

Series 725T Diverter Valve



⚠ WARNING

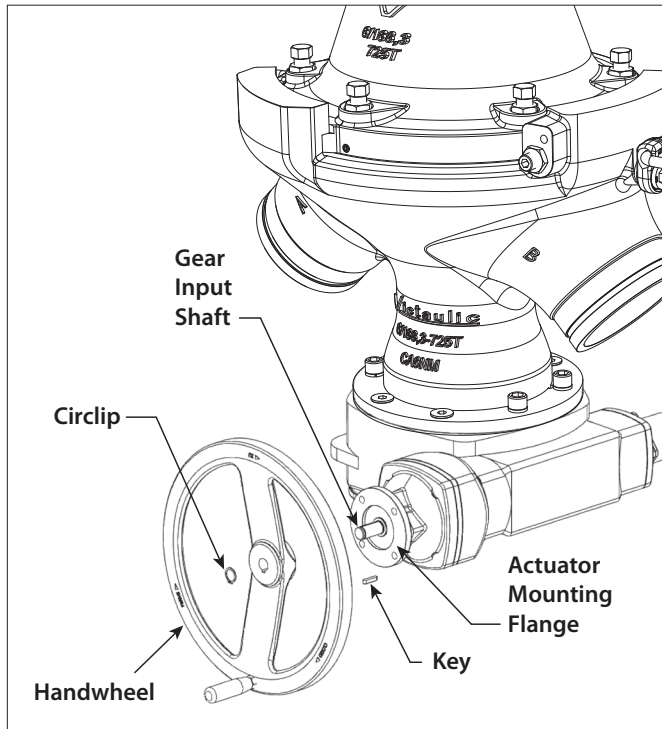


- Read and understand all instructions before attempting to install any Victaulic products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Confirm that any equipment, branch lines, or sections of piping that may have been isolated for/during testing or due to valve closures/positioning are identified, depressurized, and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Wear safety glasses, hardhat, foot protection, and hearing protection.

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

NOTICE

- Drawings and/or pictures in this manual may be exaggerated for clarity.
- The product, along with these installation and maintenance instructions, contain trademarks, copyrights, and/or patented features that are the exclusive property of Victaulic.



ASSEMBLY OF THE HANDWHEEL FOR MANUAL (GEAR-OPERATED) VALVES

NOTICE

- All 725T valves are shipped with a gear operator and handwheel for manual operation.
- In the event of actuator failure, the actuator may be removed from the gear operator and replaced with the handwheel for valve operation.
- Store the handwheel in a safe location for future use. Do not discard.

1. Place the key onto the gear input shaft.
2. Install the handwheel over the gear input shaft.
3. Attach circlip in front of the handwheel, onto the gear input shaft.

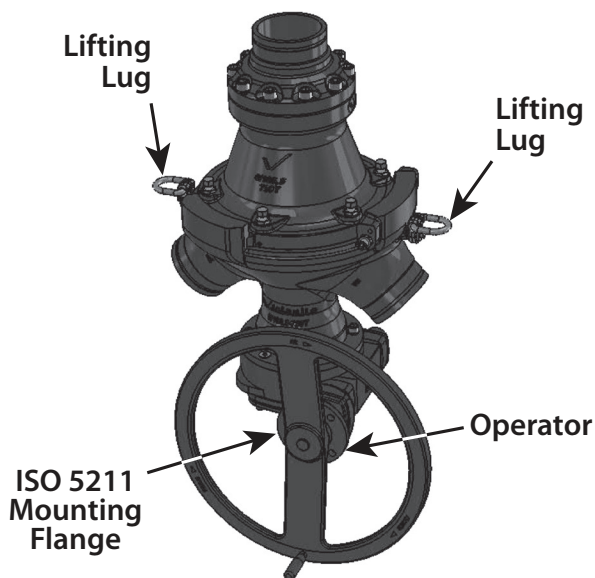
INSTALLATION INFORMATION

Series 725T Diverter Valves may be specified for three different types of pipe preparation, for use with three types of Victaulic products. (**NOTE:** These applications are not interchangeable.)

- Cut grooved pipe ends, for use with Victaulic EndSeal™ couplings
- Double grooved pipe ends, for use with Victaulic Style 808 couplings
- Pipe prepared with rings, for use with Victaulic Style 809N couplings

NOTICE

- Refer to the installation instructions provided with the couplings, or visit victaulic.com for the most up-to-date information.



Series 725T Diverter Valves can be installed in horizontal, vertical, or intermediate positions. All positions shall allow access to the actuator or gear operator.

Series 725T Diverter Valves and connecting piping shall be supported to prevent the joints from being subjected to bending loads, shear loads, or any other external loads.

Using both lifting lugs, support the valve to ensure balanced loading. In addition, a cradle or cribbing can be used to provide increased support.

⚠ WARNING

- **WELDING TO SERIES 725T DIVERTER VALVES AND COUPLINGS IS NOT PERMITTED.**

Failure to follow these instructions may cause valve damage, resulting in death or serious personal injury and property damage.

ACTUATOR SETUP

Always refer to the actuator manufacturer’s manual and wiring diagrams for complete setup and operating requirements. These documents are packaged with the actuator, and shall be reviewed upon receipt. Additional copies of the actuator manufacturer’s manual and wiring diagrams can be obtained directly from the actuator manufacturer’s website. The actuator serial number can be obtained from the identification plate attached to the side of the actuator.

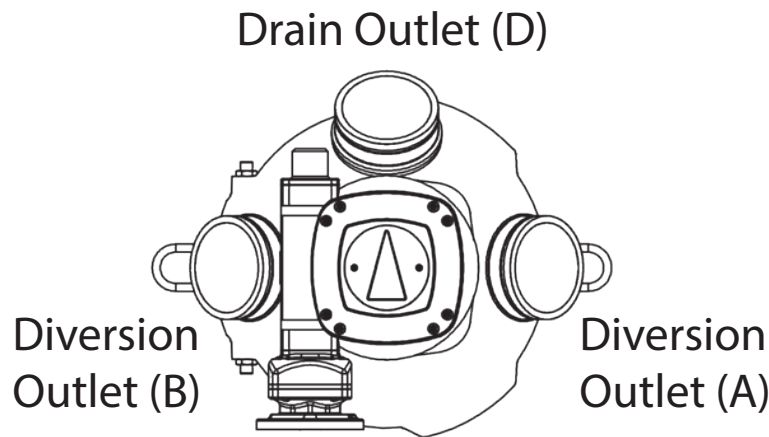
⚠ CAUTION

- **Actuator limit switches are factory set from Victaulic and shall not be adjusted. Adjustments made to the limit switches on the actuators will require further adjustments to the travel stops of the valve gearbox.**
- Making adjustments to factory settings may cause under/over travel of the valve plug and misalignment, resulting in premature wear of valve outlets or failure of the outlet seals.**

In installation areas where the actuator will be subjected to constant vibration, Victaulic recommends that the actuator control unit be located away from the actuator.

For manual override of electric actuators, refer to the electric actuator manufacturer’s manual for complete instructions. For manual override of pneumatic or hydraulic actuators, or if manual override of an electric actuator is unsuccessful, remove the actuator from the gear operator by removing the assembly bolts at the actuator mounting flange and follow all steps in the “Assembly of the Handwheel for Manual (Gear-Operated) Valves” section.

Actuators are designed to operate within the parameters specified in the table below. Additional information will be required to determine appropriate specifications for the particular system.



Series 725T Helpful Information

Operator/Actuator Performance									
Nominal Size inches DN	Manual (Gear Operator)				Pneumatic			Electric	
	Number of Turns from Flow Position A to Flow Position B	Number of Turns from Flow Position A or Flow Position B to Flow Position D (Drain Outlet)	Handwheel Dimensions inches mm	Rim Pull lbf N	Supply Air			RPM	
					Pressure psi bar	Flow Rate SCFM l/s	RPM	50Hz	60Hz
4 DN100	80	40	24.80 630	51 227	92 6.3	32 15	109	90	108
6 DN150	80	40	24.80 630	67 298	92 6.3	42 20	100	90	108
8 DN200	109	54	24.80 630	77 342	92 6.3	85 40	90	90	108

NOTE: For additional actuation requirements, contact Victaulic.

VALVE OPERATION

⚠ CAUTION

- Under normal operation, **DO NOT** actuate or operate the Series 725T Diverter Valve with backfill or other abrasive media in the system, or while the valve is pressurized. To prevent permanent damage to internal valve components, the system shall be flushed and free of backfill before indexing the valve.
- Refer to the “Backfill Evacuation Due to System Blockage” section for actuating the valve in the event of a system blockage. Failure to follow these instructions may result in property damage.

Diversion Service

⚠ WARNING

- Drain outlet (D) **SHALL NOT** be capped or closed off.
 - Drain outlet (D) **SHALL** be piped to an appropriate waste area or collection area.
- Failure to follow these instructions may result in death or serious personal injury and property/enviromental damage.

For a directional change of backfill flow to stopes, complete the following steps.


1. Shut down backfill pump/gravity feed system.
2. Flush piping system with clean water to remove build-up on pipes and valve.
3. Once flushing is complete, rotate the diverter plug from current outlet to desired outlet. (Refer to the “Series 725T Helpful Information” table for actuation input requirements. In addition, refer to the actuation manufacturer’s manual provided with the valve.) Alternatively, If flush water is to be redirected to a sump collection area, follow the “Flush Service” section below.
4. At the operator’s option, flush the system prior introducing backfill to identify and clear flow path blockages, as well as to provide confirmation that the backfill will be transported to the desired location.
5. Resume backfill operation.

⚠ CAUTION

- The Series 725T Diverter Valve may be specified for use in locations designed for backfill dumping, and may be operated under pressure to dump backfill in the event of a blockage.
 - The diversion outlets (A and B) shall be used only when the diverting plug is fully aligned with a diversion outlet. The diversion outlets shall never be used in a partially-open position.
- Failure to follow these instructions will cause premature valve wear and leakage, resulting in property damage and voiding of any Victaulic warranty.

Flush Service

⚠ WARNING

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- Drain outlet (D) will be exposed when cycling the valve from diversion outlets A and B.
 - Drain outlet (D) shall not be used for standard backfill diversion for stope filling.
 - Pipe shall be connected to the drain outlet (D) in order to direct any water or backfill material to a safe collection area. Verify that the piping and collection area are built to safely contain and withstand materials that may be evacuated from the line.
- Failure to follow these instructions may result in death or serious personal injury and property damage.

When diverting flush water to a sump collection area, complete the following steps.

1. Shut down backfill pump/gravity feed system.
2. Flush piping system with clean water to remove build up on pipes and valve.
3. Operate the valve from backfill service direction to the drain outlet (D), allowing the flush water to enter a sump collection area. (Refer to the “Series 725T Helpful Information” table for actuation input requirements. In addition, refer to the actuation manufacturer’s manual provided with the valve.)
4. Once flushing is complete, return valve to backfill service location and resume backfill operation.

⚠ CAUTION

- The Series 725T Diverter Valve may be specified for use in locations designed for backfill dumping, and may be operated under pressure to dump backfill in the event of a blockage.
 - The diversion outlets (A and B) shall be used only when the diverting plug is fully aligned with a diversion outlet. The diversion outlets shall never be used in a partially-open position.
- Failure to follow these instructions will cause premature valve wear and leakage, resulting in property damage and voiding of any Victaulic warranty.

Backfill Evacuation Due to System Blockage

To evacuate backfill from the borehole and piping upstream of the valve in the event of a system blockage downstream of the valve, complete the following steps.

1. Shut down backfill pump/gravity feed system.
2. Operate the valve from the backfill service direction to the drain outlet (D), allowing upstream backfill to flow to a safe disposal area. (Refer to the “Series 725T Helpful Information” table for actuation input requirements. In addition, refer to the actuation manufacturer’s manual provided with the valve.)
3. Flush remaining backfill from the upstream borehole piping with clean water to remove build-up on pipes and valves.

To recondition the valve for service after a dump event, complete the following steps.

- 4a. If rotating the diverter plug back to the backfill blockage side, only do so when clean flush water remains in the valve. Do not attempt to rotate the diverter plug back while dry. After downstream blockage is cleared, rotate the diverter plug through several full cycles with low-pressure water inside the valve to clear any internal debris that has accumulated during the dump event.

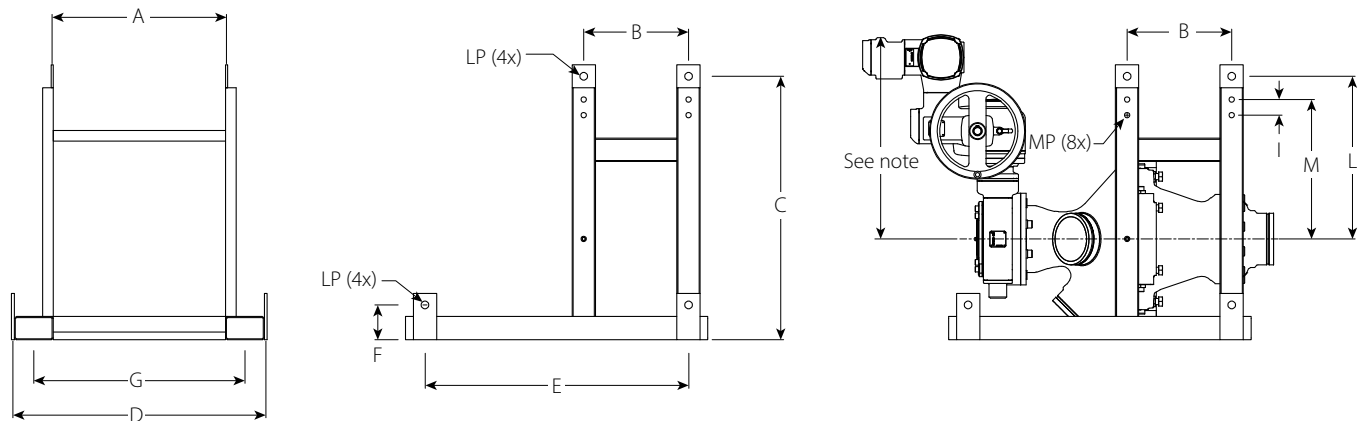
⚠ CAUTION

- After using the Victaulic Series 725T Diverter Valve to dump upstream backfill due to a downstream blockage, the diverter plug may be rotated back to the original position only with clean flush water remaining in the valve. Rotating the valve while dry will result in damage to seals and excessive operating torque.

Failure to follow these instructions will cause premature valve wear and leakage, resulting in property damage and voiding of any Victaulic warranty.

- 4b. If the backfill has solidified in the downstream piping, the diverter valve shall be visually inspected to verify that there is no solidified backfill in the outlet where the blockage occurred. This will require removal of the coupling at the outlet port where the blockage occurred, and may require removal of the entire valve from the system. Any debris shall be fully removed, and the valve shall be flushed with clean water prior to returning the valve to service.
5. Resume backfill operation only after the valve has been thoroughly cleaned and inspected.

DIMENSIONS WITH OPTIONAL SUPPORT FRAME



Nominal Size inches DN	Dimensions – inches/mm											LP øLifting Point	MP øMounting Point	Weight lbs kg
	A	B	C	D	E	F	G	M	L	I				
4 DN100	17.81 452.5	9.50 241.3	30.50 774.7	30.54 775.7	34.00 863.6	4.50 114.3	22.56 573.1	16.50 419.1	19.50 495.3	2.00 50.8	1.00 25.4	0.69 17.5	187 85	
6 DN150	22.50 571.5	11.50 292.1	34.00 863.6	35.23 894.7	34.00 863.6	4.50 114.3	27.25 692.2	17.50 444.5	20.50 520.7	2.00 50.8	1.00 25.4	0.69 17.5	232 105	
8 DN200	28.75 730.3	16.00 406.4	40.50 1028.7	41.48 1053.5	42.00 1066.8	4.50 114.3	33.50 850.9	21.00 533.4	24.00 609.6	2.00 50.8	1.00 25.4	0.69 17.5	265 120	

NOTE: The height from the centerline of the valve to the top of the actuator may exceed the distance from the centerline to the mounting holes of the frame (“M” dimension).

Series 725T Diverter Valve

For complete contact information, visit victaulic.com

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