



## DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim 4 Inch and 6 Inch (DN100 and DN150)

### General Description

The TYCO DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim is a diaphragm-style valve that depends upon water pressure in the Diaphragm Chamber to hold the Diaphragm closed against water supply pressure. Key features include:

- Pressure-reducing function maintains pre-set outlet pressure.
- Remote-resetting feature provides the ability to reset the Deluge Valve from one or more locations.
- Compact, space-saving design reduces valve room footprint and construction costs.
- Electric actuation is compatible with many types of automatic and manual release options.

Operation of the DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim is provided by an automatic electric detection system or remote manual electric activation.

The force differential applied through the Diaphragm that holds it in the set position is reduced below the Valve trip point. Water supply pressure then forces the Diaphragm open, permitting water to flow into the system piping and through the Alarm Port, actuating system alarms.

When the Deluge Valve is activated, system outlet pressure is determined by the Pilot Valve's set point. The Diaphragm regulates downstream pressure based on this setting.

The Pilot Valve can be used in various applications and configurations, and should be installed according to the Deluge Valve's application scheme, honoring the Pilot Valve's working conditions described herein. For other configurations, contact a TYCO Representative.

#### IMPORTANT

Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

#### NOTICE

The DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim described herein must be installed and maintained in compliance with this document as well as with the applicable installation and testing standards (e.g., NFPA 13 and 25), in addition to the standards of any local authorities having jurisdiction. Failure to do so may impair the performance of these devices.

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Contact the installing contractor or manufacturer with any questions.

### Technical Data

#### Approvals

UL Listed

UL Listing is based on the following criteria:

- Inspection, testing, and maintenance requirements referenced in the Standard for Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, NFPA 25.
- Periodic testing of the DV-5 Deluge Valve thereafter in accordance with NFPA 25.

#### Valve Trim

Each package of trim includes:

- Diaphragm Chamber Pressure Gauge
- Manual Control Station
- Main Drain Valve
- System Drain Valve
- Automatic Drain Valve
- Pressure-Reducing Pilot Valve

The following items are included in the Pre-Trimmed Valve Assemblies but can be ordered separately for use in conjunction with trim kits:

- Model BFV-300 Butterfly Valve
- Waterflow Pressure Alarm Switch (PS10-2)
- Figure 577 Grooved Coupling



The trim arrangement in this data sheet has been approved for use with the Bürkert Type 5282 Solenoid Valve.

#### NOTICE

When system pressure is greater than 175 psi (12,1 bar), provision is to be made to replace the standard-order, 300 psi (20,7 bar) Water Pressure Gauges, shown in Figure 2, with separately ordered 600 psi (41,4 bar) Water Pressure Gauges.

**Maximum Inlet Pressure**  
250 psi (17,2 bar)

**Minimum Differential Pressure**  
50 psi (3,45 bar)

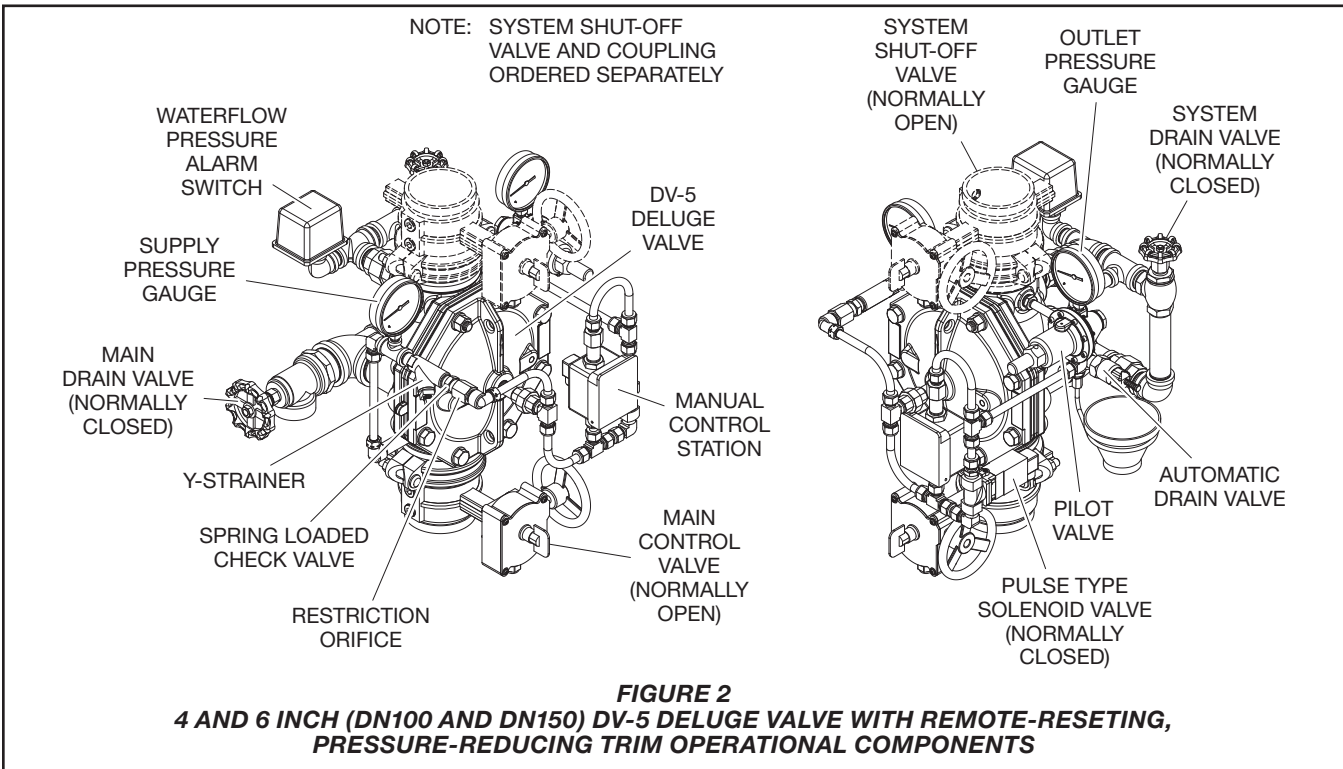
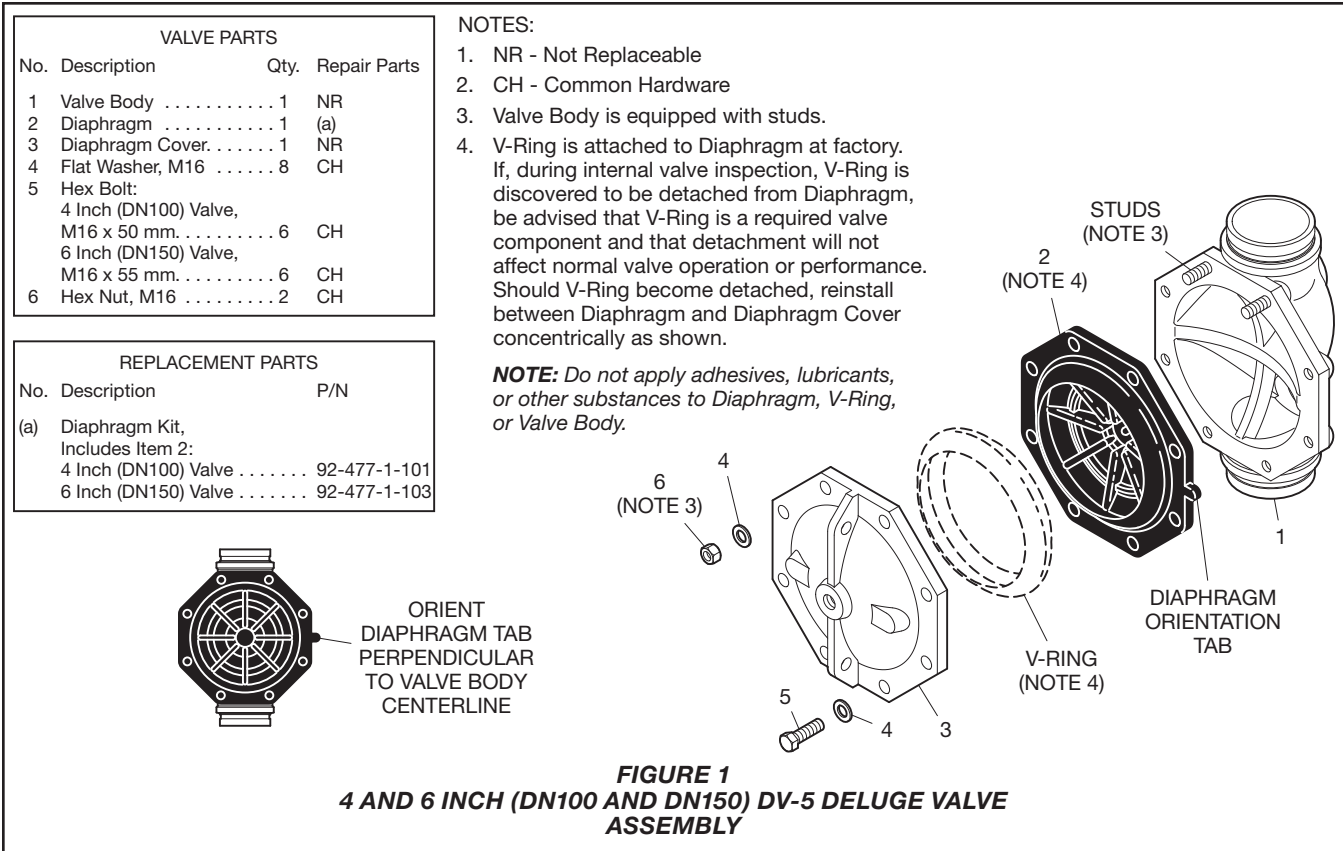
**Field Outlet Set Pressure Range**  
Per UL Listing, 35 to 200 psi (2,4 to 13,8 bar)

**Pressure Loss with Inlet Pressure Above Set Pressure**  
The inlet pressure minus the outlet set pressure equals pressure loss. For example, if the inlet flowing pressure is 225 psi (15,5 bar) and the field outlet set pressure is 130 psi (9,0 bar), the pressure loss is 95 psi (6,5 bar).

**Pressure Loss with Inlet Pressure Below Set Pressure**  
Refer to Graphs A and B. These graphs are a requirement of UL and should be used for reference only.

**Rated Flowing Range**  
4 inch. ....0 to 1000 gpm (DN100) .... (0 to 3785 lpm)  
6 inch. ....0 to 2000 gpm (DN150) .... (0 to 8325 lpm)

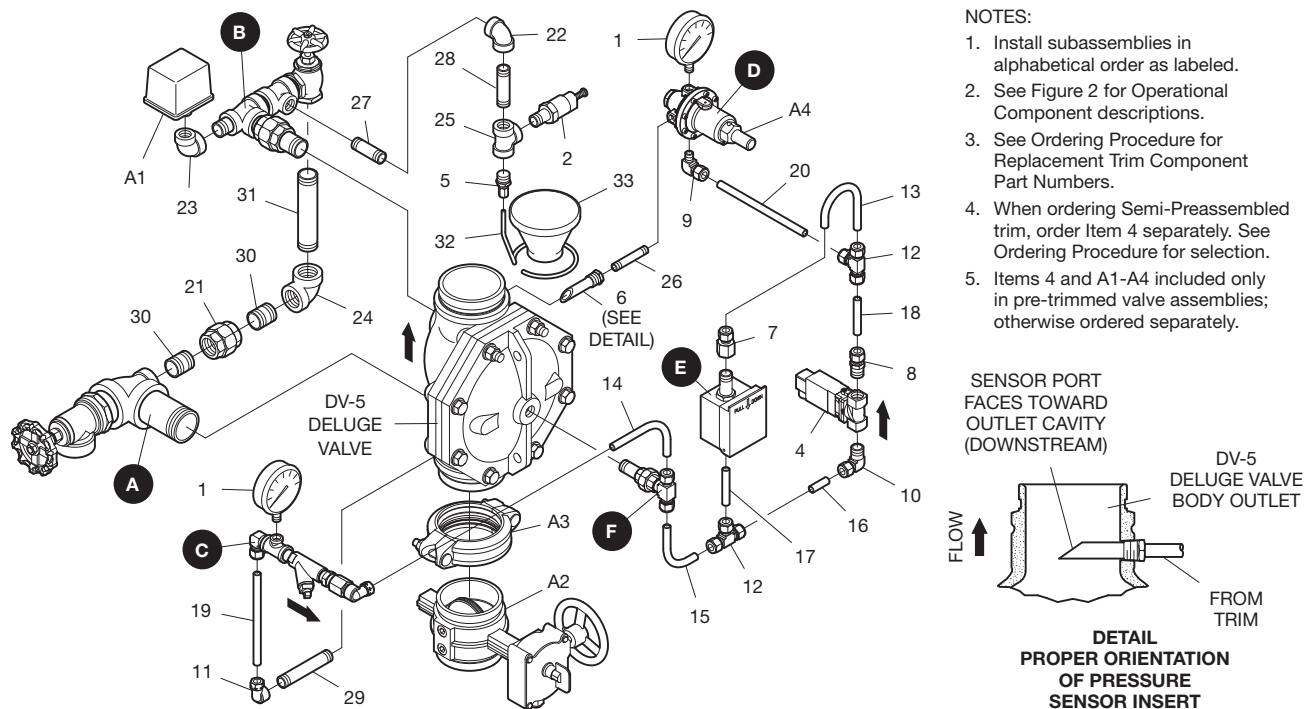
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Item	Description	Component Size		Qty.
		4" (DN100)	6" (DN150)	
A	Trim Sub-Assembly A, Main Drain	N/A	N/A	1
B	Trim Sub-Assembly B, Alarm Port Connection and System Drain	N/A	N/A	1
C	Trim Sub-Assembly C, Diaphragm Chamber Supply Strainer	N/A	N/A	1
D	Trim Sub-Assembly D, Pilot Valve	N/A	N/A	1
E	Trim Sub-Assembly E, Manual Control Station	N/A	N/A	1
F	Trim Sub-Assembly F, Diaphragm Chamber Supply Connection	N/A	N/A	1

1	Water Pressure Gauge, 300 lb.	N/A	N/A	2
2	Model AD-1 Automatic Drain Valve	N/A	N/A	1
3	Item No. Not Used	N/A	N/A	N/A
4	Solenoid Valve, Ordered Separately	N/A	N/A	1
5	Drip Funnel Connector	N/A	N/A	1
6	Pressure Sensor Insert	N/A	N/A	1
7	Compression Fitting, Connector, FM Approved, Tube x Female NPT	1/2" x 1/2"	1/2" x 1/2"	1
8	Compression Fitting, Connector, Tube x Male NPT	1/2" x 1/2"	1/2" x 1/2"	1
9	Compression Fitting, Elbow, Reducing, 90°, Tube x Male NPT	1/2" x 1/4"	1/2" x 1/4"	1
10	Compression Fitting, Elbow, 90°, Tube x Male NPT	1/2" x 1/2"	1/2" x 1/2"	1

Item	Description	Component Size		Qty.
		4" (DN100)	6" (DN150)	
11	Compression Fitting, Elbow, 90°, FM Approved, Tube x Female NPT	1/2" x 1/2"	1/2" x 1/2"	1
12	Compression Fitting, Union Tee, Tube	1/2"	1/2"	2
13	Copper Tube, U-Bend	N/A	N/A	1
14	Copper Tube, Top-Bend	N/A	N/A	1
15	Copper Tube, Bottom-Bend	N/A	N/A	1
16	Copper Tube, Straight	1/2" x 1-1/2"	1/2" x 1-1/2"	1
17	Copper Tube, Straight	1/2" x 2-7/8"	1/2" x 2-7/8"	1
18	Copper Tube, Straight	1/2" x 2-7/8"	1/2" x 3-15/16"	1
19	Copper Tube, Straight	1/2" x 7-1/2"	1/2" x 8-1/2"	1
20	Copper Tube, Straight	1/2" x 8-3/16"	1/2" x 10-3/4"	1
21	Union, NPT	1"	1"	1
22	Elbow, 90°, NPT	1/2"	1/2"	1
23	Elbow, Reducing, 90°, NPT	3/4" x 1/2"	3/4" x 1/2"	1
24	Elbow, 90°, NPT	1"	1"	1
25	Tee, NPT	1/2"	1/2"	1
26	Nipple, NPT	1/4" x 3"	1/4" x 3"	1
27	Nipple, NPT	1/2" x 2-1/2"	1/2" x 2-1/2"	1
28	Nipple, NPT	1/2" x 3"	1/2" x 3"	1
29	Nipple, NPT	1/2" x 4-1/2"	1/2" x 5-1/2"	1
30	Nipple, NPT	1" x Close	1" x Close	2
31	Nipple, NPT	1" x 6"	1" x 9-1/4"	1
32	Drip Funnel Bracket	N/A	N/A	1
33	Drip Funnel	N/A	N/A	1
A1	Waterflow Press Alarm Switch	N/A	N/A	1
A2	Model BFV-300 Butterfly Valve	4" (DN100)	6" (DN150)	1
A3	Figure 577 Coupling	4" (DN100)	6" (DN150)	1
A4	Pilot Valve	N/A	N/A	1



**FIGURE 3**  
**4 AND 6 INCH (DN100 AND DN150) DV-5 DELUGE VALVE WITH REMOTE-RESETTING, PRESSURE-REDUCING TRIM, SEMI-PREASSEMBLED TRIM**

### **Pressure-Reducing Pilot Valve**

The Pilot Valve operates when hydraulic pressure is applied below the spring-loaded membrane. The spring's tension upon the membrane can be adjusted (increased by the Adjusting Screw). The membrane is connected to the Pilot Valve's seal trim, opening and closing the Pilot Valve's water passage.

The Pilot Valve is normally Open. When no pressure is applied below the spring-loaded membrane, the Pilot Valve allows the Deluge Valve to open. Once pipeline pressure is built downstream of the Deluge Valve, this pressure is conveyed to the Pilot Valve's membrane through the sensor port. When the pressure surpasses the set point (pre-adjusted through the Pilot Valve's Adjusting Screw), the membrane moves, closing the water passage and shutting off the Deluge Valve.

When the downstream pressure reduces below the Pilot Valve's set point, the membrane moves, opening the water passage and allowing the Deluge Valve to open.

The Pilot Valve is mounted with a priming supply restriction between the Main Valve's inlet and the Pilot Valve's inlet. The valve is a 2-way pilot. During operation, water circulates constantly through the Pilot Valve, providing an immediate response to any changes in pipeline pressure.

#### **NOTICE**

*The spring range should be appropriate to desired working conditions (required preset value). To verify the spring's pressure range, check the colored ring and compare to the spring range table.*

## **Materials of Construction**

#### **NOTICE**

*The galvanized or brass nipples and fittings for the Valve Trim provide corrosion resistance and are intended to extend the life of the installation of the TYCO DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim when exposed to internal and external corrosive conditions. Although these selections are intended to resist corrosion, it is recommended that the end user or other technical expert familiar with conditions at the proposed installation be consulted with respect to these selections for a given corrosive condition.*

*Systems using a seawater or brackish water supply require special considerations in order to extend the life of the Deluge Valve and Trim. This type*

*of system ideally should be configured with a primary source of clean fresh water and that only upon system operation is the secondary water supply (seawater or brackish water) allowed to enter the system. After the system operation, the system should be thoroughly flushed with clean fresh water.*

*Following this recommendation can increase the service life of the DV-5 Deluge Valve.*

### **Pressure Gauge**

Bronze bourdon tube with brass socket

### **Gauge Test Valve**

Bronze body per ASTM B584

### **Manual Control Station**

Corrosion-resistant copper alloys and glass filled PTFE seals; Thermoplastic enclosure

### **Automatic Drain Valve**

Brass body per ASTM B584, Type 440 stainless steel or brass per ASTM B134 ball, and galvanized steel inlet

### **Pressure-Reducing Pilot Valve**

Brass body and Diaphragm of nylon reinforced rubber

### **Ball Valve**

Corrosion resistant copper alloys and glass-filled PTFE seals

### **Spring-Loaded Check Valve**

Brass body and Buna-N seal

### **Y-Strainer**

Bronze body per ASTM B584 and Type 304 stainless steel screen

### **Angle Valve**

Bronze body per ASTM B584 with Nitrile disc for 1 Inch Valve; TEFLON disc for 2 Inch Valve

### **Tubing Fitting**

Brass per ASTM B16

### **Tubing Fitting Type K**

Type L copper per ASTM B88

### **Pipe Fittings**

Galvanized malleable iron per ANSI B16.3 or cast iron per ANSI B16.4

### **Pipe Nipples**

Schedule 40 galvanized steel per ASTM A53 or A135

## **Design Criteria**

The following items must be considered and applied accordingly for TYCO DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim installations.

#### **NOTICE**

*The owner is responsible to design into the system a releasing circuit such that the Solenoid Valve is properly configured to enable remote resetting where this functionality is desired.*

The building owner must be informed of the capabilities and limitations of a remote-resetting system as it pertains to the possibility of an inadvertent manual closing of the DV-5 Deluge Valve during a fire condition. Therefore, the personnel responsible for the fire protection system must be fully trained with respect to system components and required actions in the case of an alarm.

The Control Panel, Detectors, and Pull Stations are to be installed in accordance with their laboratory listings and approval.

At least one Electrical Pull Station is to be located adjacent to the Control Panel to facilitate manual remote operation of the system.

System piping is to be installed so that it is self-draining. TYCO Model AD-2 Automatic Drain Valves can be used to drain low sections of pipe as necessary. Refer to technical data sheet TFP1632.

## **Operation**

The Pilot Valve of the TYCO DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim determines the system outlet pressure once the valve is tripped. Applications can use factory-set pressure or adjust this pressure in the field.

Regulated flow through the Pilot Valve decreases and increases the pressure in the Diaphragm Chamber sufficiently to open and close the DV-5 Deluge Valve, as required, to regulate downstream set pressure. Refer to the Pressure-Reducing Pilot Valve section under Technical Data.

Initial activation of the Solenoid Valve due to electrical detection or activation of the electrical manual pull station results in the latched opening of the Solenoid Valve, allowing water flow from the Diaphragm Chamber. This drop in Diaphragm Chamber pressure allows the Diaphragm to open, permitting water to flow into the system piping and to the Waterflow Pressure Switch.

To remotely reset the Deluge Valve, the voltage to the Solenoid Valve must be transferred to the appropriate terminals on the Solenoid Valve (Fig. 4). This results in the latched closure of the Solenoid Valve, prohibiting continued flow of water from the Diaphragm Chamber, resulting in closing of the Deluge Valve. After resetting the electrical detection system or electrical manual pull station, ensure that the releasing circuit is returned to its normal operating condition.



## Installation

TYCO DV-5 Deluge Valves with Remote-Resetting, Pressure-Reducing Trim must be installed in accordance with this section.

### CAUTION

Proper operation of the DV-5 Deluge Valve depends upon trim installed in accordance with the instructions given in this technical data sheet. Failure to follow the appropriate trim diagram may prevent the valve from functioning properly, may void the manufacturer's warranty, and will void listings.

Do not handle the DV-5 Deluge Valve by its trim arrangement (for example, the copper tubing). Improper handling may result in impairment of the device to operate properly in a fire situation.

The DV-5 Deluge Valve must be installed in a readily visible and accessible location.

The DV-5 Deluge Valve and associated Remote-Resetting, Pressure-Reducing Trim must be maintained at a minimum temperature of 40°F (4°C).

Heat tracing of the DV-5 Deluge Valve or its Remote-Resetting, Pressure-Reducing Trim is not permitted. Heat tracing can result in the formation of hardened mineral deposits that are capable of preventing proper operation.

**Step 1.** Ensure the Main Control/Shut-Off Valve is installed properly.

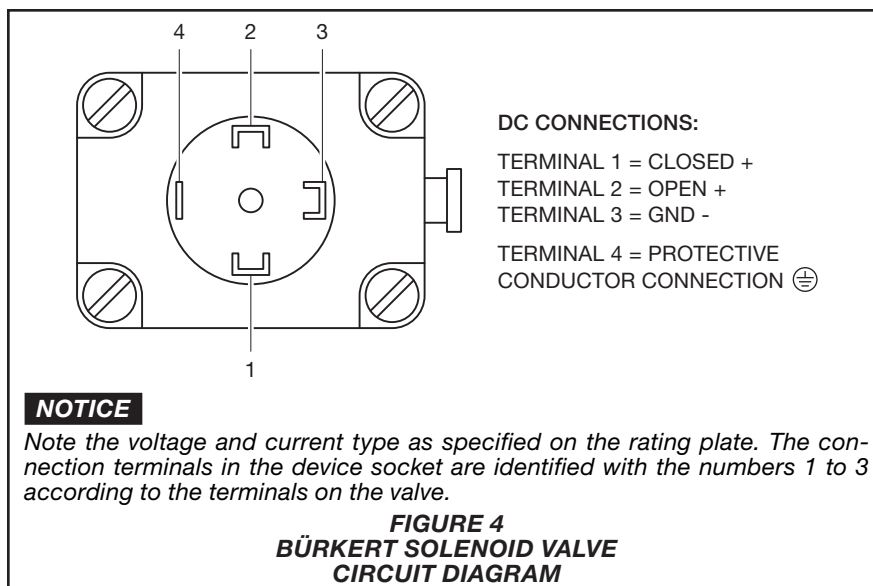
**Step 2.** Install the DV-5 Deluge Valve with the flow arrow in the proper direction.

**Step 3.** Install the System Control/Shut-Off Valve.

**Step 4.** Ensure suitable disposal of drain water. Direct drainage water to ensure that it will not cause accidental damage to property or danger to persons.

**Step 5.** Make conduit and electrical connections in accordance with the requirements of the authority having jurisdiction and/or the National Electrical Code (NFPA 70).

**Step 6.** For proper wiring of the Bürkert Type 5282 Solenoid Valve, refer to Figure 4.



## Valve Setting Procedure

TYCO DV-5 Deluge Valves with Remote-Resetting, Pressure-Reducing Trim must be set in accordance with the following instructions.

**Step 1.** Ensure the System Control/Shut-Off Valve, Main Control/Shut-Off Valve, and System Drain Valve are closed.

**Step 2.** Ensure the Manual Control Station and Solenoid Valve are closed.

**Step 3.** Open the Main Drain slowly and only a small amount.

**Step 4.** With the System Control/Shut-Off Valve closed, slowly open the Main Control/Shut-Off Valve.

**Step 5.** Slowly close the Main Drain Valve to ensure that no trapped air exists below the Diaphragm Chamber.

**Step 6.** Note the Supply Pressure Gauge.

**Step 7.** Check the Automatic Drain Valve for leakage. Correct any leaks before proceeding to the next step.

**Step 8.** Slowly open the System Control/Shut-Off Valve.

The DV-5 Deluge Valve is now set for service.

## Adjusting Pilot Valve Pressure

A minimum flow of 100 gpm (380 lpm) is required to adjust the Pilot Valve's pressure.

### NOTICE

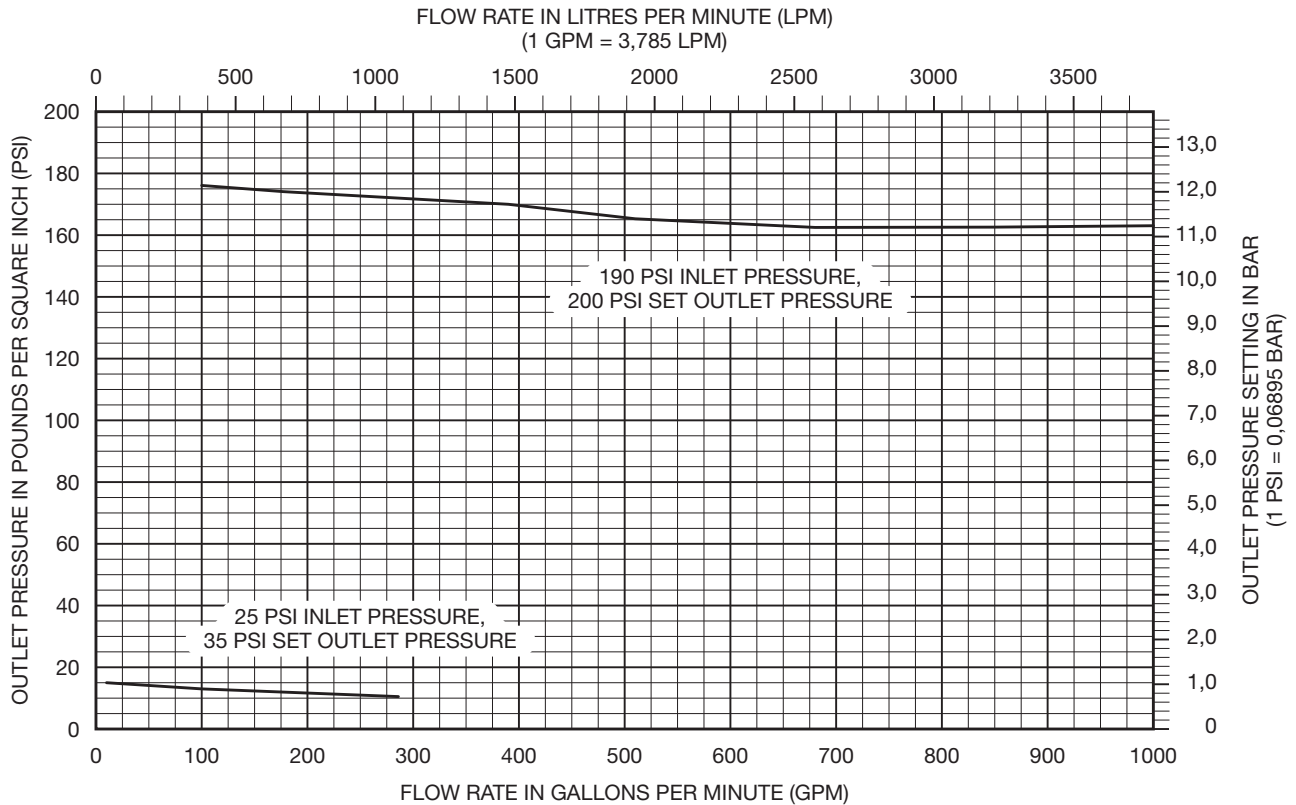
After any downstream pressure adjustment, the following items are to be recorded on a tag attached to the valve:

- Valve installation location
- Inlet static pressure
- Inlet residual pressure
- Outlet residual pressure
- Intended outlet flow

The tag is not to be removed until after the system has been accepted by the authority having jurisdiction. It is recommended that the tag not be removed even after acceptance by the authority having jurisdiction unless another means of record keeping is maintained.

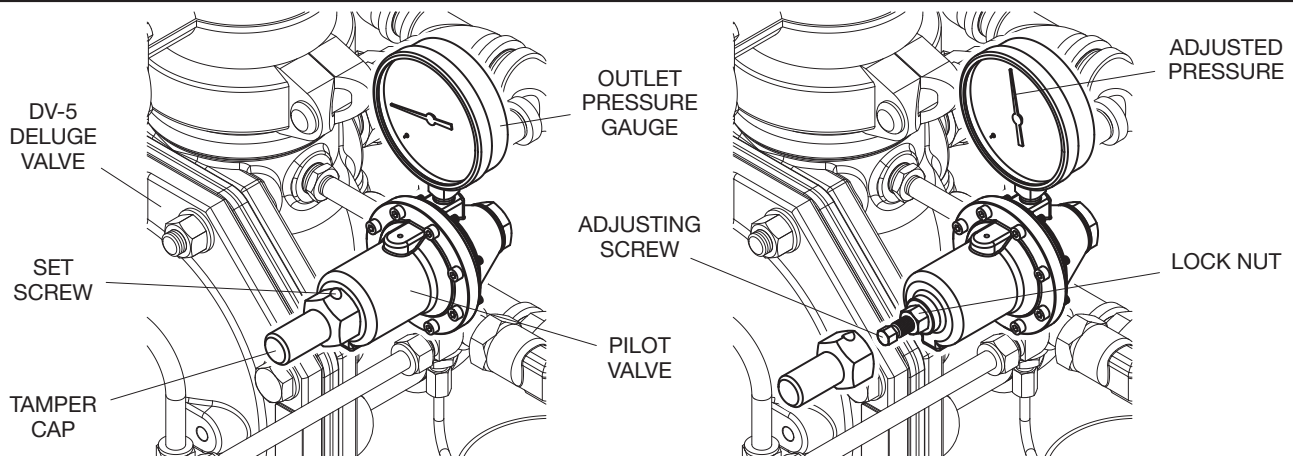
Pressure in the Pilot Valve is factory-set. To re-adjust the pressure, set the valve first, according to the Valve Setting Procedure described in this technical data sheet, then follow the steps below. Refer to Figure 5 as needed.

**Step 1.** To set the pressure in the field, trip the valve manually or electrically. It is recommended that the valve is tripped electrically to test the entire system.



**GRAPH A**  
**4-INCH (DN100) DV-5 DELUGE VALVE WITH REMOTE-RESETTING, PRESSURE-REDUCING TRIM**  
**OUTLET PRESSURE VERSUS FLOW**

*(When Inlet Pressure Falls Below a Set Pressure Of 200 Psi [13,8 Bar] and 35 Psi [2,4 Bar])  
 (This Graph Is a Requirement Of UL and Should Be Used as Reference Only.)*



**FIGURE 5**  
**DV-5 DELUGE VALVE WITH REMOTE-RESETTING, PRESSURE-REDUCING TRIM**  
**SYSTEM OUTLET PRESSURE PILOT VALVE ADJUSTMENT**

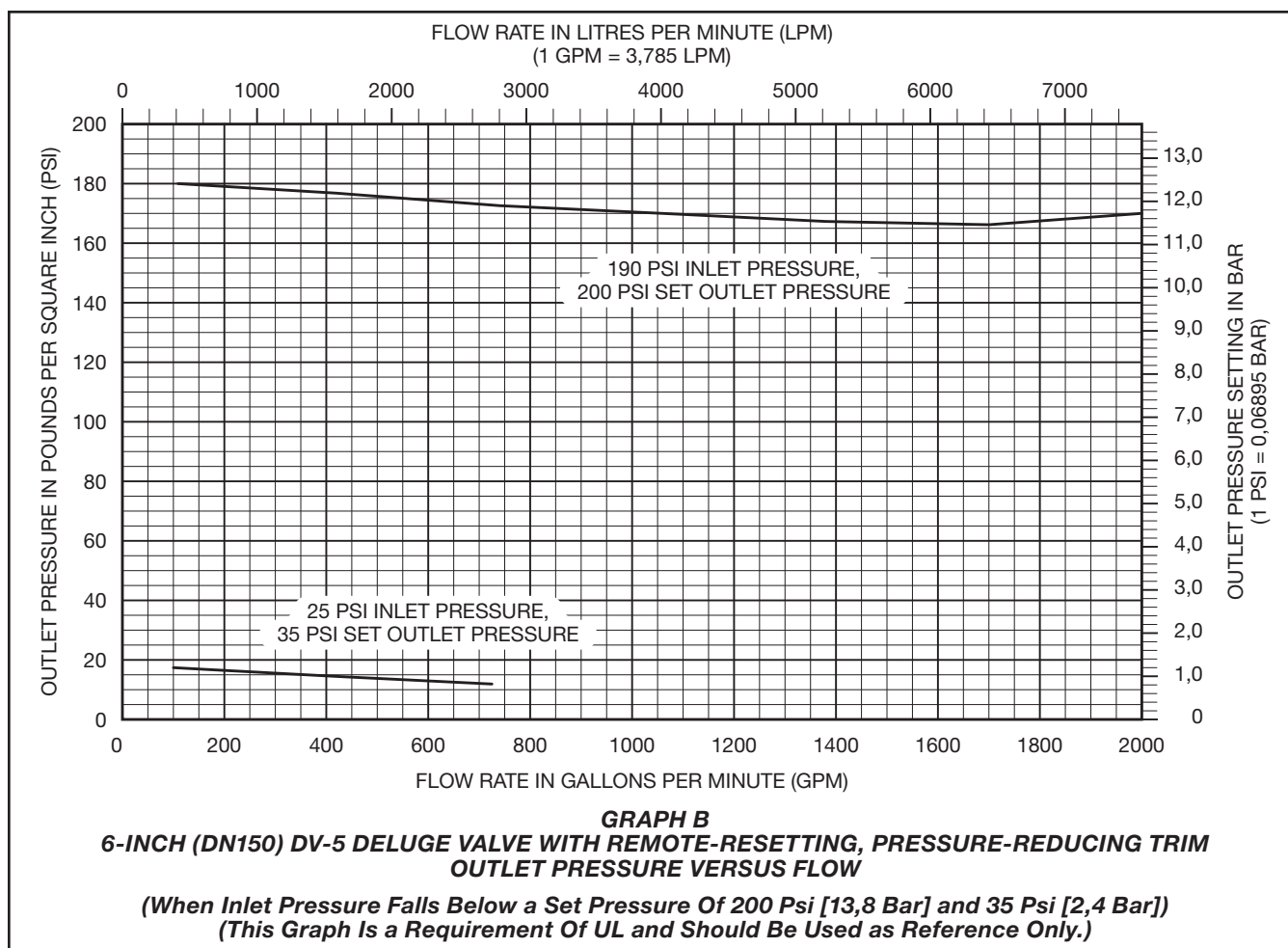
**Step 2.** Remove the Tamper Cap of the Pilot Valve by first loosening the Set Screw and unscrewing the Tamper Cap.

**Step 3.** If surging flow occurs, attempt to bleed trapped air from the system via the Automatic Drain Valve.

**Step 4.** Loosen the Lock Nut on the Adjusting Screw of the Pilot Valve.

**Step 5.** Turn the Adjusting Screw clockwise to increase outlet pressure or counterclockwise to decrease outlet pressure.

**Step 6.** Observe the Outlet Pressure Gauge for changes. The valve needs time to reach the new set point after changing the preset pressure. Turn the Adjusting Screw 1/2 a turn at a time until the pressure stabilizes.



If necessary, turn the Adjusting Screw again until the desired set point is achieved.

**Step 7.** After the desired performance, tighten the Lock Nut.

**Step 8.** Replace the Tamper Cap and tighten the Set Screw.

**Step 9.** Ensure that the system is properly drained.

The DV-5 Deluge Valve is now set for service.

## Care and Maintenance

TYCO DV-5 Deluge Valves with Remote-Resetting, Pressure-Reducing Trim must be maintained and serviced in accordance with this section.

Before closing a fire protection system main control valve for maintenance work on the fire protection system that it controls, obtain permission to shut down the affected fire protection systems from the proper authorities and notify all personnel who may

be affected by this action. Reset the DV-5 Deluge Valve in accordance with the Valve Setting Procedure section.

Perform the following procedures and inspections as indicated, in addition to any specific requirements of the authorities having jurisdiction. Correct any impairment immediately.

Some procedures outlined in this section result in operation of the associated alarms. Consequently, notify the owner and the fire department, central station, or other signal station to which the alarms are connected before performing the tests.

### NOTICE

*When the system is using either a sea-water or brackish water supply, internal and external inspection of the DV-5 Deluge Valve is essential. Parts showing any signs of corrosion must be replaced to ensure the integrity of the system.*

*The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, and in compliance with the appli-*

*cable standards of any authority having jurisdiction (e.g., NFPA 25). Contact the installing contractor or product manufacturer with any questions.*

Automatic sprinkler systems are recommended to be inspected, tested, and maintained by a qualified Inspection Service in accordance with local requirements and/or national codes.

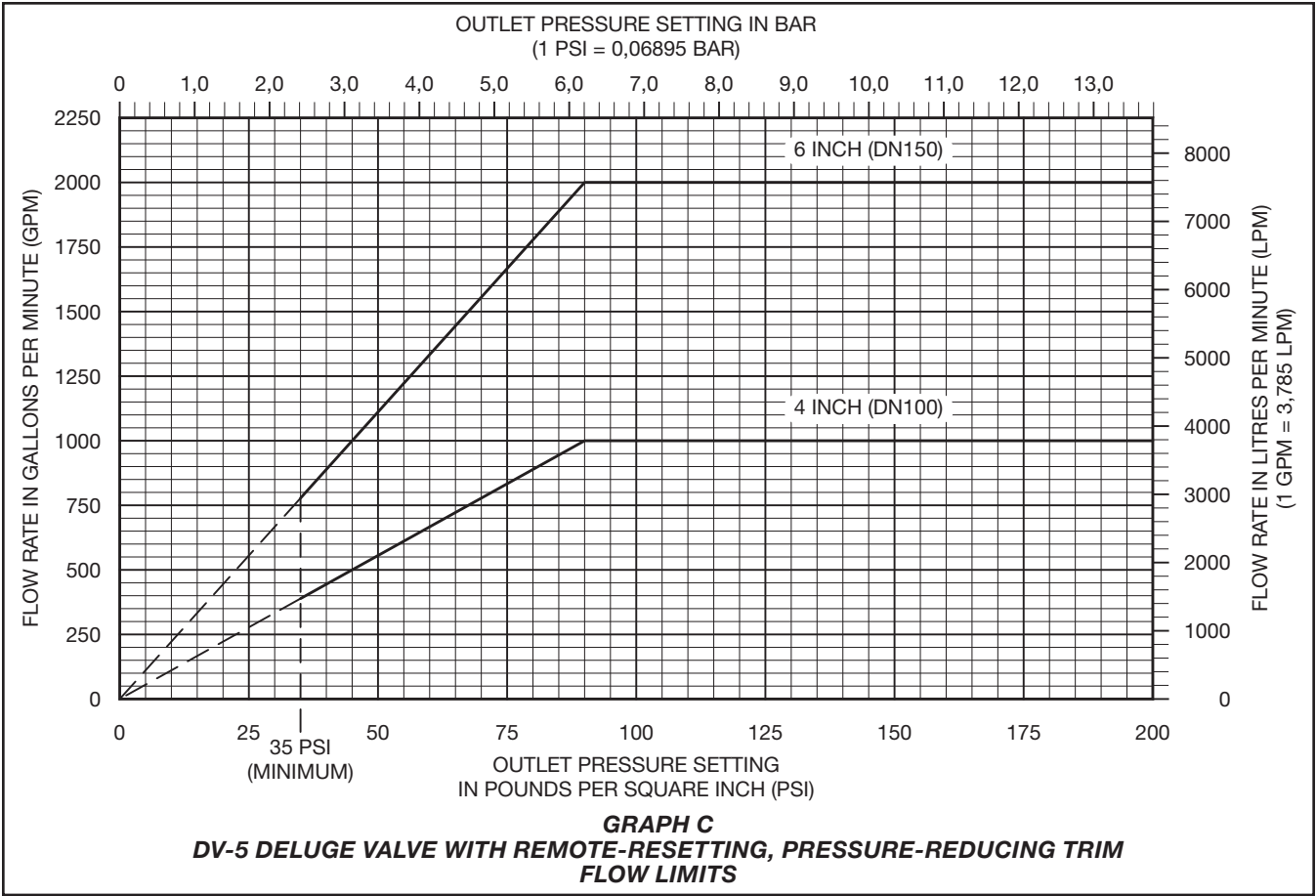
Prior to performing inspection and/or maintenance procedures, it is recommended that those individuals responsible for the care and maintenance of the DV-5 Deluge Valve develop a working understanding of the system in general. These instructions, as well as individual instructions for the Deluge Valve, Solenoid Valve, Manual Control Station, switches, and pressure maintenance devices, should be reviewed.

### Removing the System from Service

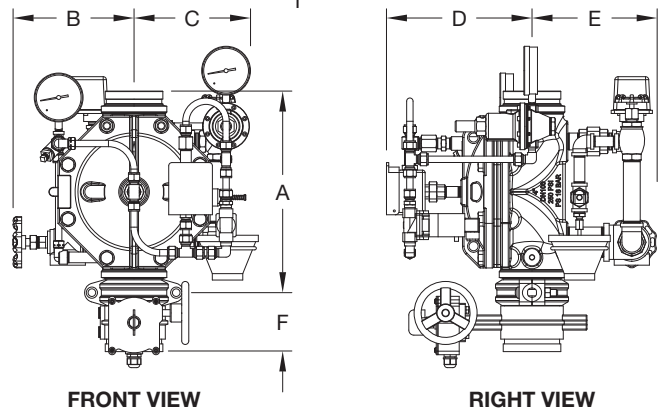
(Refer to Figure 2.)

**Step 1.** Close the Main Control/Shut-Off Valve.

**Step 2.** Open the System Drain Valves and drain the system.



Valve Size	Nominal Dimensions Inches (mm)						Approx. Weight Lbs. (kg.)
Inches (DN)	A	B	C	D	E	F	
4 (DN100)	15.50 (394,0)	8.60 (218,3)	8.63 (219,2)	10.89 (276,6)	9.41 (238,9)	4.54 (115,4)	129 (58,5)
6 (DN150)	18.50 (470,0)	10.58 (268,7)	10.36 (263,2)	13.46 (341,9)	10.39 (263,8)	5.83 (148)	186 (84,4)



**FIGURE 6**  
**DV-5 DELUGE VALVE WITH REMOTE-RESETTING, PRESSURE-REDUCING TRIM**  
**NOMINAL INSTALLATION DIMENSIONS**



### Annual Operation Test Procedure

At least once a year, verify proper operation of the DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim (i.e., valve opening during a fire condition) as follows. Refer to Figure 1.

**Step 1.** To prevent water from flowing beyond the riser, perform these steps:

- Close the Main Control/Shut-Off Valve.
- Open the Main Drain Valve.
- Open the Main Control/Shut-Off Valve one turn beyond the position at which water just begins to flow from the Main Drain Valve.
- Close the Main Drain Valve.

**Step 2.** Test the releasing panel in accordance with the manufacturer's instructions to energize the solenoid valve.

### NOTICE

*Be prepared to perform Steps 3 to 5 quickly, if water must be prevented from flowing beyond the riser.*

**Step 3.** Verify that the valve has tripped, as indicated by the flow of water into the system.

**Step 4.** Close the Main Control/Shut-Off Valve.

**Step 5.** Reset the DV-5 Deluge Valve in accordance with the Valve Setting Procedure.

### Placing the System Back in Service After Operational Tests

Refer to Figure 2.

**Step 1.** Close the Main Control/Shut-Off Valve.

**Step 2.** To drain water from the system, open the System Drain Valve and the Main Drain Valve. Ensure that system piping is completely drained.

**Step 3.** Reset the actuation system:

- Manual Actuation — Push the operating lever on the Manual Control Station to the Up position. Do not close the hinged cover at this time.

- Electric Actuation — Reset the electric detection system in accordance with the manufacturer's instructions to de-energize the solenoid valve.

**Step 4.** Open the Main Control/Shut-Off Valve to pressurize the Diaphragm Chamber.

**Step 5.** Open and then close the Manual Control Station to vent trapped air from the Diaphragm Chamber.

### Internal Valve Inspection

Once every five years during the annual operational test procedure and prior to the DV-5 Deluge Valve being reset, the interior of the Deluge Valve must be cleaned and inspected for wear and damage. Damaged or worn parts must be replaced. (Replacement of the Diaphragm every ten years is recommended, or more frequently if inspections and/or wear and tear warrant more frequent replacement.)

When reinstalling the Diaphragm Cover, complete the following steps to assure the Diaphragm Cover Fasteners (Hex Bolts) are uniformly and securely tightened.

**Step 1.** Align Diaphragm and Diaphragm Cover in proper orientation with valve body (Ref. Figure 1) and hold in place

**Step 2.** Assemble Flat Washers onto Hex Bolts

**Step 3.** Apply LOCTITE No. 242 (or equivalent) to Hex Bolt threads

**Step 4.** Insert Hex Bolts through Diaphragm Cover and Diaphragm, hand-tighten into valve body

**Step 5.** Using crossdraw sequence to assure uniformity, wrench-tighten Hex Bolts to appropriate torque values (Ref. Table A)

**Step 6.** Inspect to assure all Hex Bolts are securely tightened

### NOTES

*If the water supply contains chemicals which tend to attack a Nylon fabric-reinforced, natural rubber or the five year inspection indicates a build-*

Valve Sizes Inches (DN)	Torque lb-ft (N-m)
4 (DN100)	65 (88,13)
6 (DN150)	72 (97,62)

**TABLE A**  
**DIAPHRAGM COVER BOLTS**  
**MAXIMUM TORQUE**

*up of debris within the Deluge Valve that could affect its proper operation, then the frequency of the internal valve inspection procedure must be appropriately increased. If the system has a seawater or brackish water supply, then the frequency of the internal valve inspection procedure must be appropriately increased. (An annual internal valve inspection for a system having a seawater or brackish water supply is recommended.)*

*With reference to Figure 1, make certain that the Diaphragm is correctly oriented; otherwise, the DV-5 Deluge Valve cannot be properly set.*

*Under-tightening the Diaphragm Cover Bolts can result in internal and external leakage.*

The V-Ring is attached to the Diaphragm at the factory. If, during an internal valve inspection, the V-Ring is discovered to be detached from the Diaphragm, be advised that the V-Ring is a required valve component and that detachment will not affect normal valve operation or performance. Should the V-Ring become detached, reinstall it between the Diaphragm and Diaphragm Cover concentrically as shown in Figure 1.

**NOTE:** Do not apply adhesives, lubricants, or other substances to the Diaphragm, V-Ring, or Valve Body.

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<p>* ISO Ports ** NPT Ports</p> <p><b>TABLE B</b> <b>DV-5 DELUGE VALVE WITH REMOTE-RESETTING, PRESSURE-REDUCING TRIM</b> <b>PART NUMBER SELECTION FOR FULLY ASSEMBLED UL LISTED VALVE WITH TRIM</b></p>																																																			

# Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product description and Part Number (P/N).

**Fully Assembled DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim**  
Specify: Size (specify), Fully Assembled DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim, and P/N (specify, refer to Table B).

**Semi-Preassembled DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim**  
Equipment must be ordered separately for Semi-Preassembled Remote-Resetting, Pressure-Reducing Trim. Order Trim, Deluge Valve, Solenoid Valve, Pressure Alarm Switch, and Butterfly Valve as follows:

- Specify: Size (specify), Semi-Pre-assembled DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim, P/N (specify) (Brass/Galvanized material is standard)  
4 Inch (DN100) ..... 52-477-2-117  
6 Inch (DN150) ..... 52-477-2-118
- Specify: Size (specify) DV-5 Deluge Valve (Refer to Technical Data Sheet TFP1305 for ordering information)
- Specify: Impulse Type Solenoid Valve, Bürkert, P/N 2460566 (Refer to Technical Data Sheet TFP2180 for other Solenoid Valve options.)
- Specify: Model PS10-2 Dual-Contact Waterflow Pressure Alarm Switch, P/N 25710
- Specify two Butterfly Valves, which are required to set the DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim. Refer to your published Price List for details.

**Accessories**  
Specify (description) for use with the Fully Assembled DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim, P/N (specify)  
Model AD-2  
Automatic Drain Valve  
(TFP1630) ..... 52-789-1-004

**Replacement Parts**  
Specify (description) for use with (size) DV-5 Deluge Valve with Remote-Resetting, Pressure-Reducing Trim, P/N (specify):  
Model AD-1  
Automatic Drain Valve  
(TFP1630) ..... 52-793-2-004  
Model MC-1  
Manual Control Station  
(TFP1382) ..... 52-289-2-001  
Model PS10-1  
Waterflow Pressure  
Alarm Switch ..... 25700  
Model PS10-1  
Waterflow Pressure  
Alarm Switch  
(European Conformity) ..... 0260  
Model PS10-2  
Dual-Contact  
Waterflow Pressure  
Alarm Switch ..... 25710  
Model WMA-1  
Water Motor Alarm  
Red Finish Gong  
(TFP921) ..... 52-630-1-001P  
Pilot Valve ..... 92-570-2-200  
Impulse Type  
Solenoid Valve (Bürkert) ..... 2460566  
Spring-Loaded  
Check Valve ..... 92-322-1-002  
"Y" Strainer ..... 52-353-1-005