

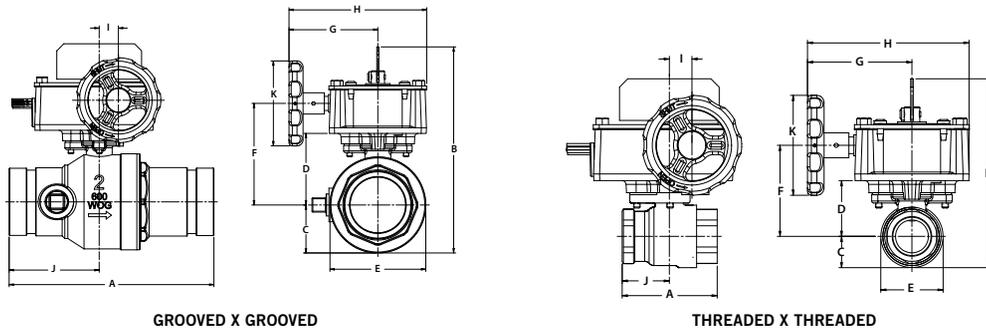
# FireLock® Ball Valve

Series 728

## DIMENSIONS

Size	Dimensions – inches/millimeters											Aprx. Wgt. Each
Nominal Size inches/Actual mm	End to End "A"	Height "B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"J"	"K"	lbs/kg
1 Thd. x Thd. 33.7 Thd. x Thd.	2.84 72.1	4.74 120.4	0.91 23.1	1.67 42.4	1.82 46.2	2.40 61.0	3.15 80.0	4.86 123.4	0.68 17.3	1.42 36.1	3.00 76.2	5.1 2.3
1¼ Thd. x Thd. 42.4 Thd. x Thd.	3.31 84.1	4.95 125.7	1.10 27.9	1.88 47.8	2.20 55.9	2.61 66.3	3.15 80.0	4.86 123.4	0.68 17.3	1.65 41.9	3.00 76.2	5.8 2.6
1½ Thd. x Thd. 48.3 Thd. x Thd.	3.66 93.0	5.13 130.3	1.29 32.8	2.06 52.3	2.58 65.5	2.79 70.9	3.15 80.0	4.86 123.4	0.68 17.3	1.83 46.5	3.00 76.2	6.6 3.0
2 Thd. x Thd. 60.3 Thd. x Thd.	4.33 110.0	5.49 139.4	1.69 42.9	2.42 61.5	3.38 85.9	3.15 80.0	3.15 80.0	4.86 123.4	0.68 17.3	2.16 54.9	3.00 76.2	8.5 3.9
1¼ Grv. x Grv. 42.4 Grv. x Grv.	7.25 184.2	4.95 125.7	1.10 27.9	1.87 47.5	2.20 55.9	2.61 66.3	3.15 80.0	4.86 123.4	0.68 17.3	3.19 81.0	3.00 76.2	7.5 3.4
1½ Grv. x Grv. * 48.3 Grv. x Grv. *	7.25 184.2	5.17 131.3	1.29 32.8	2.10 53.3	2.58 65.5	2.83 71.9	3.15 80.0	4.86 123.4	0.68 17.3	3.19 81.0	3.00 76.2	8.5 3.9
2 Grv. x Grv. * 60.3 Grv. x Grv. *	7.25 184.2	5.47 138.9	1.69 42.9	2.40 61.0	3.38 85.9	3.13 79.5	3.15 80.0	4.86 123.4	0.68 17.3	3.19 81.0	3.00 76.2	10.5 4.8

The NPT tap is available only on the 1½ - 2-inch/48.3 - 60.3-mm grooved x grooved versions.



## 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.

- The Series 728 Ball Valve is UL and ULC Listed and FM Approved for 365-psi/2517-kPa/25-Bar working pressure for indoor or outdoor use.
- Flow performance for Series 728 Ball Valves satisfies UL Specification 1091 and FM Approval Standard 1112.
- Installation of the Series 728 Ball Valve must be made in accordance with NFPA 13 and NFPA 72.
- Series 728 Ball Valves are designed for ambient weather conditions. DO NOT use these valves in submersible services.

- For grooved x grooved Series 728 Ball Valves, use ONLY grooved-end, IPS carbon steel pipe to install the valve into the system. DO NOT use plain-end IPS pipe or grooved cast ductile iron pipe.
- For threaded x threaded Series 728 Ball Valves, follow standard threading practices to install the valve into the system.
- To prevent valves from rotating in the system, Victaulic recommends installing the Series 728 Ball Valve 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 728 Ball Valves are not designed for use with handle extensions or chain-wheel operators.
- The NPT supply-side tap of the Series 728 Ball Valve MUST BE UPSTREAM (away from the device) when supplying pressure to the piston charge line of Series 756 and Series 758 FireLock fire protection valves or the diaphragm charge line of Series 768 and Series 769 FireLock NXT fire protection valves. NOTE: When using the NPT tap to supply pressure to fire protection valves, as stated, the Series 728 Ball Valve must be installed with the flow direction arrow on the body facing the correct way. If the NPT tap is not being used, the Series 728 Ball Valve can be installed with the flow direction arrow on the body facing either way.**
- For indoor and outdoor applications, a weatherproof conduit and conduit connection MUST be installed on the housing to protect internal switches from water damage. Store the valve in a dry area prior to installation.

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Series 728

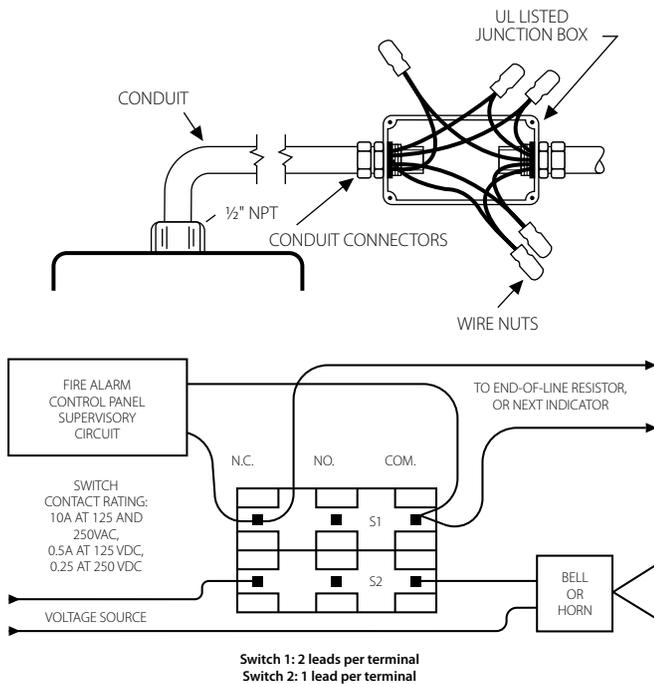
## INSTALLATION INSTRUCTIONS

1. **FOR GROOVED-END VALVES:** Install the Series 728 Ball Valve with at least one Victaulic rigid coupling. Refer to the "Important Information" section on the previous page and the instructions, supplied with the couplings, for proper installation. **NOTE:** When installing rigid, angle-bolt-pad couplings, the nuts must be tightened evenly to obtain metal-to-metal contact with equal offsets at each bolt pad.
- 1a. **FOR THREADED-END VALVES:** Install the Series 728 Ball Valve by following standard threading practices.

## 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 "open" position.**
4. One switch has two #18 MTW wires per terminal, which permit complete supervision of leads (refer to diagrams and notes on this page). The second switch has one #18 MTW 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 MTW 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

- 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



**NOTE:** The diagram in the previous column 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 open. When the valve is fully open, the indicator light and alarm will go out. Cap off any unused wires (e.g. brown and 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).

## GEAR OPERATOR REPLACEMENT

In the event that a gear operator fails, replacement of the actuator would be required.

**⚠ DANGER**

- De-energize the electrical system before attempting to replace the actuator.
- Use only victaulic replacement parts.

Failure to follow these instructions could result in serious personal injury and product failure.

1. De-energize the electrical system and disconnect the wiring before attempting to replace the actuator of a Series 728 Ball Valve.
2. Remove the T25 tamper-resistant screw that attaches the indicator flag to the actuator's stem adapter. Remove the indicator flag.
3. Remove the four cover plate screws that attach the cover plate to the actuator housing. Remove the cover plate from the actuator housing.
4. Remove the two screws that attach the switch assembly to the actuator housing. Remove the switch assembly from the actuator housing.
5. Remove the three actuator mounting screws that attach the actuator to the valve. Remove the old actuator from the valve.
6. Replace the gasket between the valve and actuator housing with the new gasket provided in the kit.
7. If installed, remove the cover plate and switch assembly from the new actuator housing.
8. Make sure the position of the new actuator matches that of the valve.
9. Install the new actuator onto the valve. Tighten the three actuator mounting screws to 25 inch-lbs/3 N•m (±2.5 inch-lbs/0.3 N•m).
10. Install the new switch assembly into the actuator housing. The switch wires must be guided through the tapped hole in the side of the actuator housing prior to aligning the switch plate. Failure to do so may damage the wires and cause the switch circuit to malfunction. Care must be taken to avoid damage to the levers on the switches while aligning the switch plate. Tighten the two switch plate mounting screws completely.
11. Install the new cover plate onto the actuator housing. Tighten the four cover plate screws to 80 inch-lbs/9 N•m (±10 inch-lbs/1 N•m).
12. Install the indicator flag to the actuator's stem adapter with the T25 tamper-resistant screw.
13. Re-wire the gear operator. Refer to the "Switch and Wiring" section.
14. Cycle the valve fully opened and then fully closed. Verify proper valve and switch function.

For complete contact information, visit [www.victaulic.com](http://www.victaulic.com)

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