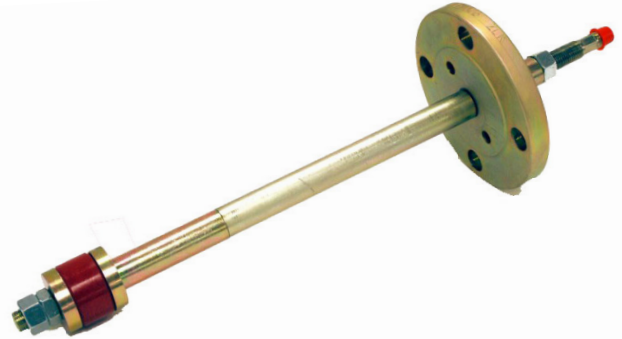


High Lift Flange Weld Test Plug

Purge, weld, and test flange connections with the same plug

- Fast and easy installation and testing
- Faster pipe repairs and retrofits
- Reduces NDE
- Minimal water use, less handling and waste
- Minimum 1.5:1 safety factor
- Center Port for upstream monitoring



EST Group reduces the cost, downtime delays, and waste water disposal associated with conventional flange testing. The High Lift Flange Weld test plug lets you monitor conditions upstream of the seal, isolate and purge the weld area, complete the weld, and hydro test to Code requirements¹ with one tool.

The plug isolates just the weld area so there is no need to fill the entire line or vessel. Each test utilizes a minimum amount of water. No line blinds; no vacuum trucks or dehydration services; reduced NDE; and reduced water and environmental waste. Just a simple rock-solid tool that saves time and money every time you use it.

An EST Group refinery customer reported that the High Lift Flange Weld test plug paid for itself one-quarter of the way through its first use!

Maximum Test Pressures

150 ANSI Flange Class - 450 psi (30.9 Bar)
300 ANSI Flange Class - 1,125 psi (77.2 Bar)
600+ ANSI Flange Class - 1,125* psi (77.2* Bar)
*Consult Factory for higher pressure ratings

The only plugs manufactured under
a QA program certified to ISO-9001!

Can be supplied under ANSI N45.2, 10CFR50 Appendix B
¹Meets: ASME BPV section I, V, and VII; ASME piping Code B31.1 and B31.3;
API-510; National Inspection Code (reference: National Board Interpretation 01-15
dated February 2, 2002)

| Flange Size | Pipe Schedule | Seal to Pipe Clearance (inches (mm)) | Vent and Fill Port NPT Size | L1-A (inches (mm)) | L1-B (inches (mm)) | L2 (inches (mm)) | L3 (inches (mm)) | L4 (inches (mm)) | Shipping Weight 150# (lbs (kg)) | Shipping Weight 300# (lbs (kg)) |
|-------------|---------------|--------------------------------------|-----------------------------|--------------------|--------------------|------------------|------------------|------------------|---------------------------------|---------------------------------|
| 3/4" DN20 | 80 / 40 | 0.07 (1.8) / 0.07 (1.8) | 1/8" F | 12 (304.8) | 3 (76.2) | 14 1/4 (362.0) | 1 1/4 (31.8) | 24 11/16 (627.1) | 8 (3.62) | 9 (4.08) |
| 1" DN25 | 80 / 40 | 0.11 (2.8) / 0.11 (2.8) | 1/8" F | 12 (304.8) | 3 (76.2) | 14 1/4 (362.0) | 1 1/4 (31.8) | 24 11/16 (627.1) | 9 (4.08) | 11 (4.98) |
| 1 1/4" DN32 | 80 / 40 | 0.13 (3.3) / 0.13 (3.3) | 1/8" F | 12 (304.8) | 3 1/8 (85.7) | 15 (381.2) | 1 5/8 (41.3) | 20 3/8 (517.5) | 10 (4.53) | 13 (5.89) |
| 1 1/2" DN40 | 80 / 40 | 0.17 (4.3) / 0.17 (4.3) | 1/4" F | 12 (304.8) | 3 1/8 (85.7) | 15 1/8 (384.2) | 1 3/4 (44.5) | 20 3/8 (517.5) | 11 (4.98) | 15 (6.80) |
| 2" DN50 | 80 / 40 | 0.25 (6.4) / 0.25 (6.4) | 1/4" F | 12 (304.8) | 3 1/8 (85.7) | 15 1/8 (384.2) | 1 3/4 (44.5) | 20 3/8 (517.5) | 14 (6.34) | 18 (8.16) |
| 2 1/2" DN65 | 80 / 40 | 0.25 (6.4) / 0.25 (6.4) | 1/4" F | 12 (304.8) | 6 (152.4) | 17 1/8 (435.0) | 2 (50.8) | 22 3/8 (568.3) | 20 (9.06) | 25 (11.33) |
| 3" DN80 | 80 / 40 | 0.38 (9.7) / 0.38 (9.7) | 3/4" F | 12 (304.8) | 6 (152.4) | 17 1/8 (435.0) | 2 (50.8) | 22 3/8 (568.3) | 26 (11.78) | 33 (14.95) |
| 4" DN100 | 80 / 40 | 0.44 (11.2) / 0.44 (11.2) | 3/4" F | 12 (304.8) | 6 (152.4) | 17 1/8 (435.0) | 2 (50.8) | 22 3/8 (568.3) | 32 (14.50) | 43 (19.48) |
| 6" DN150 | 80 / 40 | 0.50 (12.7) / 0.50 (12.7) | 3/4" F | 12 (304.8) | 6 (152.4) | 20 1/2 (520.7) | 3 3/4 (95.3) | 28 (711.2) | 70 (31.72) | 91 (41.23) |
| 8" DN200 | 80 / 40 | 0.50 (12.7) / 0.50 (12.7) | 3/4" F | 12 (304.8) | 6 (152.4) | 20 3/4 (527.1) | 4 (101.6) | 28 (711.2) | 146 (66.15) | 178 (80.65) |

| Flange Size | ANSI Flange Class | Pipe Schedule | Bottom Washer O.D. (inches (mm)) | Plug O.D. (inches (mm)) | Shaft Qty | Dimension to Seal (inches (mm)) | Overall Length (inches (mm)) | Seal / Washer Length (inches (mm)) | Seal O-Ring Dash Number | Shipping Weight 150# (lbs (kg)) | Shipping Weight 300# (lbs (kg)) |
|-------------|-------------------|------------------------------|----------------------------------|---|-----------|---------------------------------|------------------------------|---|-------------------------|---------------------------------|---------------------------------|
| 10" DN250 | 150 - 300 | 80 / XS / 40 / STD | 8.81 (223.8) | 9.06 (230.1) / 9.25 (235.0) / 9.52 (241.8) | 4 | 12 1/2 (317.5) | 20 11/16 (525.5) | 4 (101.6) / 4 (101.6) / 4 (101.6) | -446 / -446 / -447 | 175 (79.3) | 230 (104.2) |
| 12" DN300 | 150 - 300 | 80 / XS / 40 / STD | 10.87 (276.1) | 10.87 (276.1) / 11.25 (285.8) / 11.50 (292.1) | 4 | 12 1/2 (317.5) | 20 11/16 (525.5) | 3 1/2 (88.9) / 4 (101.6) / 4 (101.6) | -449 / -450 / -451 | 212 (96.1) | 332 (150.4) |
| 14" DN350 | 150 - 300 | 80 / XS / 40 / 30 / STD | 11.00 (279.4) | 12.00 (304.8) / 12.50 (317.5) / 12.62 (320.5) / 12.75 (323.9) | 6 | 12 1/2 (317.5) | 20 15/16 (531.8) | 4 3/8 (111.1) / 4 3/8 (111.1) / 4 3/8 (111.1) / 4 3/8 (111.1) | N/A | 296 (134.1) | 386 (174.9) |
| 16" DN400 | 150 - 300 | 80 / XS / 30 / STD | 13.06 (331.7) | 13.81 (350.8) / 14.50 (368.3) / 14.75 (374.7) | 8 | 12 1/2 (317.5) | 20 15/16 (531.8) | 4 3/8 (111.1) / 4 3/8 (111.1) / 4 3/8 (111.1) | N/A | 397 (179.9) | 528 (239.2) |
| 18" DN450 | 150 - 300 | 80 / 40 / XS / STD | 14.75 (374.7) | 15.62 (396.7) / 16.38 (416.1) / 16.50 (419.1) / 16.75 (425.5) | 8 | 12 1/2 (317.5) | 20 11/16 (525.5) | 4 5/8 (117.5) / 4 5/8 (117.5) / 4 5/8 (117.5) / 4 5/8 (117.5) | N/A | 497 (225.2) | 656 (297.2) |
| 20" DN500 | 150 - 300 | 80 / 40 / 30 / XS / 20 / STD | 16.94 (430.3) | 17.44 (443.0) / 18.31 (465.1) / 18.50 (769.9) / 18.75 (476.3) | 10 | 12 1/2 (317.5) | 20 11/16 (525.5) | 4 3/8 (111.1) / 4 3/8 (111.1) / 4 3/8 (111.1) / 4 3/8 (111.1) | N/A | 640 (290.0) | 870 (394.2) |
| 24" DN600 | 150 - 300 | 80 / 40 / XS / 20 / STD | 19.88 (505.0) | 21.06 (534.9) / 22.12 (561.8) / 22.50 (571.5) / 22.75 (577.9) | 12 | 12 3/4 (323.9) | 20 15/16 (531.8) | 4 3/4 (120.7) / 4 3/4 (120.7) / 4 3/4 (120.7) / 4 3/4 (120.7) | N/A | 932 (422.3) | 1255 (568.6) |

Other schedules and 600# flanges available upon request.

Seal-to-pipe clearance: Approximately 1/2". Clearance may be slightly smaller on plugs that accommodate more than one schedule size.

Replacement washers: Required on all schedule sizes except for the smallest I.D. for each size pipe.

External O-ring: Included on 10" and 12" seals.

Standard seal material: Urethane

