



FIGURE 15V SERIES

SIZES 3/4" - 3"

PRESSURES to 30" HG at 400°F

- Vacuum Service
- Low Cost
- High Capacity
- Cast Iron or Aluminum Body
- Dependable
- Tight Shutoff
- Sharp Popping & Closing Action
- High Degree of Repeatability
- Unitized Body

OPTIONS

- Stainless Trim

MODELS

- 015V - Cast Iron Body, Bronze Seats, Vacuum Service
- 015LV - Aluminum Body on 015V (2" x 2 1/2" only)

FIGURE 15V SERIES SAFETY VALVE

APPLICATION DATA

- Vacuum Pumps
- Bulk Hauling Railroad & Truck Tank Cars
- Pneumatic Equipment
- Tanks

VALVE RATINGS

| Model | Pressure in.HG (mmHG) | Temperature °F (°C) |
|-------|--------------------------|----------------------------|
| All | 5 to 30 (.2 to 1) | -20 to 400 (-29 to 204) |

APPLICABLE CODES

- Canadian Registration #0H0591.9C

Sizing Guidelines

Testing Specifications

Installation/Maintenance

ORDERING CODE

| MODEL NUMBER (Must be 4 Digits) | ORIFICE | INLET SIZE* | CONNECTIONS | — | SET PRESSURE (Must be 3 Digits) |
|---|----------|----------------|---------------|---|------------------------------------|
| example: <u>015V</u> | <u>Z</u> | <u>J</u> | <u>A</u> | — | <u>012</u> |
| 015V - Cast Iron Body, Brz Seats, Vacuum Svc. | Z | D - 3/4 | A - MPT x FPT | | Set Pressure (Hg) |
| 15LV - Aluminum Body on 015V | | E - 1 | | | |
| | | F - 1 1/4 | | | |
| | | G - 1 1/2 | | | |
| | | H - 2 | | | |
| | | J - 2 1/2 | | | |
| | | K - 3 | | | |

*Valve outlet should be mounted at vacuum side of system.

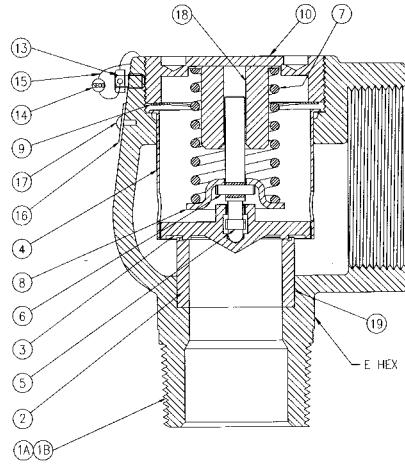
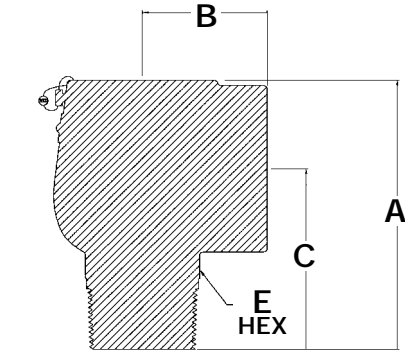
FIGURE 15V SERIES

SPECIFICATION

The valve inlet and outlet shall be one integral casting assuring proper alignment of disc, seat and spindle for smooth action. The valve shall maintain a high degree of repeatability. The valve shall be top guided by a disc guide fitted into the body. The valve shall have a non-adjustable blowdown.

MATERIALS OF CONSTRUCTION

| Ref | Part Name | Material |
|-----|-------------------|-------------------------------|
| 1A | Body | Cast ASTM A126 |
| 1B | Body | Aluminum ASTM B26, A03560, T6 |
| 2 | Seat | Bronze ASTM B505 |
| 3 | Disc | Brass/Bronze ASTM B505 |
| 4 | Disc Guide | Brass ASTM B135 |
| 5 | Spindle | Steel ASTM A108 |
| 6 | Spindle Pin | Plated Steel |
| 7 | Spring | Plated Steel |
| 8 | Spring Washer | Plated Steel |
| 9 | Wave Washer | Plated Steel |
| 10 | Compression Screw | Cast Iron ASTM A126 |
| 13 | Lock Screw | Brass ASTM B16 |
| 14 | Seal | Lead |
| 15 | Seal Wire | SST |
| 16 | Nameplate | SST |
| 17 | Drive Screw | SST |
| 18 | Bushing | Brass ASTM B16 |



DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

| Model | Inlet | Orifice | Outlet* | A1 | B | C | E Hex | Weight |
|---------|------------|---------|------------|-------------|------------|-------------|------------|-------------|
| ****ZDA | ¾ (20) | Z | 1 (25) | 3 (76) | 1½ (38) | 2⅞ (56) | 1¼ (32) | 1 (.4) |
| ****ZEA | 1 (25) | Z | 1¼ (32) | 3¾ (95) | 2 (51) | 2⅞ (67) | 1½ (38) | 2 (.9) |
| ****ZFA | 1¼ (32) | Z | 1½ (40) | 4¼ (108) | 2½ (54) | 3 (76) | 1½ (48) | 3 (1.4) |
| ****ZGA | 1½ (40) | Z | 2 (50) | 4⅞ (117) | 2⅞ (56) | 3⅞ (81) | 2 (51) | 4 (1.8) |
| ****ZHA | 2 (50) | Z | 2½ (65) | 6⅞ (156) | 2⅞ (73) | 4 (102) | 3 (76) | 8 (3.6) |
| ****ZJA | 2½ (65) | Z | 2½ (65) | 7⅞ (194) | 3⅞ (95) | 4⅞ (111) | 3¼ (83) | 14 (6.3) |
| ****ZKA | 3 (80) | Z | 3 (80) | 9 (229) | 3⅞ (98) | 5⅞ (130) | 4 (102) | 22 (10) |

**** Add appropriate model number

* Valve outlet should be mounted at vacuum side of system.

AIR CAPACITY CHART – MODELS 015V & 015LV

Rated Flow SCFM (M³/HR)

| Set* Pressure in. HG | Valve & Orifice Area, in ² * | | | | | | |
|----------------------------|---|----------------|------------------|-----------------|-----------------|------------------|---------------|
| | ¾ Z 1 0.276 | 1 Z 1¼ 0.49 | 1½ Z 1½ 0.765 | 1½ Z 2 1.107 | 2 Z 2½ 1.961 | 2½ Z 2½ 3.063 | 3 Z 3 4.43 |
| 5 | 36 | 85 | 132 | 191 | 337 | 528 | 764 |
| 6 | 39 | 90 | 140 | 203 | 359 | 561 | 812 |
| 7 | 41 | 94 | 147 | 213 | 376 | 588 | 851 |
| 8 | 42 | 98 | 152 | 221 | 389 | 609 | 881 |
| 9 | 43 | 100 | 156 | 227 | 400 | 625 | 904 |
| 10 | 44 | 102 | 159 | 231 | 407 | 637 | 922 |
| 11 | 45 | 104 | 161 | 234 | 412 | 645 | 933 |
| 12 | 45 | 104 | 162 | 236 | 415 | 650 | 940 |
| 12.8-30 | 45 | 105 | 163 | 236 | 417 | 651 | 943 |

M³/HR

| Set Pressure mmHG | Valve & Orifice Area cm ² * | | | | | | | |
|-------------------------|--|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|
| | 20 Z 25 1.78 | 25 Z 32 3.16 | 32 Z 40 4.94 | 40 Z 50 7.14 | 50 Z 65 12.65 | 65 Z 65 19.76 | 80 Z 65 19.76 | 80 Z 80 25.58 |
| 127 | 62 | 144 | 224 | 325 | 573 | 897 | 1297 | |
| 152 | 66 | 153 | 238 | 346 | 610 | 953 | 1380 | |
| 178 | 69 | 160 | 249 | 362 | 639 | 999 | 1445 | |
| 203 | 71 | 166 | 258 | 375 | 661 | 1034 | 1497 | |
| 229 | 73 | 171 | 265 | 385 | 679 | 1062 | 1536 | |
| 254 | 75 | 174 | 270 | 392 | 692 | 1082 | 1566 | |
| 279 | 76 | 176 | 274 | 397 | 701 | 1096 | 1586 | |
| 305 | 76 | 177 | 276 | 400 | 706 | 1104 | 1597 | |
| 325-762 | 76 | 178 | 276 | 401 | 708 | 1107 | 1601 | |

*Valve outlet should be mounted at vacuum side of system.