## DIMENSIONS

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<th>Nominal Size</th>
<th>Pipe Outside Diameter</th>
<th>Pipe Outside Diameter</th>
<th>End to End</th>
<th>Dimensions – inches/millimeters</th>
<th>Aprx. Wgt. Each</th>
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**FireLock® Butterfly Valve with Weatherproof Actuator and Supervised-Closed Switches**

Series 766 (365-psi/25-Bar/2516-kPa) and Series 707C (300-psi/21-Bar/2068-kPa)
**FireLock® Butterfly Valve with Weatherproof Actuator and Supervised-Closed Switches**

**Series 766 (365-psi/25-Bar/2516-kPa) and Series 707C (300-psi/21-Bar/2068-kPa)**

**IMPORTANT INSTALLATION INFORMATION**

**WARNING**
- Read and understand all instructions before attempting to install any Victaulic piping products.
- Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Wear safety glasses, hardhat, and foot protection.

Failure to follow these instructions could result in serious personal injury and/or property damage.

**SERIES 766 AND 707C BUTTERFLY VALVES ARE SUPERVISED IN THE “CLOSED” POSITION. THESE VALVES ARE INTENDED FOR USE ONLY IN THE FIRE PROTECTION SYSTEM WATER SOURCE AND SPRINKLER HEADS. THESE VALVES ARE INTENDED FOR USE ONLY IN FIRE PUMP TEST BYPASS LINES.**

- Series 766 Butterfly Valves are UL Listed for 365-psi/25-Bar/2516-kPa working pressure for indoor or outdoor use. Series 707C Butterfly Valves are UL Listed for 300-psi/21-Bar/2068-kPa working pressure for indoor or outdoor use.
- Installation of Series 766 and 707C Butterfly Valves must be made in accordance with NFPA 13 and NFPA 72.
- Series 766 and 707C Butterfly Valves are designed for ambient weather conditions. DO NOT use these valves in submersible services.
- DO NOT install valves with the disc in the full-open position. Make sure no part of the disc protrudes beyond the end of the valve body.
- Use ONLY grooved-end, IPS carbon steel pipe with Series 766 and Series 707C Butterfly Valves. DO NOT use plain-end IPS pipe or grooved cast ductile iron pipe.
- To prevent valves from rotating in the system, Victaulic recommends installing Series 766 and 707C Butterfly Valves with at least one Victaulic rigid coupling. If two Victaulic flexible couplings are used, additional support may be required to prevent the valve from rotating. Refer to the instructions, supplied with the couplings, for proper installation.
- Series 766 and 707C Butterfly Valves are not designed for use with handle extensions or chain-wheel operators.
- For outdoor applications, a weatherproof conduit and conduit connection MUST be installed on the housing to protect internal switches. Store the valve in a dry area prior to installation.
- In the event of actuator failure, contact Victaulic. Only Victaulic replacement parts must be used.

**CAUTION**
- Use ONLY Victaulic replacement parts. Failure to follow this instruction may cause improper valve operation, resulting in property damage.

**INSTALLATION INSTRUCTIONS**

1. To prevent damage to the disc during installation, turn the hand wheel so that the disc is in the “SHUT” position. No portion of the disc should extend beyond the end of the valve body during installation.
2. Install Series 766 and 707C Butterfly Valves with at least one Victaulic rigid coupling. Refer to the “Important Information” section on the previous page. When installing Victaulic couplings, the nuts must be tightened evenly to obtain metal-to-metal contact at the bolts pads. Always refer to the instructions, supplied with the coupling, or the I-100 Field Installation Handbook for complete installation instructions.

**SWITCH AND WIRING**

1. The supervisory switch contains two, single pole, double throw, pre-wired switches.
2. Switches are rated:
   - 10 amps @ 125 or 250 VAC/60 Hz
   - 0.50 amps @ 125 VDC
   - 0.25 amps @ 250 VDC
3. Switches supervise the valve in the “CLOSED” position.
4. One switch has two #18 insulated wires per terminal, which permit complete supervision of leads (refer to diagrams and notes below). The second switch has one #18 insulated wire per terminal. This double circuit provides flexibility to operate two electrical devices at separate locations, such as an indicating light and an audible alarm, in the area that the valve is installed.
5. A #14 insulated ground lead (green) is provided.

Switch #1 = S1 For connection to the supervisory circuit of a UL Listed alarm control panel

Switch #2 = S2 Auxiliary switch that may be connected to auxiliary devices, per the authority having jurisdiction

**SUPERVISORY SWITCH AND WIRING**

- **S1**
  - Normally Closed: (2) Blue
  - Common: (2) Yellow

- **S2**
  - Normally Closed: Blue with Orange Stripe
  - Normally Open: Brown with Orange Stripe
  - Common: Yellow with Orange Stripe

**SWITCH AND CONTROL PANEL**

- **N.O.**
  - Normally Open:
    - OR
  - Normal:
    - BELL OR HORN

**CIRCUIT**

- **VOLTAGE SOURCE**
  - TO END-OF-LINE RESISTOR, OR NEXT INDICATOR
  - Switch 1: 2 leads per terminal
  - Switch 2: 1 lead per terminal
  - 
  - UL LISTED JUNCTION BOX
  - FIRE ALARM
  - CONTROL PANEL
  - SUPERVISORY CIRCUIT
  - VOLTAGE SOURCE
  - N.O.
  - NO
  - COM
  - SWITCH CONTACT RATING 16A AT 125 AND 250VAC
  - BOS R1 125VDC
  - 0.25 AT 250VDC
  - 0.50 AT 125VDC
  - 10 AT 125VDC

**NOTE:** The above diagram shows a connection between the common terminal (yellow – S1 and yellow-with-orange stripe – S2) and the normally closed terminal (blue – S1 and blue-with-orange stripe – S2). In this example, the indicator light and alarm will stay on until the valve is fully CLOSED. When the valve is fully CLOSED, the indicator light and alarm will go out. Cap off any unused wires (e.g. brown with orange stripe).

Only S1 (two leads per terminal) may be connected to the fire alarm control panel. The connection of the alarm switch wiring shall be in accordance with NFPA 72 and the auxiliary switch per NFPA 70 (NEC).