Model DPV-1 Dry Pipe Valve External Resetting

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

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Available Sizes and End Connections				
End Connection	Nominal Valve Size			
	2-1/2 in. (DN65)	3 in. (DN80)	4 in. (DN100)	6 in. (DN150)
Flange x Flange	N/A	N/A	•	•
Flange x Groove	N/A	N/A	•	•
Groove x Groove	•	•	•	•

• = Available
N/A = Not Available

General Description

The TYCO Model DPV-1 Dry Pipe Valves are differential valves used to automatically control the flow of water into dry pipe fire protection sprinkler systems upon operation of one or more automatic sprinklers. The DPV-1 also provides for actuation of fire alarms upon system operation. The Model DPV-1 features are as follows:

- External reset.
- 250 psi (17,2 bar) pressure rating.
- Unique offset single clapper design enabling a simple compact valve to minimize installation labor.
- Ductile iron construction to ensure a lightweight valve to minimize shipping cost.
- A variety of inlet and outlet connections.
- Compact, Pre-Trimmed, and Semi-Assembled, easy to operate valve trim.
- Simple reset procedure through the elimination of priming water.

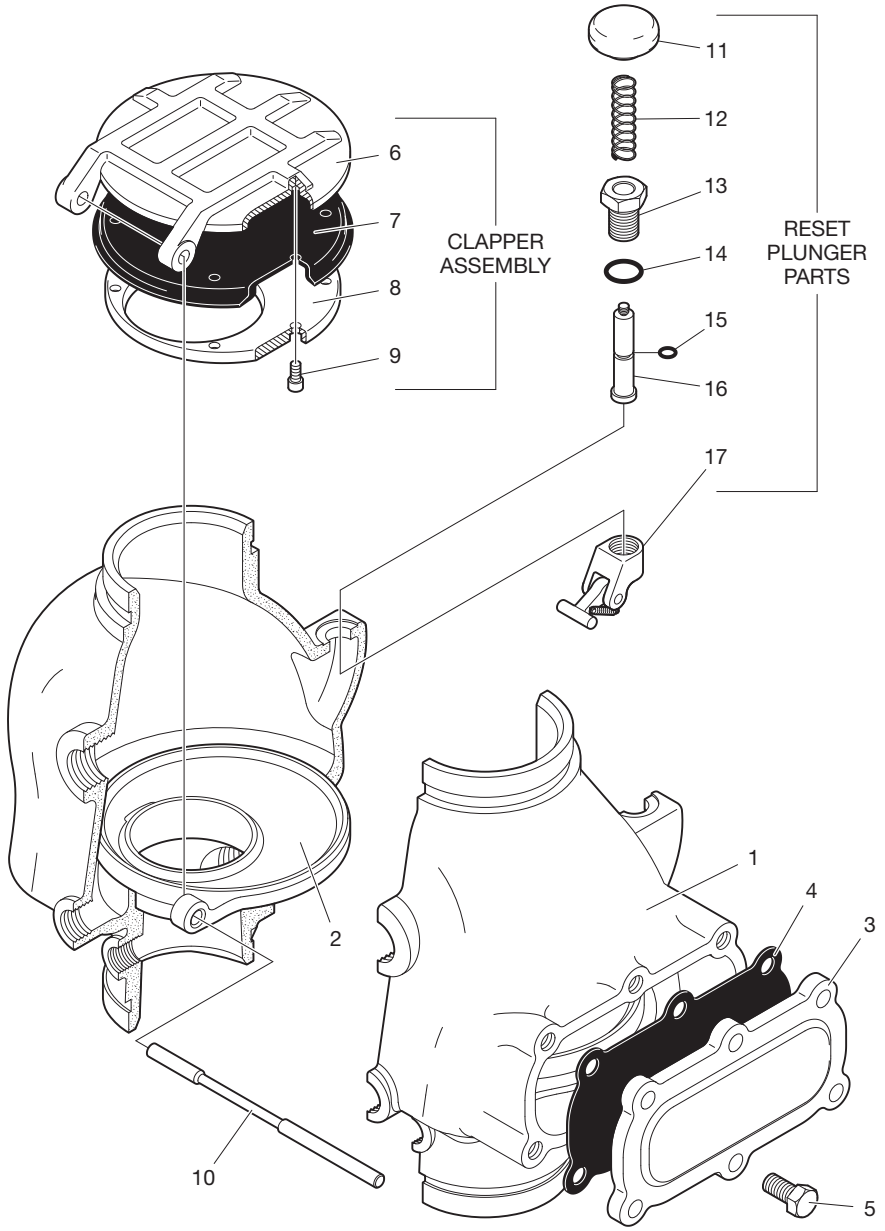
Dry pipe sprinkler systems are used in unheated warehouses, parking garages, store windows, attic spaces, loading docks, and other areas exposed to freezing temperatures, where water filled pipe cannot be utilized. When set for service, the dry pipe sprinkler system is pressurized with air (or nitrogen). The loss of pressure through an operated automatic sprinkler in response to heat from a fire permits the DPV-1 Dry Pipe Valve to open and allow a flow of water into the sprinkler system piping. Table B establishes the minimum required system air pressure that includes a safety factor to help prevent false operations that might occur due to water supply fluctuations.

NOTICE

The Model DPV-1 Dry Pipe Valves described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), in addition to the standards of any authorities having jurisdiction, such as FM Global. 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 product manufacturer with any questions.

In all cases, the appropriate NFPA or FM Global installation standard, or other applicable standard, must be referenced to ensure applicability and to obtain complete installation guidelines. The general guidelines in this data sheet are not intended to provide complete installation criteria.



NO.	DESCRIPTION	QTY.	REF.
1	Valve Body	1	NR[1]
2	Air and Water Seat	1	NR[1]
3	Handhole Cover	1	NR[1]
4	Handhole Cover Gasket	1	(b)
5	1/2-13 UNC x 1" Hex Head Cap Screw: 2-1/2, 3 Inch Valves	5	CH[2]
	4 Inch Valve	6	CH[2]
6	Clapper	1	(a)
7	Clapper Facing	1	(a) or (b)
8	Clapper Facing Retaining Plate	1	(a)
9	2-1/2, 3 Inch Valves: 1/4" x 3/8" Long #10-32 Shoulder Screw	5	(a)
	4 Inch Valve: 1/4-20 UNC x 1/2" Socket Head Cap Screw	7	(a)
10	Clapper Hinge Pin	1	(a)
11	Reset Knob	1	(c) or (d)
12	Reset Spring	1	(c)
13	Reset Bushing	1	(c)
14	Reset Bushing O-Ring	1	(b), (c) or (e)
15	Reset Plunger O-Ring[3]	1	(b) or (c)
16	Reset Plunger	1	(c)
17	Reset Latch Subassembly	1	(c)

NOTES:
1. NR = Not Replaceable
2. CH = Common Hardware
3. Dow Corning FS3452 Flourosilicone Grease factory-applied to Reset Plunger O-Ring; Do not remove grease when reassembling valve.

REPLACEMENT PARTS

NO.	DESCRIPTION	P/N
(a)	Clapper Assembly Includes Items 6-10:	
	2-1/2, 3 Inch Valves	92-312-2-203
	4 Inch Valve	92-312-2-403
(b)	Repair Parts Kit Includes Items 4, 7, 14, 15	
	2-1/2, 3 Inch Valves	92-312-1-204
	4 Inch Valve	92-312-1-404
(c)	Reset Plunger Parts Kit Includes Items 11-17	92-312-1-405
(d)	Reset Knob, Item 11	92-312-1-406
(e)	Reset Plunger O-Ring, Item 15	92-312-1-407

FIGURE 1 - PART 1 OF 2
MODEL DPV-1 DRY PIPE VALVE
2-1/2, 3, AND 4 INCH (DN65, DN80, DN100) ASSEMBLIES

NO.	DESCRIPTION	QTY.	REF.
1	Valve Body	1	NR[1]
2	Air and Water Seat	1	NR[1]
3	Water Seal O-Ring	1	NR[1]
4	Air Seal O-Ring	1	NR[1]

NO.	DESCRIPTION	QTY.	REF.
5	3/8-16 UNC x 1" Socket Head Cap Screw	8	NR[1]
6	Handhole Cover	1	NR[1]
7	Handhole Cover Gasket	1	(b)

NO.	DESCRIPTION	QTY.	REF.
8	5/8-11 UNC x 1" Hex Head Cap Screw	6	CH[2]
9	Clapper	1	(a)
10	Clapper Facing	1	(a) or (b)
11	Clapper Facing Retaining Plate	1	(a)
12	1/4-20 UNC x 1/2" Socket Head Cap Screw	9	(a)
13	Clapper Hinge Pin	1	(a)
14	Reset Knob	1	(c) or (d)
15	Reset Spring	1	(c)
16	Reset Bushing	1	(c)
17	Reset Bushing O-Ring	1	(b), (c) or (e)
18	Reset Plunger O-Ring[3]	1	(b) or (c)
19	Reset Plunger	1	(c)
20	Reset Latch Subassembly	1	(c)

NOTES:
1. NR = Not Replaceable
2. CH = Common Hardware
3. Dow Corning FS3452 Flourosilicone Grease factory-applied to Reset Plunger O-Ring; Do not remove grease when reassembling valve.

REPLACEMENT PARTS

NO.	DESCRIPTION	P/N
(a)	Clapper Assembly Includes Items 9-13	92-312-2-603
(b)	Repair Parts Kit Includes Items 7, 10, 17, 18	92-312-1-604
(c)	Reset Plunger Parts Kit Includes Items 14-20	92-312-1-405
(d)	Reset Knob, Item 14.	92-312-1-406
(e)	Reset Plunger O-Ring, Item 18	92-312-1-407

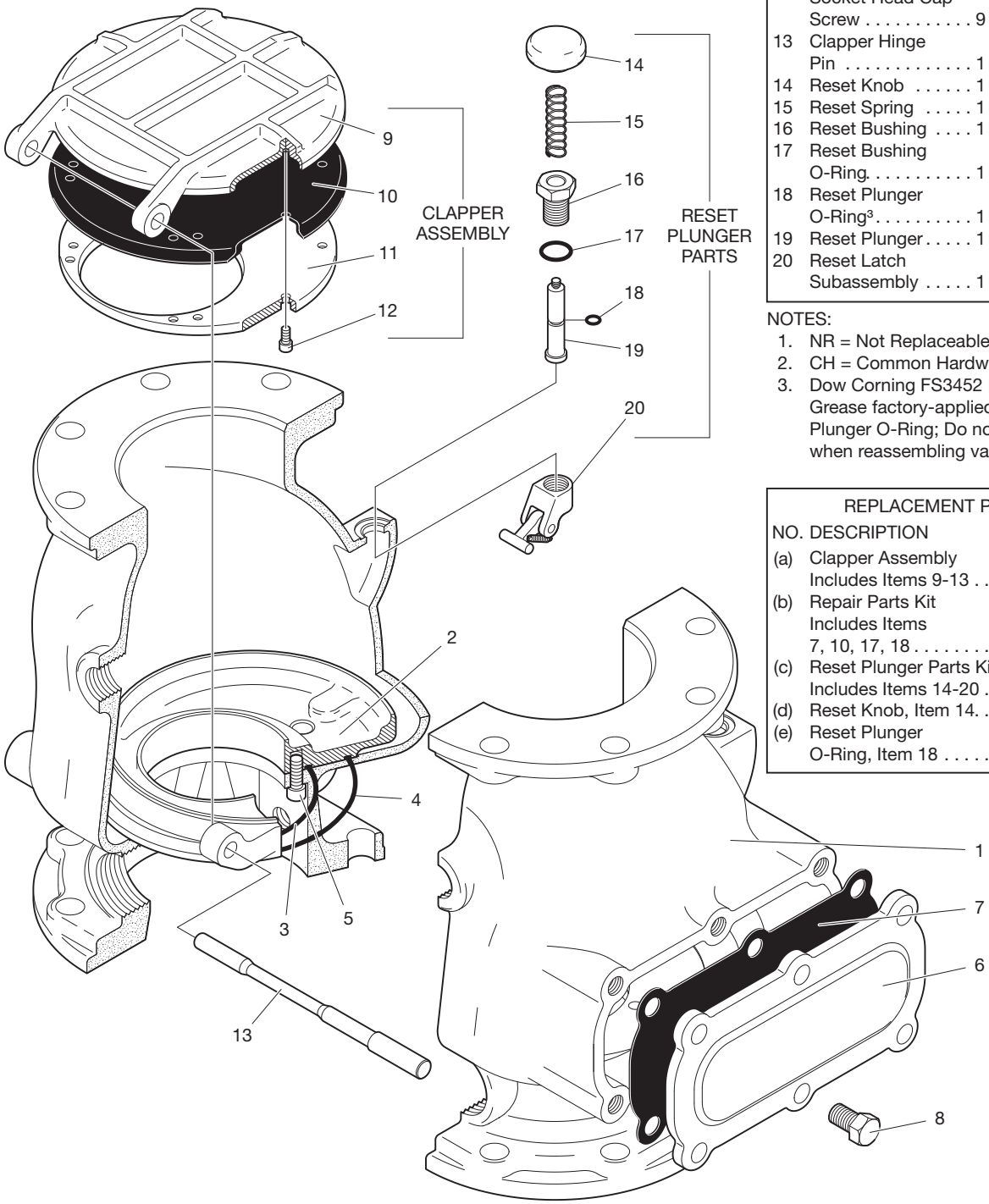


FIGURE 1 - PART 2 OF 2
MODEL DPV-1 DRY PIPE VALVE
6 INCH (DN150) ASSEMBLY

Technical Data

Approvals
UL and C-UL Listed
FM Approved

Dry Pipe Valve
The TYCO Model DPV-1 Dry Pipe Valves shall be installed in the vertical orientation only (supply at bottom flowing upward) and are rated for use at a maximum service pressure of 250 psi (17,2 bar). Valve and trim dimensions are shown in Figure 6.

Flanged connections are available and drilled per ANSI, ISO, AS, and JIS specifications as shown in Table A. The grooved outlet connections, as applicable, are cut in accordance with standard groove specifications for steel pipe. They are suitable for use with grooved end pipe couplings that are listed or approved for fire protection system service. Available combinations of inlet and outlet connections are described in the Ordering Procedure section and in the Available End Connection and Sizes table on page 1.

Trim port connections of valves having flanges drilled to ANSI, AS, or JIS specifications are NPT threaded per ANSI Standard B1.20.1. Trim port connections of valves having flanges drilled to ISO are available either threaded per ISO 7-1 or NPT threaded per ANSI Standard B1.20.1. Valves with NPT threaded ports will readily accept the trim arrangements shown in Parts 2 and 3 of Figures 3, 4, and 5.

Model DPV-1 Valve assemblies are shown in Figure 1. The body and handhole cover are ductile iron. The handhole cover gasket is neoprene, and the clapper facing is EPDM. The air/water seat ring is brass, the clapper is bronze or aluminum bronze, and both the clapper retaining plate and latch are bronze. The hinge pin is aluminum bronze, and the fasteners for the handhole cover are carbon steel.

Valve Trim
Installation dimensions are provided in Figure 6, and valve trim and pre-trimmed valve assemblies are shown in Figures 3, 4, and 5.

The valve trim, ordered separately or as a pre-trimmed valve assembly, forms a part of the laboratory listings and approvals of the DPV-1 valve and is necessary for the proper operation of the DPV-1 valve.

Trim packages or pre-trimmed valve assemblies include the following equipment:

- Water Supply Pressure Gauge
- System Air Pressure Gauge
- Air Supply Connections
- Main Drain Valve
- Low Body Drain Valve
- Alarm Test Valve
- Automatic Drain Valve
- Drip Funnel
- Connections For Optional Quick Opening Device (Accelerator)

Pre-trimmed valve assemblies also include the following equipment:

- Model BFV-300 Butterfly Valve
- Figure 577 Grooved Coupling
- PS10-2 Waterflow Alarm Switch
- PS40-2 Low Air Pressure Alarm Switch

Order the above equipment separately when ordering trim packages separately.

Note: *When the system pressure is greater than 175 psi (12,1 bar), provision shall be made to replace the standard order 300 psi (20,7 bar) water pressure gauge with a separately ordered 600 psi (41,4 bar) water pressure gauge.*

Weights
The following are the nominal weights for pre-trimmed valve assemblies, semi-assembled trim, and DPV-1 valves without trim.

Pre-Trimmed DPV-1 Valve Assemblies:

2-1/2 in. (DN65) G x G	87 lb (40 kg)
3 in. (DN80) G x G	90 lb (42 kg)
4 in. (DN100) G x G	121 lb (56 kg)
4 in. (DN100) F x G	135 lb (64 kg)
4 in. (DN100) F x F	145 lb (69 kg)
6 in. (DN150) G x G	175 lb (81 kg)
6 in. (DN150) F x G	195 lb (90 kg)
6 in. (DN150) F x F	208 lb (96 kg)

Standard Galvanized Semi-Assembled DPV-1 Trim:

2-1/2 in. (DN65)	23 lb (11 kg)
3 in. (DN80)	23 lb (11 kg)
4 in. (DN100)	30 lb (14 kg)
6 in. (DN150)	30 lb (14 kg)

DPV-1 Valve (Without Trim):

2-1/2 in. (DN65) G x G	37 lb (17 kg)
3 in. (DN80) G x G	.38 lb(18 kg)
4 in. (DN100) G x G	57 lb (26 kg)
4 in. (DN100) F x G	67 lb (31 kg)
4 in. (DN100) F x F	77 lb (36 kg)
6 in. (DN150) G x G	95 lb (44 kg)
6 in. (DN150) F x G	108 lb (50 kg)
6 in.(DN150) F x F	121 lb (56 kg)

Air Supply
Table B shows the system air pressure requirements as a function of the water supply pressure. The air (or nitrogen) pressure in the sprinkler system is recommended to be automatically maintained by using one of the following pressure maintenance devices, as appropriate:

- Model AMD-1 Air Maintenance Device (pressure reducing type)
- Model AMD-2 Air Maintenance Device (compressor control type)
- Model AMD-3 Nitrogen Maintenance Device (high pressure reducing type)

The pressure relief valve provided with the valve trim is factory set to relieve at a pressure of approximately 45 psi (3,1 bar). If the normal system air pressure is less than or exceeds 40 psi (2,8 bar), then the pressure relief valve must be reset to relieve at a pressure that is in accordance with the authority having jurisdiction.

Quick Opening Device
The Model DPV-1 Dry Pipe Valve may optionally be equipped with an electronic or mechanical dry pipe valve accelerator. Select the VIZOR Electronic Dry Pipe Valve Accelerator (4 and 6 in. sizes only) as described in Technical Data Sheet TFP1105, or the Model ACC-1 Mechanical Dry Pipe Valve Accelerator (2-1/2 through 6 in. sizes) as described in Technical Data Sheet TFP1112.

The VIZOR or the ACC-1 is used to reduce the time to valve actuation following the operation of one or more automatic sprinklers. In some cases the use of a quick opening device such as the VIZOR or the ACC-1 may be required to meet the requirements of the NFPA to meet water delivery times.

Nominal Valve Size	Flange Drilling Specification											
	Nominal Dimensions in Inches and (mm)											
	ANSI B16.42[1] (Class 150)			ISO 7005-2 (PN16)[2]			JIS B 2210 (10K)			AS 2129 (Table E)		
	Dim. A	Dim. B	Qty. N	Dim. A	Dim. B	Qty. N	Dim. A	Dim. B	Qty. N	Dim. A	Dim. B	Qty. N
4 in. (DN100)	7.50 (190,5)	0.75 (19,0)	8	7.09 (180,0)	0.75 (19,0)	8	6.89 (175,0)	0.59 (15,0)	8	7.00 (178,0)	0.71 (18,0)	8
6 in. (DN150)	9.50 (241,3)	0.88 (22,2)	8	9.45 (240,0)	0.91 (23,0)	8	9.45 (240,0)	0.75 (19,0)	8	9.25 (235,0)	0.87 (22,0)	8

1. Drilling same as ANSI B16.1 (Class 125).
2. Drilling same as BS 4504 Section 3.2 (PN16) and DIN 2532 (PN16).

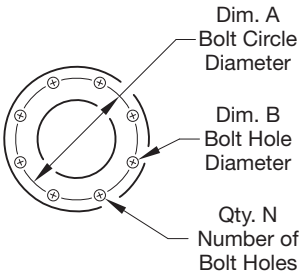
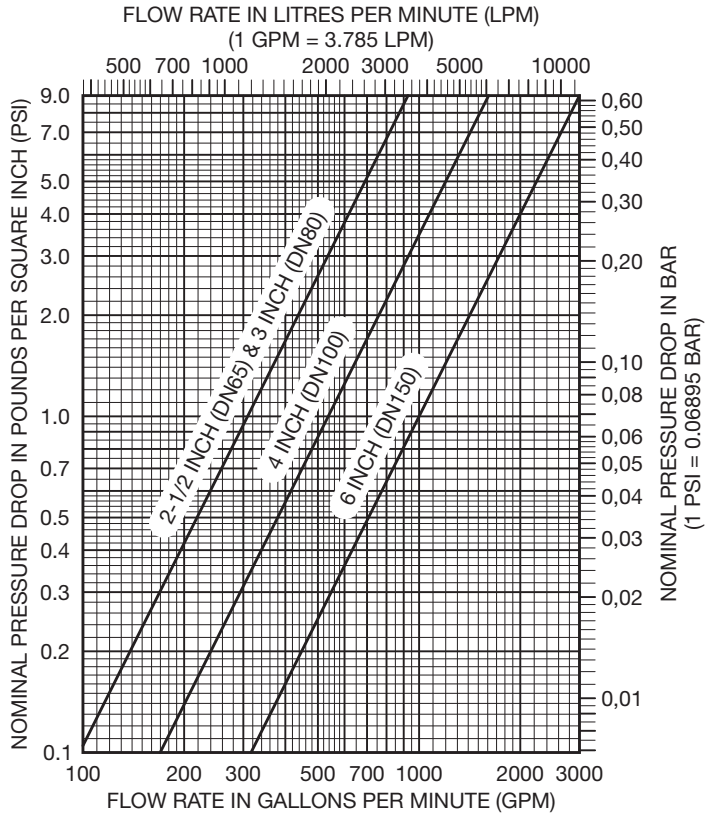


TABLE A
SELECTION OF FLANGE DRILLING SPECIFICATIONS

Maximum Water Supply Pressure psi	System Air Pressure Range psi
20	10
60	15 - 23
80	20 - 28
100	25 - 33
120	30 - 38
145	35 - 43
165	40 - 48
185	45 - 53
205	50 - 58
225	55 - 63
250	60 - 68

TABLE B
SYSTEM AIR PRESSURE REQUIREMENTS



The approximate friction losses, based on the Hazen and Williams formula and expressed in equivalent length of Schedule 40 pipe with C=100 and flowing at typical flow rates, are as follows:

2-1/2 in. valve at 250 GPM flow = 2.2 ft
3 in. valve at 350 GPM flow = 4.9 ft
4 in. valve at 600 GPM flow = 8.9 ft
6 in. valve at 1500 GPM flow = 22.0 ft

GRAPH A
MODEL DPV-1 DRY PIPE VALVES
NOMINAL PRESSURE LOSS VS. FLOW

Operation

The TYCO Model DPV-1 Dry Pipe Valve is a differential type valve that utilizes a substantially lower system (air or nitrogen) pressure than the supply (water) pressure, to maintain the set position shown in Figure 2A. The differential nature of the DPV-1 is based on the area difference between the air seat and the water seat in combination with the ratio of the radial difference from the hinge pin to the center of the water seat and the hinge pin to the center of the air seat. The difference is such that 1 psi (0,07 bar) of system air pressure can hold approximately 5.5 psi (0,38 bar) of water supply pressure.

Table B establishes the minimum required system air pressure that includes a safety factor to help prevent false operations that occur due to water supply fluctuations.

The intermediate chamber of the DPV-1 is formed by the area between the air seat and water seat as shown in Figure 2B. The intermediate chamber normally remains at atmospheric pressure through the alarm port connection and the valve trim to the normally open automatic drain valve, see Fig. 3, 4, or 5. Having the intermediate chamber, as shown in Figure 2B, open to atmosphere is critical to the DPV-1 valve remaining set, otherwise the full resulting pressure of the system air pressure on top of the clapper assembly cannot be realized.

For example, and assuming a water supply pressure of 100 psi (6,9 bar), if the system air pressure is 25 psi (1,7 bar) and there was 15 psi (1,0 bar) pressure trapped in the intermediate chamber, the resulting pressure across the top of the clapper would only be 10 psi (0,7 bar). This pressure would be insufficient to hold the clapper assembly closed against a water supply pressure of 100 psi (6,9 bar). It is for this reason that the plunger of the automatic drain valve must be depressed during several of the resetting steps, as well as during inspections, making certain that the automatic drain valve is open.

When one or more automatic sprinklers operate in response to a fire, air pressure within the system piping is relieved through the open sprinklers. When the air pressure is sufficiently reduced, the water pressure overcomes the differential holding the clapper assembly closed and the clapper assembly swings clear of the water seat, as shown in Figure 2C, This action permits water flow into the system piping and subsequently to be discharged from any open sprinklers. Also, with the clapper assembly open, the intermediate chamber is pressurized and water flows through the alarm port as shown in Figure 2B at the rear of the DPV-1 valve to actuate system water flow alarms. The flow from the alarm port is also sufficient to close the otherwise normally open automatic drain valve in the valve trim.

After a valve actuation and upon subsequent closing of a system main control valve to stop water flow, the clapper assembly will latch open as shown in Figure 3D. Latching open of the DPV-1 will permit complete draining of the system (including any loose scale) through the main drain port.

During the valve resetting procedure and after the system is completely drained, the external reset knob can be easily depressed to externally unlatch the clapper assembly as shown in Figure 2E. As such, the clapper assembly is returned to its normal set position to facilitate setting of the dry pipe sprinkler system, without having to remove the handhole cover.

Installation

General Instructions

Proper operation of the Model DPV-1 Dry Pipe Valve depends upon its trim being installed in accordance with the instructions given in this Technical Data Sheet. Failure to follow the appropriate trim diagram may prevent the DPV-1 valve from functioning properly, as well as void listings, approvals, and the manufacturer warranties.

Failure to latch open the clapper assembly prior to a system hydrostatic test may result in damage to the clapper assembly.

The DPV-1 valve must be installed in a readily visible and accessible location.

The DPV-1 valve and associated trim must be maintained at a minimum temperature of 40°F (4°C).

Heat tracing of the DPV-1 valve or its associated trim is not permitted. Heat tracing can result in the formation of hardened mineral deposits that are capable of preventing proper operation.

The Model DPV-1 Dry Pipe Valve is to be installed in accordance with the following criteria:

- All nipples, fittings, and devices must be clean and free of scale and burrs before installation. Use pipe thread sealant sparingly on male pipe threads only.
- The DPV-1 valve must be trimmed in accordance with Figures 3, 4, or 5, as applicable. If the DPV-1 is to be equipped with a dry pipe valve accelerator, refer to the Technical Data Sheet TFP1105 for the VIZOR Electronic Dry Pipe Valve Accelerator or TFP1112 for the Model ACC-1 Mechanical Dry Pipe Valve Accelerator.
- Care must be taken to make sure that components such check valves, strainers, and globe valves are installed with the flow arrows in the proper direction.
- Drain tubing to the drip funnel must be installed with smooth bends that will not restrict flow.
- The main drain and drip funnel drain may be interconnected provided a check valve is located at least 12 in. (300 mm) below the drip funnel. The low body drain valve, as shown in Fig. 3, 4, or 5, may be piped so as to discharge into the Drip Funnel or to a separate drain.
- Suitable provision must be made for disposal of drain water. Drainage water must be directed such that it will not cause accidental damage to property or danger to persons.
- Unused pressure alarm switch and/or water motor alarm connections must be plugged.
- The pressure relief valve provided with the valve trim is factory set to relieve at a pressure of approximately 45 psi (3,1 bar), which can typically be used for a maximum normal system air pressure of 40 psi (2,8 bar). The pressure relief valve may be reset to a lower or higher pressure; however, it must be reset to relieve at a pressure which is in accordance with the requirements of the authority having jurisdiction.

  To reset the pressure relief valve, first loosen the jam nut and then adjust the cap accordingly — clockwise for a higher pressure setting or counter-clockwise for a lower pressure setting. After verifying the desired pressure setting, tighten the jam nut.
- It is best practice to install an appropriately rated and listed relief valve upstream of the Model DPV-1 Dry Pipe Valve, between the inlet of the DPV-1 valve and any check valves or back flow preventers, to ensure transient increases in water pressure do not cause unintended operation of the DPV-1 valve.
- Installation of an air maintenance device, as described in the Technical Data Section, is recommended.
- An inspector's test connection as required By NFPA 13 must be provided on the system piping at the most remote location from the Model DPV-1 Valve.
- Conduit and electrical connections are to be made in accordance with the requirements of the authority having jurisdiction and/or the National Electric Code.
- Before a system hydrostatic test is performed in accordance with NFPA 13 system acceptance test requirements, the clapper assembly is to be manually latched open as shown in Figure 2D; the automatic drain valve as shown in Figures 3, 4, or 5 is to be temporarily replaced with a 1/2 in. NPT plug, the 3/32 in. vent fitting (Item 13, Figure 3; Item 15, Figure 4; or Item 15, Figure 5) is to be temporarily replaced with a 1/4 in. NPT plug, and the handhole cover bolts are to be tightened using a cross-draw sequence.

Valve Setting Procedure

Steps 1 through 11 are to be performed when initially setting the Model DPV-1 Dry Pipe Valve; after an operational test of the fire protection system; or, after system operation due to a fire.

NOTES: *If the DPV-1 is equipped with a dry pipe valve accelerator, refer to its resetting instructions before resetting the DPV-1. Refer to TFP1105 for the VIZOR or TFP1112 for the ACC-1.*

Based on the instructions provided, reset the Accelerator at the appropriate time during the resetting of the DPV-1.

Unless otherwise noted, see Figure 3, 4, or 5 to identify functional trim components.

Step 1. Close the main control valve, and close the air supply control valve. If the DPV-1 is equipped with a dry pipe valve accelerator, remove the dry pipe valve accelerator from service in accordance with the Technical Data Sheet (TDS) instructions, refer to TDS TFP1105 for the VIZOR or TDS TFP1112 for the ACC-1.

Step 2. Open the main drain valve and all auxiliary drains in the system. Close the auxiliary drain valves after water ceases to discharge. Leave the main drain valve open.

Step 3. Depress the plunger of the automatic drain valve to verify that it is open and that the DPV-1 valve is completely drained.

Step 4. Open the optional alarm control valve, as applicable, if it was closed to silence local alarms.

Step 5. As necessary, replace all sprinklers that have operated. Replacement sprinklers must be of the same type and temperature rating as those which have operated.

NOTICE

In order to prevent the possibility of a subsequent operation of an overheated solder type sprinkler, any solder type sprinklers which were possibly exposed to a temperature greater than their maximum rated ambient must be replaced.

Step 6. Push down on the reset knob as shown in Figure 2E to allow the clapper assembly to re-seat.

Step 7. Pressurize the system with air (or nitrogen) to 10 psi (0,7 bar), and then individually open all auxiliary drain valves in the system piping to drain any remaining water in trapped sections. Close each drain valve as soon as water ceases to discharge.

Also partially open the low body drain valve to assure that the riser is completely drained. Close the low body drain valve as soon as water ceases to discharge.

Step 8. Refer to Table B and then restore the system to the normal system air pressure as necessary to hold the DPV-1 valve closed.

Step 9. Depress the plunger on the automatic drain valve to make sure it is open and that there is no air discharging.

The absence of air discharging from the automatic drain valve is an indication of a properly set air seat within the DPV-1 valve. If air is discharging, refer to the Care and Maintenance section under Automatic Drain Valve Inspection to determine/correct the cause of the leakage problem.

Step 10. Partially open the main control valve. Slowly close the main drain valve as soon as water discharges from the drain connection.

Depress the plunger on the automatic drain valve to make sure that it is open and that there is no water discharging. The absence of water discharging from the automatic drain valve is an indication of a properly set water seat within the DPV-1 valve. If water is discharging, refer to the Care and Maintenance section under the Automatic Drain Valve Inspection to determine/correct the cause of the leakage problem.

If there are no leaks, the DPV-1 valve is ready to be placed in service and the main control valve must then be fully opened.

Note: *After setting a fire protection system, notify the proper authorities and advise those responsible for monitoring proprietary and/or central station alarms.*

Step 11. Once a week after a valve is reset following an operational test or system operation, the low body drain valve (and any low point drain valves) should be partially opened (and then subsequently closed) to relieve drain-back water. Continue this procedure until drain-back water is no longer present.

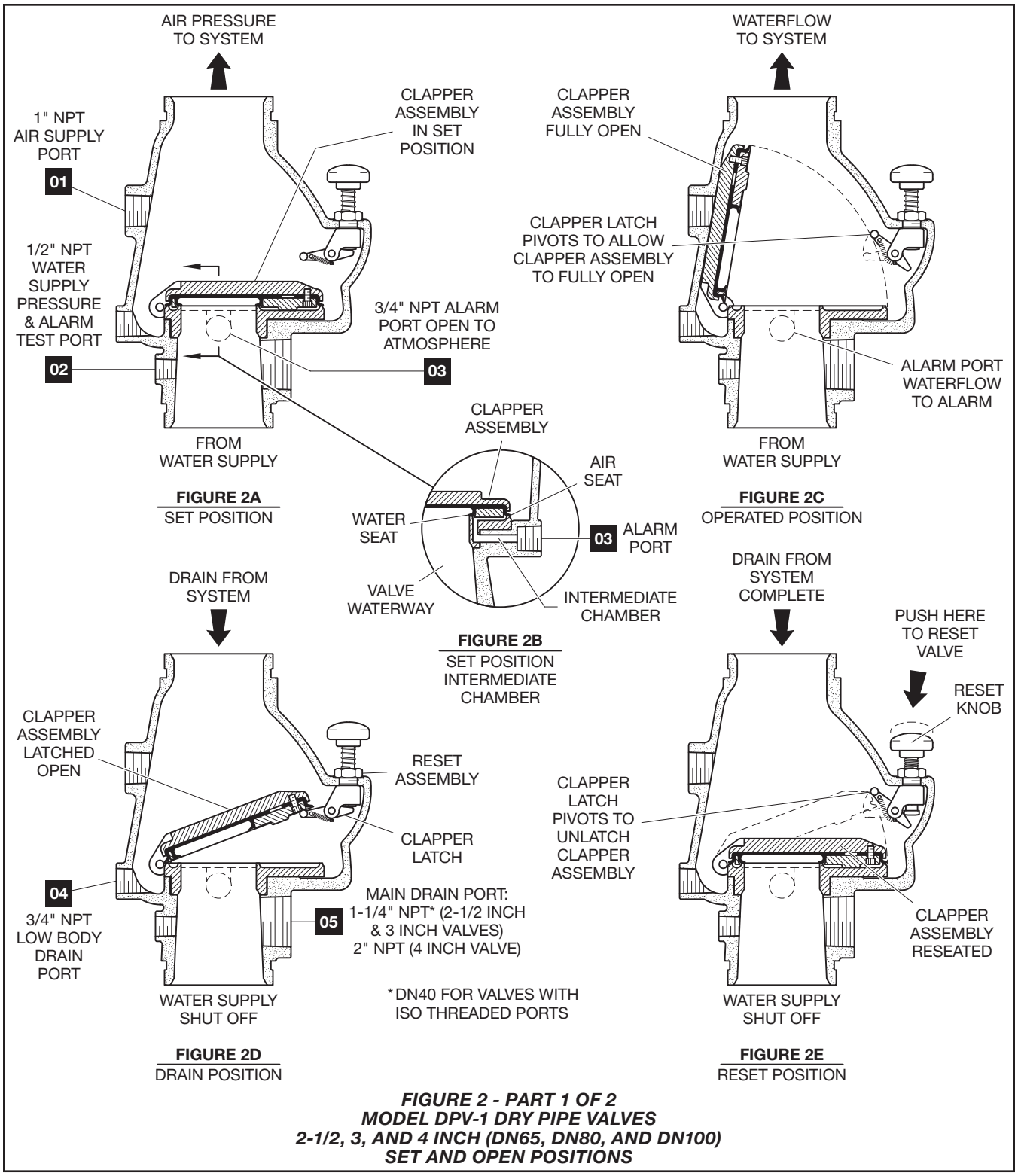


FIGURE 2 - PART 1 OF 2
MODEL DPV-1 DRY PIPE VALVES
2-1/2, 3, AND 4 INCH (DN65, DN80, AND DN100)
SET AND OPEN POSITIONS

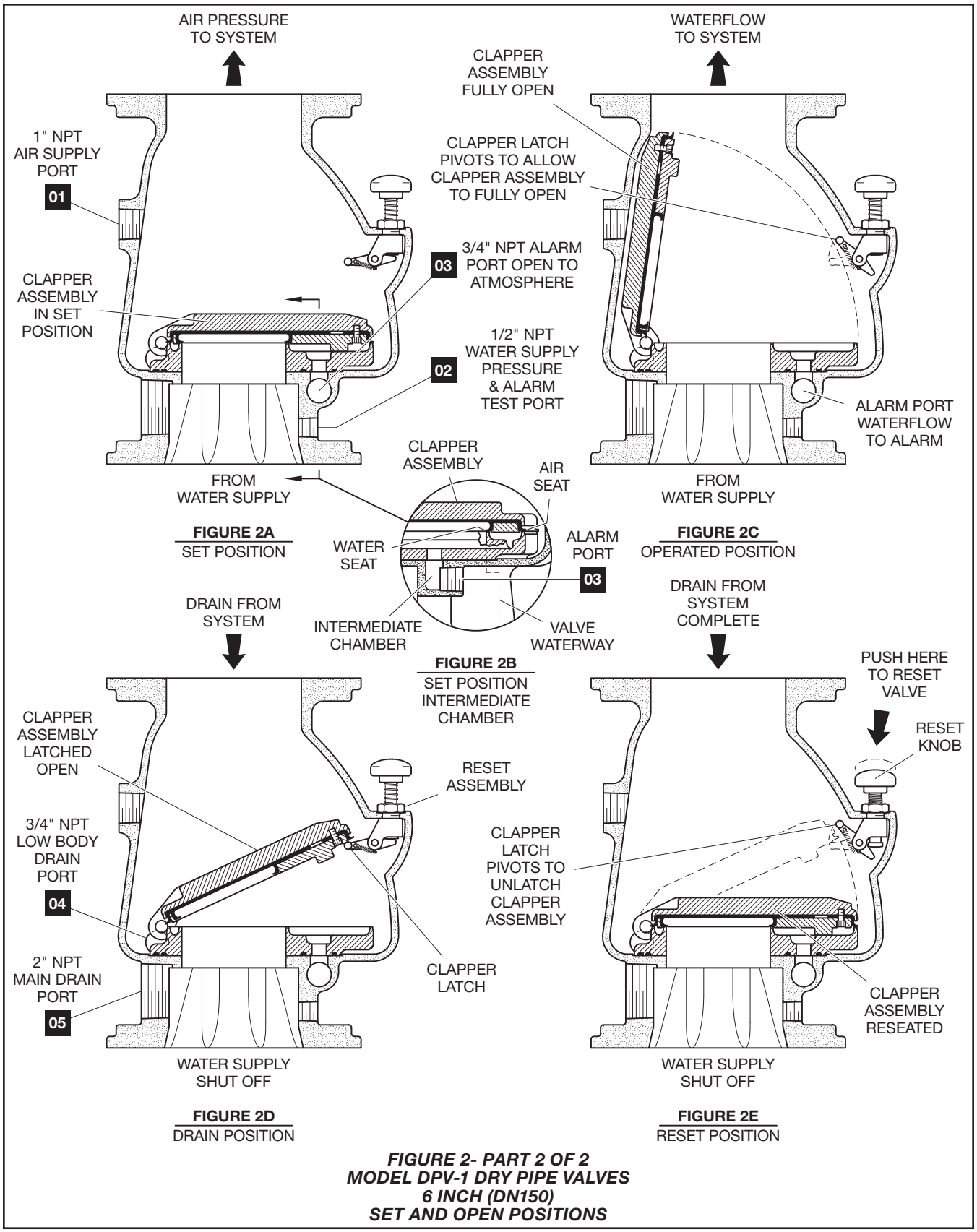


FIGURE 2- PART 2 OF 2
MODEL DPV-1 DRY PIPE VALVES
6 INCH (DN150)
SET AND OPEN POSITIONS

NOTES:

1. SEE FIGURE 3 PART 3 FOR TRIM ARRANGEMENT WITH BILL OF MATERIALS AND COMPONENT PART NUMBERS.
2. TRIM SHOWN FULLY ASSEMBLED; COMPONENTS SUCH AS GAUGES AND SWITCHES MAY REQUIRE ASSEMBLY IN TRIM AT INSTALLATION.

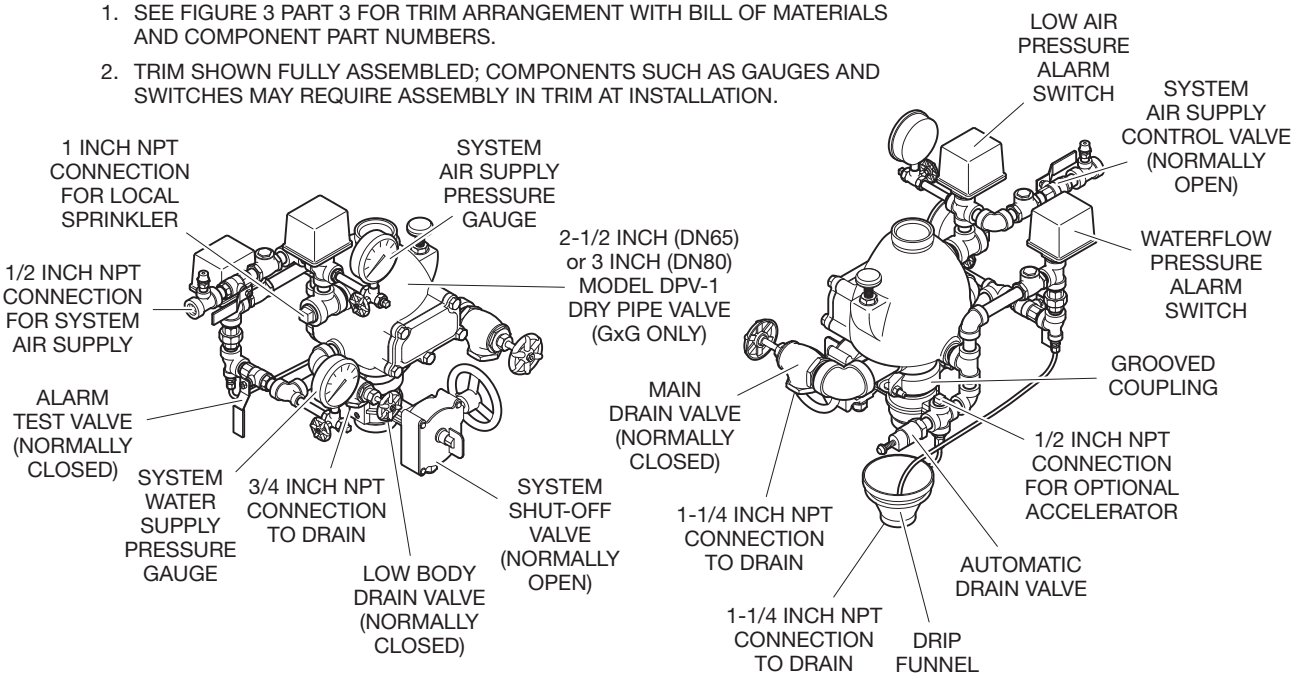


FIGURE 3 - PART 1 OF 3
2-1/2 AND 3 INCH (DN65 AND DN80) MODEL DPV-1 DRY PIPE VALVE
PRE-TRIMMED ASSEMBLY

NOTES:

1. INSTALL TRIM ASSEMBLIES IN ALPHABETICAL ORDER.
2. SEE FIGURE 2 FOR VALVE PORT IDENTIFICATION.
3. ROUTE 1/4" TUBING TO DRIP FUNNEL.

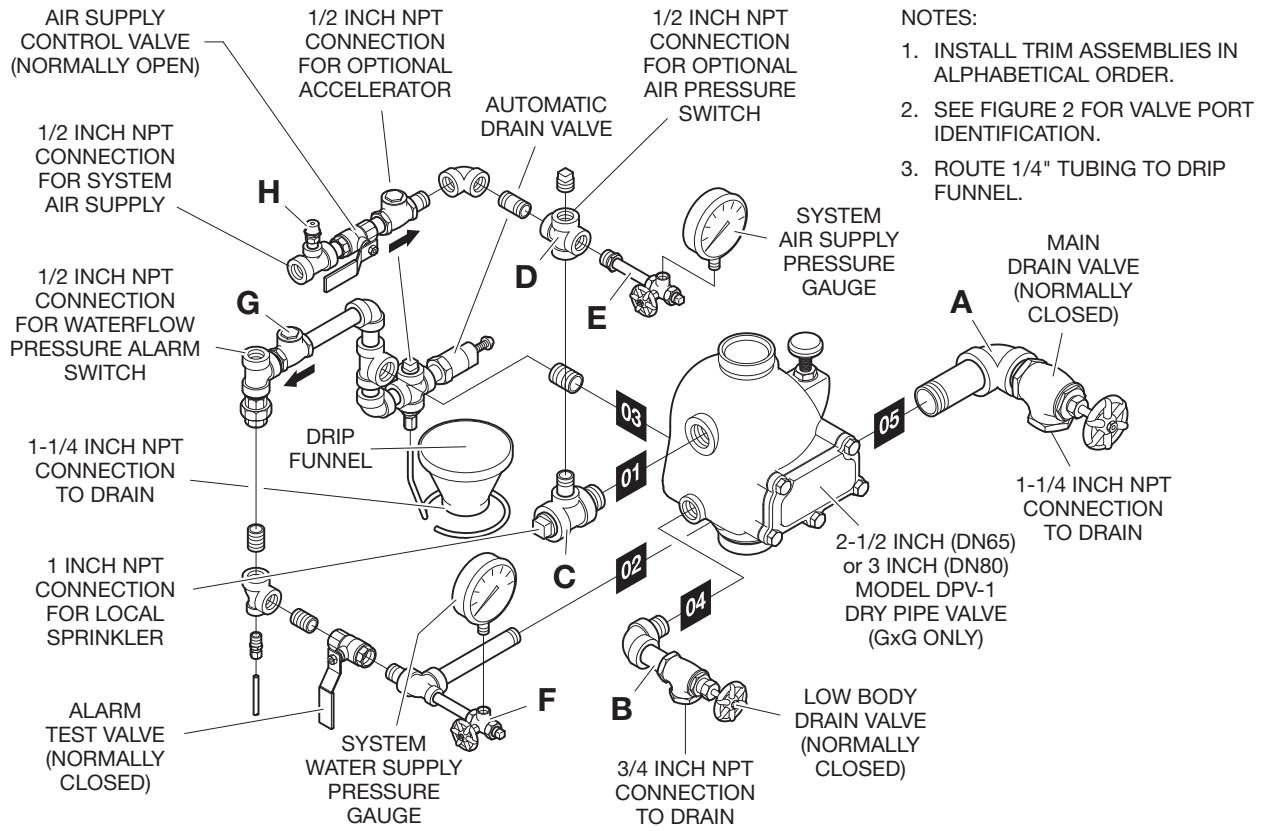
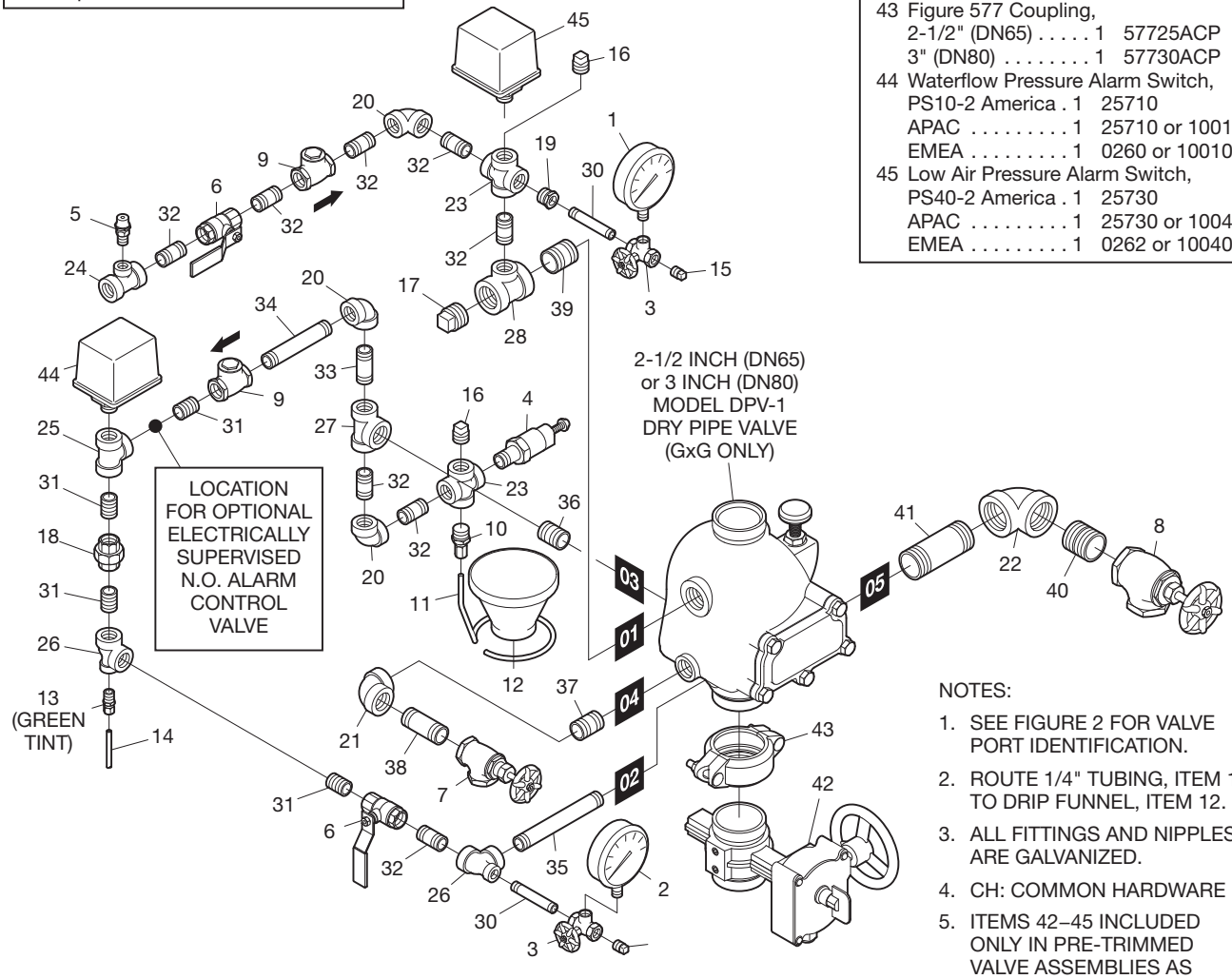


FIGURE 3 - PART 2 OF 3
2-1/2 AND 3 INCH (DN65 AND DN80) MODEL DPV-1 DRY PIPE VALVE
EXPLODED ARRANGEMENT OF SEMI-ASSEMBLED TRIM

NO.	DESCRIPTION	QTY	P/N
1	250 psi/ 1750 kPa Air Pressure Gauge	1	92-343-1-012
2	300 psi/ 2000 kPa Water Pressure Gauge	1	92-343-1-005
3	1/4" Gauge Test Valve	2	46-005-1-002
4	Model AD-1 Automatic Drain Valve	1	52-793-2-004
5	1/4" Pressure Relief Valve	1	92-343-1-020
6	1/2" Ball Valve	2	46-050-1-004
7	3/4" Angle Valve	1	46-048-1-005
8	1-1/4" Angle Valve	1	46-048-1-007
9	1/2" Swing Check Valve	2	46-049-1-004
10	Drip Funnel Connector	1	92-211-1-005
11	Drip Funnel Bracket	1	92-211-1-003
12	Drip Funnel	1	92-343-1-007
13	3/32" Vent Fitting	1	92-032-1-002
14	1/4" Tube, 18" Long	1	CH
15	1/4" Plug	2	CH
16	1/2" Plug	2	CH
17	1" Plug	1	CH
18	1/2" Union	1	CH
19	1/2" x 1/4" Reducing Bushing	1	CH
20	1/2" 90° Elbow	3	CH
21	3/4" 90° Elbow	1	CH
22	1-1/4" 90° Elbow	1	CH
23	1/2" Cross	2	CH
24	1/2" x 1/2" x 1/4" Reducing Tee	1	CH
25	1/2" Tee	1	CH
26	1/2" x 1/4" x 1/2" Reducing Tee	2	CH
27	1/2" x 1/2" x 3/4" Reducing Tee	1	CH
28	1" x 1" x 1/2" Reducing Tee	1	CH
29	Not Used		
PIPE NIPPLES:			
30	1/4" x 3"	2	CH
31	1/2" x Close	4	CH
32	1/2" x 1-1/2"	8	CH
33	1/2" x 2"	1	CH
34	1/2" x 4-1/2"	1	CH
35	1/2" x 6"	1	CH
36	3/4" x Close	1	CH
37	3/4" x 1-1/2"	1	CH
38	3/4" x 2-1/2"	1	CH
39	1" x Close	1	CH
40	1-1/4" x Close	1	CH
41	1-1/4" x 4"	1	CH

COMPONENTS INCLUDED ONLY IN PRE-TRIMMED VALVE ASSEMBLIES:

42	Model BFV-300 Butterfly Valve, 2-1/2" (DN65)	1	59300G025WS
	3" (DN80)	1	59300G030WS
43	Figure 577 Coupling, 2-1/2" (DN65)	1	57725ACP
	3" (DN80)	1	57730ACP
44	Waterflow Pressure Alarm Switch, PS10-2 America	1	25710
	APAC	1	25710 or 100102
	EMEA	1	0260 or 100101
45	Low Air Pressure Alarm Switch, PS40-2 America	1	25730
	APAC	1	25730 or 100402
	EMEA	1	0262 or 100401



NOTES:

1. SEE FIGURE 2 FOR VALVE PORT IDENTIFICATION.
2. ROUTE 1/4" TUBING, ITEM 14, TO DRIP FUNNEL, ITEM 12.
3. ALL FITTINGS AND NIPPLES ARE GALVANIZED.
4. CH: COMMON HARDWARE
5. ITEMS 42–45 INCLUDED ONLY IN PRE-TRIMMED VALVE ASSEMBLIES AS APPLICABLE; OTHERWISE SEPARATELY ORDERED.

FIGURE 3 - PART 3 OF 3
2-1/2 AND 3 INCH (DN65 AND DN80) MODEL DPV-1 DRY PIPE VALVE
EXPLODED ARRANGEMENT OF VALVE TRIM

1. SEE FIGURE 4 PART 3 FOR TRIM ARRANGEMENT WITH BILL OF MATERIALS AND COMPONENT PART NUMBERS.
2. TRIM SHOWN FULLY ASSEMBLED; COMPONENTS SUCH AS GAUGES AND SWITCHES MAY REQUIRE ASSEMBLY IN TRIM AT INSTALLATION.

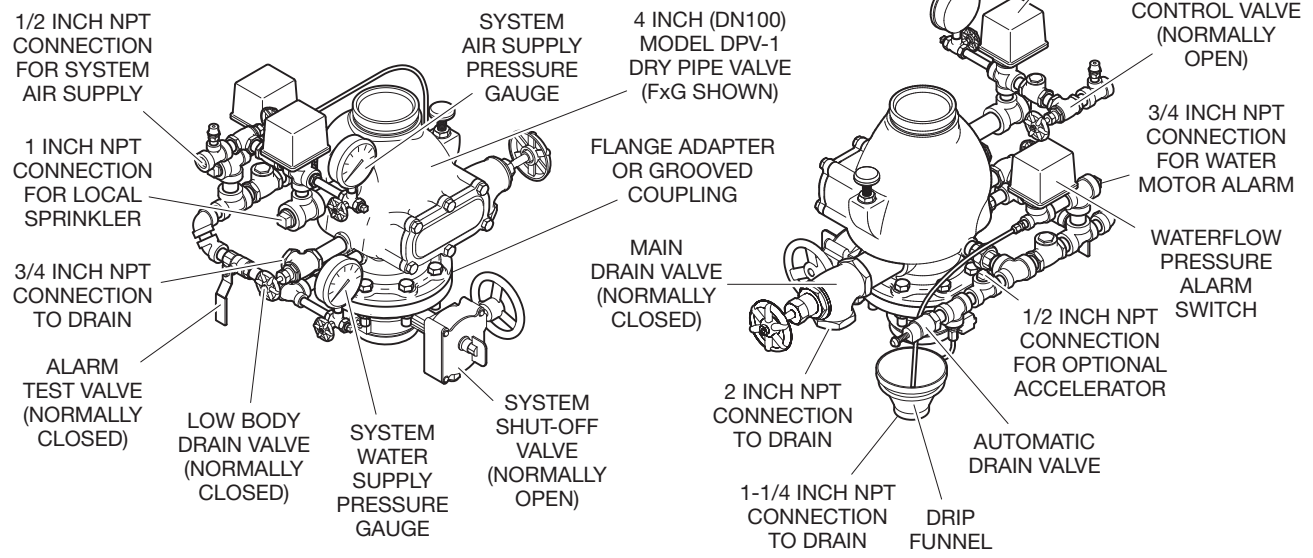
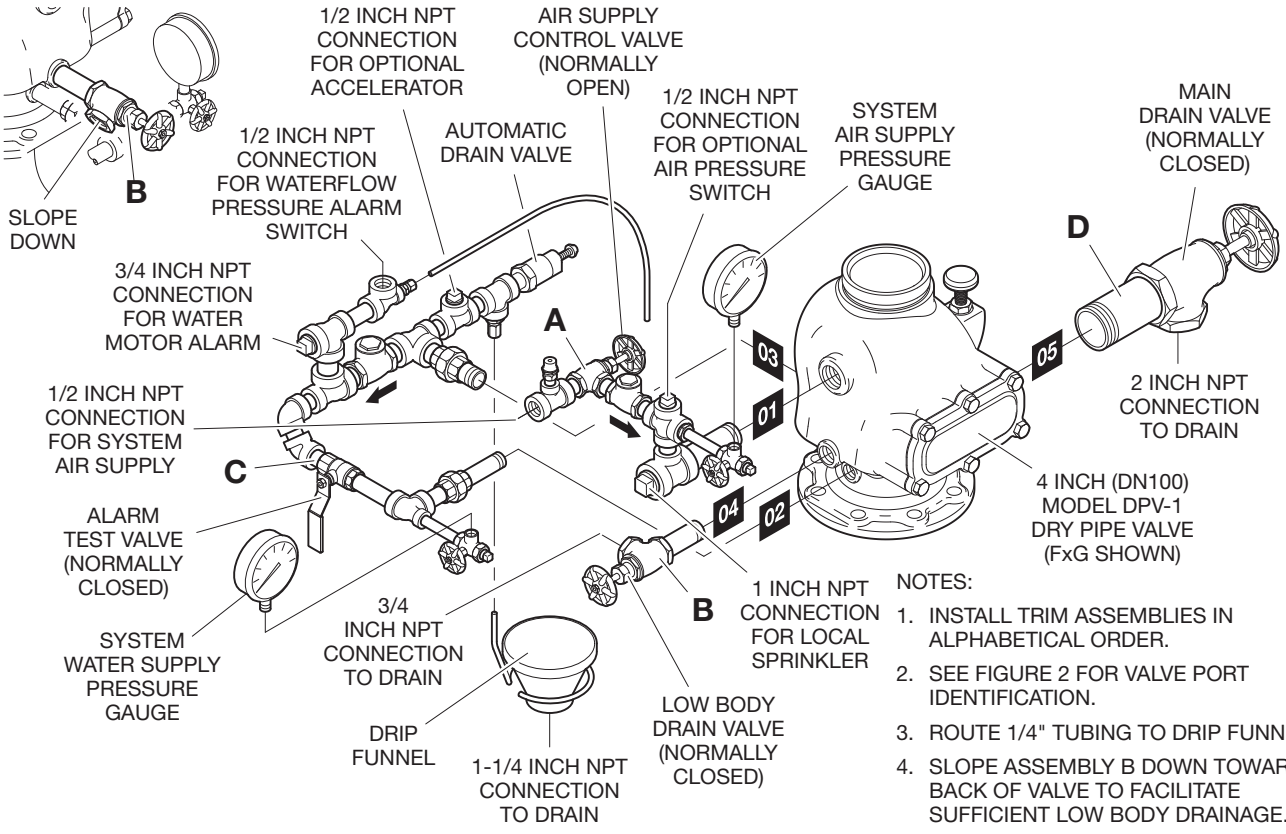


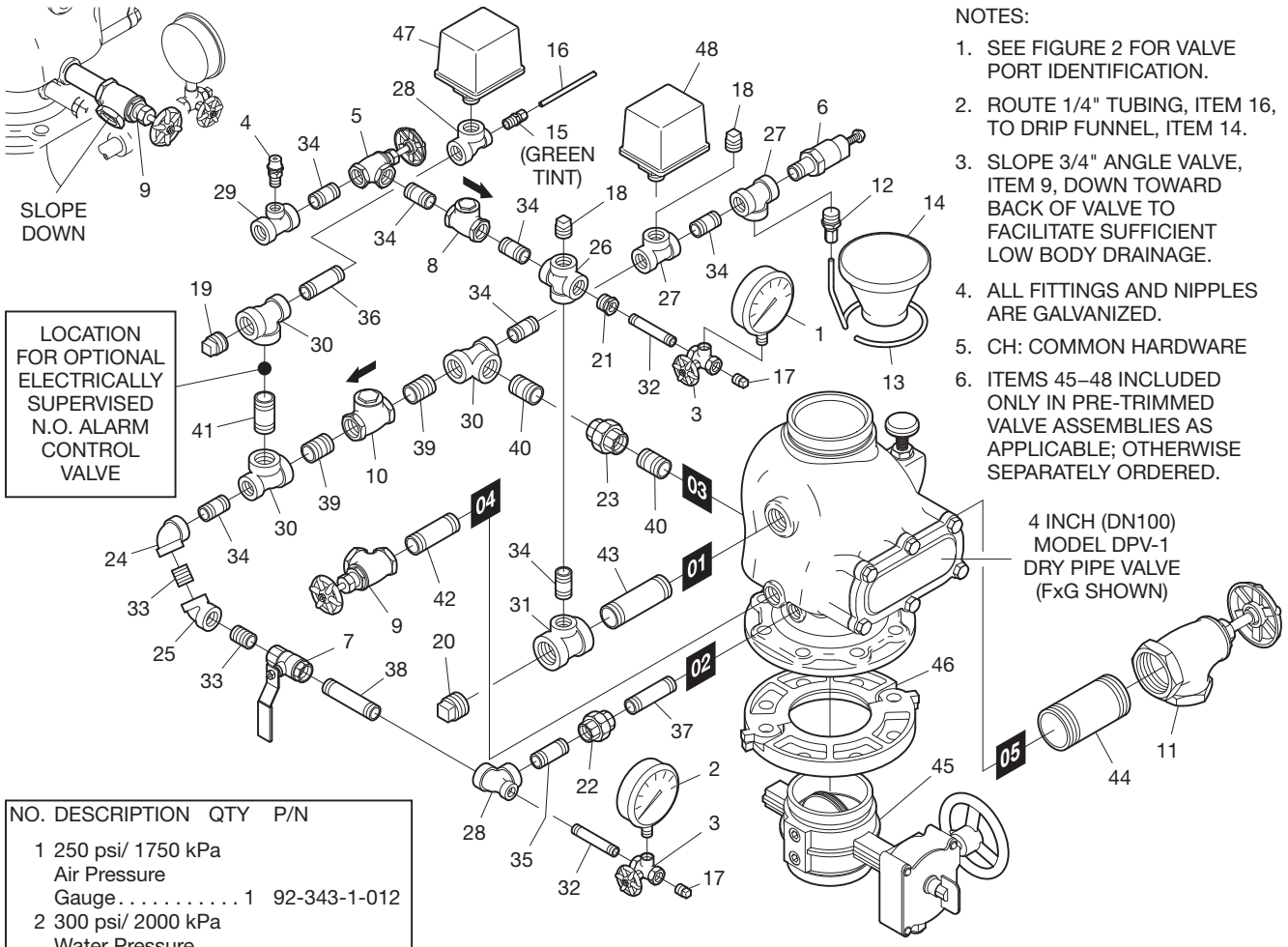
FIGURE 4 - PART 1 OF 3
4 INCH (DN100) MODEL DPV-1 DRY PIPE VALVE
PRE-TRIMMED ASSEMBLY



NOTES:

1. INSTALL TRIM ASSEMBLIES IN ALPHABETICAL ORDER.
2. SEE FIGURE 2 FOR VALVE PORT IDENTIFICATION.
3. ROUTE 1/4" TUBING TO DRIP FUNNEL.
4. SLOPE ASSEMBLY B DOWN TOWARD BACK OF VALVE TO FACILITATE SUFFICIENT LOW BODY DRAINAGE.

FIGURE 4 - PART 2 OF 3
4 INCH (DN100) MODEL DPV-1 DRY PIPE VALVE
EXPLODED ARRANGEMENT OF SEMI-ASSEMBLED TRIM



NOTES:

1. SEE FIGURE 2 FOR VALVE PORT IDENTIFICATION.
2. ROUTE 1/4" TUBING, ITEM 16, TO DRIP FUNNEL, ITEM 14.
3. SLOPE 3/4" ANGLE VALVE, ITEM 9, DOWN TOWARD BACK OF VALVE TO FACILITATE SUFFICIENT LOW BODY DRAINAGE.
4. ALL FITTINGS AND NIPPLES ARE GALVANIZED.
5. CH: COMMON HARDWARE
6. ITEMS 45–48 INCLUDED ONLY IN PRE-TRIMMED VALVE ASSEMBLIES AS APPLICABLE; OTHERWISE SEPARATELY ORDERED.

NO.	DESCRIPTION	QTY	P/N
1	250 psi/ 1750 kPa Air Pressure Gauge	1	92-343-1-012
2	300 psi/ 2000 kPa Water Pressure Gauge	1	92-343-1-005
3	1/4" Gauge Test Valve	2	46-005-1-002
4	1/4" Pressure Relief Valve	1	92-343-1-020
5	1/2" Angle Valve	1	46-048-1-004
6	Model AD-1 Automatic Drain Valve	1	52-793-2-004
7	1/2" Ball Valve	1	46-050-1-004
8	1/2" Swing Check Valve	1	46-049-1-004
9	3/4" Angle Valve	1	46-048-1-005
10	3/4" Swing Check Valve	1	46-049-1-005
11	2" Angle Valve	1	46-048-1-009
12	Drip Funnel Connector	1	92-211-1-005
13	Drip Funnel Bracket	1	92-211-1-003
14	Drip Funnel	1	92-343-1-007
15	3/32" Vent Fitting	1	92-032-1-002
16	1/4" Tube, 24" Long	1	CH
17	1/4" Plug	2	CH
18	1/2" Plug	2	CH
19	3/4" Plug	1	CH

NO.	DESCRIPTION	QTY	P/N
20	1" Plug	1	CH
21	1/2" x 1/4" Reducing Bushing	1	CH
22	1/2" Union	1	CH
23	3/4" Union	1	CH
24	1/2" 90° Elbow	1	CH
25	1/2" 45° Elbow	1	CH
26	1/2" Cross	1	CH
27	1/2" Tee	2	CH
28	1/2" x 1/4" x 1/2" Reducing Tee	2	CH
29	1/2" x 1/2" x 1/4" Reducing Tee	1	CH
30	3/4" x 1/2" x 3/4" Reducing Tee	3	CH
31	1" x 1" x 1/2" Reducing Tee	1	CH
PIPE NIPPLES:			
32	1/4" x 3"	2	CH
33	1/2" x Close	2	CH
34	1/2" x 1-1/2"	7	CH
35	1/2" x 2"	1	CH
36	1/2" x 2-1/2"	1	CH
37	1/2" x 3"	1	CH
38	1/2" x 3-1/2"	1	CH
39	3/4" x Close	2	CH

NO.	DESCRIPTION	QTY	P/N
40	3/4" x 1-1/2"	2	CH
41	3/4" x 2"	1	CH
42	3/4" x 3"	1	CH
43	1" x 4"	1	CH
44	2" x 4-1/2"	1	CH

COMPONENTS INCLUDED ONLY IN PRE-TRIMMED VALVE ASSEMBLIES:

NO.	DESCRIPTION	QTY	P/N
45	Model BFV-300 Butterfly Valve, 4" (DN100)	1	59300G040WS
46	Butterfy Valve Assembly Component: GxG DPV-1 Valves, Figure 577 Coupling, 4" (DN100)	1	57740ACP
	FxF, FxG DPV-1 Valves, Figure 71 Flange Adapter, 4" (DN100)	1	7140S
47	Waterflow Pressure Alarm Switch, PS10-2 America	1	25710
	APAC	1	25710 or 100102
	EMEA	1	0260 or 100101
48	Low Air Pressure Alarm Switch, PS40-2 America	1	25730
	APAC	1	25730 or 100402
	EMEA	1	0262 or 100401

FIGURE 4 - PART 3 OF 3
4 INCH (DN100) MODEL DPV-1 DRY PIPE VALVE
EXPLODED ARRANGEMENT OF VALVE TRIM

NOTES:

1. SEE FIGURE 5 PART 3 FOR TRIM ARRANGEMENT WITH BILL OF MATERIALS AND COMPONENT PART NUMBERS.
2. TRIM SHOWN FULLY ASSEMBLED; COMPONENTS SUCH AS GAUGES AND SWITCHES MAY REQUIRE ASSEMBLY IN TRIM AT INSTALLATION.

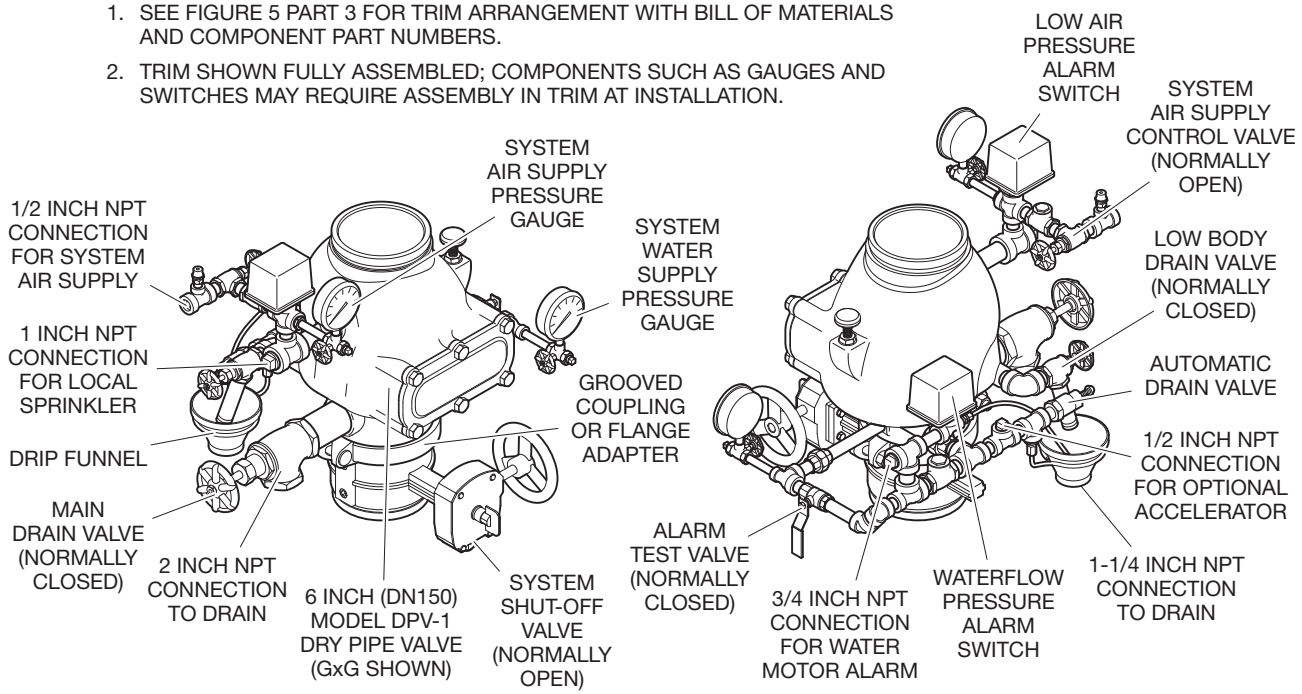
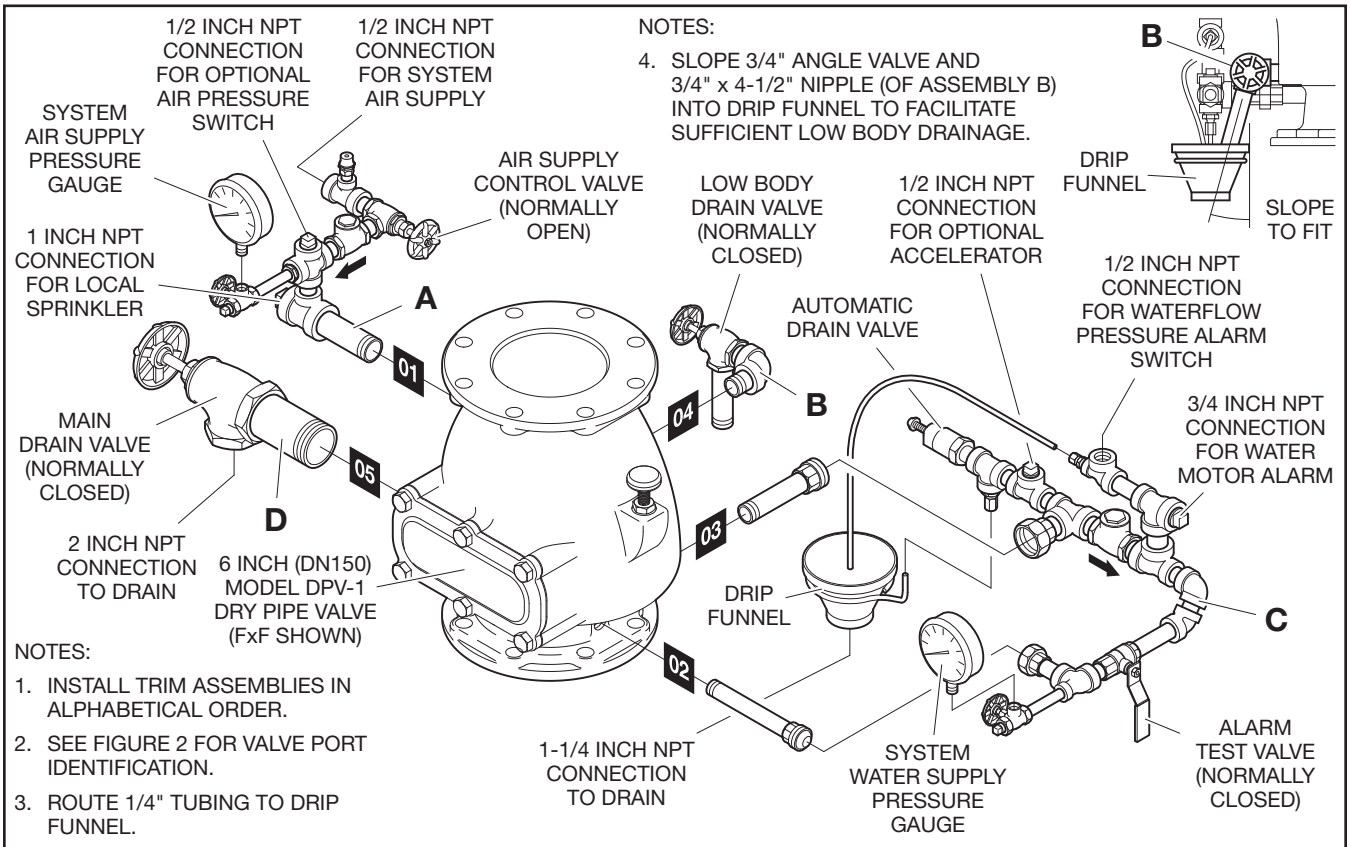


FIGURE 5 - PART 1 OF 3
6 INCH (DN150) MODEL DPV-1 DRY PIPE VALVE
PRE-TRIMMED ASSEMBLY

NOTES:

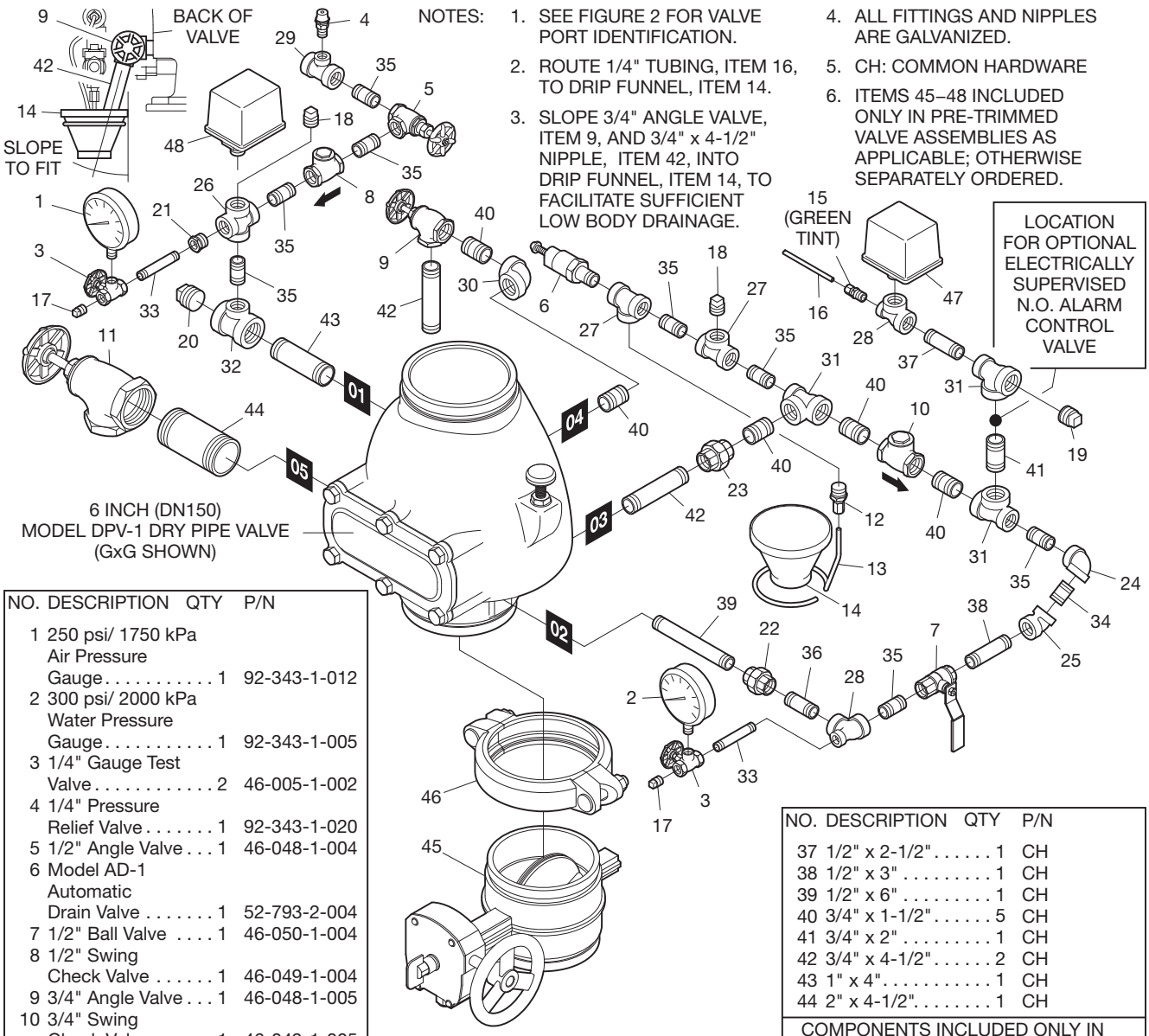
4. SLOPE 3/4" ANGLE VALVE AND 3/4" x 4-1/2" NIPPLE (OF ASSEMBLY B) INTO DRIP FUNNEL TO FACILITATE SUFFICIENT LOW BODY DRAINAGE.



NOTES:

1. INSTALL TRIM ASSEMBLIES IN ALPHABETICAL ORDER.
2. SEE FIGURE 2 FOR VALVE PORT IDENTIFICATION.
3. ROUTE 1/4" TUBING TO DRIP FUNNEL.

FIGURE 5 - PART 2 OF 3
6 INCH (DN150) MODEL DPV-1 DRY PIPE VALVE
EXPLODED ARRANGEMENT OF SEMI-ASSEMBLED TRIM



NOTES:

1. SEE FIGURE 2 FOR VALVE PORT IDENTIFICATION.
2. ROUTE 1/4" TUBING, ITEM 16, TO DRIP FUNNEL, ITEM 14.
3. SLOPE 3/4" ANGLE VALVE, ITEM 9, AND 3/4" x 4-1/2" NIPPLE, ITEM 42, INTO DRIP FUNNEL, ITEM 14, TO FACILITATE SUFFICIENT LOW BODY DRAINAGE.
4. ALL FITTINGS AND NIPPLES ARE GALVANIZED.
5. CH: COMMON HARDWARE
6. ITEMS 45–48 INCLUDED ONLY IN PRE-TRIMMED VALVE ASSEMBLIES AS APPLICABLE; OTHERWISE SEPARATELY ORDERED.

NO.	DESCRIPTION	QTY	P/N
1	250 psi/ 1750 kPa Air Pressure Gauge	1	92-343-1-012
2	300 psi/ 2000 kPa Water Pressure Gauge	1	92-343-1-005
3	1/4" Gauge Test Valve	2	46-005-1-002
4	1/4" Pressure Relief Valve	1	92-343-1-020
5	1/2" Angle Valve	1	46-048-1-004
6	Model AD-1 Automatic Drain Valve	1	52-793-2-004
7	1/2" Ball Valve	1	46-050-1-004
8	1/2" Swing Check Valve	1	46-049-1-004
9	3/4" Angle Valve	1	46-048-1-005
10	3/4" Swing Check Valve	1	46-049-1-005
11	2" Angle Valve	1	46-048-1-009
12	Drip Funnel Connector	1	92-211-1-005
13	Drip Funnel Bracket	1	92-211-1-003
14	Drip Funnel	1	92-343-1-007
15	3/32" Vent Fitting	1	92-032-1-002
16	1/4" Tube, 24" Long	1	CH
17	1/4" Plug	2	CH
18	1/2" Plug	2	CH
19	3/4" Plug	1	CH
20	1" Plug	1	CH
21	1/2" x 1/4" Reducing Bushing	1	CH
22	1/2" Union	1	CH
23	3/4" Union	1	CH
24	1/2" 90° Elbow	1	CH

NO.	DESCRIPTION	QTY	P/N
25	1/2" 45° Elbow	1	CH
26	1/2" Cross	1	CH
27	1/2" Tee	2	CH
28	1/2" x 1/4" x 1/2" Reducing Tee	2	CH
29	1/2" x 1/2" x 1/4" Reducing Tee	1	CH
30	3/4" 90° Elbow	1	CH
31	3/4" x 1/2" x 3/4" Reducing Tee	3	CH
32	1" x 1" x 1/2" Reducing Tee	1	CH
PIPE NIPPLES:			
33	1/4" x 3"	2	CH
34	1/2" x Close	1	CH
35	1/2" x 1-1/2"	8	CH
36	1/2" x 2"	1	CH

NO.	DESCRIPTION	QTY	P/N
37	1/2" x 2-1/2"	1	CH
38	1/2" x 3"	1	CH
39	1/2" x 6"	1	CH
40	3/4" x 1-1/2"	5	CH
41	3/4" x 2"	1	CH
42	3/4" x 4-1/2"	2	CH
43	1" x 4"	1	CH
44	2" x 4-1/2"	1	CH

COMPONENTS INCLUDED ONLY IN PRE-TRIMMED VALVE ASSEMBLIES:

NO.	DESCRIPTION	QTY	P/N
45	Model BFV-300 Butterfly Valve, 6" (DN150)	1	59300G060WS
46	Butterfy Valve Assembly Component: GxG DPV-1 Valves, Figure 577 Coupling, 6" (DN150)	1	57760ACP
	FxF, FxG DPV-1 Valves, Figure 71 Flange Adapter, 6" (DN150)	1	7160S
47	Waterflow Pressure Alarm Switch, PS10-2 America	1	25710
	APAC	1	25710 or 100102
	EMEA	1	0260 or 100101
48	Low Air Pressure Alarm Switch, PS40-2 America	1	25730
	APAC	1	25730 or 100402
	EMEA	1	0262 or 100401

FIGURE 5 - PART 3 OF 3
6 INCH (DN150) MODEL DPV-1 DRY PIPE VALVE
EXPLODED ARRANGEMENT OF VALVE TRIM

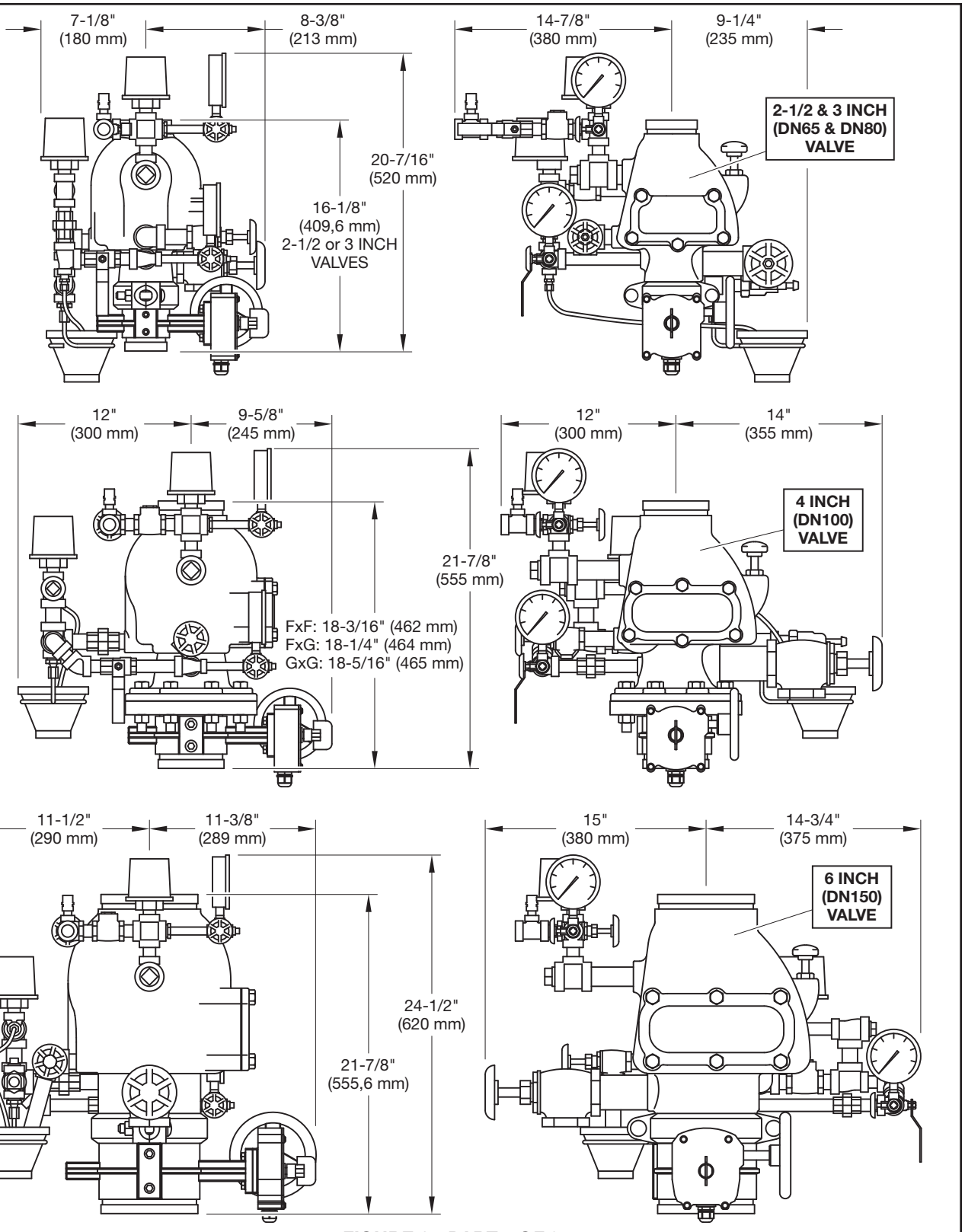


FIGURE 6 - PART 1 OF 2
MODEL DPV-1 DRY PIPE VALVE
INSTALLATION DIMENSIONS, PRE-TRIMMED VALVE

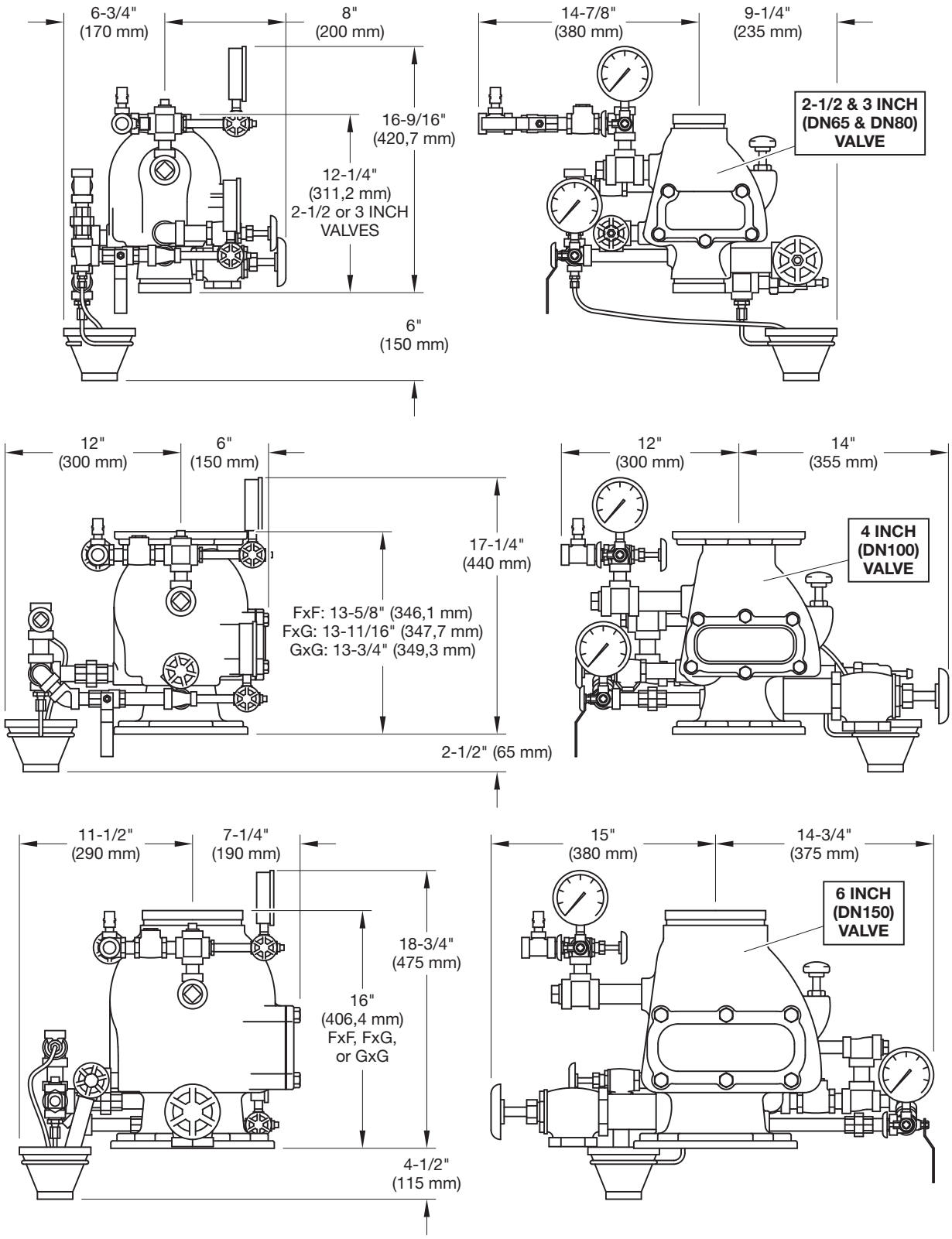


FIGURE 6 - PART 2 OF 2
MODEL DPV-1 DRY PIPE VALVE
INSTALLATION DIMENSIONS, VALVE AND SEMI-ASSEMBLED TRIM

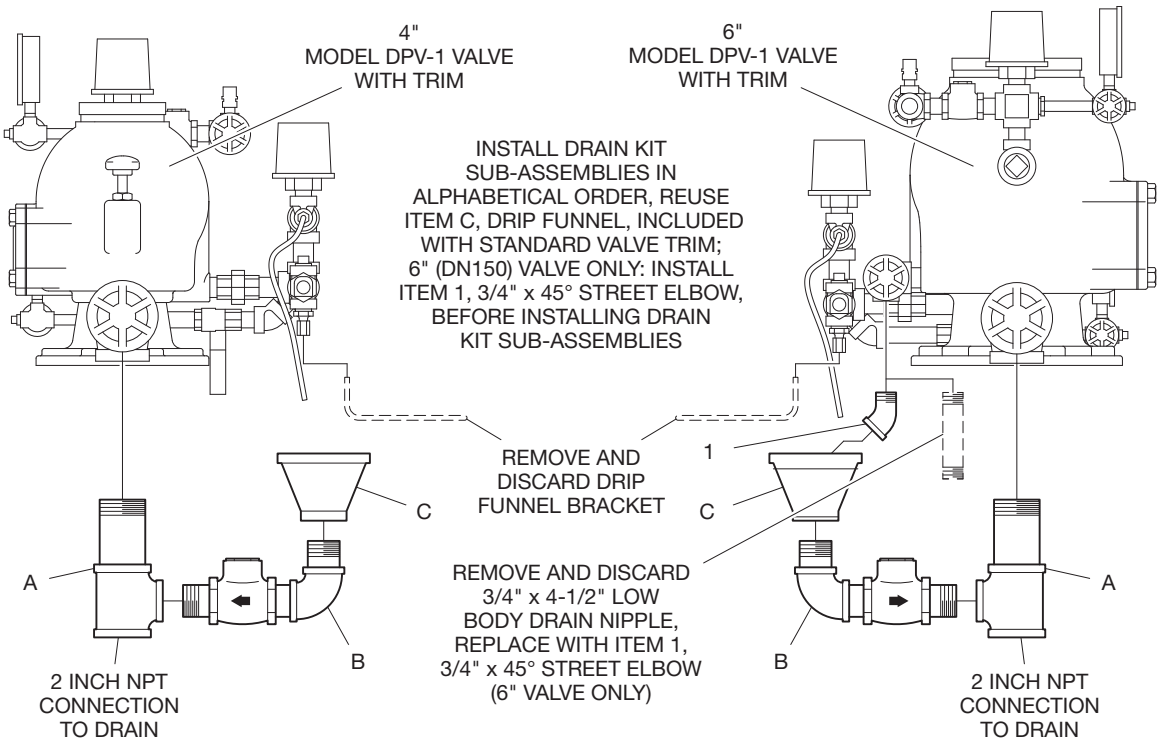


FIGURE 7
OPTIONAL DRAIN KIT INSTALLATION

Care and Maintenance

The following procedures and inspections should be performed as indicated, in addition to any specific requirements of the NFPA, and any impairment must be immediately corrected.

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

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the NFPA such as NFPA 25, in addition to the standards of any authority having jurisdiction. Contact the installing contractor or sprinkler manufacturer regarding 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.

The operational test procedure and waterflow pressure alarm test procedure will result in operation of the associated alarms. Consequently, notification must first be given to the owner and the fire department, central station, or other signal station to which the alarms are connected.

Annual Operation Test Procedure
Note: *Unless otherwise noted, see Figure 3, 4, or 5 to identify functional trim components.*

Proper operation of the DPV-1 valve — for example, opening of the DPV-1 valve during a fire condition — should be verified at least once a year as follows:

Step 1. If necessary, prevent water from flowing beyond the riser by performing the following steps:

- **a.** Close the main control valve.
- **b.** Open the main drain valve.
- **c.** Open the main control valve one turn beyond the position at which water just begins to flow from the main drain valve.
- **d.** Close the main drain valve.

Step 2. Open the system inspector's test connection.

Step 3. Verify that the DPV-1 valve has operated, as indicated by the flow of water into the system and that all waterflow alarms operate properly.

Step 4. Close the system main control valve.

Step 5. Reset the DPV-1 valve in accordance with the Valve Setting Procedure.

Note: *It is recommended that the requirement of NFPA 25 to annually inspect the inside of the valve be performed at this time and prior to resetting the DPV-1 valve. Refer to the Automatic Drain Valve Inspection subsection Steps 2 through 5 for instructions with regard to the inspection of the clapper facing.*

Quarterly Waterflow Alarm Test Procedure
Testing of the system waterflow alarms should be performed quarterly. To test the waterflow alarm, open the alarm test valve, which will allow a flow of water to the waterflow pressure alarm switch and/or water motor alarm. Upon satisfactory completion of the test, close the alarm test valve.

Nominal Valve Sizes in. (DN)	Handhole Cover Bolt Torque lb-ft (N·m)
2-1/2 (DN65)	20 (27)
3 (DN80)	20 (27)
4 (DN100)	20 (27)
6 (DN150)	45 (61)

TABLE C
HANDHOLE COVER BOLTS
RECOMMENDED TORQUE

Water Pressure Inspection
The water pressure gauge is to be inspected monthly (per NFPA 25) to ensure that normal system water pressure is being maintained.

Air Pressure Inspection
The air pressure gauge is to be inspected monthly (per NFPA 25) to ensure that normal system air pressure is being maintained.

Automatic Drain Valve Inspection
The automatic drain valve should be inspected monthly (per NFPA 25) by depressing the plunger and checking to ensure that the automatic drain valve is not discharging water and/or air. A discharge of water and/or air is an indication that the air and/or water seats are leaking, which could subsequently cause a false operation should the intermediate chamber become inadvertently pressurized.

If leakage is present, take the DPV-1 valve out of service (for example, close the main control valve, open the main drain valve, close the air supply control valve, remove the dry pipe valve accelerator from service, as applicable, in accordance with the Technical Data Sheet (TDS) instructions, (refer to TDS TFP1105 for the VIZOR or TDS TFP1112 for the ACC-1), and open the inspector's test connection to relieve the system air pressure to 0 psi (0 bar) as indicated on the system air pressure gauge), and then after removing the handhole cover, perform the following steps:

Step 1. Make sure that the seat ring is clean and free of any nicks or significant scratches.

Step 2. Remove the clapper assembly from the valve by first pulling out the hinge pin.

Step 3. Disassemble the clapper facing retainer from the clapper so that the clapper facing can be removed and inspected. Make sure that the clapper facing does not show signs of compression set, damage, etc. Replace the clapper facing if there is any signs of wear.

Step 4. Clean the clapper facing, clapper, and clapper facing retainer, and then reassemble the clapper assembly.

Step 5. Reinstall the clapper assembly with its hinge pin.

Step 6. Install the handhole cover:

- **a.** Align the handhole cover gasket and handhole cover in the proper orientation with the valve body as shown in Figure 1, and hold in place.
- **b.** Apply LOCTITE No. 242 or equivalent to the Hex Bolt threads.
- **c.** Insert the Hex Bolts through the handhole cover gasket and handhole cover, and hand-tighten into the valve body.
- **d.** Using a crossdraw sequence to assure uniformity, wrench-tighten the hex bolts to the recommended torque values as shown in Table C.
- **e.** Inspect to assure all the hex bolts are securely tightened.

Limited Warranty

For warranty terms and conditions, visit www.tyco-fire.com.

Ordering Procedure

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

Standard DPV-1 Dry Pipe Valve
ANSI standard outside diameter (O.D.) pipe size with grooved or ANSI drilled flange end connections and NPT threaded ports.

Specify: (specify size) Model DPV-1 Dry Pipe Valve with (specify) End Connections, P/N (specify):

Groove x Groove,
ANSI 2.88 in. (73,1 mm) O.D. Grooves:
2-1/2 in. (DN65) G x G 52-312-1-925
Groove x Groove,
ANSI 3.50 in. (88,9 mm) O.D. Grooves:
3 in. (DN80) G x G 52-312-1-930
Groove x Groove,
ANSI 4.50 in. (114,3 mm) O.D. Grooves:
4 in. (DN100) G x G 52-312-1-940
Flange x Groove,
ANSI Flange x ANSI 4.50 in. (114,3 mm) O.D. Groove:
4 in. (DN100) F x G. 52-312-1-440
Flange x Flange,
ANSI Flanges:
4 in. (DN100) F x F 52-312-1-040
Groove x Groove,
ANSI 6.62 in. (168,3 mm) O.D. Grooves:
6 in. (DN150) G x G. 52-312-1-960
Flange x Groove,
ANSI Flange x ANSI 6.62 in. (168,3 mm) O.D. Groove:
6 in. (DN150) F x G. 52-312-1-460
Flange x Flange,
ANSI Flanges:
6 in. (DN150) F x F 52-312-1-060

Pre-Trimmed DPV-1 Assemblies with Butterfly Valve
Specify: 2-1/2 in. DPV-1 Pre-Trimmed Valve Assembly, Grooved End Connections, P/N 52-310-3-925

Specify: 3 in. DPV-1 Pre-Trimmed Valve Assembly, Grooved End Connections, P/N 52-310-3-930

Specify: 4 in. DPV-1 Pre-Trimmed Valve Assembly, (specify) End Connection, P/N (specify):

Flange x Flange 52-310-3-040
Flange x Groove. 52-310-3-440
Groove x Groove 52-310-3-940

Specify: 6 in. DPV-1 Pre-Trimmed Valve Assembly, (specify) End Connection, P/N (specify):

Flange x Flange 52-310-3-060
Flange x Groove. 52-310-3-460
Groove x Groove 52-310-3-960

Pre-Trimmed DPV-1 Assemblies without Butterfly Valve
Specify: 4 in. DPV-1 Pre-Trimmed Valve Assembly without Butterfly, (specify) End Connection, P/N (specify):

Flange x Flange 52-310-4-040
Flange x Groove. 52-310-4-440

Specify: 6 in. DPV-1 Pre-Trimmed Valve Assembly without Butterfly, (specify) End Connection, P/N (specify):

Flange x Flange 52-310-4-060
Flange x Groove. 52-310-4-460

Standard Galvanized Semi-Assembled DPV-1 Trim
Note: *Valves with NPT threaded ports are intended for use with the Standard Galvanized Semi-Assembled DPV-1 Valve Trim as described in Figures 3, 4 and 5 of this document.*

Specify: 2-1/2 and 3 in. DPV-1 Semi-Assembled Galvanized Trim, P/N 52-309-2-005

Specify: 4 in. DPV-1 Semi-Assembled Galvanized Trim, P/N 52-309-2-001

Specify: 6 in. DPV-1 Semi-Assembled Galvanized Trim, P/N 52-309-2-002

Optional Drain Kit
Includes swing check valve, fittings and pipe nipples to connect the drip funnel directly to the main drain in 4 and 6 in. valve trim assemblies as shown in Figure 7.

Specify: Universal Model DPV-1 Dry Pipe Valve Drain Kit, 4 in. and 6 in. Valves, P/N 52-309-2-106

Drain Kit Replacement Check Valve
Specify: Swing Check Valve, 1-1/4 in., P/N 46-049-1-006

Optional Electronic Accelerator: VIZOR Electronic Dry Pipe Accelerator (with Trim)
Refer to Technical Data Sheet TFP1105.

Specify: VIZOR Electronic Dry Pipe Accelerator for use with the 4 or 6 in. TYCO Model DPV-1 Dry Pipe Valve Trim, P/N 52-312-3-001

Optional Mechanical Accelerator: Model ACC-1 Dry Pipe Accelerator
Refer to Technical Data Sheet TFP1112.

Specify: Model ACC-1 Dry Pipe Accelerator, P/N 52-311-1-001, and Galvanized Accelerator Trim for Model DPV-1 Dry Pipe Valve, P/N 52-311-2-010

Optional 600 PSI Water Pressure Gauge:
Specify: 600 PSI Water Pressure Gauge, P/N 92-343-1-004

Accessories
Refer to Technical data Sheets describing the following accessories, as applicable.

Specify: Description, P/N (specify):

Waterflow Pressure Alarm Switch
PS10-2 (America). 25710
(APAC) . . . . . 25710 or 100102
(EMEA) . . . . . 0260 or 100101
Low Air Pressure Alaram Switch
PS40-2 25730
(APAC) . . . . . 25730 or 100402
(EMEA) . . . . . 0262 or 100401
Model WMA-1
Water Motor Alarm. 52-630-1-001
(Refer to Technical Data Sheet TFP921)
Model AMD-1
Air Maintenance Device. 52-324-2-002
(Refer to Technical Data Sheet TFP1221)
Model AMD-2
Air Maintenance Device. 52-326-2-001
(Refer to Technical Data Sheet TFP1231)
Model AMD-3
Nitrogen Maintenance Device. . . .52-328-2-001
(Refer to Technical Data Sheet TFP1241)

Replacement Valve Parts
Specify: (description) for use with (specify size) Model DPV-1 Dry Pipe Valve, P/N, see Figure 1.

Replacement Trim Parts
Specify: (description) for use with (specify size) Model DPV-1 Dry Pipe Valve, P/N, see Figures 3, 4, or 5.

Other DPV-1 Dry Pipe Valves
Notes: *Other DPV-1 Dry Pipe Valves are valves ordered with any combination of flange drilling, pipe groove outside diameter (O.D.), or port thread specification not offered as Standard DPV-1 Dry Pipe Valves.*

Valves with NPT threaded ports are intended for use with the Standard Galvanized Semi-Assembled DPV-1 Valve Trim described in Figures 3, 4 and 5. Valves with ISO threaded ports are intended for use with special order trim that is provided by local distributors to meet the specific needs of certain localities. Please contact your local distributor regarding valves and valve trim for specific localities.

Specify: (specify size) Model DPV-1 Dry Pipe Valve with (specify) End Connections and (specify NPT or ISO) threaded ports

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