

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

Technical Data

Approvals

Model DPV-1 Dry Pipe Valves with or without the TYCO Model ACC-1 Dry Pipe Valve Accelerator are FM, LPCB, EAC, VdS, and CE Approved with European Conformity Valve Trim. See Figures 7 to 18.

For more information on Agency Approvals, contact Johnson Controls at the following office:

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 7547 TJ Enschede
 The Netherlands
 Tel: +31-(0)53-428-4444
 Fax: +31-(0)53-428-3377

Dry Pipe Valve

The DN65, DN80, DN100, and DN150 Model DPV-1 Dry Pipe Valves are for vertical installations (flow going up), and they are rated for use at a maximum service pressure of 16 bar. The nominal pressure loss versus flow is shown in Graph A, and the valve take-out dimensions are shown in Figure 2.

Flange connections are drilled per ISO 2084 (PN10/16) or ANSI B16.1 (Class 125). 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.

Threaded port connections per ISO 7-1 readily accept trim arrangements described in Figures 7 through 18.

Components of Model DPV-1 Valve assemblies are shown in Figure 1A for the DN65, DN80, and DN100 valves and in Figure 1B for the DN150 valve. 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 copper, and both the clapper retaining plate and latch are bronze. The hinge pin is aluminum bronze, and the handhole cover fasteners are carbon steel.

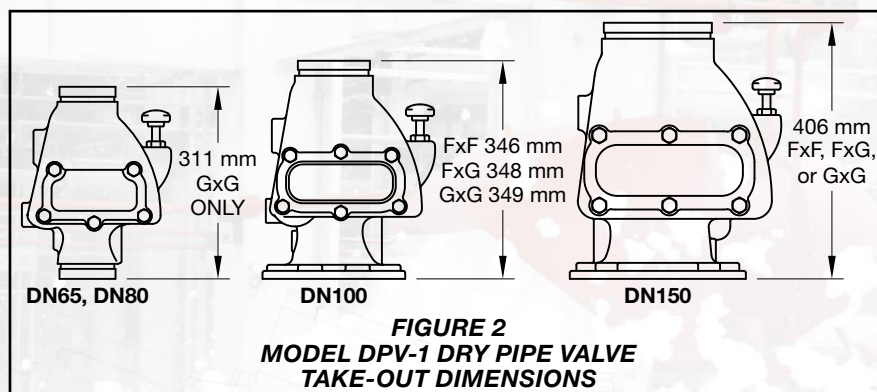


FIGURE 2
MODEL DPV-1 DRY PIPE VALVE
TAKE-OUT DIMENSIONS

Valve Trim

Valve trim arrangements are shown in Figures 7 through 18 and described in Table A. The valve trim forms a part of the laboratory approval of the Model DPV-1 Dry Pipe Valve and is necessary for the proper operation of the valve. Each package of trim includes the following items:

- Water Supply Pressure Gauge
- System Air Pressure Gauge
- Main Drain Valve
- Low Body Drain Valve
- Alarm Test Valve
- Automatic Drain Valve
- Provision For An Optional Accelerator

Air Supply

Table B provides 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). Refer to Technical Data Sheet TFP1221.
- Model AMD-2 Air Maintenance Device (compressor control type). Refer to Technical Data Sheet TFP1231.
- Model AMD-3 Nitrogen Maintenance Device (high pressure reducing type). Refer to Technical Data Sheet TFP1241.

Quick Opening Device

As an option, the Model DPV-1 Dry Pipe Valve may be acquired with the Model ACC-1 Dry Pipe Valve Accelerator as shown in Figure 4. The Model ACC-1 Dry Pipe Valve Accelerator is used to reduce the time to valve actuation following the operation of one or more automatic sprinklers.

Operating Principles

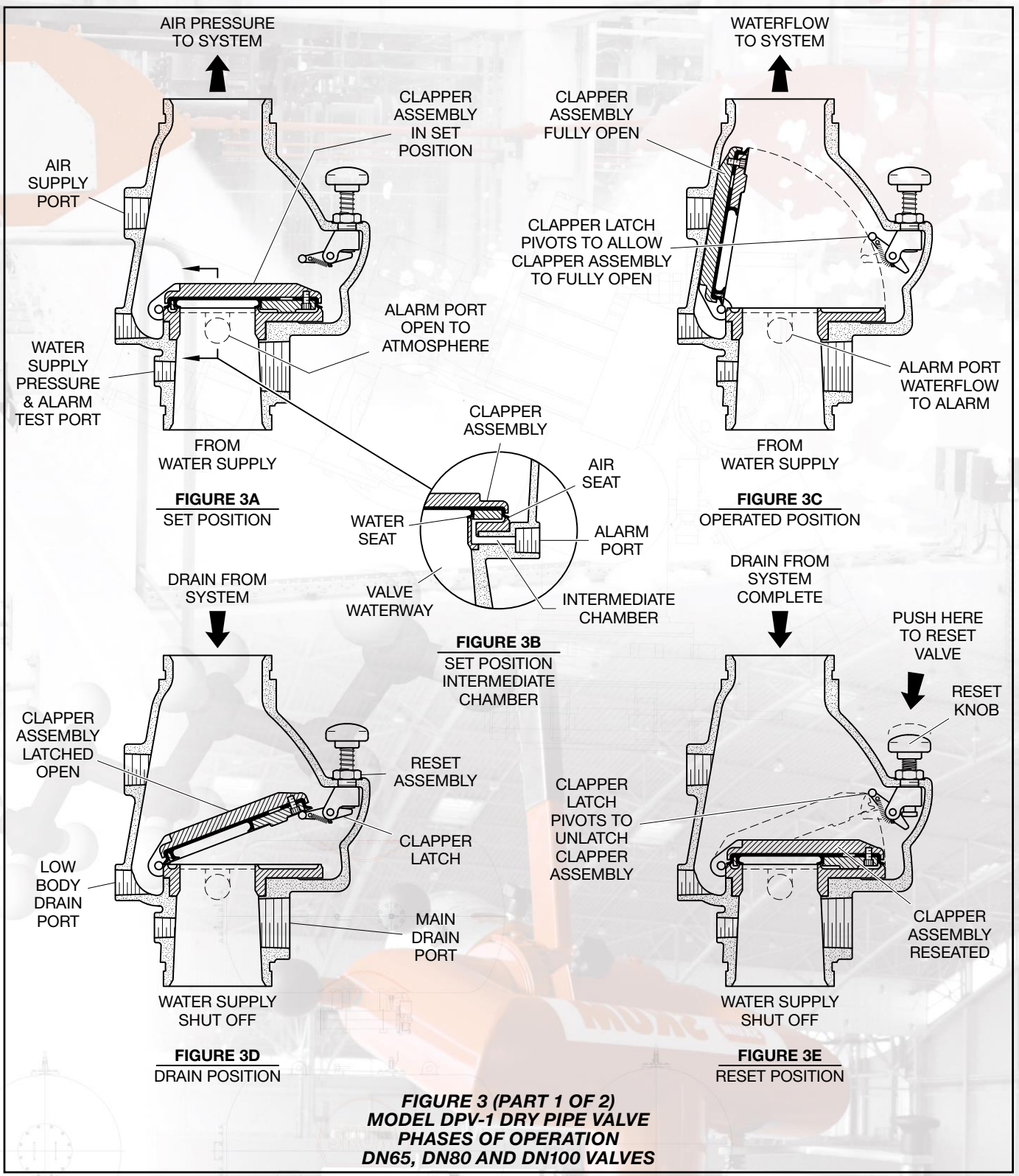
Dry Pipe Valve Operation

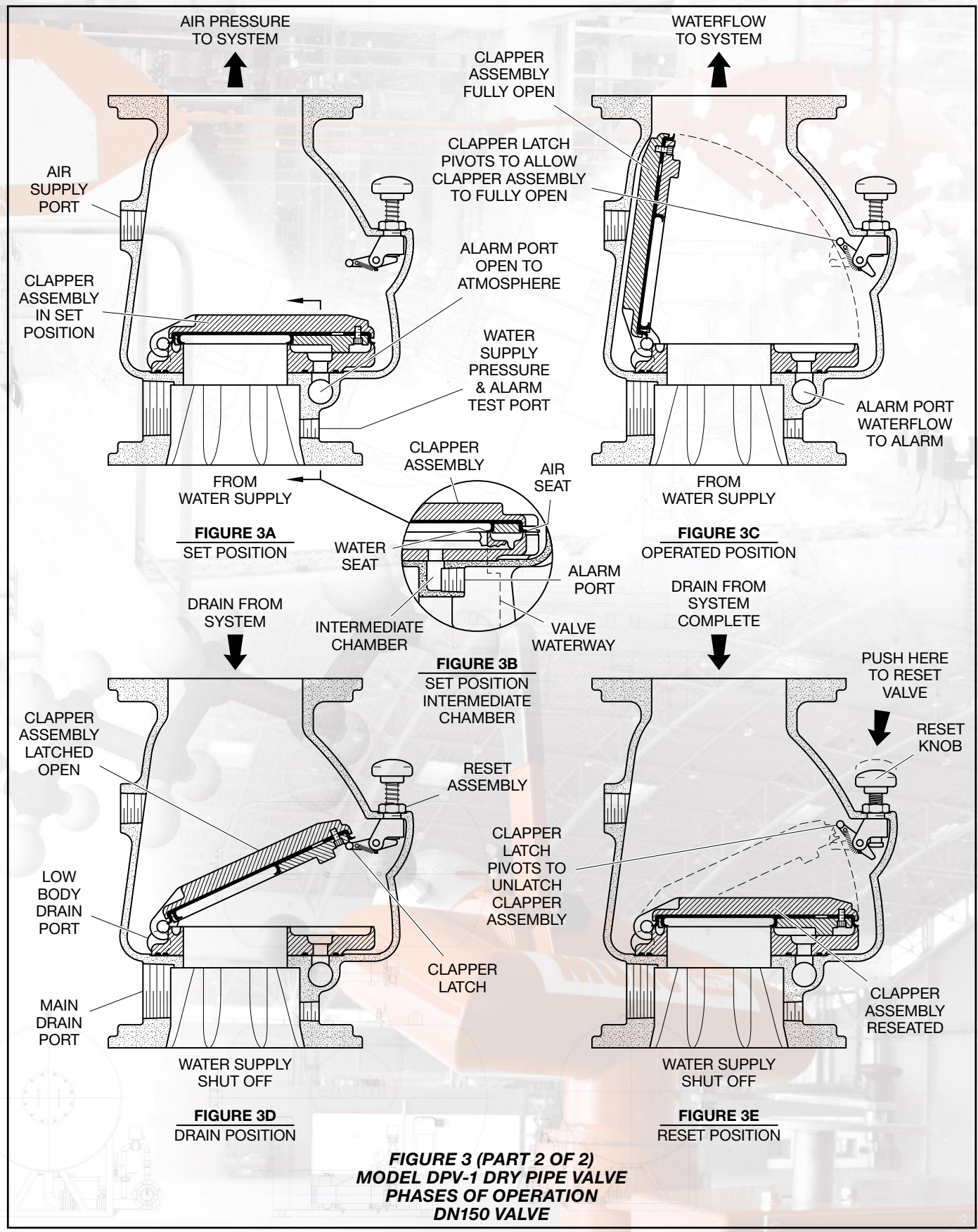
The TYCO Model DPV-1 Dry Pipe Valve is a differential type valve that utilizes a substantially lower system (air or nitrogen) pressure than the supply (water) pressure, to maintain the set position shown in Figure 3A. The differential nature of the DPV-1 valve is based on the area difference between 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 the DPV-1 valve has a nominal trip ratio of 5.5:1 (water to air).

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 valve is formed by the area between the air seat and water seat as shown in Figure 3B. 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 Figures 7 to 18. Having the intermediate chamber, Figure 3B, 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, if the system air pressure is 1,7 bar and there was 1,0 bar pressure trapped in the intermediate chamber, the resulting pressure across the top of the clapper would only be 0,7 bar. This pressure would be insufficient to hold the clapper assembly closed against a water supply pressure of 6,9 bar.

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,





NO.	DESCRIPTION	QTY.	P/N
1	Base	1	NR
2	Cover	1	NR
3	Upper Diaphragm Plate	1	See (c)
4	Pivot Plate Assembly	1	See (b)
4a	Spirol Pin	1	
4b	Pivot Plate	1	
5	Plunger	1	See (a)
5a	Pan Hd. Machine Screw	1	
5b	Upper Diaphragm Retaining Ring	2	
5c	Upper Diaphragm	1	
5d	Jam Nut	1	
6	Exhaust Valve	1	See (a)
6a	Upper Plug	1	
6b	Washer	1	
6c	Lower Diaphragm	1	
6d	Lower Plug	1	
6e	O-Ring*	1	
6f	O-Ring Retainer	1	
6g	Exhaust Valve Screw	1	
7	Rd. Head Machine Screw 1/4"-20 UNC x 5/8"	6	See (c)
8	Cover Gasket	1	See (a)
9	Vent Plug	1	See (c)
10	O-Ring*	1	See (a)
11	Restriction	1	See (a)
12	Restriction Access Plug	1	See (c)
13	Pan Hd. Machine Screw 10-32 UNF x 5/8"	4	See (b)
14	Cotter Pin	1	See (b)
15	Lever	1	See (b)
16	Retaining Ring	1	See (b)
17	Anti-Flood Valve	1	See (b)
18	Relief Valve	1	See (b)
19	Spring	1	See (b)
20	Relief Valve Seat	1	See (b)
21	O-Ring*	1	See (b)
22	Seal Washer	1	See (b)
23	Latch	1	See (a)
24	Fillister Hd. Machine Screw 1/4"-20 UNC x 1-1/2"	8	See (c)
25	Plug Seat	1	See (c)
26	O-Ring*	1	See (c)
27	O-Ring*	1	See (a)
28	Reset Knob	1	See (c)
29	Anti-Flood Seat Assembly w/Ball Float	1	See (b)
29a	Insert	1	
29b	Seal	1	
29c	Guide	1	
29d	Ball	1	
29e	Clip	1	
29f	O-Ring*	1	

* Requires thin film of FS3452 Fluorosilicone Grease
 NR: Not Replaceable

Kit	Replacement Part Kits Description	P/N
Repair Parts Kit (a)	Includes Items 5, 6, 8, 10, 11, 23, 27, and 1.5 grams of FS3452.	92-311-1-116
Replacement Parts Kit (b)	Includes Items 4, 13-22, 29, and 1.5 grams of FS3452.	92-311-1-117
Replacement Parts Kit (c)	Includes Items 3, 7, 9, 12, 24-26, 28, and 1.5 grams of FS3452.	92-311-1-118

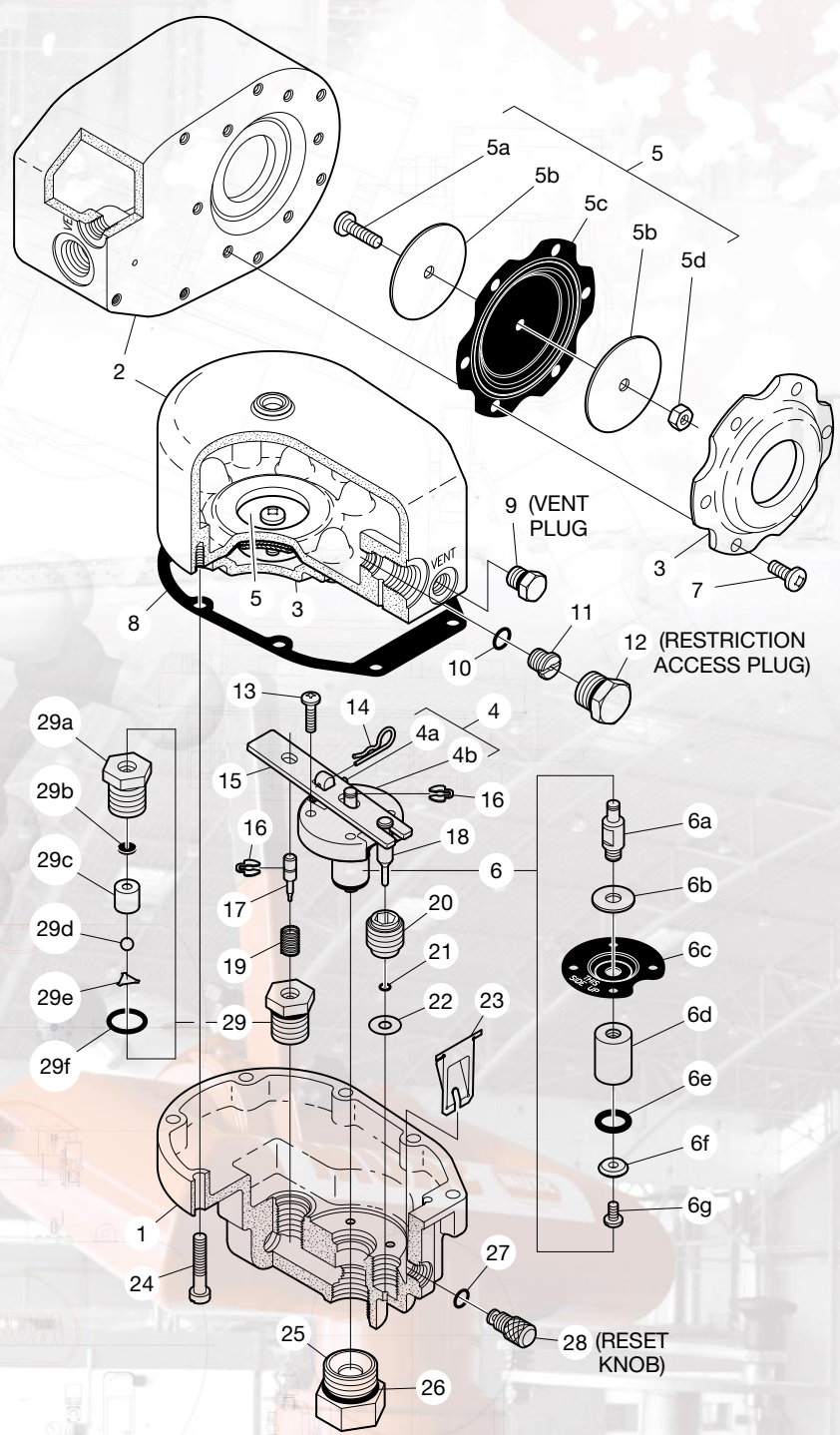
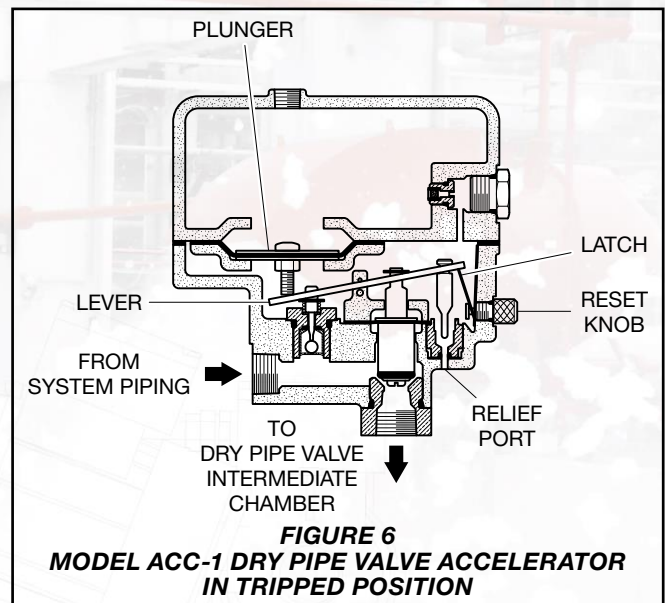
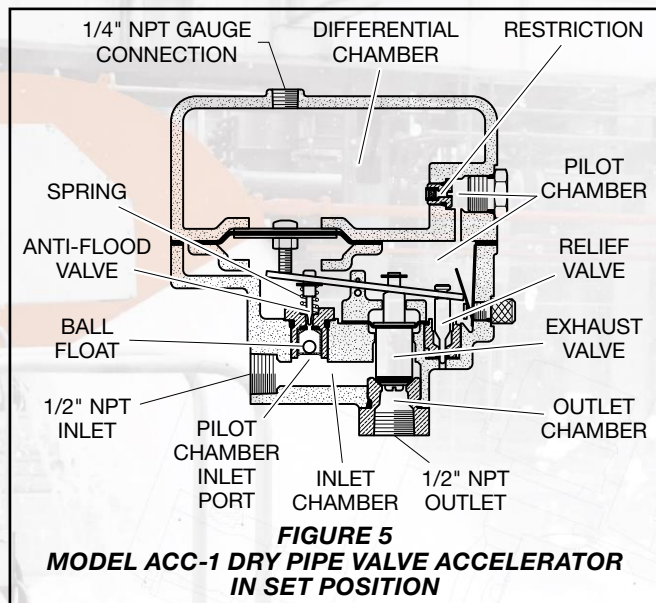


FIGURE 4
MODEL ACC-1 DRY PIPE VALVE ACCELERATOR ASSEMBLY



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 3C. 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 3B at the rear of the DPV-1 valve. As the flow through the alarm port exceeds the drain capacity of the automatic drain valve, the alarm line is pressurized to actuate system water flow alarms.

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 valve 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 3E. 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.

Accelerator Operation

The inlet chamber of the TYCO Model ACC-1 Dry Pipe Accelerator, as shown in Figure 5, is pressurized via its connection to the system. The pilot chamber is, in turn, pressurized through its inlet port which is formed by the annular opening around the lower tip of the anti-flood valve. As the

pilot chamber increases in pressure, the differential chamber is pressurized through the restriction.

The accelerator is in its set position while it is being pressurized as well as after the inlet, pilot chamber and differential chamber pressures have equalized. When in the set position, the outlet chamber is sealed off by the exhaust valve which is held against its seat by a combination of the spring pushing up against the lever and the net downward force exerted by the pressure in the pilot chamber.

Both small and slow changes in system pressure are accommodated by flow through the restriction. When, however, there is a rapid and steady drop in system (that is, inlet and pilot chamber) pressure, the pressure in the differential chamber reduces at a substantially lower rate. This condition creates a net downward force on the plunger which rotates the lever. As the lever is rotated as shown in Figure 6, the relief valve is raised out of the relief port and the anti-flood valve is depressed downward into the pilot chamber inlet port, venting the pilot chamber.

The system pressure in the inlet chamber then forces (raises) the exhaust valve off its seat. This continues the rotation of the lever into the tripped (latched) position as shown in Figure 6. As the exhaust valve is raised off its seat, system pressure is transmitted to the intermediate chamber of the dry pipe valve which neutralizes the differential pressure holding the valve closed.

Water and any water borne debris such as silt is prevented from entering the pilot chamber by virtue of the anti-flood valve having sealed off its inlet port.

After the accelerator/dry pipe valve has tripped and the sprinkler system has been drained, the piping from the system to the accelerator must also be drained and the accelerator reset/inspected according to the instructions given in the Valve Setting Procedure section.

The rate-of-flow through the restriction has been set such that the Model ACC-1 Dry Pipe Valve Accelerator provides the maximum practical sensitivity to a loss in system pressure due to a sprinkler operation while still being capable of automatically compensating for normal variations in system pressure such as are caused by environmental temperature changes. A test for verifying that the rate-of-flow through the restriction is within the range for optimum accelerator performance is given in the Valve Setting Procedure section.

Installation

NOTICE

Alteration of the trim may prevent the Model DPV-1 Dry Pipe Valve from functioning properly, as well as void approvals and the manufacturer's 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 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.

Install TYCO Model DPV-1 Dry Pipe Valves in accordance with the following criteria:

- The DPV-1 valve must be installed with factory assembled trim.
- 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.
- Installation of an air maintenance device, as described in the Technical Data Section, is recommended.
- It is best practice to install an appropriately rated and listed relief valve upstream of the DPV-1 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.
- An inspector's test connection must be provided on the system piping at the most remote location from the DPV-1 valve.
- Conduit and electrical connections are to be made in accordance with the requirements of the authority having jurisdiction.
- Before a system hydrostatic test is performed in accordance with the standards recognized by the Approval agency, in addition to any other authorities having jurisdiction, the clapper assembly is to be manually latched open as shown in Figure 3D; the automatic drain valve, as shown in Figures 7 to 18, is to be temporarily plugged; and, the handhole cover bolts are to be tightened using a cross-draw sequence.

Valve Setting Procedure

Perform this procedure 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.

See Figures 7 to 18 as applicable for the given riser arrangement and proceed as follows:

Step 1. Close the main control valve, and close the air supply control valve. If the DPV-1 valve is equipped with a dry pipe valve accelerator, close the accelerator control valve.

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. As applicable, place the three-way alarm control valve in the open position.

Step 4. Verify that the automatic drain valve has stopped draining to determine the DPV-1 valve is completely drained.

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 3E to allow the clapper assembly to reset.

Step 7. Pressurize the system with air (or nitrogen) to 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 in the valve trim to assure that the riser is completely drained. Close the low body drain valve as soon as water ceases to discharge.

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

Step 9. Verify that there is not any air discharging from the automatic drain valve.

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, see the Care and Maintenance section under Automatic Drain Valve Inspection to determine/correct the cause of the leakage problem.

Step 10. If the DPV-1 valve is equipped with a dry pipe valve accelerator, reset the dry pipe valve accelerator in accordance with Steps 10A through 10H. Otherwise, proceed to Step 11.

- a. While holding the plunger of the automatic drain valve depressed, open the accelerator control valve one-quarter turn and allow the water in the Accelerator piping to blow out. After water spray stops discharging, close the accelera-

tor control valve and then release the plunger.

- b. Slowly remove the vent plug located in the front of the accelerator cover and bleed off any residual air pressure in the differential chamber.
- c. Unscrew (counter-clockwise rotation) the knurled reset knob at the front of the accelerator until it resists further turning. A click, which is the sound of the lever snapping back into the set position, may be heard. Screw the reset knob back in until it is finger tight.

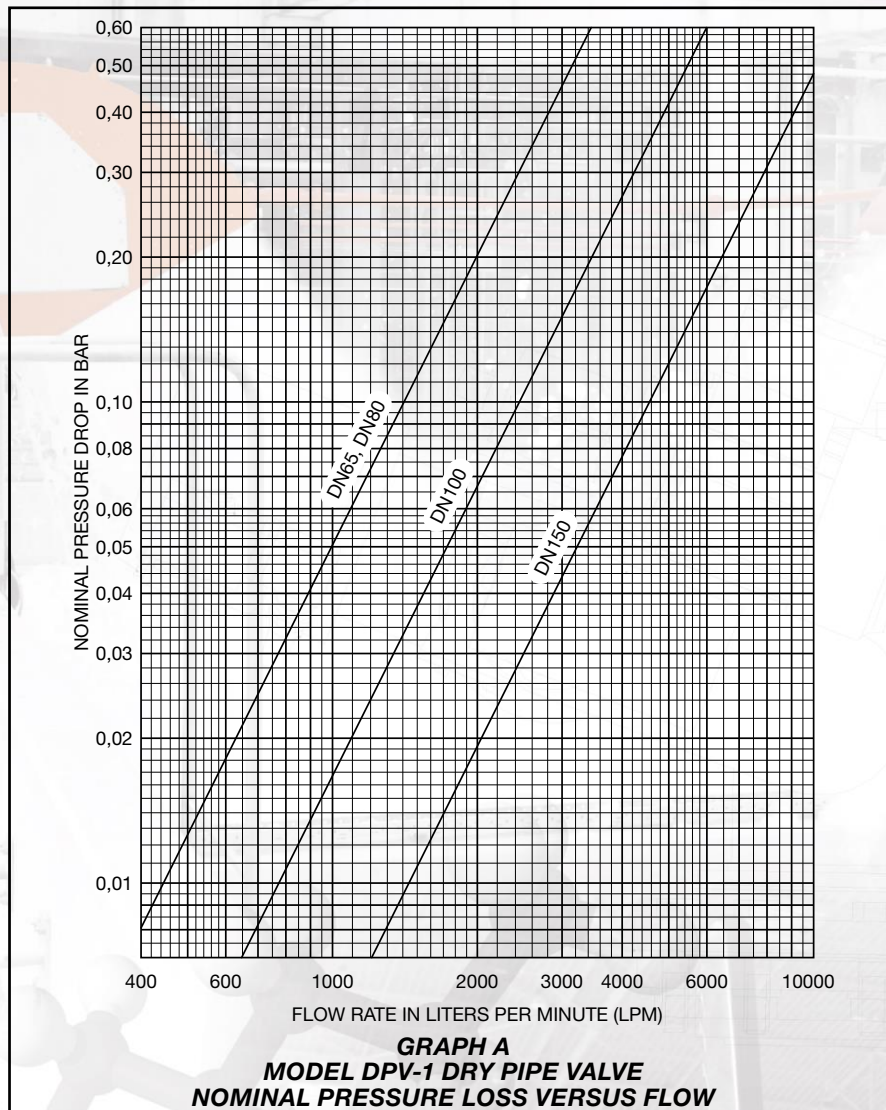
NOTICE

Do not wrench on the reset knob, since damage may result. The reset knob will turn with finger torque only.

- d. Replace the vent plug.
- e. Verify that the system air pressure has returned to normal.
- f. Using a watch, note the time for the pressure in the differential chamber of the accelerator to increase to 0,7 bar after the accelerator control valve is opened. The time should be within the range of values indicated in Table C for optimum performance of the accelerator. If the time to pressurize the differential chamber to 0,7 bar is not within the range of values given in the Table C, then the accelerator control valve should be closed and the corrective procedure described in the Care and Maintenance Section of ACC-1 Technical Data Sheet TFP1112 should be followed.
- g. When the air pressure in the differential chamber of the accelerator is equal to that in the system, then the accelerator is set and ready for service.
- h. Close the accelerator control valve and then slowly open the low body drain valve in the trim, to bleed off any excess water trapped above the dry pipe valve clapper. Close the low body drain valve, return system pressure to its normal value, and then re-open the accelerator control valve.

Step 11. Partially open the main control valve. Slowly close the main drain valve as soon as water discharges from the drain connection.

Verify that there is not any water discharging from the automatic drain valve.



Water Supply Pressure, bar	System Air Pressure Range, bar
1,4	0,7
4,1	1,0 - 1,6
5,5	1,4 - 1,9
6,9	1,7 - 2,3
8,3	2,1 - 2,6
10,0	2,4 - 3,0
11,4	2,8 - 3,3
12,8	3,1 - 3,7
14,1	3,4 - 4,0
15,5	3,8 - 4,3
16,0	4,1 - 4,6

TABLE B
SYSTEM AIR PRESSURE REQUIREMENTS

Pressure (bar)	Minimum (sec.)	Maximum (sec.)
1,4	24	160
1,7	18	116
2,1	15	92
2,8	10	60
3,5	8	48
4,1	6	36

TABLE C
ACCELERATOR DIFFERENTIAL CHAMBER FILL TIMES TO 0,7 BAR

NOTICE

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.

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 must first be obtained from the proper authorities and notify all personnel who may be affected by this decision must be notified.

Annual Operation Test Procedure

Proper operation of the Model DPV-1 Dry Pipe Valve (that is, opening of the DPV-1 valve during a fire condition) should be verified at least once a year as follows:

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, see 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 Model DPV-1 Dry Pipe Valve is ready to be placed in service and the Main Control Valve must then be fully opened.

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

Step 12. 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.

Care and Maintenance

The following procedures and inspections should be performed as indicated, in addition to any specific requirements of any authority having jurisdiction. Impairments must be immediately corrected.

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 any authority having jurisdiction. The installing contractor or product manufacturer should be contacted relative to any questions.

Automatic sprinkler systems are recommended to be inspected, tested, and maintained by a qualified inspection service.

Step 1. If water must be prevented from flowing beyond the riser, perform 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's 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.

The inside of the valve is recommended to be inspected at this time and prior to resetting the DPV-1 valve. See Steps 2 to 5 in the Inspection Procedure section on the Automatic Drain Valve for instructions on the inspection of the clapper facing.

Periodic Waterflow Alarm Test Procedure

Testing of the system waterflow alarms should be performed periodically based on the requirements of the authority having jurisdiction. To test the waterflow alarm, place the three-way alarm test valve in the "Test" position or open the standard alarm test valve, as applicable, which will allow a flow of water to the waterflow pressure alarm switch and/or water motor alarm. Upon satisfactory completion of the test, place the three-way alarm test valve in the "Open" position or close the standard alarm test valve, as applicable.

Water Pressure Inspection Procedure

The water pressure gauge is to be inspected periodically based on the requirements of the authority having jurisdiction to ensure that normal system water pressure is being maintained.

Air Pressure Inspection Procedure

The air pressure gauge is to be inspected periodically based on the requirements of the authority having jurisdiction to ensure that normal system air pressure is being maintained.

Automatic Drain Valve Inspection Procedure

The automatic drain valve should be inspected periodically based on the requirements of the authority having jurisdiction 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 (that is, 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, by closing the accelerator control valve, and open the inspector's test connection to relieve the system air pressure to 0 psig 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 D.
- e. Inspect to ensure all the hex bolts are securely tightened.

Nominal Valve Sizes DN	Handhole Cover Bolt Torque lb-ft (N-m)
DN65	20 (27)
DN80	20 (27)
DN100	20 (27)
DN150	45 (61)

TABLE D
HANDHOLE COVER BOLTS
RECOMMENDED TORQUE

Accelerator Inspection Procedure

It is recommended that the accelerator be inspected periodically based on the requirements of the authority having jurisdiction to determine proper operation of the accelerator without having to trip the dry pipe valve. This procedure must also be used whenever flooding the system would expose the water to freezing conditions.

See Technical Data Sheet TFP1112 for guidance with regard to trouble shooting of the Model ACC-1 Dry Pipe Valve Accelerator.

Step 1. Verify that the reset knob is screwed in.

Step 2. Close the system main control valve and open the main drain valve to relieve the supply pressure to the dry pipe valve.

Step 3. Verify that the accelerator control valve is open.

Step 4. Open the inspector's test connection. Verify that the time to accelerator trip is essentially the same as in previous tests. A momentary burst of air from the automatic drain valve indicates that the accelerator has tripped.

As the system pressure is decreasing, check for any sign of water being discharged from the accelerator relief port.

Step 5. Depress the plunger of the automatic drain valve. A steady stream of exhausting air indicates that the accelerator has properly latched in the tripped position.

Step 6. Close the accelerator control valve and the inspector's test connection.

Step 7. After the system automatically restores itself to its normal air pressure, reset the accelerator and dry pipe valve in accordance with the Valve Setting Procedure Steps 10 and 11.

P/N XX — X — XX — XX — X — XX											
END CONNECTION		SIZE		TRIM		SWITCH		STOP VALVE		ACCELERATOR	
27	Flange x Flange PN10/PN16	0	DN65 76,1 mm	88	EUR/FM with Three-Way Alarm Control Valve	1	PS10-1 or TPS10X1	00	To be ordered separately	00	None
28	Flange x Groove PN10/PN16	3	DN80 88,9 mm			89	EUR/FM with Standard Alarm Test Valve			00	To be ordered separately
2B	Groove x Groove	4	DN100 114,3 mm	00	To be ordered separately			01	European Conformity Trim with Accelerator and Accelerator Control Valve		
		6	DN150 168,3 mm								
		7	165,1 mm								

TABLE E
MODEL DPV-1 DRY PIPE VALVE WITH EUROPEAN CONFORMITY TRIM
FULLY TRIMMED VALVE ASSEMBLIES
PART NUMBER SELECTION

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).

Model DPV-1 Dry Pipe Valve with Assembled European Conformity Valve Trim

Specify: Fully Assembled Model DPV-1 Dry Pipe Valve with European Conformity Valve Trim, P/N (specify, see Table E).

Accessories

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

Supervisory Switch for Accelerator Control Valve. SUPSWITCHBI2DN15

Supervisory Switch for Water Motor Alarm Control Valve. SUPSWITCHBI2DN15

Air Pressure Relief Valve Factory-set at 3,1 bar. 92-343-1-020

Model WMA-1 Water Motor Alarm Red Finish Gong. 52-630-1-021R

A through Z Labels for Attaching to Valve Components. WS00000033

Supervisory Switch for Alarm Test/Shut-off Valve. WS00000011

Low Pressure Switch Kit. CEDPV1LPS

NO.	DESCRIPTION	QTY.	P/N	NO.	DESCRIPTION	QTY.	P/N
1	Copper Tube, 15 x 1 mm, Type B	1	WS00000082	20	Pipe Nipple, DN65 Valve, 1/2" BSP Thd x 100 mm	1	AP100D4
2	Pressure Relief Hose, Transparent 3 x 6 x 1.2 m	2	WS00000004	21	Pipe Nipple, DN80 Valve, 1/2" BSP Thd x 80 mm	1	AP80D4
3	Adapter Tee, DN15 Male Thd x DN15 Female Thd x DN15 Female Thd	1	TTDMDDFN	22	Pipe Nipple, 1/2" BSP Thd x 180 mm	1	AP180D4
4	Adapter Tee, DN15 Male Thd x DN15 Male Thd x DN15 Female Thd	2	TTDDMDFN	23	Pipe Nipple, 1-1/2" BSP Thd x 150 mm	1	AP150H2
5	Adapter Tee, DN15 x DN15 x DN15 Female Thd	1	TTDDDFN	24	Pipe Nipple, 3/4" BSP Thd x 100 mm	1	AP100E4
6	Reducer, DN20 Male Thd x DN15 Female Thd	1	RTEMDFN	25	Pipe Nipple, 1/2" BSP Thd x 100 mm	1	AP100D4
7	Reducer, DN20 Female Thd x DN15 Male Thd	1	RTDMEFN	26	Plug, 3/4" BSP Thd	1	A291E2
8	Adapter Reducer, DN15 Male Thd x DN8 Female Thd	2	RTDMBFN	27	Pipe Nipple, 1-1/2" BSP Thd	1	A280H2
9	Plug, DN15 Male Thd	2	PTDN	28	Reducing Tee, 1-1/2" x 1-1/2" x 1/2" BSP Female Thd	1	A130RHH2
10	Manifold, 1" BSP Female Thd, 3 x 1/2" BSP Female Thd Outlets	1	MANIF3WAY	29	Air Pressure Gauge, 250 PSI	1	923431012
11	Ball Valve, 3-way, 1/2" BSP	1	K00128	30	Model DPV-1 Dry Pipe Valve, Groove x Groove DN65 Valve	1	523131925
12	Elbow, DN20 Male Thd x DN20 Female Thd	2	ETEMEFN	31	Model DPV-1 Dry Pipe Valve, Groove x Groove DN80 Valve	1	523131930
13	Elbow, DN15 Male Thd x DN15 Female Thd	3	ETDMDFN	32	Elbow WES 3 mm/M5	2	406012
14	Adapter Elbow, DN15 Male Thd x 15 mm Compression	1	ETDMCON	33	Check Valve, DN15 Male Thd x DN15 Female Thd	1	305105
15	Elbow, DN15 x DN15 Male Thd	1	ETDDMN	34	1/2" Self-Closing Drain Valve	1	2162156
16	Elbow, DN15 x DN15 Female Thd	1	ETDDFN	35	Ball Valve, DN40 Thd	1	1610000480
17	Adapter Fitting, DN15 Female Thd x 15 mm Compression	1	ATDFCON	36	Ball Valve, DN20 Thd	1	1610000270
18	Adapter Fitting, DN15 x DN15 Male Thd	3	ATDDMN	37	Ball Valve, DN15 Thd	1	1610000210
19	Pipe Nipple, DN65 Valve, 1" BSP Thd x 90 mm	1	AP90F4	38	Pressure Alarm Switch, PS10-1 or TPS10X1	1	0260 or 100101
	Pipe Nipple, DN80 Valve, 1" BSP Thd x 80 mm	1	AP80F2	39	Water Pressure Gauge, 300 PSI / 21 bar	1	025500013

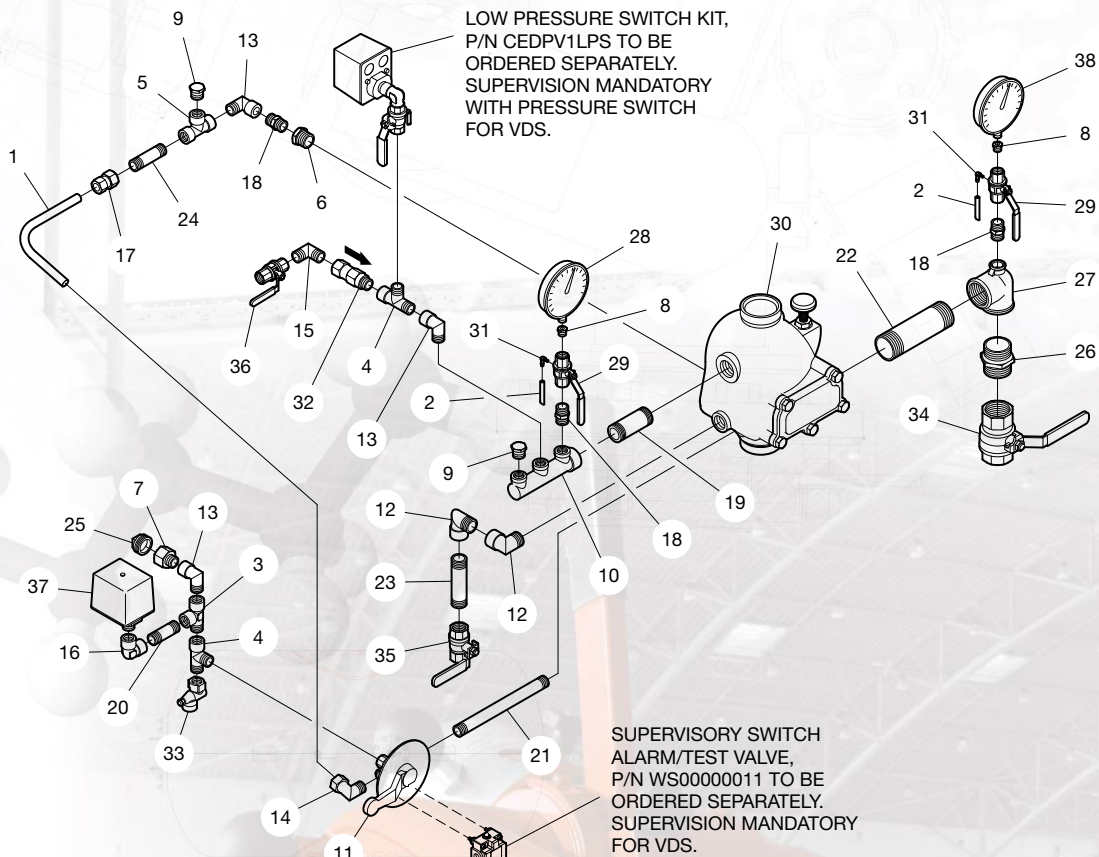


FIGURE 7
MODEL DPV-1 DRY PIPE VALVE EUROPEAN CONFORMITY TRIM
WITH THREE-WAY ALARM TEST VALVE
DN65 AND DN80

NO.	DESCRIPTION	QTY.	P/N
1	Copper Tube, 15 x 1 mm, Type B	1	WS00000082
2	Pressure Relief Hose, Transparent, 3 x 6 x 1.2 m	2	WS00000004
3	Adapter Tee, DN15 Male Thd x DN15 Female Thd x DN15 Female Thd	1	TTDMDFN
4	Adapter Tee, DN15 Male Thd x DN15 Male Thd x DN15 Female Thd	2	TTDDMDFN
5	Adapter Tee, DN15 x DN15 x DN15 Female Thd	1	TTDDDFN
6	Reducer, DN20 Male Thd x DN15 Female Thd	1	RTEMDFN
7	Reducer, DN20 Female Thd x DN15 Male Thd	1	RTDMEFN
8	Adapter Reducer, DN15 Male Thd x DN8 Female Thd	2	RTDMBFN
9	Plug, DN15 Male Thd	2	PTDN
11	Manifold, 1" BSP Female Thd, 3 x 1/2" BSP Female Thd Outlets	1	MANIF3WAY
12	Ball Valve, 3-way, 1/2" BSP	1	K00128
13	Elbow, DN20 Male Thd x DN20 Female Thd	2	ETEMEFN
14	Elbow, DN15 Male Thd x DN15 Female Thd	3	ETDMDFN
15	Adapter Elbow, DN15 Male Thd x 15 mm Compression	1	ETDMCON
16	Elbow, DN15 x DN15 Male Thd	1	ETDDMN
17	Elbow, DN15 x DN15 Female Thd	1	ETDDFN
18	Adapter Fitting, DN15 Female Thd x 15 mm Compression	1	ATDFCON
19	Adapter Fitting, DN15 x DN15 Male Thd	3	ATDDMN

NO.	DESCRIPTION	QTY.	P/N
20	Pipe Nipple, 1" BSP Thd x 80 mm	1	AP80F2
21	Pipe Nipple, 1/2" BSP Thd x 60 mm	1	AP60D4
22	Pipe Nipple, 1/2" BSP Thd x 180 mm	1	AP180D4
23	Pipe Nipple, 2" BSP Thd x 120 mm	1	AP120I2
24	Pipe Nipple, 3/4" BSP Thd x 100 mm	1	AP100E4
25	Pipe Nipple, 1/2" BSP Thd x 100 mm	1	AP100D4
26	Plug, 3/4" BSP Thd	1	A291E2
27	Pipe Nipple, 2" BSP Thd	1	A280I2
28	Reducing Tee, 2" x 2" x 1/2", BSP Female Thd	1	A130RIID2
29	Air Pressure Gauge, 250 PSI	1	923431012
30	Ball Valve, DN15 with M5 Vent Hole	2	59304FO
31	Model DPV-1 Dry Pipe Valve, Groove x Groove, DN100	1	523091923
32	Elbow WES 3 mm/M5	2	406012
33	Check Valve, DN15 Male Thd x DN15 Female Thd	1	305105
34	1/2" Self-Closing Drain Valve	1	2162156
35	Ball Valve, DN50 Thd	1	1610000600
36	Ball Valve, DN20 Thd	1	1610000270
37	Ball Valve, DN15 Thd	1	1610000210
38	Pressure Alarm Switch, PS10-1 or TPS10X1	1	0260 or 100101
39	Water Pressure Gauge, 300 PSI / 21 bar	1	025500013

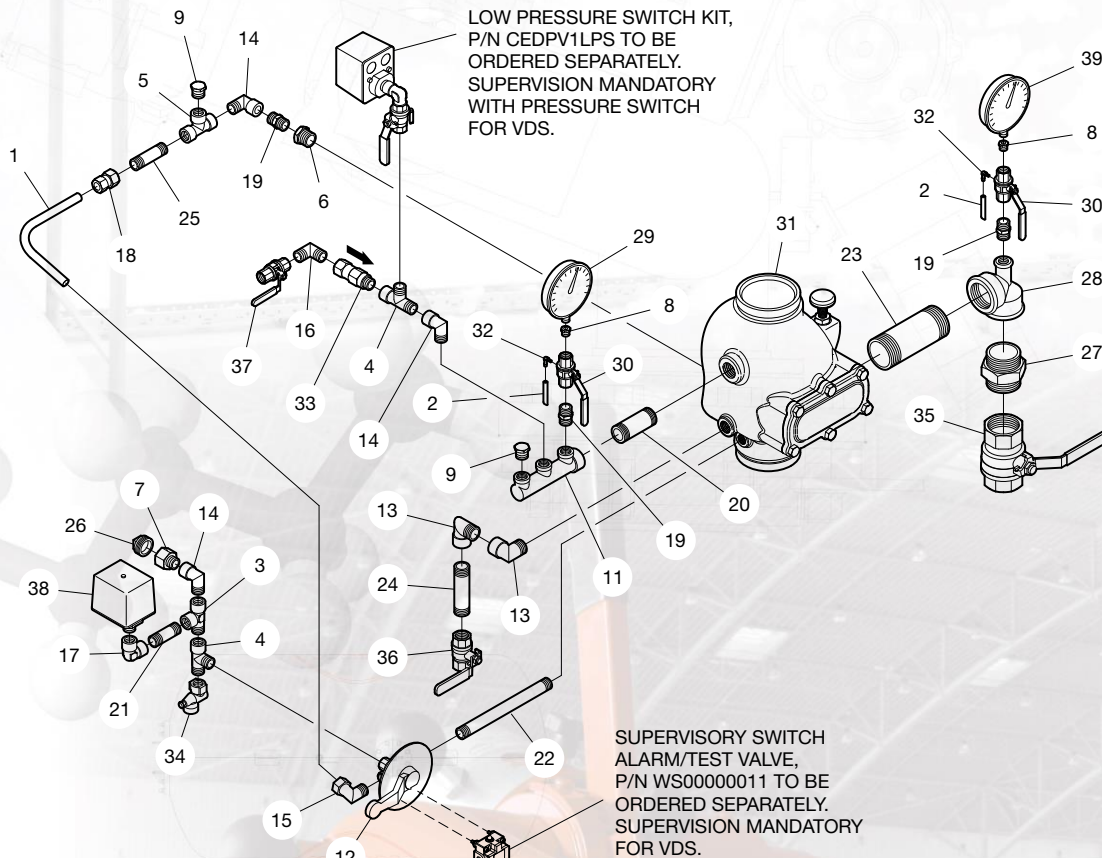
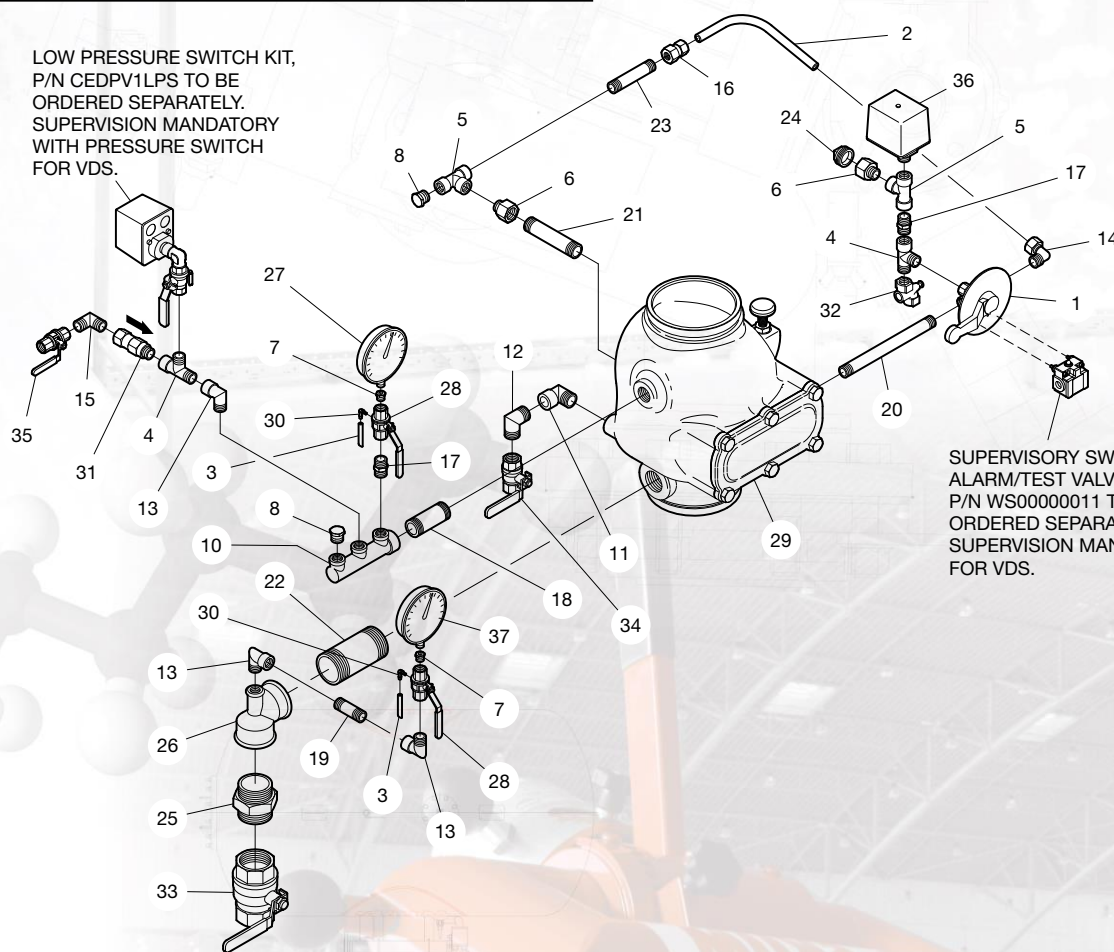


FIGURE 8
MODEL DPV-1 DRY PIPE VALVE EUROPEAN CONFORMITY TRIM
WITH THREE-WAY ALARM TEST VALVE
DN100

NO.	DESCRIPTION	QTY.	P/N
1	Ball Valve, 3-way, 1/2" BSP	1	WS0000095
2	Copper Tube, 15 x 1 mm, Type B	1	WS0000082
3	Pressure Relief Hose, Transparent, 3 x 6 x 1.2 m	2	WS0000004
4	Adapter Tee, DN15 Male Thd x DN15 Male Thd x DN15 Female Thd	2	TTDDMDFN
5	Adapter Tee, DN15 x DN15 x DN15 Female Thd	2	TTDDDFN
6	Reducer, DN20 Female Thd x DN15 Male Thd	2	RTDMEFN
7	Adapter Reducer, DN15 Male Thd x DN8 Female Thd	2	RTDMBFN
8	Plug, DN15 Male Thd	2	PTDN
10	Manifold, 1" BSP Female Thd, 3 x 1/2" BSP Female Thd Outlets	1	MANIF3WAY
11	Elbow, DN20 Male Thd x DN20 Female Thd	1	ETEMEFN
12	Elbow, DN20 Male Thd x DN20 Male Thd	1	ETEEMN
13	Elbow, DN15 Male Thd x DN15 Female Thd	3	ETDMDFN
14	Adapter Elbow, DN15 Male Thd x 15 mm Compression	1	ETDMCON
15	Elbow, DN15 x DN15 Male Thd	1	ETDDMN
16	Adapter Fitting, DN15 Female Thd x 15 mm Compression	1	ATDFCON
17	Adapter Fitting, DN15 x DN15 Male Thd	2	ATDDMN
18	Pipe Nipple, 1" BSP Thd x 80 mm	1	AP80F2
19	Pipe Nipple, 1/2" BSP Thd x 60 mm	1	AP60D4

NO.	DESCRIPTION	QTY.	P/N
20	Pipe Nipple, 1/2" BSP Thd x 180 mm	1	AP180D4
21	Pipe Nipple, 3/4" BSP Thd x 120 mm	1	AP120E4
22	Pipe Nipple, 2" BSP Thd x 100 mm	1	AP100J2
23	Pipe Nipple, 1/2" BSP Thd x 100 mm	1	AP100D4
24	Plug, 3/4" BSP Thd	1	A291E2
25	Pipe Nipple, 2" BSP Thd	1	A280I2
26	Reducing Tee, 2" x 2" x 1/2", BSP Female Thd	1	A130RIID2
27	Air Pressure Gauge, 250 PSI	1	923431012
28	Ball Valve, DN15 with M5 Vent Hole	2	59304FO
29	Model DPV-1 Dry Pipe Valve, Groove x Groove, DN150	1	523131960
30	Elbow WES 3 mm/M5	2	406012
31	Check Valve, DN15 Male Thd x DN15 Female Thd	1	305105
32	1/2" Self-Closing Drain Valve	1	2162156
33	Ball Valve, DN50 Thd	1	161000600
34	Ball Valve, DN20 Thd	1	1610000270
35	Ball Valve, DN15 Thd	1	1610000210
36	Pressure Alarm Switch, PS10-1 or TPS10X1	1	0260 or 100101
37	Water Pressure Gauge, 300 PSI / 21 bar	1	025500013

LOW PRESSURE SWITCH KIT,
 P/N CEDPV1LPS TO BE
 ORDERED SEPARATELY.
 SUPERVISION MANDATORY
 WITH PRESSURE SWITCH
 FOR VDS.



SUPERVISORY SWITCH
 ALARM/TEST VALVE,
 P/N WS0000011 TO BE
 ORDERED SEPARATELY.
 SUPERVISION MANDATORY
 FOR VDS.

FIGURE 9
MODEL DPV-1 DRY PIPE VALVE EUROPEAN CONFORMITY TRIM
WITH THREE-WAY ALARM TEST VALVE
DN150

NO.	DESCRIPTION	QTY.	P/N	NO.	DESCRIPTION	QTY.	P/N
1	Copper Tube, 15 x 1 mm, Type B	1	WS0000082	21	Pipe Nipple, 1/2" BSP Thd x 60 mm	2	AP60D4
2	Copper Tube, 1 mm x 1 m	1	WS0000008	22	Pipe Nipple, 1-1/2" BSP Thd x 150 mm	1	AP150H2
3	Pressure Relief Hose, Transparent 3 x 6 x 1.2 m	2	WS0000004	23	Pipe Nipple, 3/4" BSP Thd x 100 mm	1	AP100E4
4	Pressure Relief Hose, Transparent 3 x 6 x 1.2 m	2	WS0000004	24	Pipe Nipple, DN65 Valve, 1/2" BSP Thd x 120 mm	1	AP120D4
5	Adapter Tee, DN15 Male Thd x DN15 Female Thd x DN15 Female Thd	3	TTDMDDFN	24	Pipe Nipple, DN80 Valve, 1/2" BSP Thd x 100 mm	1	AP100D4
6	Adapter Tee, DN15 Male Thd x DN15 Male Thd x DN15 Female Thd	2	TTDDMDFN	25	Plug, 3/4" BSP Thd	1	A291E2
7	Adapter Tee, DN15 x DN15 x DN15 Female Thd	1	TTDDDFN	26	Pipe Nipple, 1-1/2" BSP Thd	1	A280H2
8	Reducer, DN20 Male Thd x DN15 Female Thd	1	RTEMDFN	27	Reducing Tee, 1-1/2" x 1-1/2" x 1/2" BSP Female Thd	1	A130RHHD2
9	Reducer, DN20 Female Thd x DN15 Male Thd	1	RTDMEFN	28	Air Pressure Gauge, 250 PSI	1	923431012
10	Adapter Reducer, DN15 Male Thd x DN8 Female Thd	3	RTDMBFN	29	Anti Flood Fitting, 3/32" Restriction	1	920321002
11	Plug, DN15 Male Thd	2	PTDN	30	Ball Valve, DN15 with M5 Vent Hole	2	59304FO
12	Manifold, 1" BSP Female Thd, 3 x 1/2" BSP Female Thd Outlets	1	MANIF3WAY	31	Model DPV-1 Dry Pipe Valve, Groove x Groove DN65 Valve	1	523131925
13	Elbow, DN20 Male Thd x DN20 Female Thd	2	ETEMEFN	31	Model DPV-1 Dry Pipe Valve, Groove x Groove DN80 Valve	1	523131930
14	Elbow, DN15 Male Thd x DN15 Female Thd	3	ETDMDFN	32	Elbow WES 3 mm/M5	2	406012
15	Elbow, DN15 x DN15 Male Thd	1	ETDDMN	33	Check Valve, DN15 Male Thd x DN15 Female Thd	1	305105
16	Elbow, DN15 x DN15 Female Thd	1	ETDDFN	34	1/2" Self-Closing Drain Valve	1	2162156
17	Adapter Fitting, DN15 Male Thd x 15 mm Compression	1	ATDMCON	35	Ball Valve, DN40 Thd	1	1610000480
18	Adapter Fitting, DN15 Female Thd x 15 mm Compression	1	ATDFCON	36	Ball Valve, DN20 Thd	1	1610000270
19	Adapter Fitting, DN15 x DN15 Male Thd	3	ATDDMN	37	Ball Valve, DN15 Thd	3	1610000210
20	Pipe Nipple, DN65 Valve, 1" BSP Thd x 90 mm	1	AP90F4	38	Pressure Alarm Switch, PS10-1 or TPS10X1	1	0260 or 100101
	Pipe Nipple, DN80 Valve, 1" BSP Thd x 80 mm	1	AP80F2	38	Water Pressure Gauge, 300 PSI / 21 bar	1	025500013

LOW PRESSURE SWITCH KIT, P/N CEDPV1LPS TO BE ORDERED SEPARATELY. SUPERVISION MANDATORY WITH PRESSURE SWITCH FOR FM/VDS/LPCB.

SUPERVISORY SWITCH, WATER MOTOR ALARM, P/N SUPSWITCHBI2DN15 TO BE ORDERED SEPARATELY. SUPERVISION MANDATORY FOR VDS.

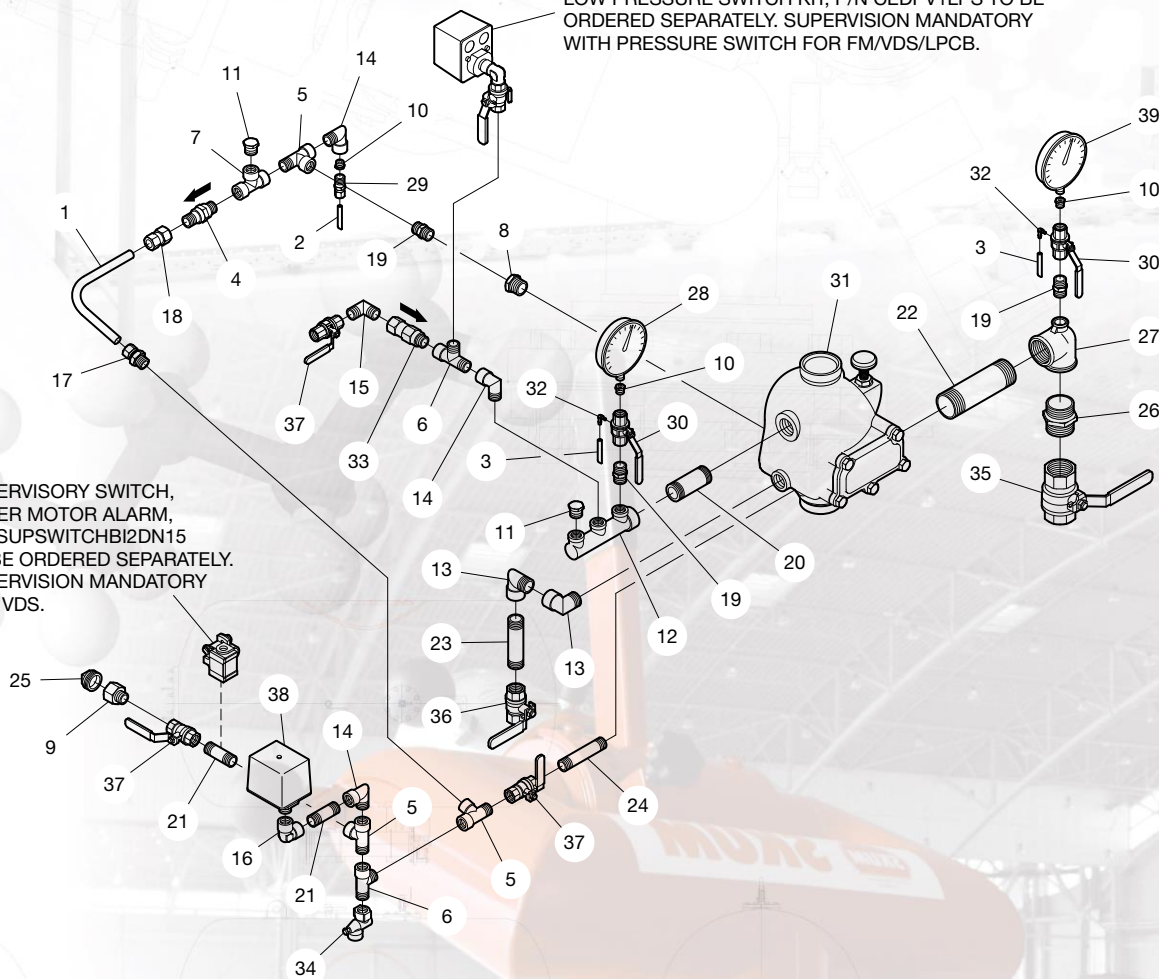


FIGURE 10
MODEL DPV-1 DRY PIPE VALVE EUROPEAN CONFORMITY TRIM
WITH STANDARD ALARM TEST VALVE
DN65 AND DN80

NO.	DESCRIPTION	QTY.	P/N
1	Copper Tube, 15 x 1 mm, Type B	1	WS0000082
2	Copper Tube, 1 mm x 1 m	1	WS0000008
3	Pressure Relief Hose, Transparent, 3 x 6 x 1.2 m	2	WS0000004
4	Spring Loaded Check Valve, 1/2" NPT	1	V923221002
5	Adapter Tee, DN15 Male Thd x DN15 Female Thd x DN15 Female Thd	3	TTDDMDFN
6	Adapter Tee, DN15 Male Thd x DN15 Male Thd x DN15 Female Thd	2	TTDDMDFN
7	Adapter Tee, DN15 x DN15 x DN15 Female Thd	1	TTDDDFN
8	Reducer, DN20 Male Thd x DN15 Female Thd	1	RTEMDFN
9	Reducer, DN20 Female Thd x DN15 Male Thd	1	RTDMEFN
10	Adapter Reducer, DN15 Male Thd x DN8 Female Thd	3	RTDMBFN
11	Plug, DN15 Male Thd	2	PTDN
12	Manifold, 1" BSP Female Thd, 3 x 1/2" BSP Female Thd Outlets	1	MANIF3WAY
13	Elbow, DN20 Male Thd x DN20 Female Thd	2	ETEMEFN
14	Elbow, DN15 Male Thd x DN15 Female Thd	3	ETDMDFN
15	Elbow, DN15 x DN15 Male Thd	1	ETDDMN
16	Elbow, DN15 x DN15 Female Thd	1	ETDDFN
17	Adapter Elbow, DN15 Male Thd x 15 mm Compression	1	ETDMCON
18	Adapter Fitting, DN15 Female Thd x 15 mm Compression	1	ATDFCON

NO.	DESCRIPTION	QTY.	P/N
19	Adapter Fitting, DN15 x DN15 Male Thd	3	ATDDMN
20	Pipe Nipple, 1" BSP Thd x 80 mm	1	AP80F2
21	Pipe Nipple, 1/2" BSP Thd x 60 mm	2	AP60D4
22	Pipe Nipple, 2" BSP Thd x 120 mm	1	AP120I2
23	Pipe Nipple, 3/4" BSP Thd x 100 mm	1	AP100E4
24	Pipe Nipple, 1/2" BSP Thd x 100 mm	1	AP100D4
25	Plug, 3/4" BSP Thd	1	A291E2
26	Pipe Nipple, 2" BSP Thd	1	A280I2
27	Reducing Tee, 2" x 2" x 1/2", BSP Female Thd	1	A130RIID2
28	Air Pressure Gauge, 250 PSI	1	923431012
29	Anti Flood Fitting, 3/32" Restriction	1	920321002
30	Ball Valve, DN15 with M5 Vent Hole	2	59304FO
31	Model DPV-1 Dry Pipe Valve, Groove x Groove, DN100	1	523091923
32	Elbow WES 3 mm/M5	2	406012
33	Check Valve, DN15 Male Thd x DN15 Female Thd	1	305105
34	1/2" Self-Closing Drain Valve	1	2162156
35	Ball Valve, DN50 Thd	1	1610000600
36	Ball Valve, DN20 Thd	1	1610000270
37	Ball Valve, DN15 Thd	1	1610000210
38	Pressure Alarm Switch, PS10-1 or TPS10X1	1	0260 or 100101
39	Water Pressure Gauge, 300 PSI / 21 bar	1	025500013

LOW PRESSURE SWITCH KIT, P/N CEDPV1LPS TO BE ORDERED SEPARATELY. SUPERVISION MANDATORY WITH PRESSURE SWITCH FOR FM/VDS/LPCB.

SUPERVISORY SWITCH, WATER MOTOR ALARM, P/N SUPSWITCHBI2DN15 TO BE ORDERED SEPARATELY. SUPERVISION MANDATORY FOR VDS.

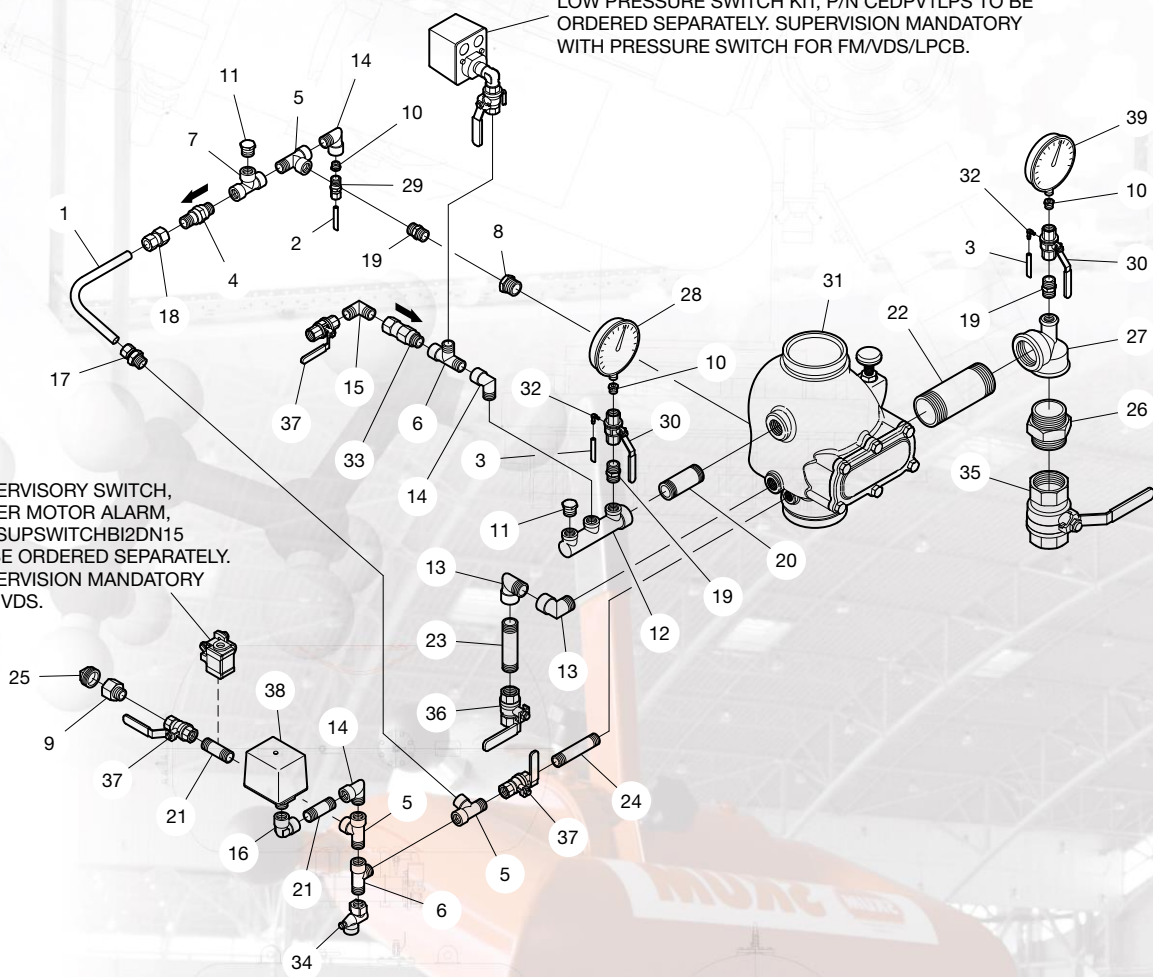
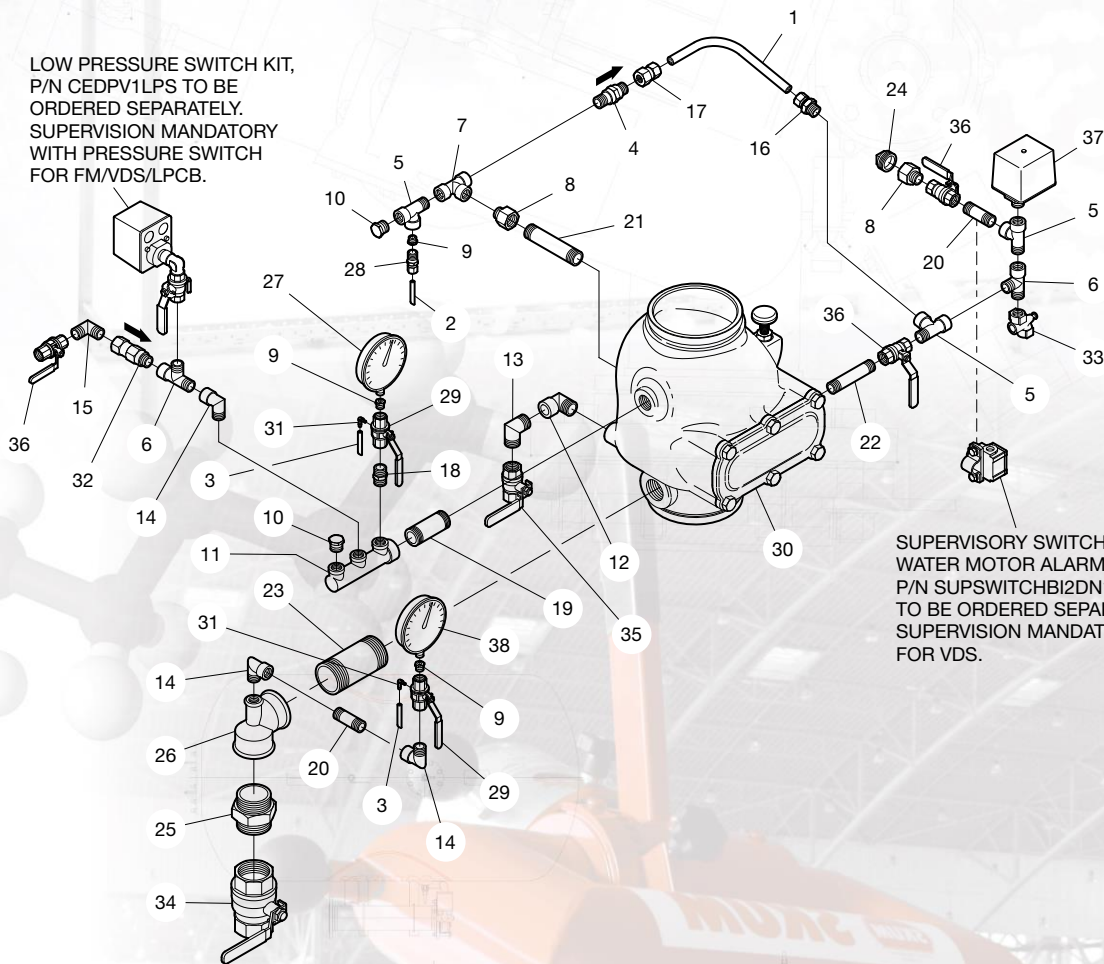


FIGURE 11
MODEL DPV-1 DRY PIPE VALVE EUROPEAN CONFORMITY TRIM
WITH STANDARD ALARM TEST VALVE
DN100

NO.	DESCRIPTION	QTY.	P/N	NO.	DESCRIPTION	QTY.	P/N
1	Copper Tube, 15 x 1 mm, Type B	1	WS00000082	19	Pipe Nipple, 1" BSP Thd x 80 mm	1	AP80F2
2	Copper Tube, 1 mm x 1 m	1	WS00000008	20	Pipe Nipple, 1/2" BSP Thd x 60 mm	2	AP60D4
3	Pressure Relief Hose, Transparent, 3 x 6 x 1.2 m	2	WS00000004	21	Pipe Nipple, 3/4" BSP Thd x 120 mm	1	AP120E4
4	Spring Loaded Check Valve, 1/2" NPT	1	V923221002	22	Pipe Nipple, 1/2" BSP Thd x 120 mm	1	AP120D4
5	Adapter Tee, DN15 Male Thd x DN15 Female Thd x DN15 Female Thd	3	TTDMDFFN	23	Pipe Nipple, 2" BSP Thd x 100 mm	1	AP100I2
6	Adapter Tee, DN15 Male Thd x DN15 Male Thd x DN15 Female Thd	2	TTDDMDFN	24	Plug, 3/4" BSP Thd	1	A291E2
7	Adapter Tee, DN15 x DN15 x DN15 Female Thd	1	TTDDDFN	25	Pipe Nipple, 2" BSP Thd	1	A280I2
8	Reducer, DN20 Female Thd x DN15 Male Thd	2	RTDMEFN	26	Reducing Tee, 2" x 2" x 1/2", BSP Female Thd	1	A130RIID2
9	Adapter Reducer, DN15 Male Thd x DN8 Female Thd	3	RTDMBFN	27	Air Pressure Gauge, 250 PSI	1	923431012
10	Plug, DN15 Male Thd	2	PTDN	28	Anti Flood Fitting, 3/32" Restriction	1	920321002
11	Manifold, 1" BSP Female Thd, 3 x 1/2" BSP Female Thd Outlets	1	MANIF3WAY	29	Ball Valve, DN15 with M5 Vent Hole	2	59304FO
12	Elbow, DN20 Male Thd x DN20 Female Thd	1	ETEMEFN	30	Model DPV-1 Dry Pipe Valve, Groove x Groove, DN150	1	523131960
13	Elbow, DN20 Male Thd x DN20 Male Thd	1	ETEEMN	31	Elbow WES 3 mm/M5	2	406012
14	Elbow, DN15 Male Thd x DN15 Female Thd	3	ETDMDFN	32	Check Valve, DN15 Male Thd x DN15 Female Thd	1	305105
15	Elbow, DN15 x DN15 Male Thd	1	ETDDMN	33	1/2" Self-Closing Drain Valve	1	2162156
16	Adapter Fitting, DN15 Male Thd x 15 mm Compression	1	ATDMCON	34	Ball Valve, DN50 Thd	1	161000600
17	Adapter Fitting, DN15 Female Thd x 15 mm Compression	1	ATDFCON	35	Ball Valve, DN20 Thd	1	1610000270
18	Adapter Fitting, DN15 x DN15 Male Thd	1	ATDDMN	36	Ball Valve, DN15 Thd	1	1610000210
				37	Pressure Alarm Switch, PS10-1 or TPS10X1	1	0260 or 100101
				38	Water Pressure Gauge, 300 PSI / 21 bar	1	025500013

LOW PRESSURE SWITCH KIT, P/N CEDPV1LPS TO BE ORDERED SEPARATELY. SUPERVISION MANDATORY WITH PRESSURE SWITCH FOR FM/VDS/LPCB.



SUPERVISORY SWITCH, WATER MOTOR ALARM, P/N SUPSWITCHBI2DN15 TO BE ORDERED SEPARATELY. SUPERVISION MANDATORY FOR VDS.

FIGURE 12
MODEL DPV-1 DRY PIPE VALVE EUROPEAN CONFORMITY TRIM
WITH STANDARD ALARM TEST VALVE
DN150

NO.	DESCRIPTION	QTY.	P/N	NO.	DESCRIPTION	QTY.	P/N
1	Copper Tube, 15 x 1 mm, Type D	1	WS00000086	22	Pipe Nipple, DN65 Valve, 1/2" BSP Thd x 100 mm	1	AP100D4
2	Copper Tube, 15 x 1 mm, Type C	1	WS00000083		Pipe Nipple, DN80 Valve, 1/2" BSP Thd x 80 mm	1	AP80D4
3	Copper Tube, 15 x 1 mm, Type B	1	WS00000082	23	Pipe Nipple, 1/2" BSP Thd x 60 mm	1	AP60D4
4	Pressure Relief Hose, Transparent, 3 x 6 x 1.2 m	2	WS00000004	24	Pipe Nipple, 1/2" BSP Thd x 180 mm	1	AP180D4
5	Adapter Tee, DN15 Male Thd x DN15 Female Thd x DN15 Female Thd	1	TTDMDDFN	25	Pipe Nipple, 1-1/2" BSP Thd x 150 mm	1	AP150H2
6	Adapter Tee, DN15 Male Thd x DN15 Male Thd x DN15 Female Thd	2	TTDDMDFN	26	Pipe Nipple, 3/4" BSP Thd x 100 mm	1	AP100E4
7	Adapter Tee, DN15 x DN15 x DN15 Female Thd	1	TTDDDFN	27	Pipe Nipple, 1/2" BSP Thd x 100 mm	1	AP100D4
8	Reducer, DN20 Male Thd x DN15 Female Thd	1	RTEMDFN	28	Plug, 3/4" BSP Thd	1	A291E2
9	Reducer, DN20 Female Thd x DN15 Male Thd	1	RTDMEFN	29	Pipe Nipple, 1-1/2" BSP Thd	1	A280H2
10	Adapter Reducer, DN15 Male Thd x DN8 Female Thd	2	RTDMBFN	30	Reducing Tee, 1-1/2" x 1-1/2" x 1/2", BSP Female Thd	1	A130RHHD2
11	Manifold, 1" BSP Female Thd, 3 x 1/2" BSP Female Thd Outlets	1	MANIF3WAY	31	Air Pressure Gauge, 250 PSI	2	923431012
12	Ball Valve, 3-way, 1/2" BSP	1	K00128	32	Plug, 3/4" BSP Thd	2	59304FO
13	Elbow, DN20 Male Thd x DN20 Female Thd	2	ETEMEFN	33	Model ACC-1 Dry Pipe Valve Accelerator	1	523111001
14	Elbow, DN15 Male Thd x DN15 Female Thd	4	ETDMDFN	34	Model DPV-1 Dry Pipe Valve, Groove x Groove DN65 Valve	1	523131925
15	Adapter Elbow, DN15 Male Thd x 15 mm Compression	4	ETDMCON		DN80 Valve	1	523131930
16	Elbow, DN15 x DN15 Male Thd	1	ETDDMN	35	Elbow WES 3 mm/M5	2	406012
17	Elbow, DN15 x DN15 Female Thd	1	ETDDFN	36	Check Valve, DN15 Male Thd x DN15 Female Thd	1	305105
18	Adapter Fitting, DN15 Male Thd x 15 mm Compression	3	ATDMCON	37	1/2" Self-Closing Drain Valve	1	2162156
19	Adapter Fitting, DN15 Female Thd x 15 mm Compression	1	ATDFCON	38	Ball Valve, DN40 Thd	1	1610000480
20	Adapter Fitting, DN15 x DN15 Male Thd	3	ATDDMN	39	Ball Valve, DN20 Thd	1	1610000270
21	Pipe Nipple, DN65 Valve, 1" BSP Thd x 90 mm	1	AP90F4	40	Ball Valve, DN15 Thd	2	1610000210
	Pipe Nipple, DN80 Valve, 1" BSP Thd x 80 mm	1	AP80F2	41	Pressure Alarm Switch, PS10-1 or TPS10X1	1	0260 or 100101
				42	Water Pressure Gauge, 300 PSI / 21 bar	1	025500013

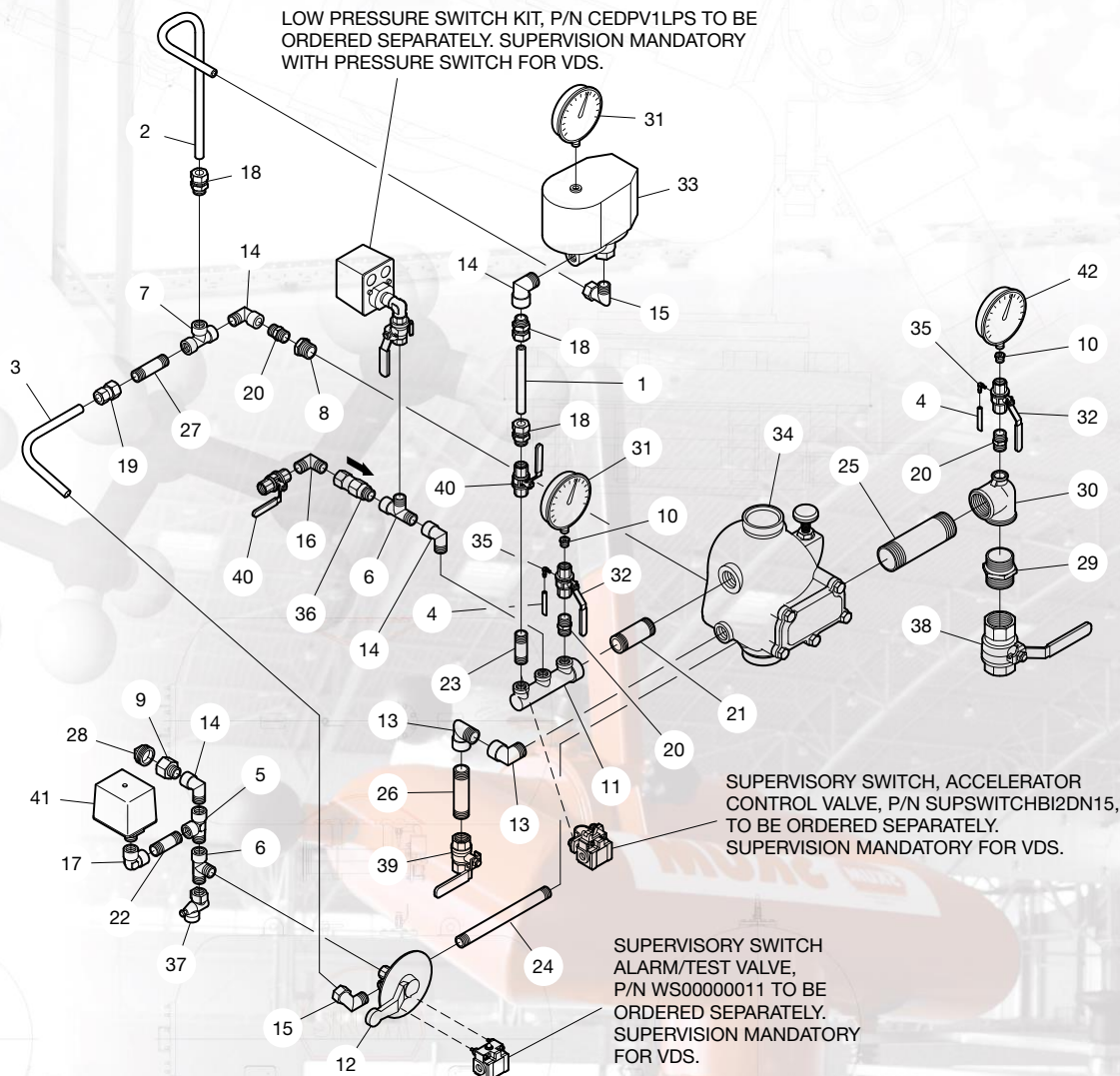


FIGURE 13
MODEL DPV-1 DRY PIPE VALVE EUROPEAN CONFORMITY TRIM
WITH THREE-WAY ALARM TEST VALVE AND MODEL ACC-1 ACCELERATOR
DN65 AND DN80

NO.	DESCRIPTION	QTY.	P/N
1	Copper Tube, 15 x 1 mm, Type D	1	WS00000086
2	Copper Tube, 15 x 1 mm, Type C	1	WS00000083
3	Copper Tube, 15 x 1 mm, Type B	1	WS00000082
4	Pressure Relief Hose, Transparent, 3 x 6 x 1.2 m	2	WS00000004
5	Adapter Tee, DN15 Male Thd x DN15 Female Thd x DN15 Female Thd	1	TTDMDDFN
6	Adapter Tee, DN15 Male Thd x DN15 Male Thd x DN15 Female Thd	2	TTDDMDFN
7	Adapter Tee, DN15 x DN15 x DN15 Female Thd	1	TTDDDFN
8	Reducer, DN20 Male Thd x DN15 Female Thd	1	RTEMDFN
9	Reducer, DN20 Female Thd x DN15 Male Thd	1	RTDMEFN
10	Adapter Reducer, DN15 Male Thd x DN8 Female Thd	2	RTDMBFN
11	Manifold, 1" BSP Female Thd, 3 x 1/2" BSP Female Thd Outlets	1	MANIF3WAY
12	Ball Valve, 3-way, 1/2" BSP	1	K00128
13	Elbow, DN20 Male Thd x DN20 Female Thd	2	ETEMEFN
14	Elbow, DN15 Male Thd x DN15 Female Thd	4	ETDMDFN
15	Adapter Elbow, DN15 Male Thd x 15 mm Compression	2	ETDMCFN
16	Elbow, DN15 x DN15 Male Thd	1	ETDDMN
17	Elbow, DN15 x DN15 Female Thd	1	ETDDFN
18	Adapter Fitting, DN15 Male Thd x 15 mm Compression	3	ATDMCFN
19	Adapter Fitting, DN15 Female Thd x 15 mm Compression	1	ATDFCFN
20	Adapter Fitting, DN15 x DN15 Male Thd	3	ATDDMN

NO.	DESCRIPTION	QTY.	P/N
21	Pipe Nipple, 1" BSP Thd x 80 mm	1	AP80F2
22	Pipe Nipple, 1/2" BSP Thd x 60 mm	2	AP60D4
23	Pipe Nipple, 1/2" BSP Thd x 180 mm	1	AP180D4
24	Pipe Nipple, 2" BSP Thd x 120 mm	1	AP120I2
25	Pipe Nipple, 3/4" BSP Thd x 100 mm	1	AP100E4
26	Pipe Nipple, 1/2" BSP Thd x 100 mm	1	AP100D4
27	Plug, 3/4" BSP Thd	1	A291E2
28	Pipe Nipple, 2" BSP Thd	1	A280I2
29	Reducing Tee, 2" x 2" x 1/2", BSP Female Thd	1	A130RIID2
30	Air Pressure Gauge, 250 PSI	2	923431012
31	Ball Valve, DN15 with M5 Vent Hole	2	59304FO
32	Model ACC-1 Dry Pipe Valve Accelerator	1	523111001
33	Model DPV-1 Dry Pipe Valve, Groove x Groove, DN100	1	523091923
34	Elbow WES 3 mm/M5	2	406012
35	Check Valve, DN15 Male Thd x DN15 Female Thd	1	305105
36	1/2" Self-Closing Drain Valve	1	2162156
37	Ball Valve, DN50 Thd	1	1610000600
38	Ball Valve, DN20 Thd	1	1610000270
39	Ball Valve, DN15 Thd	2	1610000210
40	Pressure Alarm Switch, PS10-1 or TPS10X1	1	0260 or 100110
41	Water Pressure Gauge, 300 PSI / 21 bar	1	025500013

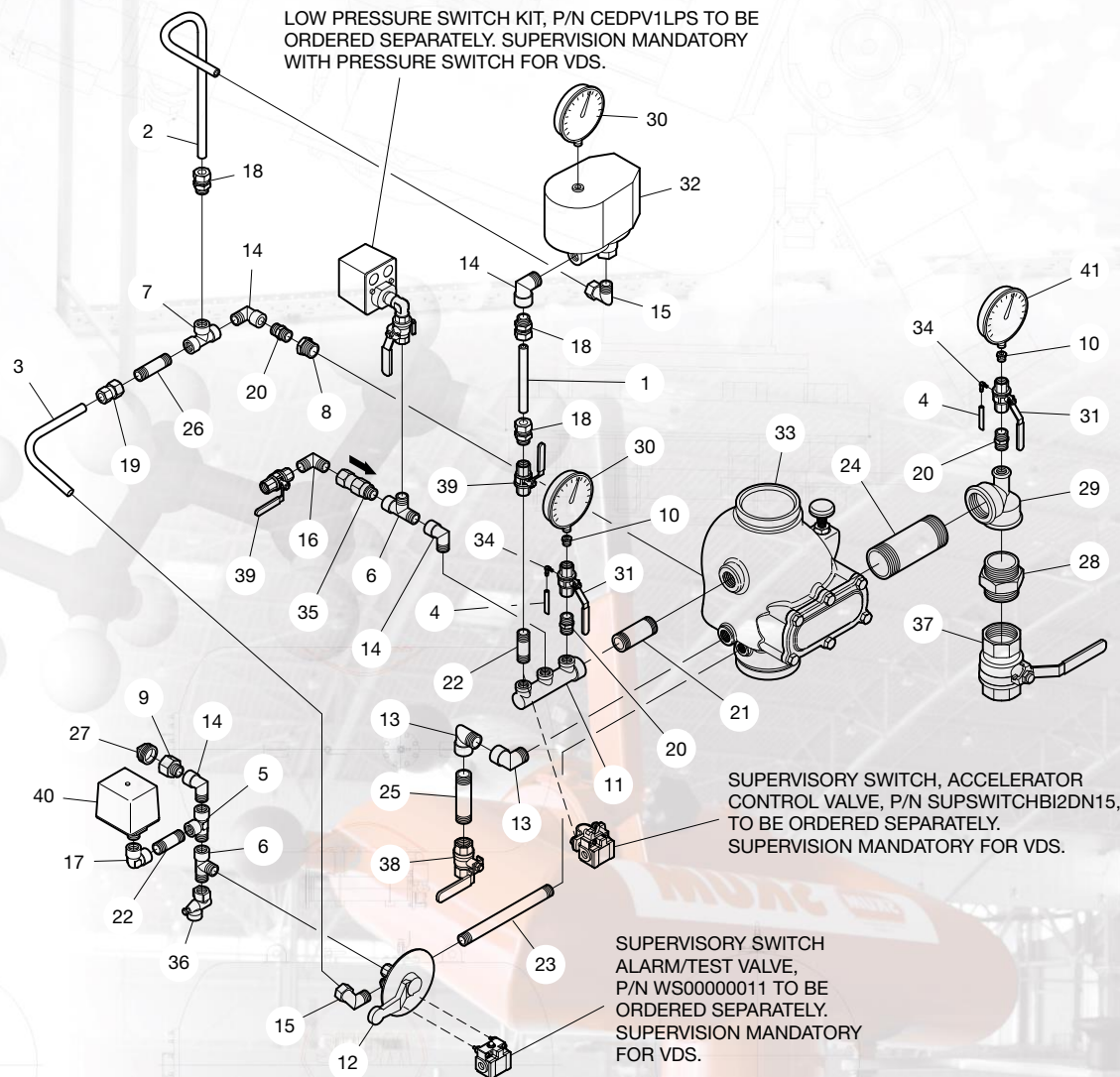


FIGURE 14
MODEL DPV-1 DRY PIPE VALVE EUROPEAN CONFORMITY TRIM
WITH THREE-WAY ALARM TEST VALVE AND MODEL ACC-1 ACCELERATOR
DN100

NO.	DESCRIPTION	QTY.	P/N	NO.	DESCRIPTION	QTY.	P/N
1	Ball Valve, 3-way, 1/2" BSP	1	WS00000095	20	Pipe Nipple, 1/2" BSP Thd x 60 mm	2	AP60D4
2	Copper Tube, 15 x 1 mm, Type B	1	WS00000088	21	Pipe Nipple, 1/2" BSP Thd x 180 mm	1	AP180D4
3	Copper Tube, 15 x 1 mm, Type C	1	WS00000087	22	Pipe Nipple, 3/4" BSP Thd x 120 mm	1	AP120E4
4	Copper Tube, 15 x 1 mm, Type D	1	WS00000086	23	Pipe Nipple, 2" BSP Thd x 100 mm	1	AP100I2
5	Pressure Relief Hose, Transparent, 3 x 6 x 1.2 m	2	WS00000004	24	Pipe Nipple, 1/2" BSP Thd x 100 mm	1	AP100D4
6	Adapter Tee, DN15 Male Thd x DN15 Male Thd x DN15 Female Thd	2	TTDDMDFN	25	Plug, 3/4" BSP Thd	1	A291E2
7	Adapter Tee, DN15 x DN15 x DN15 Female Thd	2	TTDDDFN	26	Pipe Nipple, 2" BSP Thd	1	A280I2
8	Reducer, DN20 Female Thd x DN15 Male Thd	2	RTDMEFN	27	Reducing Tee, 2" x 2" x 1/2", BSP Female Thd	1	A130RIID2
9	Adapter Reducer, DN15 Male Thd x DN8 Female Thd	2	RTDMBFN	28	Air Pressure Gauge, 250 PSI	2	923431012
10	Manifold, 1" BSP Female Thd, 3 x 1/2" BSP Female Thd Outlets	1	MANIF3WAY	29	Ball Valve, DN15 with M5 Vent Hole	2	59304FO
11	Elbow, DN20 Male Thd x DN20 Female Thd	1	ETEEMFN	30	Model ACC-1 Dry Pipe Valve Accelerator	1	523111001
12	Elbow, DN20 Male Thd x DN20 Male Thd	1	ETEEMN	31	Model DPV-1 Dry Pipe Valve, Groove x Groove, DN150	1	523131960
13	Elbow, DN15 Male Thd x DN15 Female Thd	4	ETDMDFN	32	Elbow WES 3 mm/M5	2	406012
14	Adapter Elbow, DN15 Male Thd x 15 mm Compression	2	ETDMCON	33	Check Valve, DN15 Male Thd x DN15 Female Thd	1	305105
15	Elbow, DN15 x DN15 Male Thd	1	ETDDMN	34	1/2" Self-Closing Drain Valve	1	2162156
16	Adapter Fitting, DN15 Male Thd x 15 mm Compression	3	ATDMCON	35	Ball Valve, DN50 Thd	1	1610000600
17	Adapter Fitting, DN15 Female Thd x 15 mm Compression	1	ATDFCON	36	Ball Valve, DN20 Thd	1	1610000270
18	Adapter Fitting, DN15 x DN15 Male Thd	2	ATDDMN	37	Ball Valve, DN15 Thd	2	1610000210
19	Pipe Nipple, 1" BSP Thd x 80 mm	1	AP80F2	38	Pressure Alarm Switch, PS10-1 or TPS10X1	1	0260 or 100101
				39	Water Pressure Gauge, 300 PSI / 21 bar	1	025500013

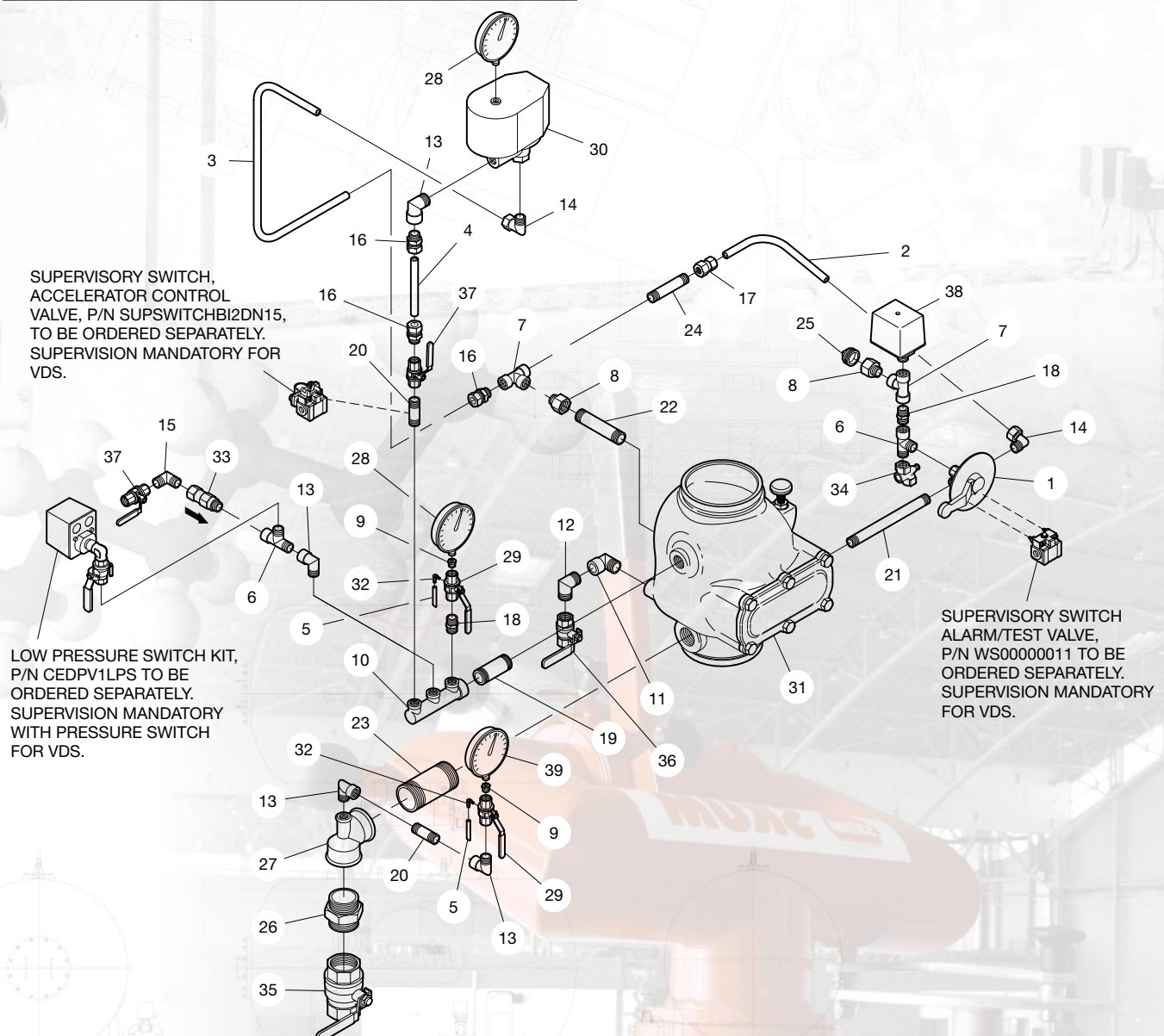


FIGURE 15
MODEL DPV-1 DRY PIPE VALVE EUROPEAN CONFORMITY TRIM
WITH THREE-WAY ALARM TEST VALVE AND MODEL ACC-1 ACCELERATOR
DN150

NO.	DESCRIPTION	QTY.	P/N
1	Copper Tube, 15 x 1 mm, Type D	1	WS0000086
2	Copper Tube, 15 x 1 mm, Type C	1	WS0000083
3	Copper Tube, 15 x 1 mm, Type B	1	WS0000082
4	Copper Tube, 1 mm x 1 m	1	WS0000008
5	Pressure Relief Hose, Transparent, 3 x 6 x 1.2 m	2	WS0000004
6	Spring Loaded Check Valve, 1/2" NPT	1	V923221002
7	Adapter Tee, DN15 Male Thd x DN15 Female Thd x DN15 Female Thd	3	TTDMDFN
8	Adapter Tee, DN15 Male Thd x DN15 Male Thd x DN15 Female Thd	2	TTDDMDFN
9	Adapter Tee, DN15 x DN15 x DN15 Female Thd	1	TTDDDFN
10	Reducer, DN20 Male Thd x DN15 Female Thd	1	RTDMDFN
11	Reducer, DN20 Female Thd x DN15 Male Thd	1	RTDMEFN
12	Adapter Reducer, DN15 Male Thd x DN8 Female Thd	3	RTDMBFN
13	Manifold, 1" BSP Female Thd, 3 x 1/2" BSP Female Thd Outlets	1	MANIF3WAY
14	Elbow, DN20 Male Thd x DN20 Female Thd	2	ETEMEFN
15	Elbow, DN15 Male Thd x DN15 Female Thd	4	ETDMDFN
16	Adapter Elbow, DN15 Male Thd x 15 mm Compression	1	ETDMCON
17	Elbow, DN15 x DN15 Male Thd	1	ETDDMN
18	Elbow, DN15 x DN15 Female Thd	1	ETDDFN
19	Adapter Fitting, DN15 Male Thd x 15 mm Compression	4	ATDMCON
20	Adapter Fitting, DN15 Female Thd x 15 mm Compression	1	ATDFCON
21	Adapter Fitting, DN15 x DN15 Male Thd	3	ATDDMN

NO.	DESCRIPTION	QTY.	P/N
22	Pipe Nipple, DN65 Valve, 1" BSP Thd x 90 mm	1	AP90F4
	Pipe Nipple, DN80 Valve, 1" BSP Thd x 80 mm	1	AP80F2
23	Pipe Nipple, 1/2" BSP Thd x 60 mm	3	AP60D4
24	Pipe Nipple, 1-1/2" BSP Thd x 150 mm	1	AP150H2
25	Pipe Nipple, 3/4" BSP Thd x 100 mm	1	AP100E4
26	Pipe Nipple, DN65 Valve, 1/2" BSP Thd x 120 mm	1	AP120D4
	Pipe Nipple, DN80 Valve, 1/2" BSP Thd x 100 mm	1	AP100D4
27	Plug, 3/4" BSP Thd	1	A291E2
28	Pipe Nipple, 1-1/2" BSP Thd	1	A280H2
29	Reducing Tee, 1-1/2" x 1-1/2" x 1/2" BSP Female Thd	1	A130RHHD2
30	Air Pressure Gauge, 250 PSI	2	923431012
31	Anti Flood Fitting, 3/32" Restriction	1	920321002
32	Ball Valve, DN15 with M5 Vent Hole	2	59304FO
33	Model ACC-1 Dry Pipe Valve Accelerator	1	523111001
34	Model DPV-1 Dry Pipe Valve, Groove x Groove		
	DN65 Valve	1	523131925
	DN80 Valve	1	523131930
35	Elbow WES 3 mm/M5	2	406012
36	Check Valve, DN15 Male Thd x DN15 Female Thd	1	305105
37	1/2" Self-Closing Drain Valve	1	2162156
38	Ball Valve, DN40 Thd	1	1610000480
39	Ball Valve, DN20 Thd	1	1610000270
40	Ball Valve, DN15 Thd	4	1610000210
41	Pressure Alarm Switch, PS10-1 or TPS10X1	1	0260 or 100101
42	Water Pressure Gauge, 300 PSI / 21 bar	1	025500013

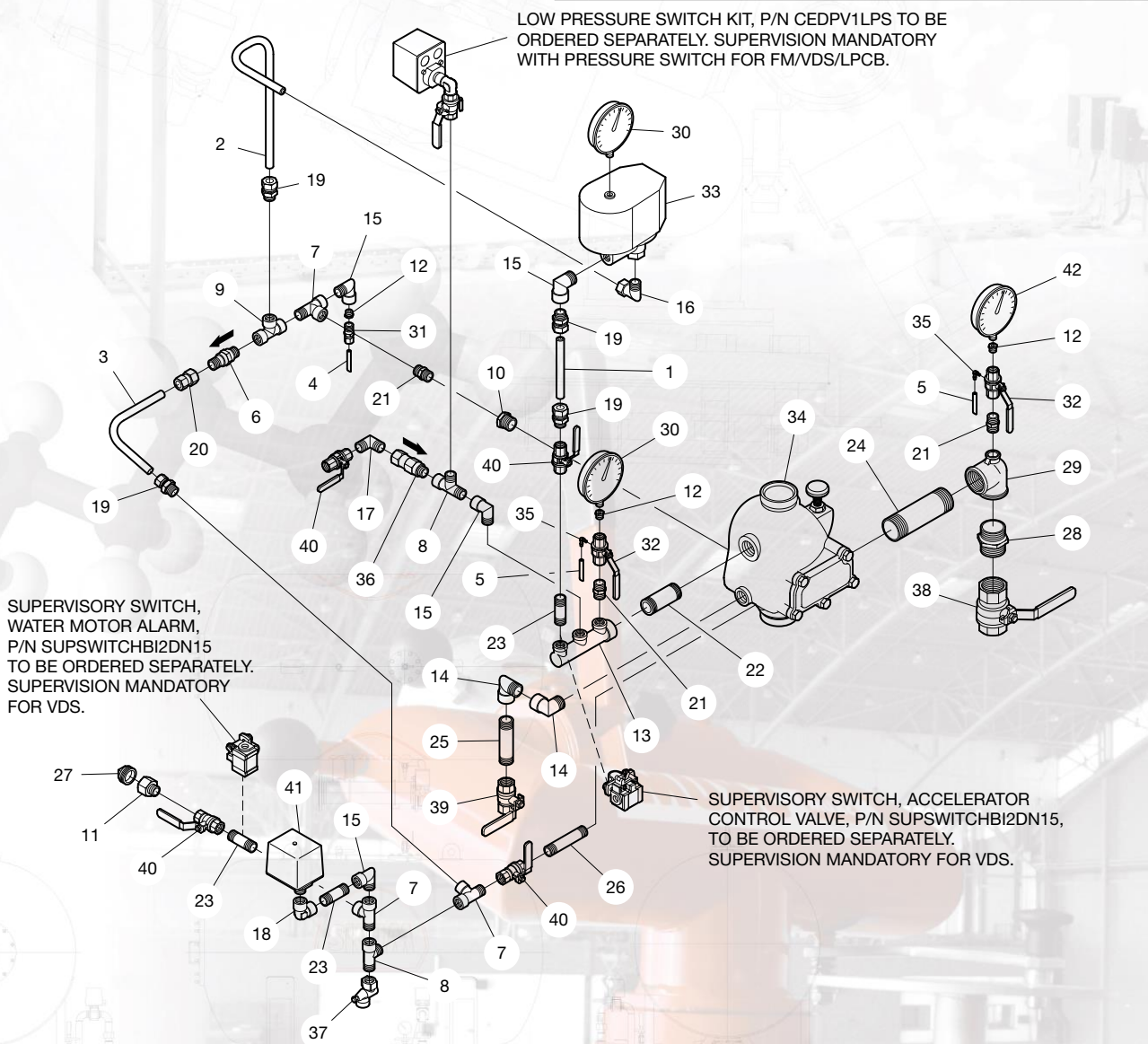


FIGURE 16
MODEL DPV-1 DRY PIPE VALVE EUROPEAN CONFORMITY TRIM
WITH STANDARD ALARM TEST VALVE AND MODEL ACC-1 ACCELERATOR
DN65 AND DN80

NO.	DESCRIPTION	QTY.	P/N	NO.	DESCRIPTION	QTY.	P/N
1	Copper Tube, 15 x 1 mm, Type D	1	WS00000086	22	Adapter Fitting, DN15 x DN15 Male Thd	3	ATDDMN
2	Copper Tube, 15 x 1 mm, Type C	1	WS00000083	23	Pipe Nipple, 1" BSP Thd x 80 mm	1	AP80F2
3	Copper Tube, 15 x 1 mm, Type B	1	WS00000082	24	Pipe Nipple, 1/2" BSP Thd x 60 mm	3	AP60D4
4	Copper Tube, 1 mm x 1 m	1	WS00000008	25	Pipe Nipple, 2" BSP Thd x 120 mm	1	AP120I2
5	Pressure Relief Hose, Transparent, 3 x 6 x 1.2 m	2	WS00000004	26	Pipe Nipple, 3/4" BSP Thd x 100 mm	1	AP100E4
6	Spring Loaded Check Valve, 1/2" NPT	1	V923221002	27	Pipe Nipple, 1/2" BSP Thd x 100 mm	1	AP100D4
7	Adapter Tee, DN15 Male Thd x DN15 Female Thd x DN15 Female Thd	3	TTDDDFN	28	Plug, 3/4" BSP Thd	1	A291E2
8	Adapter Tee, DN15 Male Thd x DN15 Male Thd x DN15 Female Thd	2	TTDDMDFN	29	Pipe Nipple, 2" BSP Thd	1	A280I2
9	Adapter Tee, DN15 x DN15 x DN15 Female Thd	1	TTDDDFN	30	Reducing Tee, 2" x 2" x 1/2", BSP Female Thd	1	A130RIID2
10	Reducer, DN20 Male Thd x DN15 Female Thd	1	RTEMDFN	31	Air Pressure Gauge, 250 PSI	2	923431012
11	Reducer, DN20 Female Thd x DN15 Male Thd	1	RTDMEFN	32	Anti Flood Fitting, 3/32" Restriction	1	920321002
12	Adapter Reducer, DN15 Male Thd x DN8 Female Thd	3	RTDMBFN	33	Ball Valve, DN15 with M5 Vent Hole	2	59304FO
13	Plug, DN15 Female Thd	1	PCTDN	34	Model ACC-1 Dry Pipe Valve Accelerator	1	523111001
14	Manifold, 1" BSP Female Thd, 3 x 1/2" BSP Female Thd Outlets	1	MANIF3WAY	35	Model DPV-1 Dry Pipe Valve, Groove x Groove, DN100	1	523091923
15	Elbow, DN20 Male Thd x DN20 Female Thd	2	ETEMEFN	36	Elbow WES 3 mm/M5	2	406012
16	Elbow, DN15 Male Thd x DN15 Female Thd	4	ETDMDFN	37	Check Valve, DN15 Male Thd x DN15 Female Thd	1	305105
17	Adapter Elbow, DN15 Male Thd x 15 mm Compression	1	ETDMCON	38	1/2" Self-Closing Drain Valve	1	2162156
18	Elbow, DN15 x DN15 Male Thd	1	ETDDMN	39	Ball Valve, DN50 Thd	1	1610000600
19	Elbow, DN15 x DN15 Female Thd	1	ETDDFN	40	Ball Valve, DN20 Thd	1	1610000270
20	Adapter Fitting, DN15 Male Thd x 15 mm Compression	4	ATDMCON	41	Ball Valve, DN15 Thd	4	1610000210
21	Adapter Fitting, DN15 Female Thd x 15 mm Compression	1	ATDFCON	42	Pressure Alarm Switch, PS10-1 or TPS10X1	1	0260 or 100101
				43	Water Pressure Gauge, 300 PSI / 21 bar	1	025500013

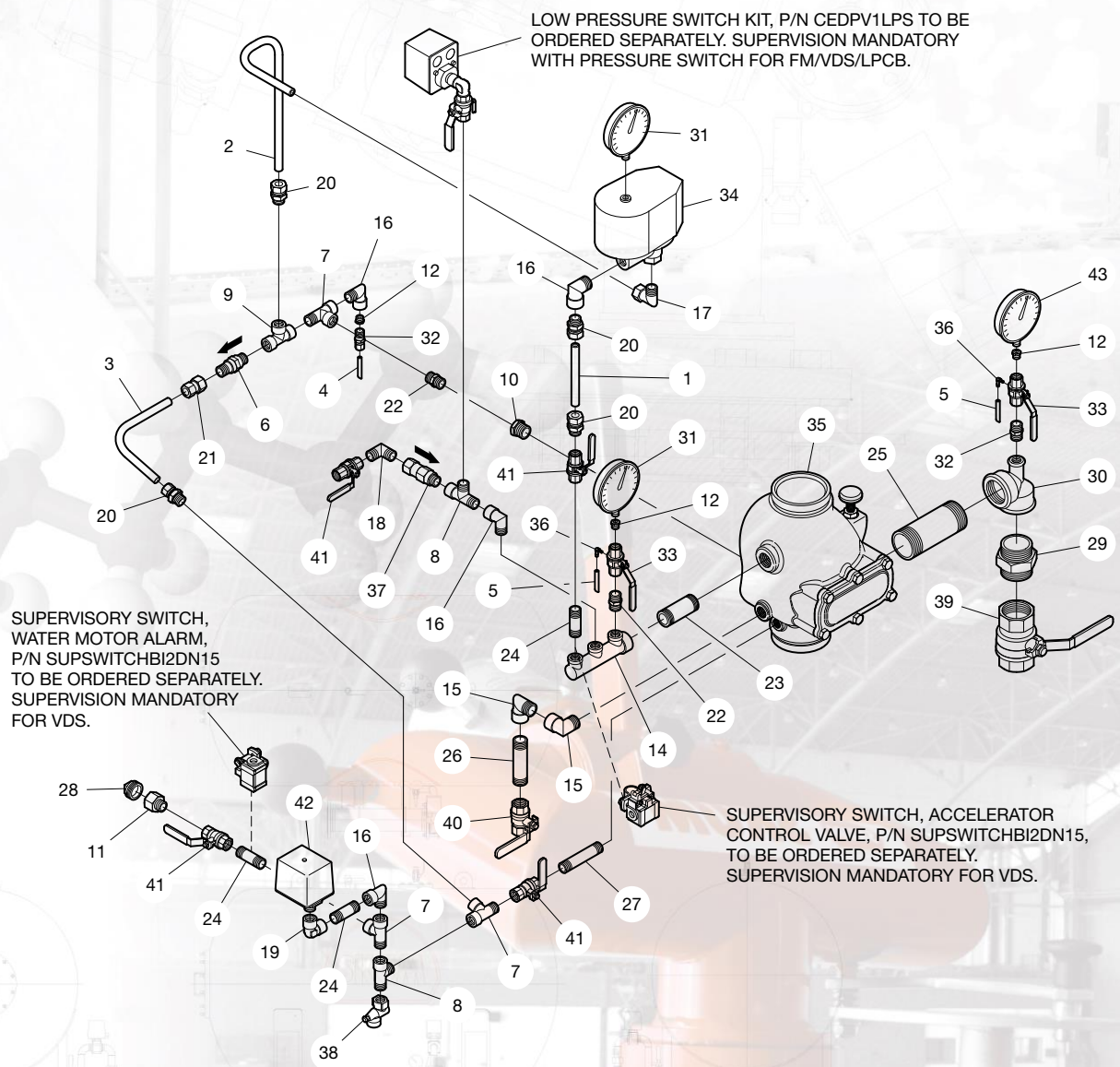
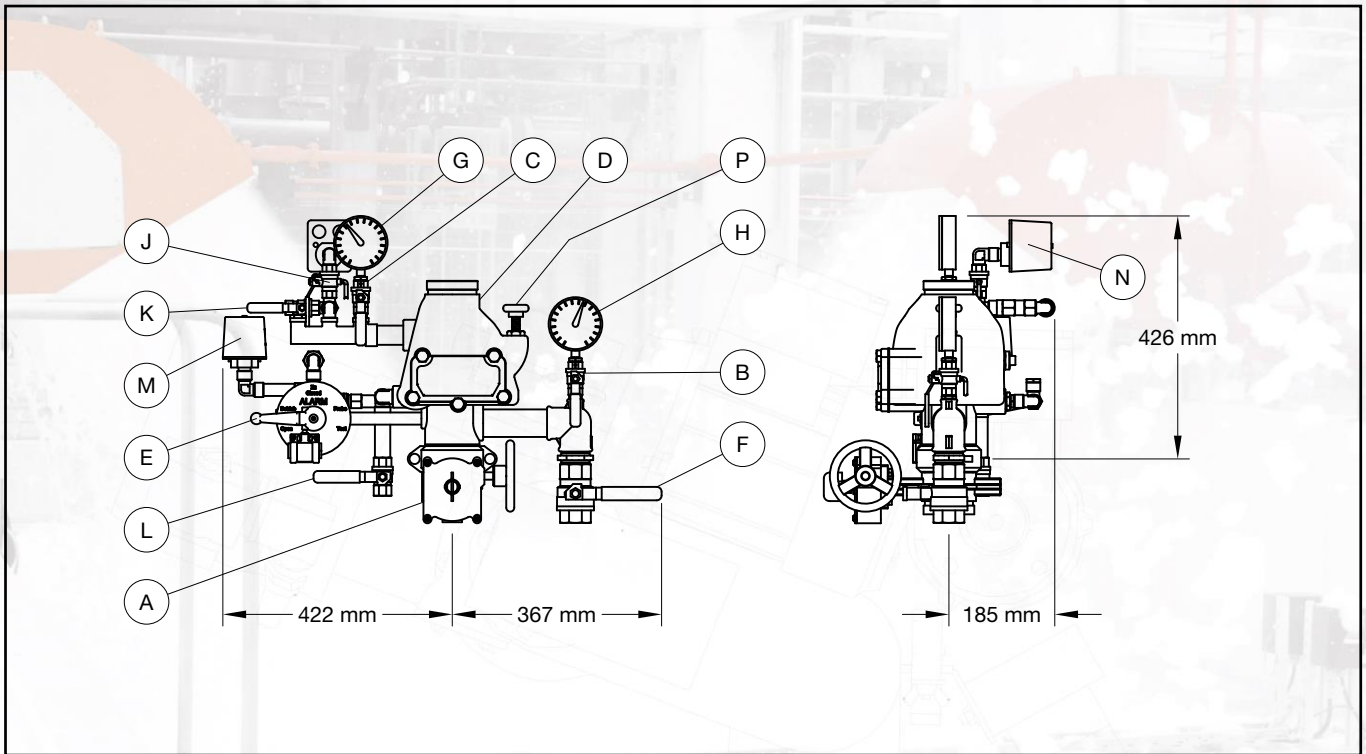


FIGURE 17
MODEL DPV-1 DRY PIPE VALVE EUROPEAN CONFORMITY TRIM
WITH STANDARD ALARM TEST VALVE AND MODEL ACC-1 ACCELERATOR
DN100

Appendix A of TFP1090 AUGUST 2023

Summary Instructions (if problems occur, consult full document)

DN65 and DN80, Model DPV-1 Dry Pipe Valve with Three-Way Alarm Test Valve, without Model ACC-1 Accelerator



I. Normal Conditions

- The Main Control Valve (A) is opened and locked.
- The sprinkler system is filled with air and is pressurized.
- The Main Drain Valve (F), and Low Body Drain Valve (L) are closed.
- The Three-Way Alarm Control Valve (E) is in the open position.
- The Pressure Gauge Valves (B) and (C) are open.
- The Pressure Switch Valve (J) is open.
- The Air Supply Control Valve (K) is open.
- System Air Pressure Gauge (G) reads downstream air pressure.
- Water Supply Pressure Gauge (H) reads the upstream water pressure.

II. Operation

When one or more sprinklers are activated, air pressure is reduced downstream of the Dry Pipe Valve. When the air pressure is sufficiently reduced, the water pressure overcomes the differential holding the Dry Pipe Valve closed and the Dry Pipe Valve opens to permit water flow into the system piping and to be discharged from any open sprinklers. Also, with the Dry Pipe Valve open, water flows through the Alarm Port at the rear of the Dry Pipe Valve to actuate the Waterflow Pressure Alarm Switch (M) and, as applicable, the Water Motor Alarm.

III. Removing System From Service

Step 1. Close the Main Control Valve (A), close the Air Supply Control Valve (K), and place the Three-Way Alarm Control Valve (E) in the closed position.

Step 2. Drain the system with the Main Drain Valve (F) and by opening all auxiliary drain valves in the system to make sure that cross-mains and branch lines are drained.

IV. Placing the System Back in Service

Step 1. Close the auxiliary drain valves after water ceases to discharge, and leave the Main Drain Valve (F) open.

Step 2. Place the Three-Way Alarm Control Valve (E) in the open position.

Step 3. Replace the sprinklers that have operated and the sprinklers close to the fire.

Step 4. Push down on the reset knob (P) to allow the Dry Pipe Valve (D) to re-seat.

Step 5. Via the Air Supply Control Valve (K), pressurize the system with air to 0,7 bar, and then open and close each auxiliary drain valves in the system piping to drain any remaining water in trapped sections. Also, partially open the Low Body Drain Valve (L) to assure that the riser is completely drained. Close the Low Body Drain Valve (L) as soon as water ceases to discharge.

Step 6. Open the Air Supply Control Valve (K) to restore the system to the normal system air pressure.

Step 7. Partially open the Main Control Valve (A), and then slowly close the Main Drain Valve (F).

Step 8. Fully open the Main Control Valve (A) and lock it open.

Step 9. Reset the fire alarm panel and notify the central alarm station.

V. Weekly Test

Important: Prior to closing any valves or activating any alarms, notify local security guards and the central alarm station if applicable.

Step 1. Place the Three-Way Alarm Control Valve (E) in the test position, verify that the alarm signal created by the Waterflow Pressure Alarm Switch (M) is visible at the fire panel. If applicable, check the sound of the Water Motor Alarm — it must be clear and steady.

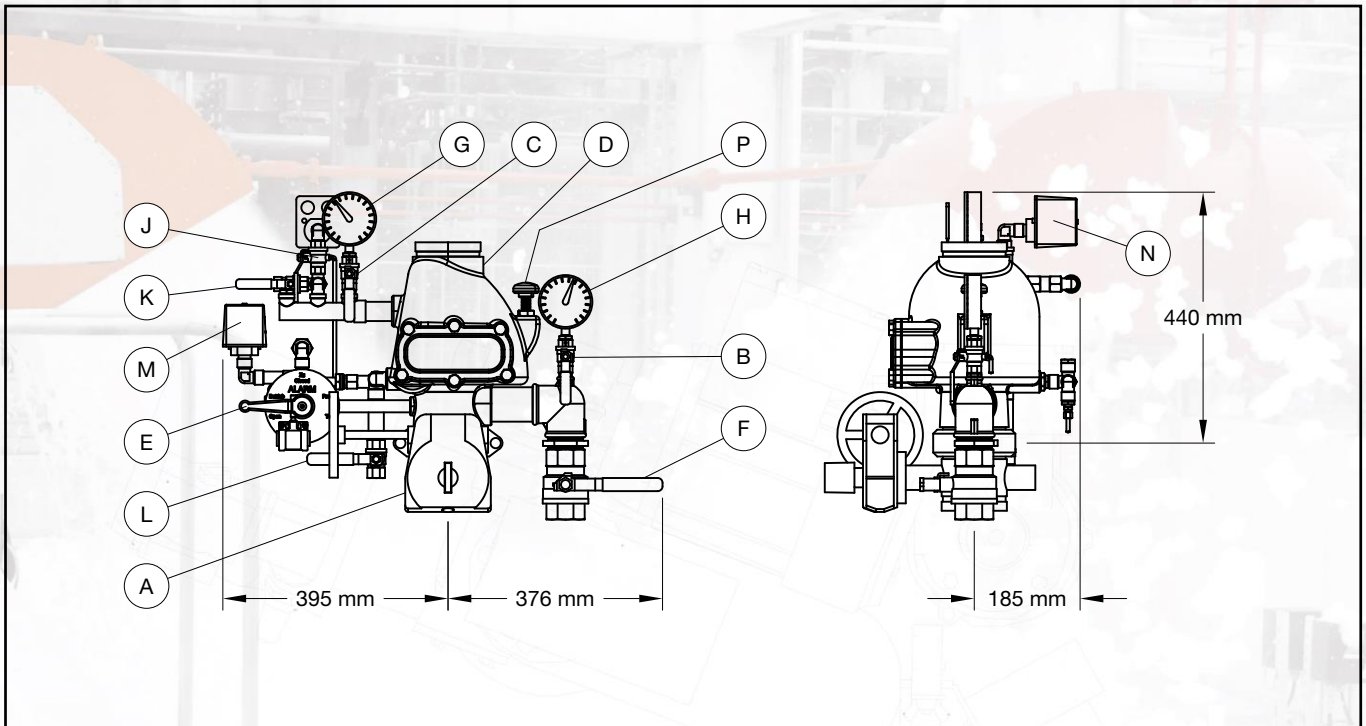
Step 2. Place the Three-Way Alarm Control Valve (E) in the open position and verify that the normal supply and system pressures are restored. If the supply pressure is below the normal, use the instructions from the water supply to obtain the usual pressure.

Step 3. Close the Pressure Switch Valve (J) and verify operation of the low air pressure Alarm Switch (N).

Step 4. Return the Pressure Switch Valve (J) to the normally open position after verifying that the alarm signal is visible at the fire panel.

Appendix B of TFP1090 AUGUST 2023

**Summary Instructions (if problems occur, consult full document)
DN100, Model DPV-1 Dry Pipe Valve with Three-Way Alarm Test Valve,
without Model ACC-1 Accelerator**



I. Normal Conditions

- The Main Control Valve (A) is opened and locked.
- The sprinkler system is filled with air and is pressurized.
- The Main Drain Valve (F), and Low Body Drain Valve (L) are closed.
- The Three-Way Alarm Control Valve (E) is in the open position.
- The Pressure Gauge Valves (B) and (C) are open.
- The Pressure Switch Valve (J) is open.
- The Air Supply Control Valve (K) is open.
- System Air Pressure Gauge (G) reads downstream air pressure.
- Water Supply Pressure Gauge (H) reads the upstream water pressure.

II. Operation

When one or more sprinklers are activated, air pressure is reduced downstream of the Dry Pipe Valve. When the air pressure is sufficiently reduced, the water pressure overcomes the differential holding the Dry Pipe Valve closed and the Dry Pipe Valve opens to permit water flow into the system piping and to be discharged from any open sprinklers. Also, with the Dry Pipe Valve open, water flows through the Alarm Port at the rear of the Dry Pipe Valve to actuate the Waterflow Pressure Alarm Switch (M) and, as applicable, the Water Motor Alarm.

III. Removing System From Service

Step 1. Close the Main Control Valve (A), close the Air Supply Control Valve (K), and place the Three-Way Alarm Control Valve (E) in the closed position.

Step 2. Drain the system with the Main Drain Valve (F) and by opening all auxiliary drain valves in the system to make sure that cross-mains and branch lines are drained.

IV. Placing the System Back in Service

Step 1. Close the auxiliary drain valves after water ceases to discharge, and leave the Main Drain Valve (F) open.

Step 2. Place the Three-Way Alarm Control Valve (E) in the open position.

Step 3. Replace the sprinklers that have operated and the sprinklers close to the fire.

Step 4. Push down on the reset knob (P) to allow the Dry Pipe Valve (D) to re-seat.

Step 5. Via the Air Supply Control Valve (K), pressurize the system with air to 0,7 bar, and then open and close each auxiliary drain valves in the system piping to drain any remaining water in trapped sections. Also, partially open the Low Body Drain Valve (L) to assure that the riser is completely drained. Close the Low Body Drain Valve (L) as soon as water ceases to discharge.

Step 6. Open the Air Supply Control Valve (K) to restore the system to the normal system air pressure.

Step 7. Partially open the Main Control Valve (A), and then slowly close the Main Drain Valve (F).

Step 8. Fully open the Main Control Valve (A) and lock it open.

Step 9. Reset the fire alarm panel and notify the central alarm station.

V. Weekly Test

Important: Prior to closing any valves or activating any alarms, notify local security guards and the central alarm station if applicable.

Step 1. Place the Three-Way Alarm Control Valve (E) in the test position, verify that the alarm signal created by the Waterflow Pressure Alarm Switch (M) is visible at the fire panel. If applicable, check the sound of the Water Motor Alarm — it must be clear and steady.

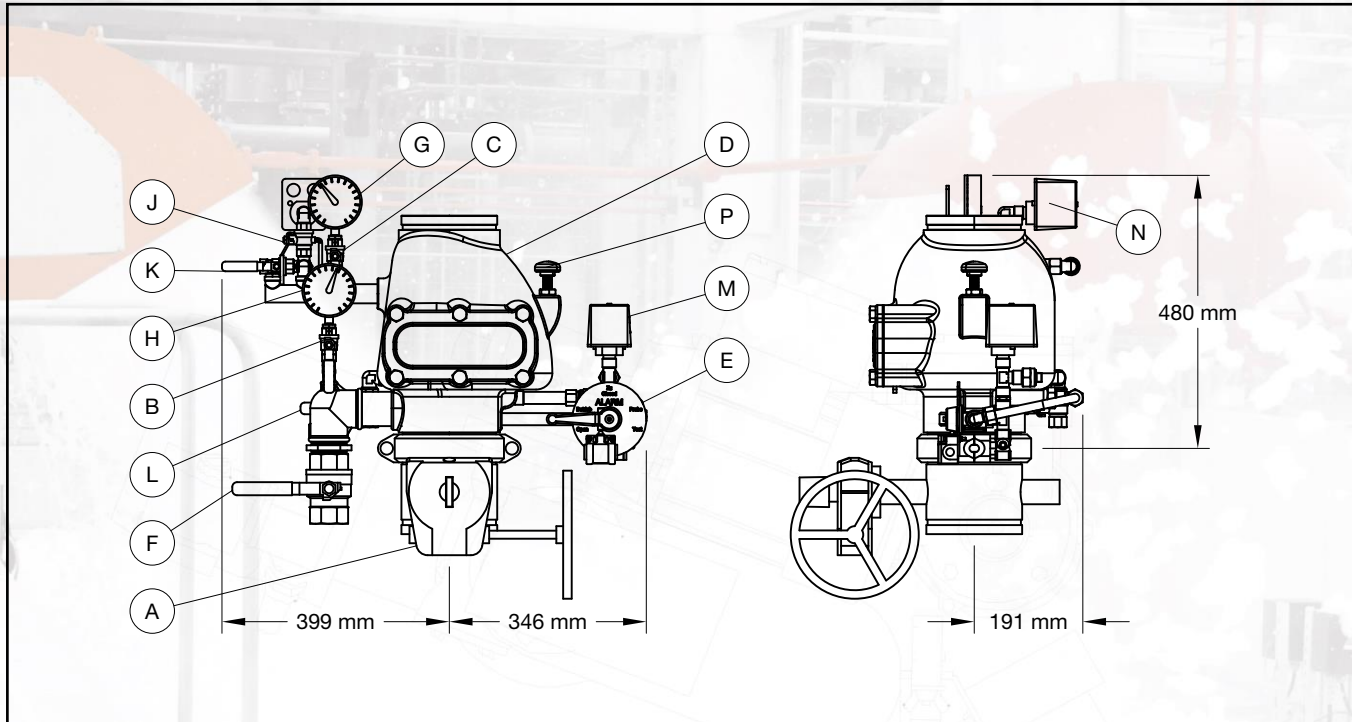
Step 2. Place the Three-Way Alarm Control Valve (E) in the open position and verify that the normal supply and system pressures are restored. If the supply pressure is below the normal, use the instructions from the water supply to obtain the usual pressure.

Step 3. Close the Pressure Switch Valve (J) and verify operation of the low air pressure Alarm Switch (N).

Step 4. Return the Pressure Switch Valve (J) to the normally open position after verifying that the alarm signal is visible at the fire panel.

Appendix C of TFP1090 AUGUST 2023

**Summary Instructions (if problems occur, consult full document)
DN150, Model DPV-1 Dry Pipe Valve with Three-Way Alarm Test Valve,
without Model ACC-1 Accelerator**



I. Normal Conditions

- The Main Control Valve (A) is opened and locked.
- The sprinkler system is filled with air and is pressurized.
- The Main Drain Valve (F), and Low Body Drain Valve (L) are closed.
- The Three-Way Alarm Control Valve (E) is in the open position.
- The Pressure Gauge Valves (B) and (C) are open.
- The Pressure Switch Valve (J) is open.
- The Air Supply Control Valve (K) is open.
- System Air Pressure Gauge (G) reads downstream air pressure.
- Water Supply Pressure Gauge (H) reads the upstream water pressure.

II. Operation

When one or more sprinklers are activated, air pressure is reduced downstream of the Dry Pipe Valve. When the air pressure is sufficiently reduced, the water pressure overcomes the differential holding the Dry Pipe Valve closed and the Dry Pipe Valve opens to permit water flow into the system piping and to be discharged from any open sprinklers. Also, with the Dry Pipe Valve open, water flows through the Alarm Port at the rear of the Dry Pipe Valve to actuate the Waterflow Pressure Alarm Switch (M) and, as applicable, the Water Motor Alarm.

III. Removing System From Service

Step 1. Close the Main Control Valve (A), close the Air Supply Control Valve (K), and place the Three-Way Alarm Control Valve (E) in the closed position.

Step 2. Drain the system with the Main Drain Valve (F) and by opening all auxiliary drain valves in the system to make sure that cross-mains and branch lines are drained.

IV. Placing the System Back in Service

Step 1. Close the auxiliary drain valves after water ceases to discharge, and leave the Main Drain Valve (F) open.

Step 2. Place the Three-Way Alarm Control Valve (E) in the open position.

Step 3. Replace the sprinklers that have operated and the sprinklers close to the fire.

Step 4. Push down on the reset knob (P) to allow the Dry Pipe Valve (D) to re-seat.

Step 5. Via the Air Supply Control Valve (K), pressurize the system with air to 0,7 bar, and then open and close each auxiliary drain valves in the system piping to drain any remaining water in trapped sections. Also, partially open the Low Body Drain Valve (L) to assure that the riser is completely drained. Close the Low Body Drain Valve (L) as soon as water ceases to discharge.

Step 6. Open the Air Supply Control Valve (K) to restore the system to the normal system air pressure.

Step 7. Partially open the Main Control Valve (A), and then slowly close the Main Drain Valve (F).

Step 8. Fully open the Main Control Valve (A) and lock it open.

Step 9. Reset the fire alarm panel and notify the central alarm station.

V. Weekly Test

Important: Prior to closing any valves or activating any alarms, notify local security guards and the central alarm station if applicable.

Step 1. Place the Three-Way Alarm Control Valve (E) in the test position, verify that the alarm signal created by the Waterflow Pressure Alarm Switch (M) is visible at the fire panel. If applicable, check the sound of the Water Motor Alarm — it must be clear and steady.

Step 2. Place the Three-Way Alarm Control Valve (E) in the open position and verify that the normal supply and system pressures are restored. If the supply pressure is below the normal, use the instructions from the water supply to obtain the usual pressure.

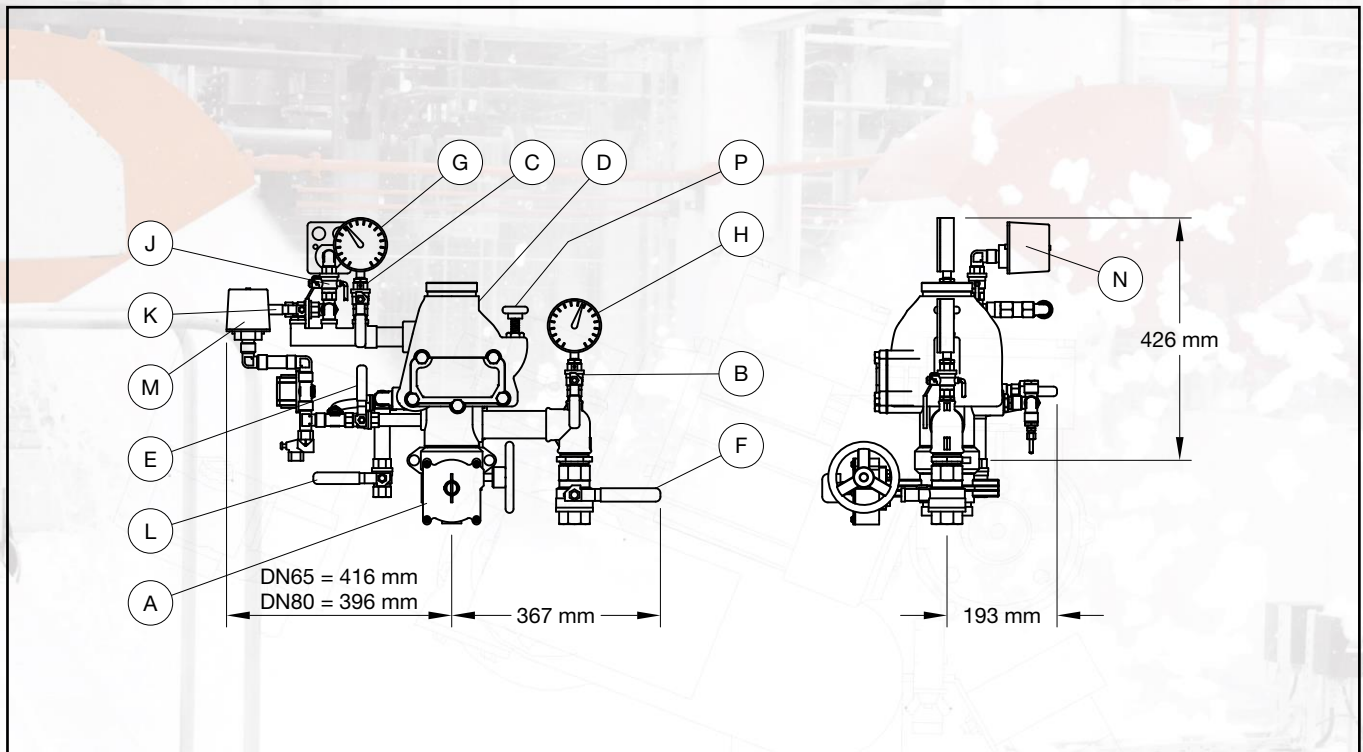
Step 3. Close the Pressure Switch Valve (J) and verify operation of the low air pressure Alarm Switch (N).

Step 4. Return the Pressure Switch Valve (J) to the normally open position after verifying that the alarm signal is visible at the fire panel.

Appendix D of TFP1090 AUGUST 2023

Summary Instructions (if problems occur, consult full document)

DN65 and DN80, Model DPV-1 Dry Pipe Valve with Standard Alarm Test Valve, without Model ACC-1 Accelerator



I. Normal Conditions

- The Main Control Valve (A) is opened and locked.
- The sprinkler system is filled with air and is pressurized.
- The Main Drain Valve (F), and Low Body Drain Valve (L) are closed.
- The Alarm Test Valve (E) is in the closed position.
- The Pressure Gauge Valves (B) and (C) are open.
- The Pressure Switch Valve (J) is open.
- The Air Supply Control Valve (K) is open.
- System Air Pressure Gauge (G) reads downstream air pressure.
- Water Supply Pressure Gauge (H) reads the upstream water pressure.

II. Operation

When one or more sprinklers are activated, air pressure is reduced downstream of the Dry Pipe Valve. When the air pressure is sufficiently reduced, the water pressure overcomes the differential holding the Dry Pipe Valve closed and the Dry Pipe Valve opens to permit water flow into the system piping and to be discharged from any open sprinklers. Also, with the Dry Pipe Valve open, water flows through the Alarm Port at the rear of the Dry Pipe Valve to actuate the Waterflow Pressure Alarm Switch (M) and, as applicable, the Water Motor Alarm.

III. Removing System From Service

Step 1. Close the Main Control Valve (A), and close the Air Supply Control Valve (K).

Step 2. Drain the system with the Main Drain Valve (F) and by opening all auxiliary drain valves in the system to make sure that cross-mains and branch lines are drained.

IV. Placing the System Back in Service

Step 1. Close the auxiliary drain valves after water ceases to discharge, and leave the Main Drain Valve (F) open.

Step 2. Replace the sprinklers that have operated and the sprinklers close to the fire.

Step 3. Push down on the reset knob (P) to allow the Dry Pipe Valve (D) to re-seat.

Step 4. Via the Air Supply Control Valve (K), pressurize the system with air to 0,7 bar, and then open and close each auxiliary drain valves in the system piping to drain any remaining water in trapped sections. Also, partially open the Low Body Drain Valve (L) to assure that the riser is completely drained. Close the Low Body Drain Valve (L) as soon as water ceases to discharge.

Step 5. Open the Air Supply Control Valve (K) to restore the system to the normal system air pressure.

Step 6. Partially open the Main Control Valve (A), and then slowly close the Main Drain Valve (F).

Step 7. Fully open the Main Control Valve (A) and lock it open.

Step 8. Reset the fire alarm panel and notify the central alarm station.

V. Weekly Test

Important: Prior to closing any valves or activating any alarms, notify local security guards and the central alarm station if applicable.

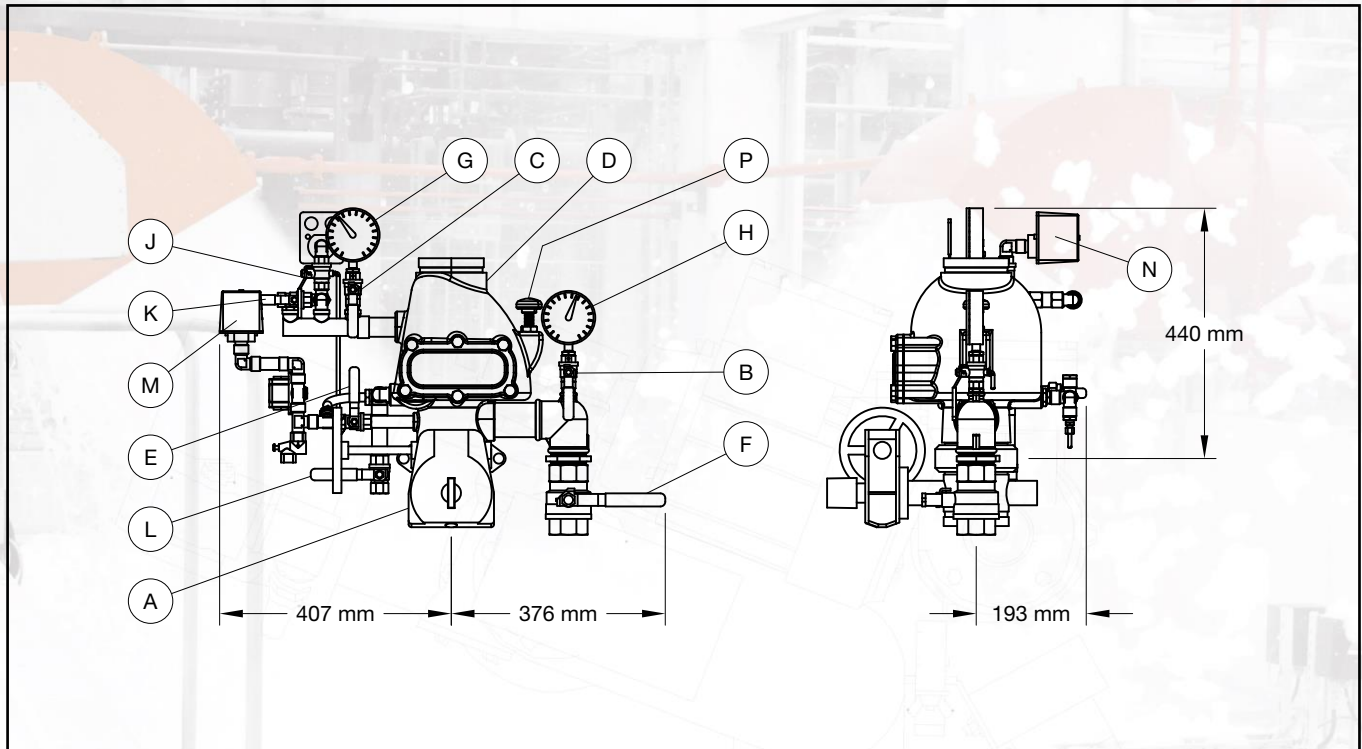
Step 1. Open the Alarm Test Valve (E), verify that the alarm signal created by the Waterflow Pressure Alarm Switch (M) is visible at the fire panel. If applicable, check the sound of the Water Motor Alarm — it must be clear and steady.

Step 2. Close the Alarm Test Valve (E), verify that the normal supply and system pressures are restored. If the supply pressure is below the normal, use the instructions from the water supply to obtain the usual pressure.

Step 3. Close the Pressure Switch Valve (J) and verify operation of the low air pressure Alarm Switch (N).

Step 4. Return the Pressure Switch Valve (J) to the normally open position after verifying that the alarm signal is visible at the fire panel.

Appendix E of TFP1090 AUGUST 2023
Summary Instructions (if problems occur, consult full document)
DN100, Model DPV-1 Dry Pipe Valve with Standard Alarm Test Valve,
without Model ACC-1 Accelerator



I. Normal Conditions

- The Main Control Valve (A) is opened and locked.
- The sprinkler system is filled with air and is pressurized.
- The Main Drain Valve (F), and Low Body Drain Valve (L) are closed.
- The Alarm Test Valve (E) is in the closed position.
- The Pressure Gauge Valves (B) and (C) are open.
- The Pressure Switch Valve (J) is open.
- The Air Supply Control Valve (K) is open.
- System Air Pressure Gauge (G) reads downstream air pressure.
- Water Supply Pressure Gauge (H) reads the upstream water pressure.

II. Operation

When one or more sprinklers are activated, air pressure is reduced downstream of the Dry Pipe Valve. When the air pressure is sufficiently reduced, the water pressure overcomes the differential holding the Dry Pipe Valve closed and the Dry Pipe Valve opens to permit water flow into the system piping and to be discharged from any open sprinklers. Also, with the Dry Pipe Valve open, water flows through the Alarm Port at the rear of the Dry Pipe Valve to actuate the Waterflow Pressure Alarm Switch (M) and, as applicable, the Water Motor Alarm.

III. Removing System From Service

Step 1. Close the Main Control Valve (A), and close the Air Supply Control Valve (K).

Step 2. Drain the system with the Main Drain Valve (F) and by opening all auxiliary drain valves in the system to make sure that cross-mains and branch lines are drained.

IV. Placing the System Back in Service

Step 1. Close the auxiliary drain valves after water ceases to discharge, and leave the Main Drain Valve (F) open.

Step 2. Replace the sprinklers that have operated and the sprinklers close to the fire.

Step 3. Push down on the reset knob (P) to allow the Dry Pipe Valve (D) to re-seat.

Step 4. Via the Air Supply Control Valve (K), pressurize the system with air to 0,7 bar, and then open and close each auxiliary drain valves in the system piping to drain any remaining water in trapped sections. Also, partially open the Low Body Drain Valve (L) to assure that the riser is completely drained. Close the Low Body Drain Valve (L) as soon as water ceases to discharge.

Step 5. Open the Air Supply Control Valve (K) to restore the system to the normal system air pressure.

Step 6. Partially open the Main Control Valve (A), and then slowly close the Main Drain Valve (F).

Step 7. Fully open the Main Control Valve (A) and lock it open.

Step 8. Reset the fire alarm panel and notify the central alarm station.

V. Weekly Test

Important: Prior to closing any valves or activating any alarms, notify local security guards and the central alarm station if applicable.

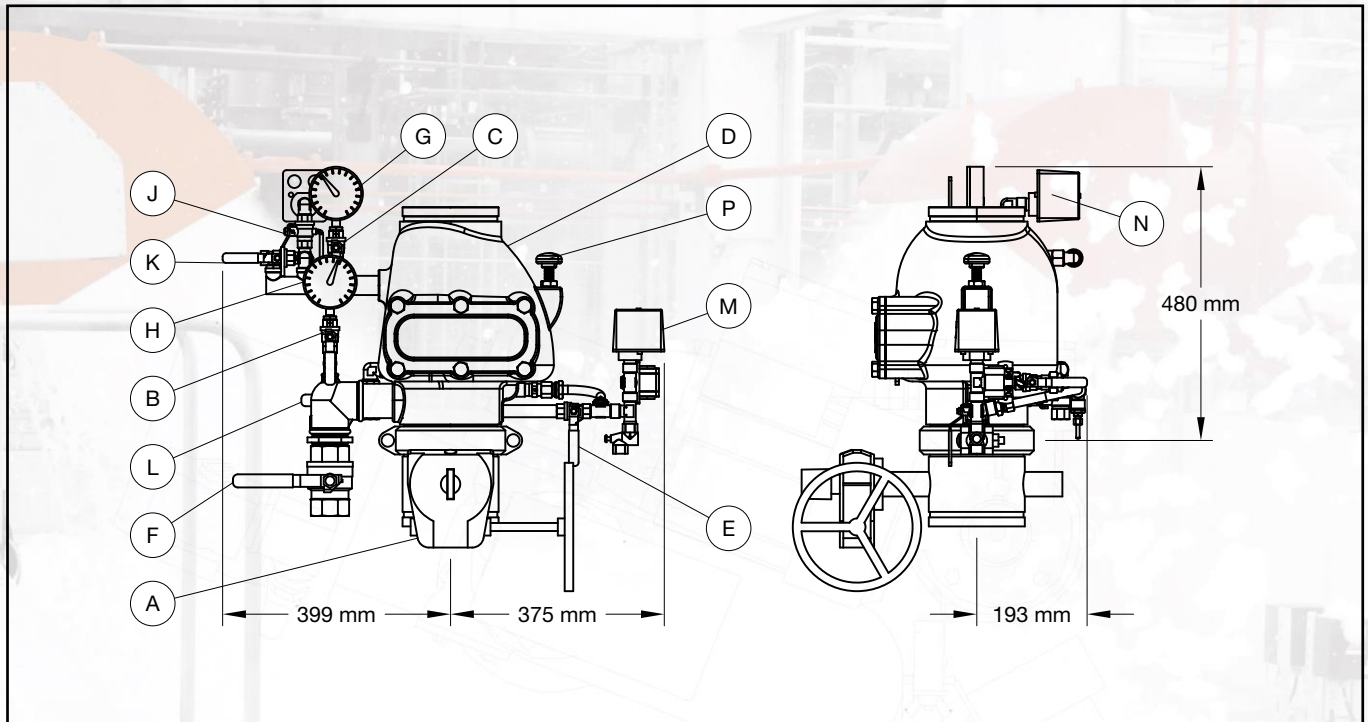
Step 1. Open the Alarm Test Valve (E), verify that the alarm signal created by the Waterflow Pressure Alarm Switch (M) is visible at the fire panel. If applicable, check the sound of the Water Motor Alarm — it must be clear and steady.

Step 2. Close the Alarm Test Valve (E), verify that the normal supply and system pressures are restored. If the supply pressure is below the normal, use the instructions from the water supply to obtain the usual pressure.

Step 3. Close the Pressure Switch Valve (J) and verify operation of the low air pressure Alarm Switch (N).

Step 4. Return the Pressure Switch Valve (J) to the normally open position after verifying that the alarm signal is visible at the fire panel.

Appendix F of TFP1090 AUGUST 2023
Summary Instructions (if problems occur, consult full document)
DN150, Model DPV-1 Dry Pipe Valve with Standard Alarm Test Valve,
without Model ACC-1 Accelerator



I. Normal Conditions

- The Main Control Valve (A) is opened and locked.
- The sprinkler system is filled with air and is pressurized.
- The Main Drain Valve (F), and Low Body Drain Valve (L) are closed.
- The Alarm Test Valve (E) is in the closed position.
- The Pressure Gauge Valves (B) and (C) are open.
- The Pressure Switch Valve (J) is open.
- The Air Supply Control Valve (K) is open.
- System Air Pressure Gauge (G) reads downstream air pressure.
- Water Supply Pressure Gauge (H) reads the upstream water pressure.

II. Operation

When one or more sprinklers are activated, air pressure is reduced downstream of the Dry Pipe Valve. When the air pressure is sufficiently reduced, the water pressure overcomes the differential holding the Dry Pipe Valve closed and the Dry Pipe Valve opens to permit water flow into the system piping and to be discharged from any open sprinklers. Also, with the Dry Pipe Valve open, water flows through the Alarm Port at the rear of the Dry Pipe Valve to actuate the Waterflow Pressure Alarm Switch (M) and, as applicable, the Water Motor Alarm.

III. Removing System From Service

Step 1. Close the Main Control Valve (A), and close the Air Supply Control Valve (K).

Step 2. Drain the system with the Main Drain Valve (F) and by opening all auxiliary drain valves in the system to make sure that cross-mains and branch lines are drained.

IV. Placing the System Back in Service

Step 1. Close the auxiliary drain valves after water ceases to discharge, and leave the Main Drain Valve (F) open.

Step 2. Replace the sprinklers that have operated and the sprinklers close to the fire.

Step 3. Push down on the reset knob (P) to allow the Dry Pipe Valve (D) to re-seat.

Step 4. Via the Air Supply Control Valve (K), pressurize the system with air to 0,7 bar, and then open and close each auxiliary drain valves in the system piping to drain any remaining water in trapped sections. Also, partially open the Low Body Drain Valve (L) to assure that the riser is completely drained. Close the Low Body Drain Valve (L) as soon as water ceases to discharge.

Step 5. Open the Air Supply Control Valve (K) to restore the system to the normal system air pressure.

Step 6. Partially open the Main Control Valve (A), and then slowly close the Main Drain Valve (F).

Step 7. Fully open the Main Control Valve (A) and lock it open.

Step 8. Reset the fire alarm panel and notify the central alarm station.

V. Weekly Test

Important: Prior to closing any valves or activating any alarms, notify local security guards and the central alarm station if applicable.

Step 1. Open the Alarm Test Valve (E), verify that the alarm signal created by the Waterflow Pressure Alarm Switch (M) is visible at the fire panel. If applicable, check the sound of the Water Motor Alarm — it must be clear and steady.

Step 2. Close the Alarm Test Valve (E), verify that the normal supply and system pressures are restored. If the supply pressure is below the normal, use the instructions from the water supply to obtain the usual pressure.

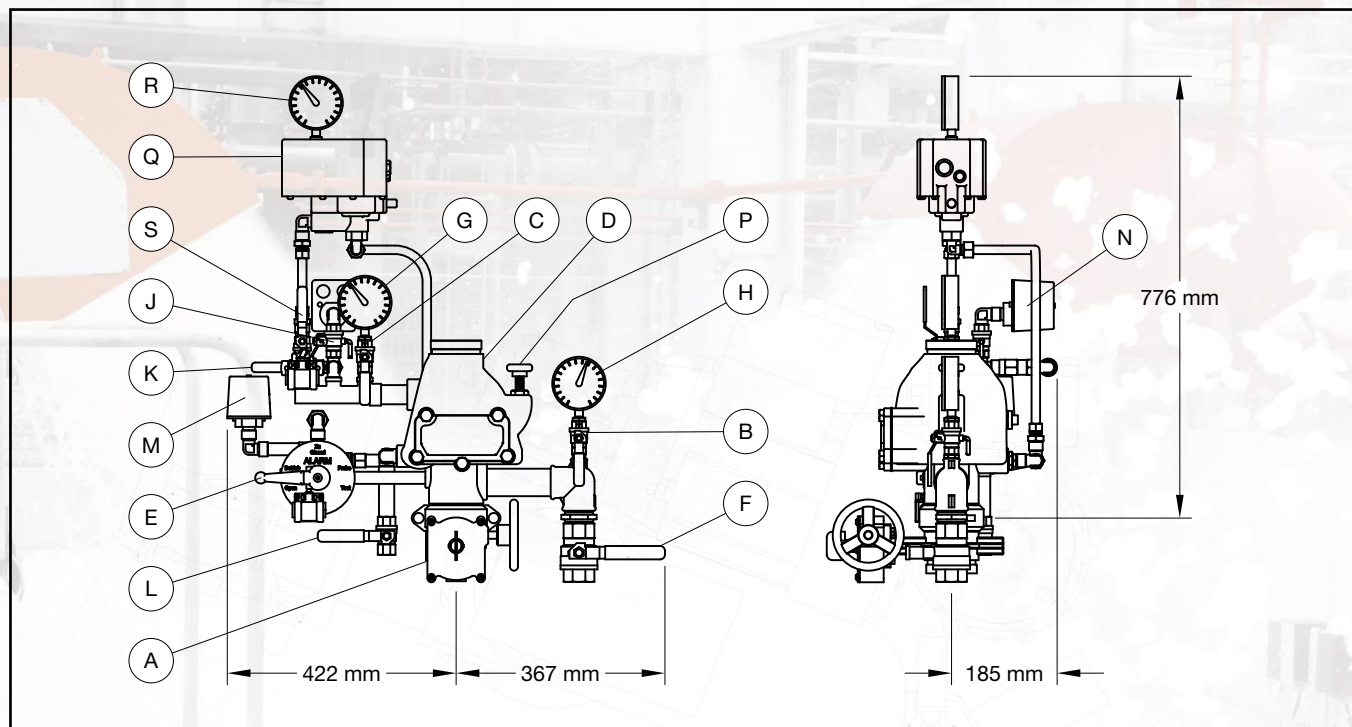
Step 3. Close the Pressure Switch Valve (J) and verify operation of the low air pressure Alarm Switch (N).

Step 4. Return the Pressure Switch Valve (J) to the normally open position after verifying that the alarm signal is visible at the fire panel.

Appendix G of TFP1090 AUGUST 2023

Summary Instructions (if problems occur, consult full document)

DN65 and DN80, Model DPV-1 Dry Pipe Valve with Three-Way Alarm Test Valve, with Model ACC-1 Accelerator



I. Normal Conditions

- The Main Control Valve (A) is opened and locked, and the Accelerator Control Valve (S) and Air Supply Control Valve (K) are open.
- The sprinkler system is filled with air and is pressurized.
- The Main Drain Valve (F), and Low Body Drain Valve (L) are closed.
- The Three-Way Alarm Control Valve (E) is in the open position.
- The Pressure Gauge Valves (B) and (C) are open.
- The Pressure Switch Valve (J) is open.
- System Air Pressure Gauge (G) reads downstream air pressure, Water Supply Pressure Gauge (H) reads the upstream water pressure, and Accelerator Air Pressure Gauge (R) reads the accelerator pressure.

II. Operation

When one or more sprinklers are activated, the accelerator operates to permit system air pressure into the Dry Pipe Valve intermediate chamber. Doing so will immediately overcome the ability of the system air pressure to hold the Dry Pipe Valve closed without having to wait for system air pressure to decay to approximately 20% of the water supply. The Dry Pipe Valve immediately opens to permit water flow into the system piping and to be discharged from any open sprinklers. Also, with the Dry Pipe Valve open, water flows to actuate the Waterflow Pressure Alarm Switch (M) and, as applicable, the Water Motor Alarm.

III. Removing System From Service

Step 1. Close the Main Control Valve (A), close the Air Supply Control Valve (K), close the Accelerator Control Valve (R), and place the Three-Way Alarm Control Valve (E) in the closed position.

Step 2. Drain the system with the Main Drain Valve (F) and by opening all auxiliary drain valves in the system to make sure that cross-mains and branch lines are drained.

IV. Placing the System Back in Service

Step 1. Close the auxiliary drain valves after water ceases to discharge, and leave the Main Drain Valve (F) open.

Step 2. Place the Three-Way Alarm Control Valve (E) in the open position.

Step 3. Replace the sprinklers that have operated and the sprinklers close to the fire.

Step 4. Push down on the reset knob (P) to allow the Dry Pipe Valve (D) to re-seat.

Step 5. Via the Air Supply Control Valve (K), pressurize the system with air to 0,7 bar, and then open and close each auxiliary drain valves in the system piping to drain any remaining water in trapped sections. Also, partially open the Low Body Drain Valve (L) to assure that the riser is completely drained. Close the Low Body Drain Valve (L) as soon as water ceases to discharge.

Step 6. Open the Air Supply Control Valve (K) to restore the system to the normal system air pressure.

Step 7. Reset accelerator (Q) using the instruction on its resetting label.

Step 8. Partially open the Main Control Valve (A), and then slowly close the Main Drain Valve (F).

Step 9. Fully open the Main Control Valve (A) and lock it open.

Step 10. Reset the fire alarm panel and notify the central alarm station.

V. Weekly Test

Important: Prior to closing any valves or activating any alarms, notify local security guards and the central alarm station if applicable.

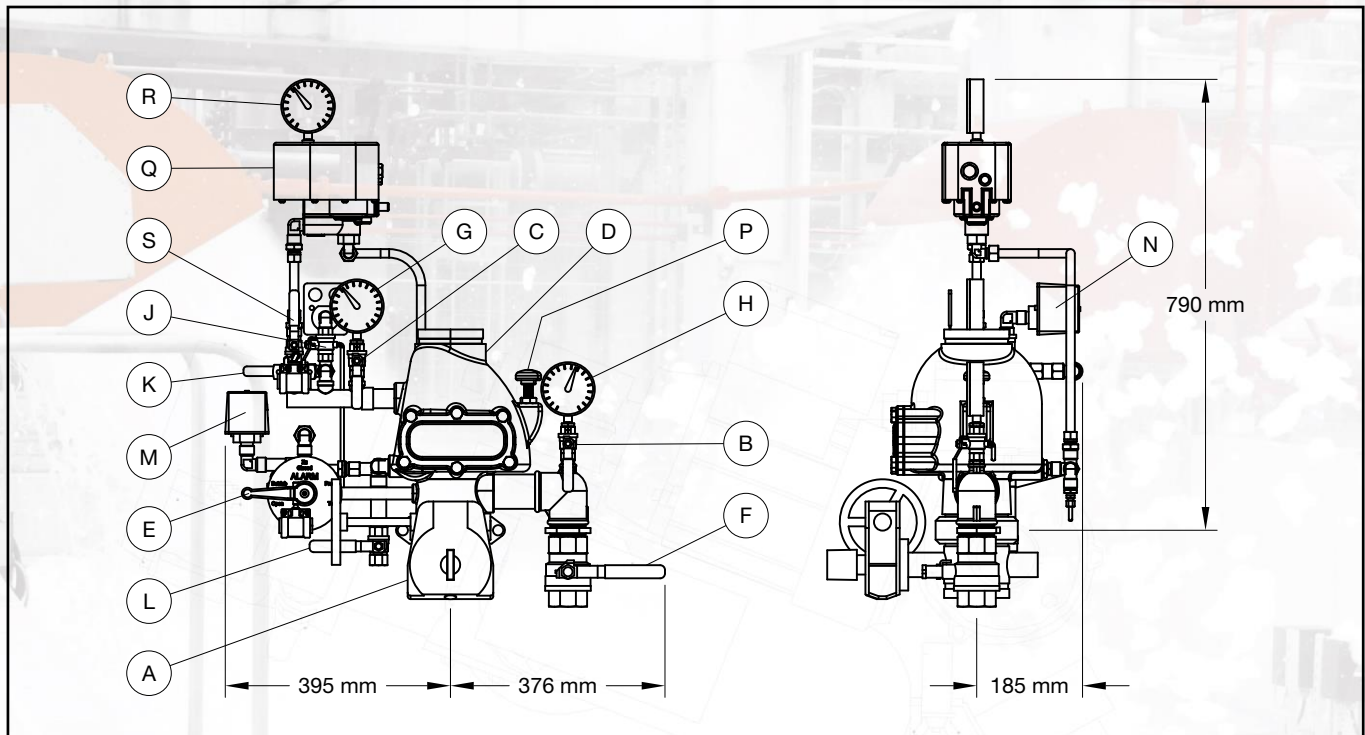
Step 1. Place the Three-Way Alarm Control Valve (E) in the test position, verify that the alarm signal created by the Waterflow Pressure Alarm Switch (M) is visible at the fire panel. If applicable, check the sound of the Water Motor Alarm — it must be clear and steady.

Step 2. Place the Three-Way Alarm Control Valve (E) in the open position and verify that the normal supply and system pressures are restored. If the supply pressure is below the normal, use the instructions from the water supply to obtain the usual pressure.

Step 3. Close the Pressure Switch Valve (J) and verify operation of the low air pressure Alarm Switch (N).

Step 4. Return the Pressure Switch Valve (J) to the normally open position after verifying that the alarm signal is visible at the fire panel.

Appendix H of TFP1090 AUGUST 2023
Summary Instructions (if problems occur, consult full document)
DN100, Model DPV-1 Dry Pipe Valve with Three-Way Alarm Test Valve,
with Model ACC-1 Accelerator



I. Normal Conditions

- The Main Control Valve (A) is opened and locked, and the Accelerator Control Valve (S) and Air Supply Control Valve (K) are open.
- The sprinkler system is filled with air and is pressurized.
- The Main Drain Valve (F), and Low Body Drain Valve (L) are closed.
- The Three-Way Alarm Control Valve (E) is in the open position.
- The Pressure Gauge Valves (B) and (C) are open.
- The Pressure Switch Valve (J) is open.
- System Air Pressure Gauge (G) reads downstream air pressure, Water Supply Pressure Gauge (H) reads the upstream water pressure, and Accelerator Air Pressure Gauge (R) reads the accelerator pressure.

II. Operation

When one or more sprinklers are activated, the accelerator operates to permit system air pressure into the Dry Pipe Valve intermediate chamber. Doing so will immediately overcome the ability of the system air pressure to hold the Dry Pipe Valve closed without having to wait for system air pressure to decay to approximately 20% of the water supply. The Dry Pipe Valve immediately opens to permit water flow into the system piping and to be discharged from any open sprinklers. Also, with the Dry Pipe Valve open, water flows to actuate the Waterflow Pressure Alarm Switch (M) and, as applicable, the Water Motor Alarm.

III. Removing System From Service

Step 1. Close the Main Control Valve (A), close the Air Supply Control Valve (R), and place the Three-Way Alarm Control Valve (E) in the closed position.

Step 2. Drain the system with the Main Drain Valve (F) and by opening all auxiliary drain valves in the system to make sure that cross-mains and branch lines are drained.

IV. Placing the System Back in Service

Step 1. Close the auxiliary drain valves after water ceases to discharge, and leave the Main Drain Valve (F) open.

Step 2. Place the Three-Way Alarm Control Valve (E) in the open position.

Step 3. Replace the sprinklers that have operated and the sprinklers close to the fire.

Step 4. Push down on the reset knob (P) to allow the Dry Pipe Valve (D) to re-seat.

Step 5. Via the Air Supply Control Valve (K), pressurize the system with air to 0,7 bar, and then open and close each auxiliary drain valves in the system piping to drain any remaining water in trapped sections. Also, partially open the Low Body Drain Valve (L) to assure that the riser is completely drained. Close the Low Body Drain Valve (L) as soon as water ceases to discharge.

Step 6. Open the Air Supply Control Valve (K) to restore the system to the normal system air pressure.

Step 7. Reset accelerator (Q) using the instruction on its resetting label.

Step 8. Partially open the Main Control Valve (A), and then slowly close the Main Drain Valve (F).

Step 9. Fully open the Main Control Valve (A) and lock it open.

Step 10. Reset the fire alarm panel and notify the central alarm station.

V. Weekly Test

Important: Prior to closing any valves or activating any alarms, notify local security guards and the central alarm station if applicable.

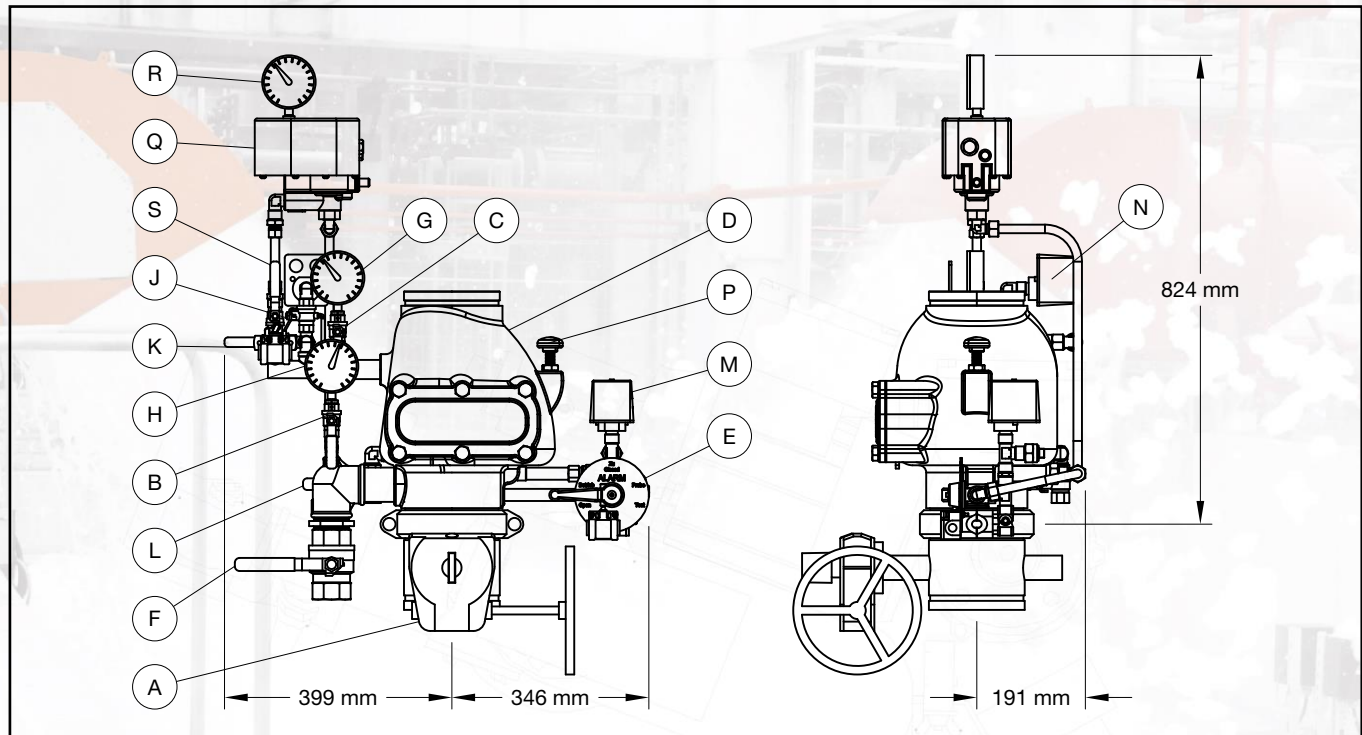
Step 1. Place the Three-Way Alarm Control Valve (E) in the test position, verify that the alarm signal created by the Waterflow Pressure Alarm Switch (M) is visible at the fire panel. If applicable, check the sound of the Water Motor Alarm — it must be clear and steady.

Step 2. Place the Three-Way Alarm Control Valve (E) in the open position and verify that the normal supply and system pressures are restored. If the supply pressure is below the normal, use the instructions from the water supply to obtain the usual pressure.

Step 3. Close the Pressure Switch Valve (J) and verify operation of the low air pressure Alarm Switch (N).

Step 4. Return the Pressure Switch Valve (J) to the normally open position after verifying that the alarm signal is visible at the fire panel.

Appendix I of TFP1090 AUGUST 2023
Summary Instructions (If problems occur, consult full document)
DN150, Model DPV-1 Dry Pipe Valve with Three-Way Alarm Test Valve,
with Model ACC-1 Accelerator



I. Normal Conditions

- The Main Control Valve (A) is opened and locked, and the Accelerator Control Valve (S) and Air Supply Control Valve (K) are open.
- The sprinkler system is filled with air and is pressurized.
- The Main Drain Valve (F), and Low Body Drain Valve (L) are closed.
- The Three-Way Alarm Control Valve (E) is in the open position.
- The Pressure Gauge Valves (B) and (C) are open.
- The Pressure Switch Valve (J) is open.
- System Air Pressure Gauge (G) reads downstream air pressure, Water Supply Pressure Gauge (H) reads the upstream water pressure, and Accelerator Air Pressure Gauge (R) reads the accelerator pressure.

II. Operation

When one or more sprinklers are activated, the accelerator operates to permit system air pressure into the Dry Pipe Valve intermediate chamber. Doing so will immediately overcome the ability of the system air pressure to hold the Dry Pipe Valve closed without having to wait for system air pressure to decay to approximately 20% of the water supply. The Dry Pipe Valve immediately opens to permit water flow into the system piping and to be discharged from any open sprinklers. Also, with the Dry Pipe Valve open, water flows to actuate the Waterflow Pressure Alarm Switch (M) and, as applicable, the Water Motor Alarm.

III. Removing System From Service

Step 1. Close the Main Control Valve (A), close the Air Supply Control Valve (K), close the Accelerator Control Valve (R), and place the Three-Way Alarm Control Valve (E) in the closed position.

Step 2. Drain the system with the Main Drain Valve (F) and by opening all auxiliary drain valves in the system to make sure that cross-mains and branch lines are drained.

IV. Placing the System Back in Service

Step 1. Close the auxiliary drain valves after water ceases to discharge, and leave the Main Drain Valve (F) open.

Step 2. Place the Three-Way Alarm Control Valve (E) in the open position.

Step 3. Replace the sprinklers that have operated and the sprinklers close to the fire.

Step 4. Push down on the reset knob (P) to allow the Dry Pipe Valve (D) to re-seat.

Step 5. Via the Air Supply Control Valve (K), pressurize the system with air to 0,7 bar, and then open and close each auxiliary drain valves in the system piping to drain any remaining water in trapped sections. Also, partially open the Low Body Drain Valve (L) to assure that the riser is completely drained. Close the Low Body Drain Valve (L) as soon as water ceases to discharge.

Step 6. Open the Air Supply Control Valve (K) to restore the system to the normal system air pressure.

Step 7. Reset accelerator (Q) using the instruction on its resetting label.

Step 8. Partially open the Main Control Valve (A), and then slowly close the Main Drain Valve (F).

Step 9. Fully open the Main Control Valve (A) and lock it open.

Step 10. Reset the fire alarm panel and notify the central alarm station.

V. Weekly Test

Important: Prior to closing any valves or activating any alarms, notify local security guards and the central alarm station if applicable.

Step 1. Place the Three-Way Alarm Control Valve (E) in the test position, verify that the alarm signal created by the Waterflow Pressure Alarm Switch (M) is visible at the fire panel. If applicable, check the sound of the Water Motor Alarm — it must be clear and steady.

Step 2. Place the Three-Way Alarm Control Valve (E) in the open position and verify that the normal supply and system pressures are restored. If the supply pressure is below the normal, use the instructions from the water supply to obtain the usual pressure.

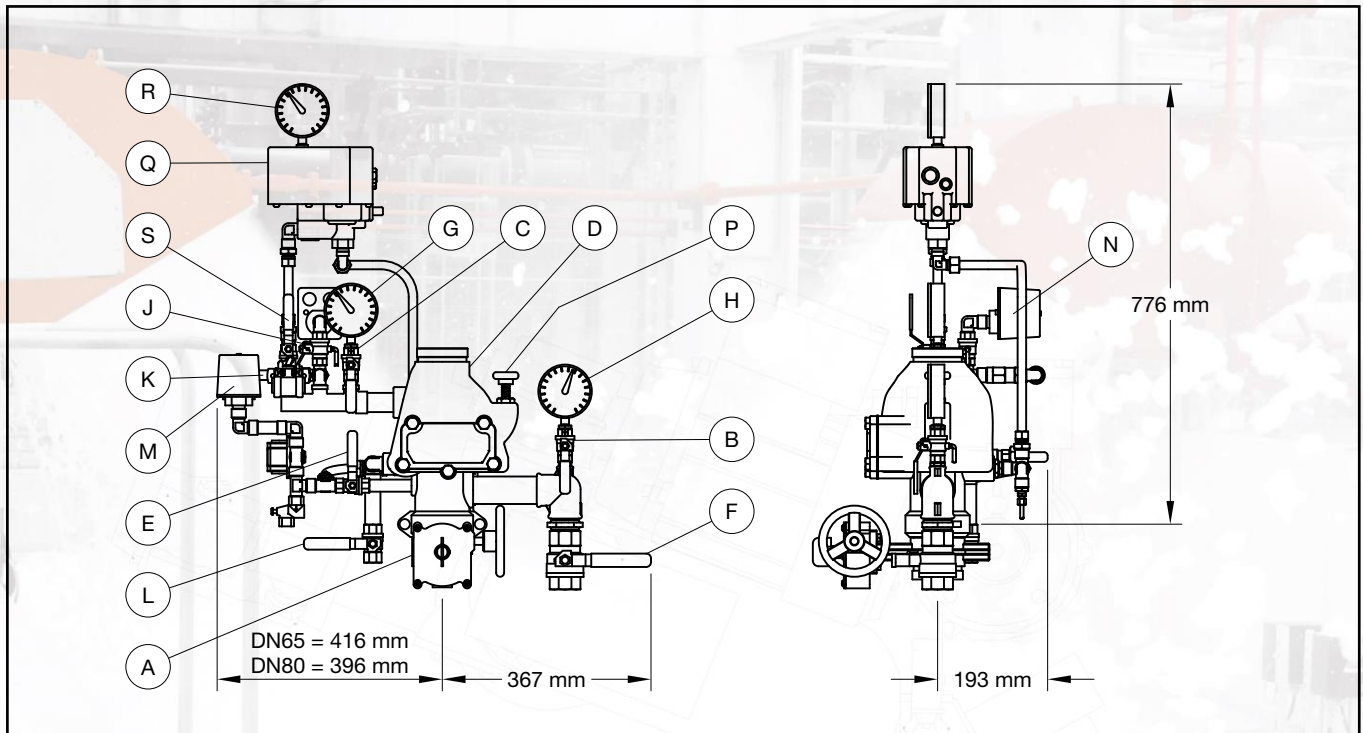
Step 3. Close the Pressure Switch Valve (J) and verify operation of the low air pressure Alarm Switch (N).

Step 4. Return the Pressure Switch Valve (J) to the normally open position after verifying that the alarm signal is visible at the fire panel.

Appendix J of TFP1090 AUGUST 2023

Summary Instructions (If problems occur, consult full document)

DN65 and DN80, Model DPV-1 Dry Pipe Valve with Standard Alarm Test Valve, with Model ACC-1 Accelerator



I. Normal Conditions

- The Main Control Valve (A) is opened and locked, and the Accelerator Control Valve (S) and Air Supply Control Valve (K) are open.
- The sprinkler system is filled with air and is pressurized.
- The Main Drain Valve (F), and Low Body Drain Valve (L) are closed.
- The Alarm Test Valve (E) is in the closed position.
- The Pressure Gauge Valves (B) and (C) are open.
- The Pressure Switch Valve (J) is open.
- System Air Pressure Gauge (G) reads downstream air pressure, Water Supply Pressure Gauge (H) reads the upstream water pressure, and Accelerator Air Pressure Gauge (R) reads the accelerator pressure.

II. Operation

When one or more sprinklers are activated, the accelerator operates to permit system air pressure into the Dry Pipe Valve intermediate chamber. Doing so will immediately overcome the ability of the system air pressure to hold the Dry Pipe Valve closed without having to wait for system air pressure to decay to approximately 20% of the water supply. The Dry Pipe Valve immediately opens to permit water flow into the system piping and to be discharged from any open sprinklers. Also, with the Dry Pipe Valve open, water flows to actuate the Waterflow Pressure Alarm Switch (M) and, as applicable, the Water Motor Alarm.

III. Removing System From Service

Step 1. Close the Main Control Valve (A), close the Air Supply Control Valve (K), and close the Accelerator Control Valve (R).

Step 2. Drain the system with the Main Drain Valve (F) and by opening all auxiliary drain valves in the system to make sure that cross-mains and branch lines are drained.

IV. Placing the System Back in Service

Step 1. Close the auxiliary drain valves after water ceases to discharge, and leave the Main Drain Valve (F) open.

Step 2. Replace the sprinklers that have operated and the sprinklers close to the fire.

Step 3. Push down on the reset knob (P) to allow the Dry Pipe Valve (D) to re-seat.

Step 4. Via the Air Supply Control Valve (K), pressurize the system with air to 0,7 bar, and then open and close each auxiliary drain valves in the system piping to drain any remaining water in trapped sections. Also, partially open the Low Body Drain Valve (L) to assure that the riser is completely drained. Close the Low Body Drain Valve (L) as soon as water ceases to discharge.

Step 5. Open the Air Supply Control Valve (K) to restore the system to the normal system air pressure.

Step 6. Reset accelerator (Q) using the instruction on its resetting label.

Step 7. Partially open the Main Control Valve (A), and then slowly close the Main Drain Valve (F).

Step 8. Fully open the Main Control Valve (A) and lock it open.

Step 9. Reset the fire alarm panel and notify the central alarm station.

V. Weekly Test

Important: Prior to closing any valves or activating any alarms, notify local security guards and the central alarm station if applicable.

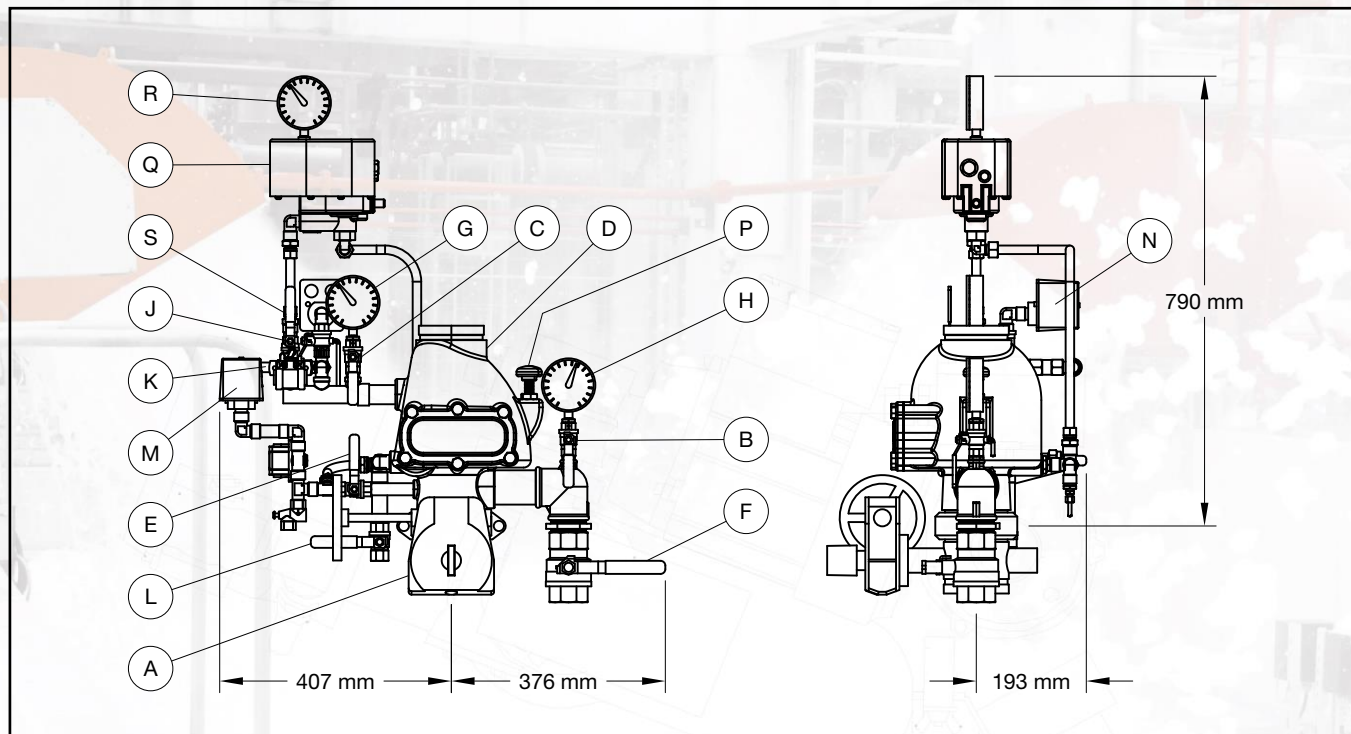
Step 1. Open the Alarm Test Valve (E), verify that the alarm signal created by the Waterflow Pressure Alarm Switch (M) is visible at the fire panel. If applicable, check the sound of the Water Motor Alarm — it must be clear and steady.

Step 2. Close the Alarm Test Valve (E), verify that the normal supply and system pressures are restored. If the supply pressure is below the normal, use the instructions from the water supply to obtain the usual pressure.

Step 3. Close the Pressure Switch Valve (J) and verify operation of the low air pressure Alarm Switch (N).

Step 4. Return the Pressure Switch Valve (J) to the normally open position after verifying that the alarm signal is visible at the fire panel.

Appendix K of TFP1090 AUGUST 2023
Summary Instructions (If problems occur, consult full document)
DN100, Model DPV-1 Dry Pipe Valve with Standard Alarm Test Valve,
with Model ACC-1 Accelerator



I. Normal Conditions

- The Main Control Valve (A) is opened and locked, and the Accelerator Control Valve (S) and Air Supply Control Valve (K) are open.
- The sprinkler system is filled with air and is pressurized.
- The Main Drain Valve (F), and Low Body Drain Valve (L) are closed.
- The Alarm Test Valve (E) is in the closed position.
- The Pressure Gauge Valves (B) and (C) are open.
- The Pressure Switch Valve (J) is open.
- System Air Pressure Gauge (G) reads downstream air pressure, Water Supply Pressure Gauge (H) reads the upstream water pressure, and Accelerator Air Pressure Gauge (R) reads the accelerator pressure.

II. Operation

When one or more sprinklers are activated, the accelerator operates to permit system air pressure into the Dry Pipe Valve intermediate chamber. Doing so will immediately overcome the ability of the system air pressure to hold the Dry Pipe Valve closed without having to wait for system air pressure to decay to approximately 20% of the water supply. The Dry Pipe Valve immediately opens to permit water flow into the system piping and to be discharged from any open sprinklers. Also, with the Dry Pipe Valve open, water flows to actuate the Waterflow Pressure Alarm Switch (M) and, as applicable, the Water Motor Alarm.

III. Removing System From Service

Step 1. Close the Main Control Valve (A), close the Air Supply Control Valve (K), and close the Accelerator Control Valve (R).

Step 2. Drain the system with the Main Drain Valve (F) and by opening all auxiliary drain valves in the system to make sure that cross-mains and branch lines are drained.

IV. Placing the System Back in Service

Step 1. Close the auxiliary drain valves after water ceases to discharge, and leave the Main Drain Valve (F) open.

Step 2. Replace the sprinklers that have operated and the sprinklers close to the fire.

Step 3. Push down on the reset knob (P) to allow the Dry Pipe Valve (D) to re-seat.

Step 4. Via the Air Supply Control Valve (K), pressurize the system with air to 0,7 bar, and then open and close each auxiliary drain valves in the system piping to drain any remaining water in trapped sections. Also, partially open the Low Body Drain Valve (L) to assure that the riser is completely drained. Close the Low Body Drain Valve (L) as soon as water ceases to discharge.

Step 5. Open the Air Supply Control Valve (K) to restore the system to the normal system air pressure.

Step 6. Reset accelerator (Q) using the instruction on its resetting label.

Step 7. Partially open the Main Control Valve (A), and then slowly close the Main Drain Valve (F).

Step 8. Fully open the Main Control Valve (A) and lock it open.

Step 9. Reset the fire alarm panel and notify the central alarm station.

V. Weekly Test

Important: Prior to closing any valves or activating any alarms, notify local security guards and the central alarm station if applicable.

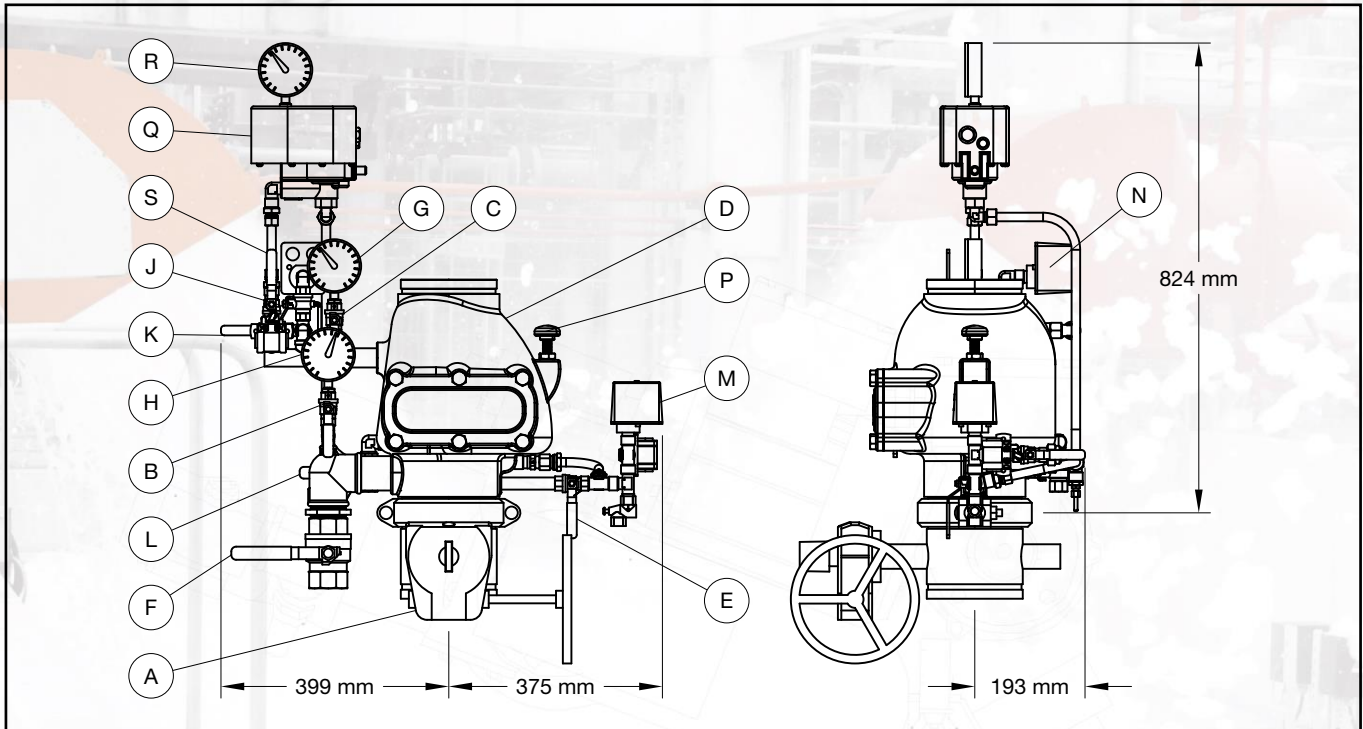
Step 1. Open the Alarm Test Valve (E), verify that the alarm signal created by the Waterflow Pressure Alarm Switch (M) is visible at the fire panel. If applicable, check the sound of the Water Motor Alarm — it must be clear and steady.

Step 2. Close the Alarm Test Valve (E), verify that the normal supply and system pressures are restored. If the supply pressure is below the normal, use the instructions from the water supply to obtain the usual pressure.

Step 3. Close the Pressure Switch Valve (J) and verify operation of the low air pressure Alarm Switch (N).

Step 4. Return the Pressure Switch Valve (J) to the normally open position after verifying that the alarm signal is visible at the fire panel.

Appendix L of TFP1090 AUGUST 2023
Summary Instructions (if problems occur, consult full document)
DN150, Model DPV-1 Dry Pipe Valve with Standard Alarm Test Valve,
with Model ACC-1 Accelerator



I. Normal Conditions

- The Main Control Valve (A) is opened and locked, and the Accelerator Control Valve (S) and Air Supply Control Valve (K) are open.
- The sprinkler system is filled with air and is pressurized.
- The Main Drain Valve (F), and Low Body Drain Valve (L) are closed.
- The Alarm Test Valve (E) is in the closed position.
- The Pressure Gauge Valves (B) and (C) are open.
- The Pressure Switch Valve (J) is open.
- System Air Pressure Gauge (G) reads downstream air pressure, Water Supply Pressure Gauge (H) reads the upstream water pressure, and Accelerator Air Pressure Gauge (R) reads the accelerator pressure.

II. Operation

When one or more sprinklers are activated, the accelerator operates to permit system air pressure into the Dry Pipe Valve intermediate chamber. Doing so will immediately overcome the ability of the system air pressure to hold the Dry Pipe Valve closed without having to wait for system air pressure to decay to approximately 20% of the water supply. The Dry Pipe Valve immediately opens to permit water flow into the system piping and to be discharged from any open sprinklers. Also, with the Dry Pipe Valve open, water flows to actuate the Waterflow Pressure Alarm Switch (M) and, as applicable, the Water Motor Alarm.

III. Removing System From Service

Step 1. Close the Main Control Valve (A), close the Air Supply Control Valve (K), and close the Accelerator Control Valve (R).

Step 2. Drain the system with the Main Drain Valve (F) and by opening all auxiliary drain valves in the system to make sure that cross-mains and branch lines are drained.

IV. Placing the System Back in Service

Step 1. Close the auxiliary drain valves after water ceases to discharge, and leave the Main Drain Valve (F) open.

Step 2. Replace the sprinklers that have operated and the sprinklers close to the fire.

Step 3. Push down on the reset knob (P) to allow the Dry Pipe Valve (D) to re-seat.

Step 4. Via the Air Supply Control Valve (K), pressurize the system with air to 0.7 bar, and then open and close each auxiliary drain valves in the system piping to drain any remaining water in trapped sections. Also, partially open the Low Body Drain Valve (L) to assure that the riser is completely drained. Close the Low Body Drain Valve (L) as soon as water ceases to discharge.

Step 5. Open the Air Supply Control Valve (K) to restore the system to the normal system air pressure.

Step 6. Reset accelerator (Q) using the instruction on its resetting label.

Step 7. Partially open the Main Control Valve (A), and then slowly close the Main Drain Valve (F).

Step 8. Fully open the Main Control Valve (A) and lock it open.

Step 9. Reset the fire alarm panel and notify the central alarm station.

V. Weekly Test

Important: Prior to closing any valves or activating any alarms, notify local security guards and the central alarm station if applicable.

Step 1. Open the Alarm Test Valve (E), verify that the alarm signal created by the Waterflow Pressure Alarm Switch (M) is visible at the fire panel. If applicable, check the sound of the Water Motor Alarm — it must be clear and steady.

Step 2. Close the Alarm Test Valve (E), verify that the normal supply and system pressures are restored. If the supply pressure is below the normal, use the instructions from the water supply to obtain the usual pressure.

Step 3. Close the Pressure Switch Valve (J) and verify operation of the low air pressure Alarm Switch (N).

Step 4. Return the Pressure Switch Valve (J) to the normally open position after verifying that the alarm signal is visible at the fire panel.



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TFP1090 Change History Appendix

ISSUE DATE	NOTES
08-23	Pages 13 to 24, Figures 7 to 18, updated Pressure Alarm Switch model to PS10-1 or TPS10X1, previously just PS10-1, updated part numbers to 0260 or 100101, previously just 0260.
06-23	Page 15, Figure 9, Item no. 1, changed P/N to WS00000095, formerly shown as K00128; Page 21, Figure 15, Item no. 1, changed P/N to WS00000095, formerly shown as K00128.
08-22	Reduced document to 24 pages + appendices, formerly 26 pages + appendices; Page 1, updated QR code and URL; Page 20, changed corporate address and telephone number to 1467 Elmwood Avenue, Cranston, RI 02910 Telephone +1-401-781-8220, formerly 1400 Pennbrook Parkway, Lansdale, PA 19446 Telephone +1-215-362-0700.
04-22	Page 1, added QR code and URL to allow convenient access to electronic version from printed document; Page 4, Approvals sub-section, added EAC Approved.
06-21	Clarified Figures 1A and 1B Dow Corning FS3452 Fluorosilicone Grease is factory-applied to Reset Plunger and must not be removed when reassembling valve, grease was formerly listed as separate Items 18 and 21 in Bills of Materials.
12-20	Updated recommended handhole cover bolt torque specifications.
08-20	Corrected Table E DN65 size specification from 73,0 mm to 76,1 mm.
07-20	Added DN65 and DN80 sizes; Added advisory note for installation of relief valve upstream of DPV-1 supply inlet to prevent transient increases in water pressure causing unintended valve operation.
08-18	Updated Tyco® branding and document format; Added Johnson Controls copyright; Added disclaimer stating specifications and information subject to change without notice; Added reference to Regulatory and Health Warning Technical Data Sheet TFP2300.
12-16	Added handhole cover installation procedure with bolt torque values.
07-15	Changed part number for accessory Model WMA-1 with red gong to 52-630-1-021R, formerly shown as 52-630-1-021.
04-15	Updated trim design; Updated requirements for separately ordered supervisory switches.
02-12	Updated Reset Plunger and replacement part number; Replaced union adjacent to air supply manifold with pipe nipple in trim arrangements; Clarified VdS Approved pressure range is for supply pressure of 3 to 16 bar.
03-11	Updated patent information.
03-06	Added repair parts.
10-05	New Technical Data Sheet TFP1090 describes Model DPV-1 Dry Pipe Valve with European Conformity Valve Trim for Eastern Hemisphere sales only.

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