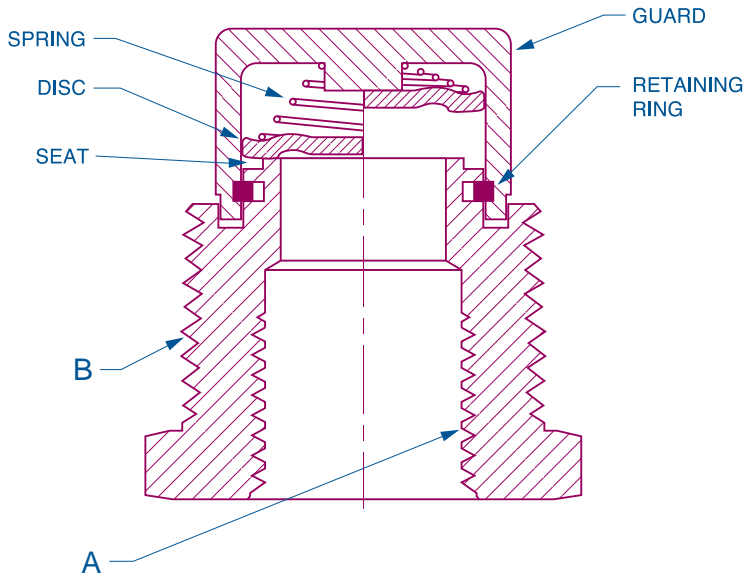


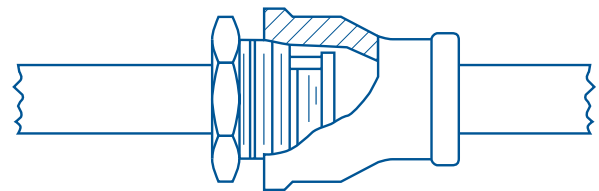
Basic-Check®



Features:

- 1/4" to 2-1/2" Line size
- 450 to 6000 CWP
- Threaded ends
- Stainless Steel Construction
- Spring-assisted silent closing
- Horizontal or vertical installation
- Tight shut-off - lapped disc & seat
- Easy Maintenance
- Versatile
- OPTIONS:
 - Inconel® 750 Spring
 - Soft seat

The DFT® Basic-Check valve is a versatile all-purpose, spring-assisted, in-line check valve that provides reliable, low maintenance service for a wide range of liquids and gases at various pressure/temperature combinations. The valve consists of a guard cage, spring, valve disc, retaining ring and seat. It can be combined with pipe fittings such as reducing couplings, drain elbows, etc. to form a complete check valve unit ideally suited for a broad range of pipeline applications or incorporated into machinery for OEM applications. The metal-to-metal sealing area of the Basic-Check valve's disc and seat is precision lapped, providing very tight shut-off of both gas and liquid. If bubble-tight shut-off is required, resilient soft seats are available.



Use with reducing coupling.

MATERIALS OF CONSTRUCTION

| Model | Seat | Disc | Guard | Spring | Retaining Ring | |
|---------------|-------|--------|---------|---------------------|----------------|--------|
| Basic-Checks | BSS | 303 SS | 316 SS | CF8M ⁽¹⁾ | 316 SS | 316 SS |
| | BSA | 416 SS | 316 SS | CF8M | 316 SS | 316 SS |
| | BSE | 303 SS | 316 SS | 17-4 SS | Inconel® | 316 SS |
| High Pressure | BSSH6 | 316 SS | 316 SS | CF8M | 316 SS | 316 SS |
| Basic-Checks | BSSH7 | 316 SS | 17-7 SS | CF8M | 316 SS | 316 SS |

(1) 1/4", 3/8" and 1/2" BSS units have a 303 SS guard



Drain elbow is another standard fitting with which DFT Basic-Check Units are used.

Basic-Check®

TECHNICAL INFORMATION

| BASIC CHECK | | CV | Friction Loss (Feet of Pipe) | VALVE CRACKING PRESSURE* | | Approx. Net WT. Each (In lbs.) |
|--------------------------------|-------------------------------|------|---------------------------------|--------------------------|-------------------|-----------------------------------|
| Line Size Inlet (FNPT) A | Outside Thread (MNPT) B | | | (PSI) (+/- 10%) | (Inches of Water) | |
| 1/4" | 1" | 5.8 | 7 | .60 (1) | 16.7 | .38 |
| 3/8" | 1" | 5.8 | 7 | .60 (1) | 16.7 | .38 |
| 1/2" | 1" | 5.8 | 7 | .60 (1) | 16.7 | .38 |
| 3/4" | 1-1/2" | 13.2 | 6 | .45 | 12.5 | .88 |
| 1" | 2" | 23.1 | 7 | .38 | 10.5 | 1.25 |
| 1-1/4" | 2-1/2" | 36 | 12.5 | .20 | 5.5 | 2.25 |
| 1-1/2" | 3" | 57.4 | 11 | .14 | 3.9 | 3.75 |
| 2" | 4" | 90 | 16 | .15 | 4.3 | 7.00 |
| 2-1/2" | 4" | 90 | 16 | .15 | 4.3 | 7.00 |

(1) Light spring available: Cracking Pressure = .24 PSI (6.5 inches of water)

*Cracking pressure for vertical flow will be slightly different: upward flow, slightly higher; downward flow, slightly less.

Not recommended for use on discharge of reciprocating compressors.

COLD, NON-SHOCK PRESSURE RATING (2)

| Size | 1/4" 3/8" 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" | 2-1/2" |
|--|----------------------|------|------|--------|--------|-----|--------|
| Basic-Check <small>BSS BSA BSE</small> | 2500 | 2000 | 1500 | 850 | 700 | 450 | 450 |
| High-Pressure <small>BSSH6</small> | 6000 | 5500 | 3000 | 1100 | 900 | 450 | 450 |
| Basic-Check <small>BSSH7</small> | 6000 | 6000 | 6000 | 4000 | 2700 | 800 | 800 |

| Sat. Steam Pressure (PSIG) Ref. (3) | Temperature (Deg. F.) | Adjusted Rating as Percent of Cold Rating |
|---|--------------------------|---|
| -3 | 200 | 86% |
| 15 | 250 | 82% |
| 52 | 300 | 78% |
| 232 | 400 | 71% |
| 407 | 450 | 69% |
| 665 | 500 | 66% |
| 1526 | 600 | 62% |
| 3075 | 700 | 60% |

All stainless steel construction is suitable for cryogenic service. For pressure rating at elevated temperatures for standard metal-seated valves, reduce above rating per chart at right.

Maximum valve temperature rating is limited by soft seal (if any) and spring materials in chart below. For ratings of soft seals using some other elastomers, consult factory.

(2) Contingent on service ratings of matching pipe and fittings.

(3) Saturated steam pressure is given for reference only; pressure limit of valve is the adjusted rating at the given temperature.

| MAXIMUM OPERATING TEMPERATURES OF MATERIALS | | | | | | |
|---|---------------|------------|------------------------|-----------|-------------|-------------------|
| | SOFT SEAT (4) | | | | SPRING | |
| MATERIALS | BUNA-N | EPDM | VITON® TFE® - VITON | ZELON | 316 SS | INCONEL® X-750 |
| TEMP. °F | -70 to 250 | -75 to 300 | -40 to 400 | 37 to 400 | -460 to 450 | -460 to 700 |

(4) Buna-N and Viton are not suitable for steam service.