

Fluoroseal

LINED PLUG VALVES



PRECISION CAST BODY, PLUG AND COVER

FluoroSeal® Lined Plug Valves use high precision investment casting method for all major pressure holding components.

CORROSION PROTECTION

FluoroSeal® standard base model offers Carbon Steel body, plug and cover (ASTM A216 Gr. WCB).

- · Low porosity PFA (Perfluoroalkoxy) as standard liner
- All cast parts have an epoxy based coating prior to lining for added protection from corrosion attack due to permeation

LOCKED-IN LINER

FluoroSeal® Lined Plug Valves feature an unpigmented virgin PFA lining applied by Transfer Molding and locked into castings by machined dovetail-shaped grooves, and cast dovetail-shaped recesses in body castings and cast holes.

- · Prevents liner collapse in vacuum conditions
- · Prevents blow out in high temperature and pressure combined conditions
- Transfer Molding insures equal distribution and consistency of liner throughout the entire surface of the lined components as per ASTM F1545
- No weak sections in the valve liner
- All liner defects are directly visible

CAVITY-FREE DESIGN

By design, Lined Plug Valves are cavity-free both in open and closed positions.

- No particle accumulation
- Ideal for corrosive slurry applications

SUPERIOR SEALING CAPABILITIES

The interface between the tapered outer plug and the tapered inner body liner provides a 360° primary sealing area. Additional sealing levels are achieved by a delta ring and PTFE diaphragm, both protected by a metal diaphragm. The metal diaphragm assists in encapsulation, acts as an antistatic device, and is a metal seal to atmosphere, in case of PTFE failure.

- Tight shutoff
- Compression seal (upstream and downstream)
- Bi-directional valve
- Sealed at both plug and stem

ADDITIONAL FEATURES

- ISO mount, explosion proof stem design
- Standard body material is WCB (1.0619) with a PFA lining
- Wrench or enclosed gear operated, actuators optional on all sizes

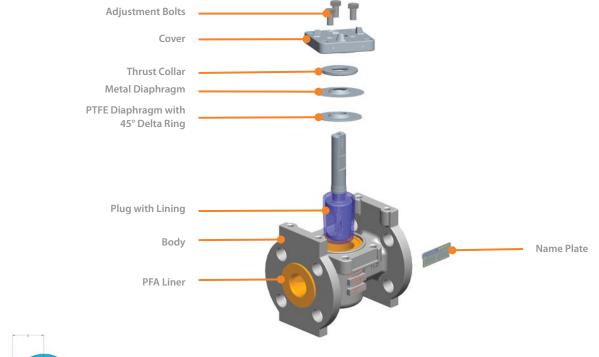




Lined Plug Cutaway

LINED PLUG VALVES







LINED ANSI/ASME CLASS 150 LBS

Flanged Ends

Wrench or Enclosed Gear Operated, Actuators Optional on All Sizes

Dimensions to ANSI B16.5 & B16.10

EG = Enclosed gear operated N = Number of holes * Available upon request Two (2) top holes in flanges are tapped with UNC threads. See Hole-UNC column

| SIZE & PRODUCT | L | | Н | | D | | K | | g | | b | | f | | d | | Q | | N | Hala HNC |
|-------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|------|-------|------|------|------|-------|-------|--------|----|----------|
| DESCRIPTION | in | mm | in | mm | in | mm | in | mm | in | mm | # | Hole-UNC |
| 1/2" LR152F/W-WCB/PFA | 4.33 | 109.98 | 3.70 | 93.98 | 3.50 | 88.90 | 2.38 | 60.45 | 1.38 | 35.05 | 0.31 | 7.87 | 0.06 | 1.52 | 0.63 | 16.00 | 8.00 | 203.00 | 4 | - |
| 3/4" LR152F/W-WCB/PFA | 4.69 | 119.13 | 3.70 | 93.98 | 3.88 | 98.55 | 2.75 | 69.85 | 1.69 | 42.93 | 0.34 | 8.64 | 0.06 | 1.52 | 0.63 | 16.00 | 8.00 | 203.00 | 4 | - |
| 1" LR152F/W-WCB/PFA | 5.00 | 127.00 | 4.40 | 111.76 | 4.25 | 108.00 | 3.13 | 79.50 | 2.00 | 50.80 | 0.38 | 9.65 | 0.06 | 1.52 | 0.63 | 16.00 | 9.00 | 229.00 | 4 | - |
| 1 1/2" LR152F/W-WCB/PFA | 6.50 | 165.10 | 5.20 | 132.08 | 5.00 | 127.00 | 3.88 | 98.60 | 2.88 | 73.20 | 0.50 | 12.70 | 0.06 | 1.52 | 0.63 | 16.00 | 14.25 | 362.00 | 4 | - |
| 2" LR152F/W-WCB/PFA | 7.00 | 177.80 | 6.00 | 152.40 | 6.00 | 152.40 | 4.75 | 120.70 | 3.63 | 92.00 | 0.56 | 14.22 | 0.06 | 1.52 | 0.75 | 19.00 | 16.50 | 419.00 | 4 | - |
| 3" LR152F/W-WCB/PFA | 8.00 | 203.20 | 6.60 | 167.64 | 7.50 | 190.50 | 6.00 | 152.40 | 5.00 | 127.00 | 0.69 | 17.53 | 0.06 | 1.52 | 0.75 | 19.00 | 16.50 | 419.00 | 4 | - |
| 4" LR152F/W-WCB/PFA | 9.00 | 228.60 | 7.80 | 198.12 | 9.00 | 228.60 | 7.50 | 190.50 | 6.19 | 157.20 | 0.88 | 22.40 | 0.06 | 1.52 | 0.75 | 19.00 | 23.60 | 599.44 | 8 | - |
| 4" LR152F/EG-WCB/PFA | 9.00 | 228.60 | 9.00 | 228.60 | 9.00 | 228.60 | 7.50 | 190.50 | 6.19 | 157.20 | 0.88 | 22.40 | 0.06 | 1.52 | 0.75 | 19.00 | 7.25 | 184.00 | 8 | - |
| 6" LR152F/EG-WCB/PFA | 10.50 | 266.70 | 10.70 | 271.78 | 11.00 | 279.40 | 9.50 | 241.30 | 8.50 | 215.90 | 0.94 | 23.88 | 0.06 | 1.52 | 0.88 | 22.40 | 7.25 | 184.00 | 8 | - |
| 8" LR152F/EG-WCB/PFA* | 11.50 | 292.10 | 13.00 | 330.20 | 13.50 | 342.90 | 11.75 | 298.50 | 10.63 | 269.80 | 1.06 | 26.92 | 0.14 | 3.56 | 0.88 | 22.40 | 9.75 | 248.00 | 8 | 3/4"-10 |
| 10" LR152F/EG-WCB/PFA* | 13.00 | 330.20 | 14.90 | 378.46 | 16.00 | 406.40 | 14.25 | 362.00 | 12.75 | 323.90 | 1.12 | 28.45 | 0.14 | 3.56 | 1.00 | 25.40 | 9.75 | 248.00 | 12 | 7/8"-9 |
| 12" LR152F/EG-WCB/PFA* | 14.00 | 355.60 | 15.70 | 398.78 | 19.00 | 482.60 | 17.00 | 431.80 | 15.00 | 381.00 | 1.19 | 30.23 | 0.14 | 3.56 | 1.00 | 25.40 | 13.75 | 349.25 | 12 | 7/8"-9 |
| 14" LR152F/EG-WCB/PFA* | 15.00 | 381.00 | 15.70 | 398.78 | 21.00 | 533.40 | 18.75 | 476.30 | 16.25 | 412.80 | 1.31 | 33.27 | 0.14 | 3.56 | 1.12 | 28.40 | 13.75 | 349.25 | 12 | 1"-8 |

LINED DIN PN 16

Flanged Ends

Dimensions to DIN EN 1092-1 & DIN EN 558-1 Enclosed gear optional on DN 100, and standard on DN 125 and DN 150

N = Number of holes

Two (2) top holes in flanges are tapped with metric threads. See Bolt Size column

| SIZE | PN | L | Н | D | K | g | b | f | d | Q | N | Bolt Size |
|--------|----|--------|--------|--------|--------|--------|-------|------|-------|--------|----|-----------|
| | | mm | mm | mm | mm | mm | mm | mm | mm | mm | # | BOIT SIZE |
| DN 25 | 16 | 160.00 | 145.00 | 115.00 | 85.00 | 68.00 | 18.00 | 2.00 | 14.00 | 210.00 | 4 | M12 |
| DN 32 | 16 | 180.00 | 176.00 | 140.00 | 100.00 | 78.00 | 18.00 | 2.00 | 18.00 | 262.50 | 4 | M16 |
| DN 40 | 16 | 200.00 | 176.00 | 150.00 | 110.00 | 88.00 | 18.00 | 2.00 | 18.00 | 262.50 | 4 | M16 |
| DN 50 | 16 | 230.00 | 195.00 | 165.00 | 125.00 | 102.00 | 18.00 | 2.00 | 18.00 | 419.10 | 4 | M16 |
| DN 65 | 16 | 290.00 | 173.00 | 185.00 | 145.00 | 122.00 | 18.00 | 2.00 | 18.00 | 419.10 | 8* | M16 |
| DN 80 | 16 | 310.00 | 173.00 | 200.00 | 160.00 | 138.00 | 20.00 | 2.00 | 18.00 | 419.10 | 8 | M16 |
| DN 100 | 16 | 350.00 | 200.00 | 220.00 | 180.00 | 158.00 | 20.00 | 2.00 | 18.00 | 618.00 | 8 | M16 |
| DN 125 | 16 | 325.00 | 303.00 | 250.00 | 210.00 | 188.00 | 22.00 | 2.00 | 18.00 | 184.20 | 8 | M16 |
| DN 150 | 16 | 350.00 | 290.00 | 285.00 | 240.00 | 212.00 | 22.00 | 2.00 | 22.00 | 184.20 | 8 | M20 |