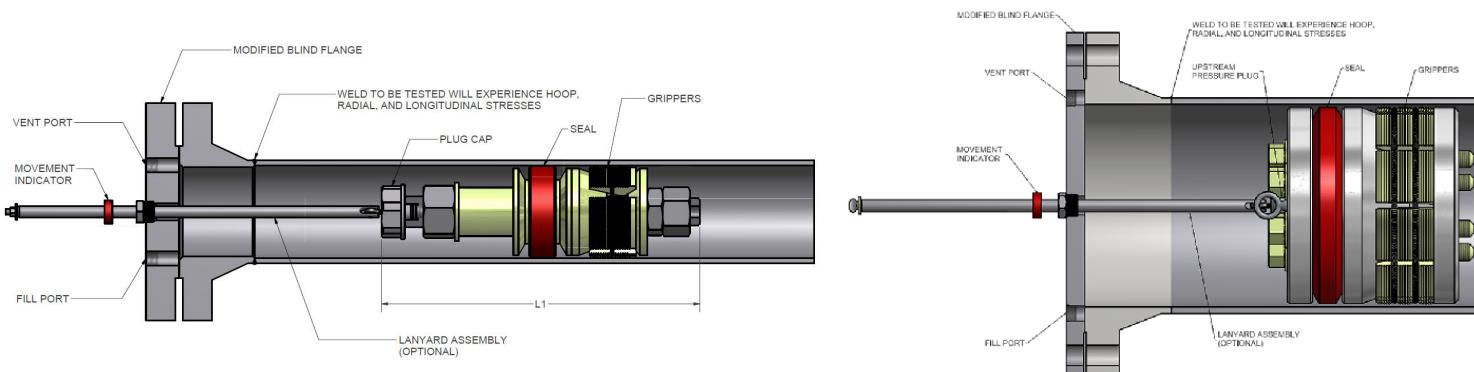
3/4" and 1" (DN20 - DN25) plugs require a modified extended flange during pressure testing.

1 1/2" to 6" (DN40 - DN150) plugs require EST Group manufactured installation equipment.

8" to 12" (DN200 - DN300) plugs have a multi-shaft design. (May be installed utilizing standard sockets and socket extensions.)

Modified blind flange with and without lanyard are available for purchase separately.

Contact EST Group for more details.



*GripTight® Reverse Pressure plugs have been designed and tested to be safe and fully functional without the use of a lanyard. The lanyard does not prevent the plug from moving downstream, but instead offers a visual indication of undesired plug movement that could occur if the plug is not properly installed. Undesired plug movement can also be detected by monitoring the application of pressure during pressure testing. Note that the lanyard assembly works in conjunction with an EST supplied blind flange. If the optional lanyard assembly is not used, the customer can supply a blind flange for testing or EST can supply one. The blind flange will need to have fill and vent ports to properly pressure test flange-to-pipe welds.