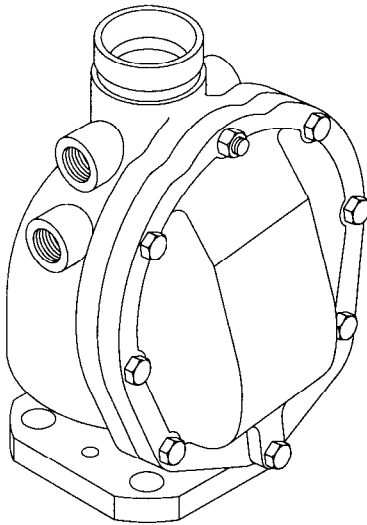




DRY PIPE VALVE — 2 and 3 INCH (50 and 80 mm)

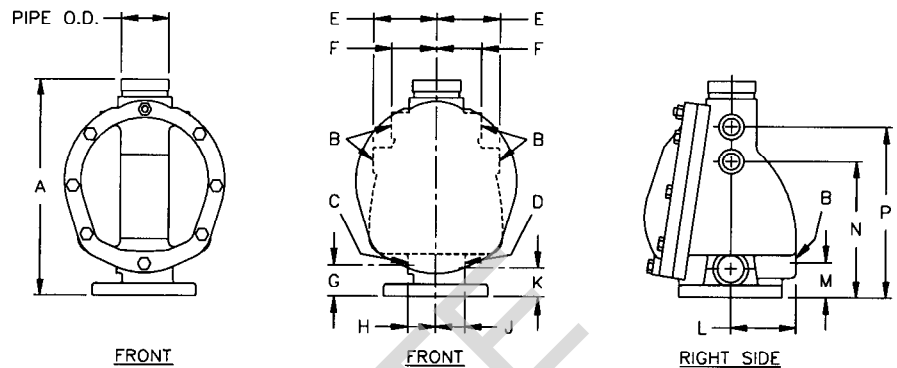
MODEL F3061 (FLANGE x GROOVE)



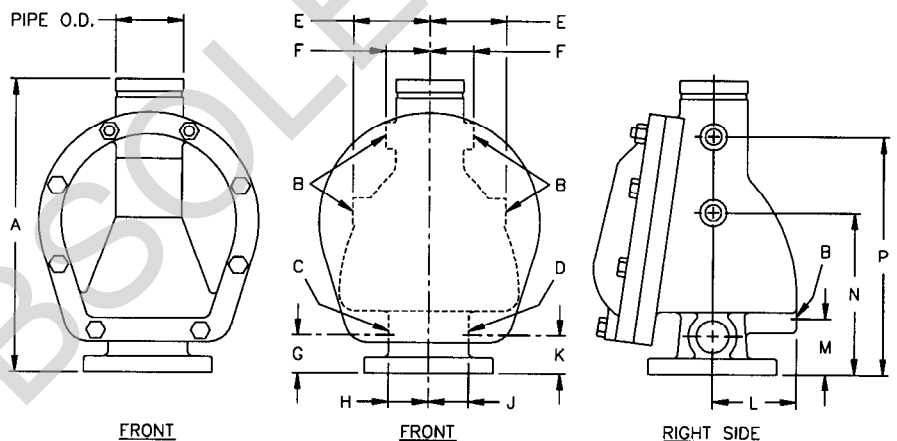
GENERAL DESCRIPTION

The 2 and 3 inch (50 and 80 mm), Model F3061 Dry Pipe Valves are differential valves used to automatically control the flow of water into dry pipe fire protection sprinkler systems upon operation of one or more automatic sprinklers. The F3061 also provides for actuation of fire alarms upon system operation. The design of the F3061 Clapper Assembly allows for the internal parts to swing outside of the Hand-hole Cover opening for easy inspection prior to resetting, and the F3061 features a field replaceable Air/Water Seat Ring.

Dry pipe sprinkler systems are typically used in unheated warehouses, parking garages, store windows, attic spaces, loading docks, and other areas exposed to freezing temperatures, where water filled pipe cannot be utilized. When set for service, the dry pipe sprinkler system is pressurized with air (nitrogen), and the loss of air pressure through an operated automatic sprinkler, in response to heat from a fire, permits the F3061 Dry Pipe Valve to open and allow a flow of water into the sprinkler system piping. The differential design of the F3061 is such that the minimum air pressure in the piping is calculated to be approximately 1/6 of the static water supply pressure, with an added 20 psi (1,4 bar) safety factor, to help prevent a false operation that might otherwise occur due to water supply pressure fluctuations.



2 Inch (50 mm) Valve



3 Inch (80 mm) Valve

Nominal Dimensions in Inches and (mm)

VALVE SIZE	A	B	C	D	E	F	G	H
2 (50)	10.88 (276,4)	1/2" NPT	1/4" NPT	1" NPT	3.06 (77,7)	2.19 (55,6)	1.56 (39,6)	1.38 (35,1)
3 (80)	15.18 (385,8)	1/2" NPT	1-1/4" NPT	1-1/4" NPT	3.94 (100,1)	2.25 (57,2)	1.94 (49,3)	2.06 (52,3)

VALVE SIZE	J	K	L	M	N	P	PIPE O.D.
2 (50)	1.44 (36,6)	1.44 (36,6)	3.19 (81,0)	1.75 (44,5)	6.81 (173,0)	8.56 (217,4)	2.375 (60,3)
3 (80)	2.06 (52,3)	1.94 (49,3)	4.56 (115,8)	4.63 (117,6)	8.38 (212,9)	12.31 (312,7)	3.500 (88,9)

FIGURE A
MODEL F3061 DRY PIPE VALVES
— DIMENSIONS AND PORT LOCATIONS —

APPROVALS AND STANDARDS

The 2 and 3 inch (50 and 80 mm), Model F3061 Dry Pipe Valves are listed by Underwriters Laboratories Inc. and Underwriters' Laboratories of Canada. The F3061 Valves are also approved by the Factory Mutual Research Corporation.

WARNING

The Model F3061 Dry Pipe Valves described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the National Fire Protection Association, in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the integrity of these devices.

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

TECHNICAL DATA

Dry Pipe Valve:

The 2 and 3 inch (50 and 80 mm), Model F3061 Dry Pipe Valves are rated for use at a maximum service pressure of 175 psi (12,1 bar). The Valve dimensions are shown in Figure A, and all of the ports are NPT threaded per ANSI Standard B1.20.1. Flanged inlet connections are drilled per ANSI specifications. The grooved outlet connections are cut in accordance with Grovlok standard groove specifications for steel pipe, and they are suitable for use with grooved end pipe couplings that are listed or approved for fire protection system service.

The F3061 Valve is to be installed vertically, as shown in Figure A. Exterior surfaces of the F3061 Valve are painted red, and the year of manufacture is indicated on the Handhole Cover.

Components of the 2 Inch (50 mm) F3061 Valve are shown in Figure B-1, and components of the 3 Inch (80 mm) F3061 Valve are shown in Figure B-2. The Body and Handhole Cover are cast iron per ASTM A48, Class 35-B. The Handhole Cover Gasket is cloth inserted Styrene Butadiene, the Clapper Facing is EPDM, and the O-Rings are Buna-N. The Air/Water Seat Ring, Clapper, Clapper Arm, Retaining Ring, and Latch are bronze per ASTM B62 (UNS C83600), and the Seat Ring

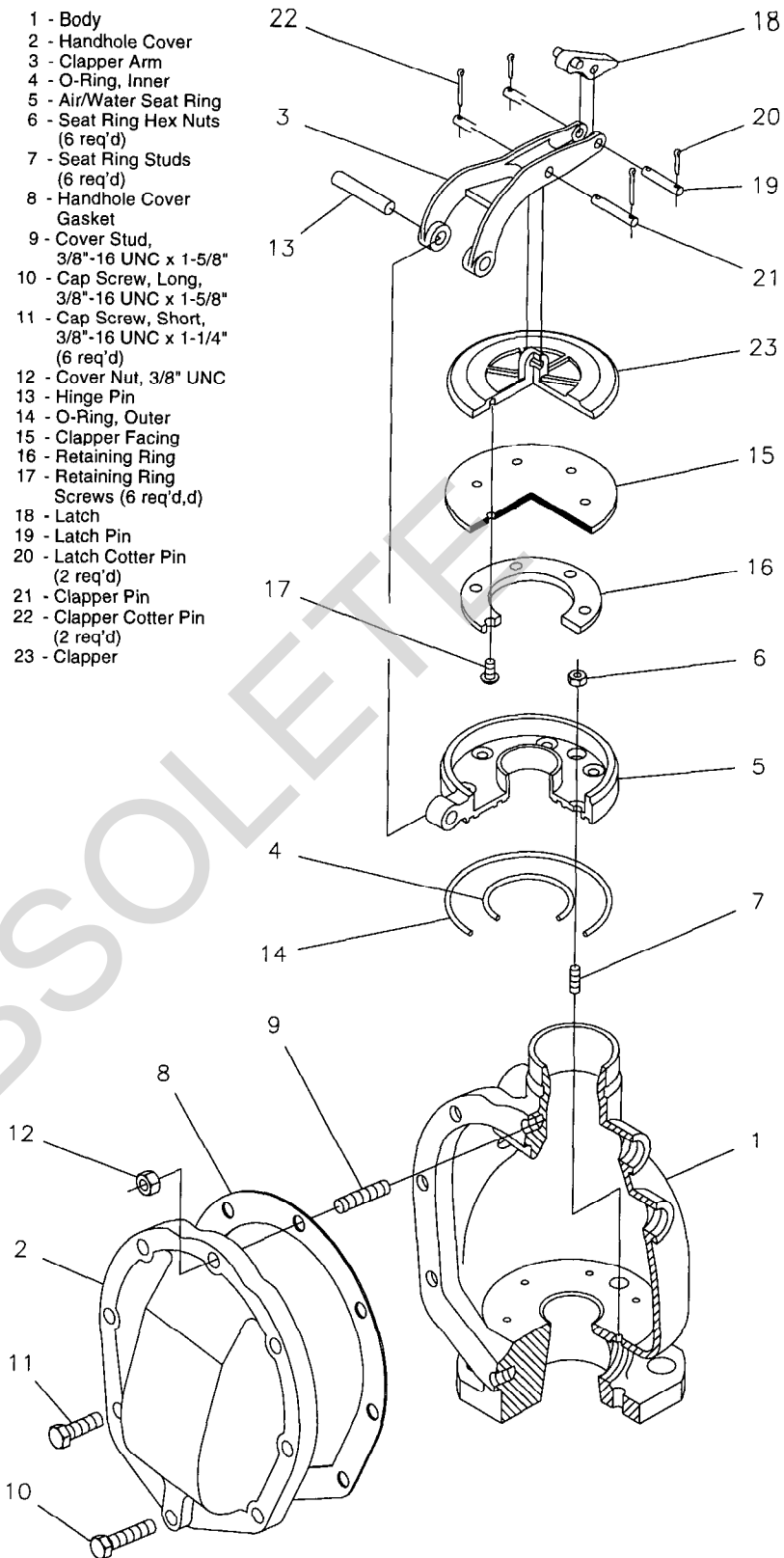


FIGURE B-1
2 INCH (50 mm) MODEL F3061 DRY PIPE VALVE
— ASSEMBLY —

- 1 - Body
- 2 - Handhole Cover
- 3 - Clapper Arm
- 4 - O-Ring, Inner
- 5 - Air/Water Seat Ring
- 6 - Seat Ring Hex Nuts (6 req'd)
- 7 - Seat Ring Studs (6 req'd)
- 8 - Handhole Cover Gasket
- 9 - Cover Stud, 5/8"-11 UNC x 2-1/4" (2 req'd)
- 10 - Cap Screw, Long, 5/8"-11 UNC x 2-1/2" (2 req'd)
- 11 - Cap Screw, Short, 5/8"-11 UNC x 1-3/4" (4 req'd)
- 12 - Cover Nut, 5/8"-11 UNC (2 req'd)
- 13 - Hinge Pin
- 14 - O-Ring, Outer
- 15 - Clapper Facing
- 16 - Retaining Ring
- 17 - Retaining Ring Screws (6 req'd)
- 18 - Latch
- 19 - Latch Pin
- 20 - Latch Cotter Pin (2 req'd)
- 21 - Clapper Pin
- 22 - Clapper Cotter Pin (2 req'd)
- 23 - Clapper

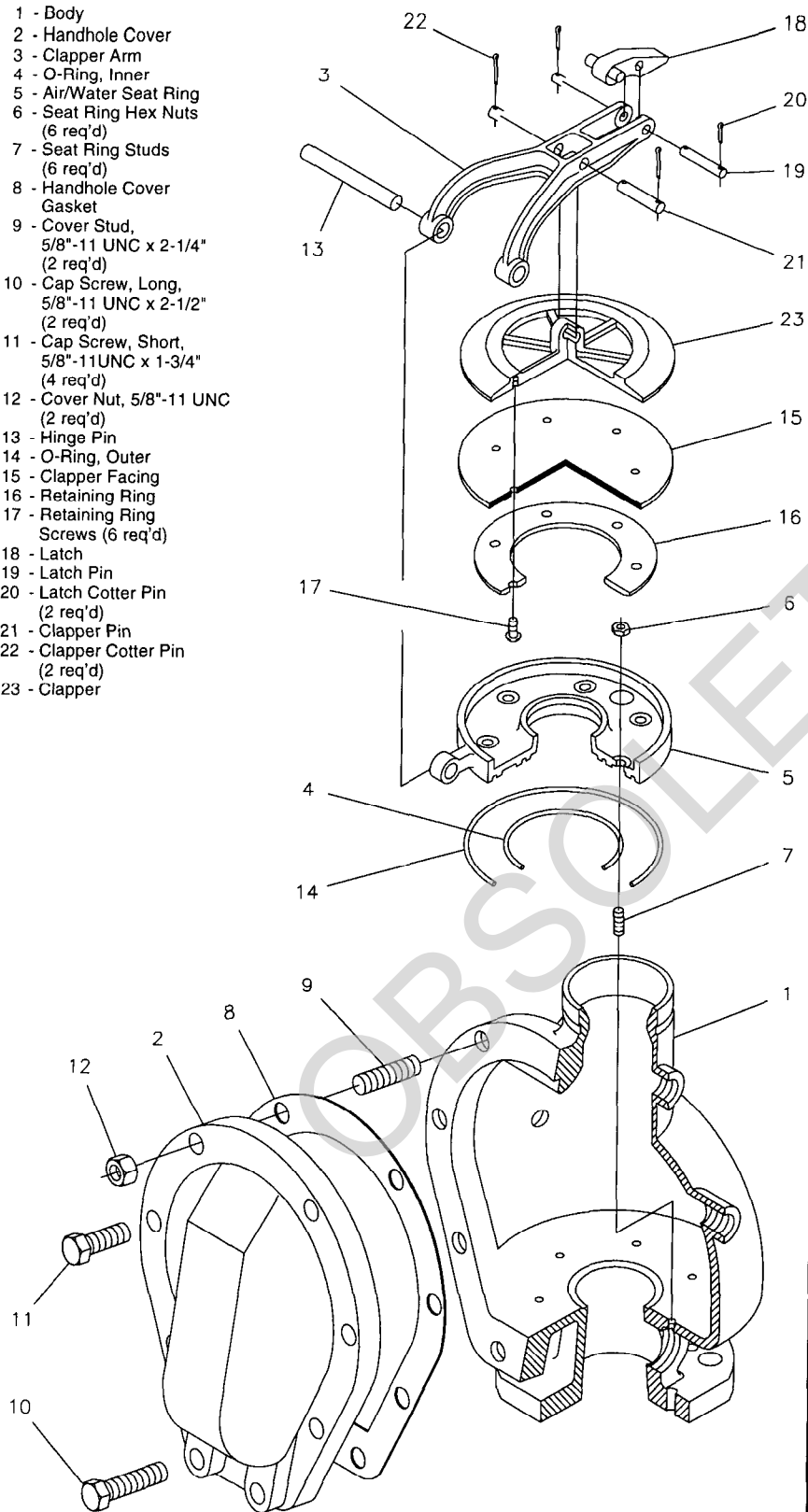


FIGURE B-2
3 INCH (80 mm) MODEL F3061 DRY PIPE VALVE
— ASSEMBLY —

Maximum Water Supply Pressure, psi	System Air Pressure Range, psi
50	28 - 34
75	32 - 38
100	36 - 43
125	39 - 46
150	43 - 51
175	47 - 55

TABLE A
SYSTEM AIR PRESSURE REQUIREMENTS

Studs and Nuts are Type 304 Stainless Steel. The Hinge Pin, Latch Pin, and Clapper Pin are brass per ASTM B16 (C36000). The Retaining Ring Screws are brass, and the Cotter Pins are stainless steel. The Handhole Cover Studs, Nuts, and Cap Screws are carbon steel.

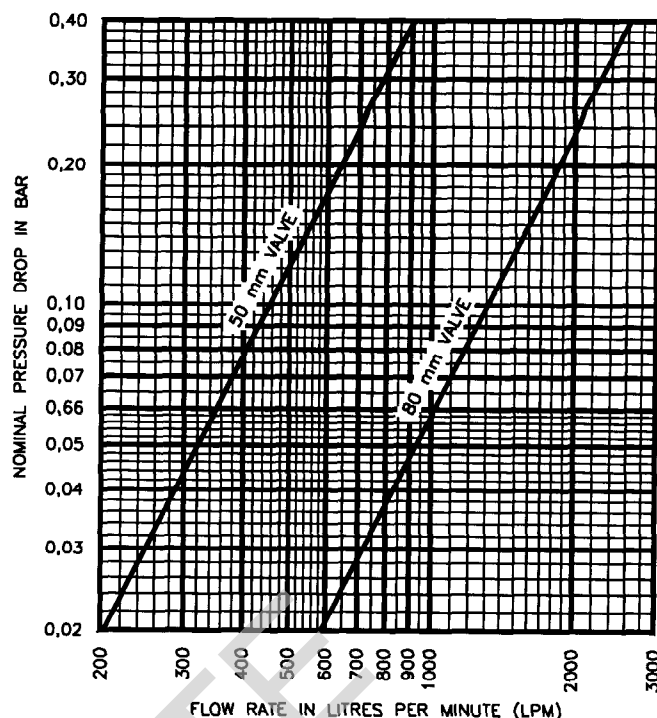
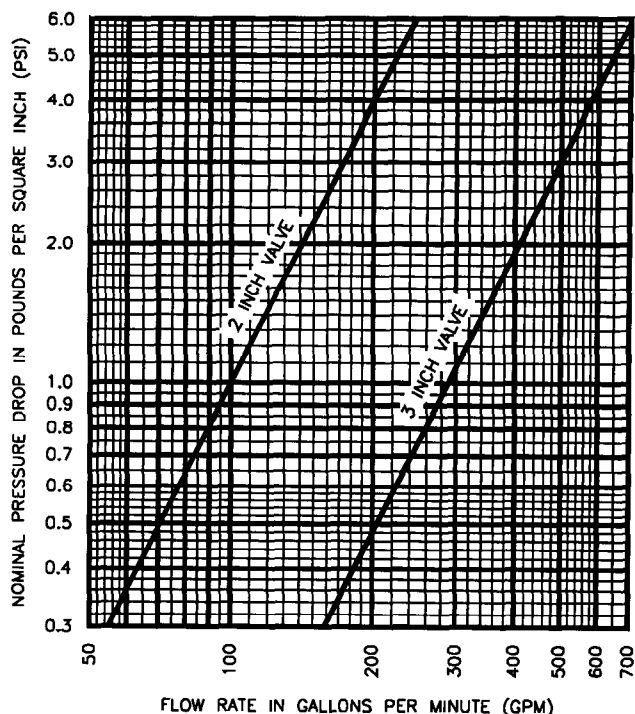
The nominal pressure losses versus flow are shown in Graphs A-1 and A-2. The approximate friction losses, based on the Hazen and Williams formula and expressed in equivalent length of Schedule 40 pipe with C = 100, is 8.4 feet for the 2 inch (50 mm) valve size and 7.7 feet for the 3 inch (80 mm) valve size. The equivalent length of pipe has been calculated on the basis of the flow rates typically used with each size valve.

Valve Trim:

Installation dimensions are given in Figures D-1 and D-2. The 2 Inch (50 mm) Valve Trim is illustrated in Figure E-1, and the 3 Inch (80 mm) Valve Trim is illustrated in Figure E-2. The Valve Trim forms a part of the laboratory listings and approval of the F3061 Valves and is necessary for the proper operation of the F3061 Valves. Each package of trim includes the following items:

- Water Supply Pressure Gauge
- System Air Pressure Gauge
- Air Supply Connections
- Main Drain Valve
- Alarm Test Valve
- Alarm Control Valve
- Automatic Drain Valve
- Priming Cup
- Priming Level Test Valve
- Drip Funnel

Table A shows the system air pressure requirements as a function of the water supply pressure. The air pressure in the sprinkler system is recommended



GRAPHS A-1 and A-2
NOMINAL PRESSURE LOSS VERSUS FLOW

to be automatically maintained by using one of the following pressure maintenance devices, as appropriate, and nitrogen pressure may be used in lieu of air pressure.

- Model F324 Air Maintenance Device (pressure reducing type), refer to Technical Data Sheet TD111.
- Model F326 Air Maintenance Device (compressor control type), refer to Technical Data Sheet TD112.
- Model F328 Nitrogen Maintenance Device (high pressure reducing type), refer to Technical Data Sheet TD113.

The Pressure Relief Valve (Item 6 - Fig. E-1 or E-2) is factory set to relieve at a pressure of approximately 45 psi (3,1 bar). If the normal system air pressure is less than or exceeds 40 psi (2,8 bar), then the pressure Relief Valve must be reset to relieve at a pressure which is in accordance with the Authority Having Jurisdiction.

OPERATING PRINCIPLES

The Model F3061 Dry Pipe Valves are differential type valves that utilize a substantially lower system (air) pressure than the supply (water) pressure, to maintain the set position shown in Figure C-1. The differential nature of the F3061 is based on the area difference between the air seat and the water seat. The difference is such that 1 psi (0,07 bar) of system air pressure can hold approximately 6 psi (0,4 bar) of water supply pressure.

The minimum system air pressure (Ref. Table A) is, therefore, calculated to be approximately 1/6 of the static water supply pressure, plus a 20 psi (1,4 bar) safety factor, to help prevent a false operation that might otherwise occur due to water supply pressure fluctuations.

Priming water within the body of the F3061 Valve, as shown in Figure C-1, helps to maintain a tight air seal at the air seat. Between the air and water seats, an intermediate chamber is formed, and the intermediate chamber is normally open to atmosphere through the alarm port and piping to the Automatic Drain Valve (Ref. Figure E-1 or E-2).

Having the intermediate chamber open to atmosphere is critical to the F3061 Valve remaining set, otherwise the full resulting pressure of the system air pressure on top of the Clapper Assembly cannot be realized. For ex-

ample, if the system air pressure is 40 psi (2,7 bar) and there was 25 psi (1,7 bar) pressure trapped in the intermediate chamber, the resulting pressure across the top of the Clapper would only be 15 psi (1,0 bar), which would be insufficient to hold the Clapper Assembly closed against a water supply pressure of 100 psi (6,9 bar). It is for this reason that the plunger of the Automatic Drain Valve needs to be depressed several times during resetting of the F3061 Valve, as well as during inspections, to make certain that the Automatic Drain Valve is open.

When one or more automatic sprinklers operate in response to a fire, air pressure within the system piping is relieved. When the air pressure becomes sufficiently reduced, the water pressure overcomes the differential, holding the Clapper Assembly closed and the Clapper Assembly swings clear of the water seat to permit water flow into the system piping and subsequently to be discharged from any open sprinklers.

Under full flow conditions, the Clapper Assembly will latch open as shown in Figure C-2. Also, with the Clapper Assembly open, the intermediate chamber is pressurized and water flows through the alarm port at the rear of the F3061 Valve to actuate system waterflow alarms. The flow from the alarm port is also sufficient to close the otherwise normally open Automatic Drain Valve (Ref. Figure E-1 or E-2).

INSTALLATION

NOTES

Proper operation of the Model F3061 Dry Pipe Valve depends upon its trim being installed in accordance with the instructions given in this Technical Data Sheet. Failure to follow the appropriate trim diagram may prevent the F3061 Valve from functioning properly, as well as void listings, approvals, and the manufacturer's warranties.

The F3061 Valve must be installed in a readily visible and accessible location.

The F3061 Valve and associated trim must be maintained at a minimum temperature of 40°F/4°C.

Heat tracing of the F3061 Valve or its associated trim is not permitted. Heat tracing can result in the formation of hardened mineral deposits which are capable of preventing proper operation.

The Model F3061 Dry Pipe Valve is to be installed in accordance with the following criteria:

1. All nipples, fittings, and devices must be clean and free of scale and burrs before installation. Use pipe thread sealant sparingly on male pipe threads only.
2. The F3061 Valve must be trimmed in accordance with Figures E-1 or E-2, as applicable.
3. Care must be taken to make sure that check valves, strainers, globe valves, etc. are installed with the flow arrows in the proper direction.
4. Drain tubing to the drip funnel must be installed with smooth bends that will not restrict flow.
5. The main drain and drip funnel drain may be interconnected provided a check valve is located at least 12 inches (300 mm) below the drip funnel.
6. 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.
7. Unused pressure alarm switch and/or water motor alarm connections must be plugged.
8. The Pressure Relief Valve provided with the Valve Trim is factory set to relieve at a pressure of approximately 45 psi (3,1 bar), which can typically be used for a maximum normal system air pressure of 40 psi

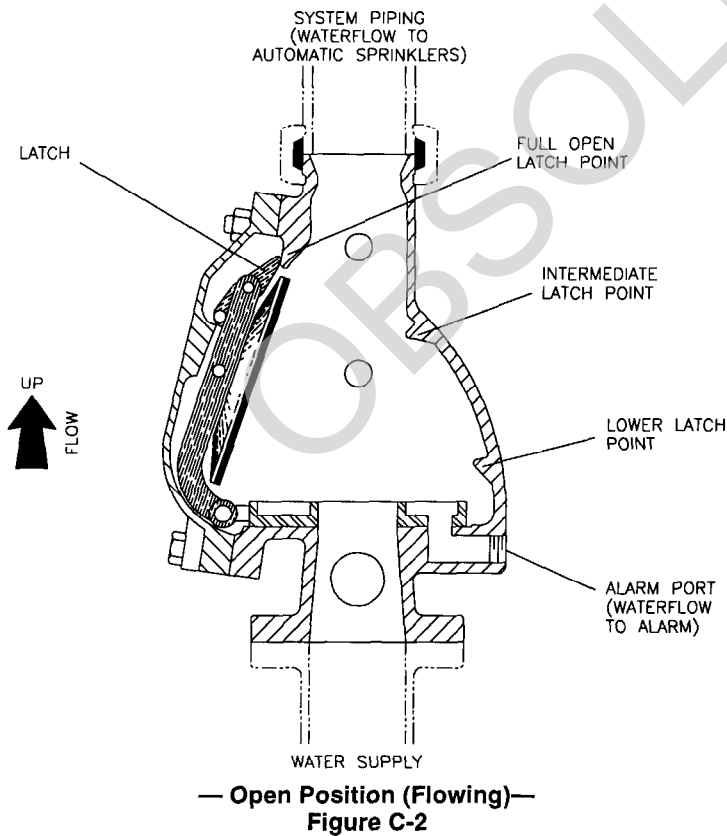
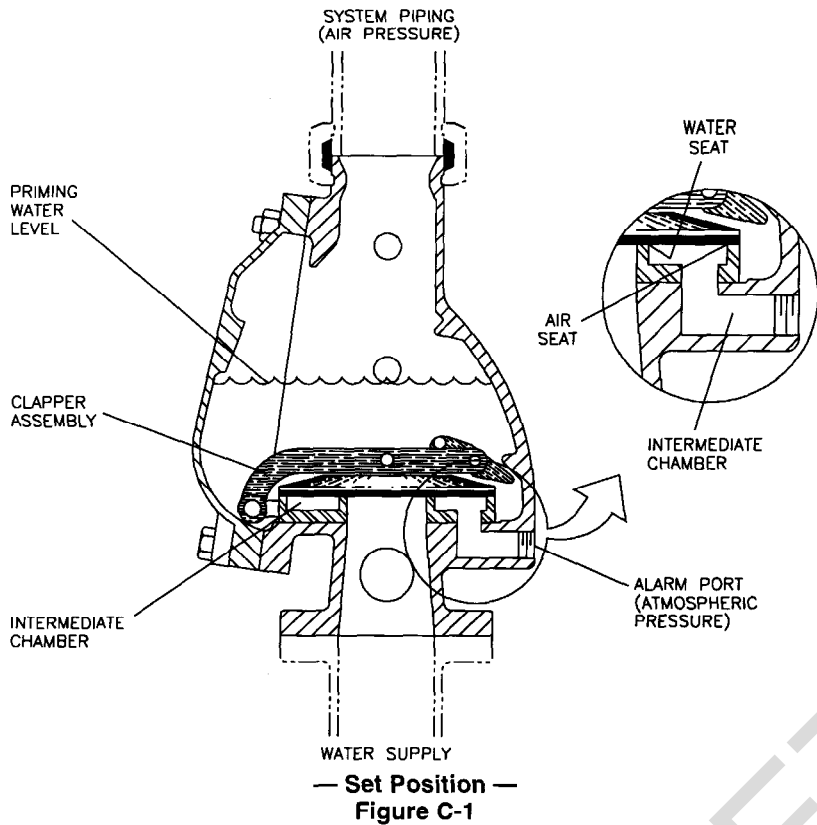
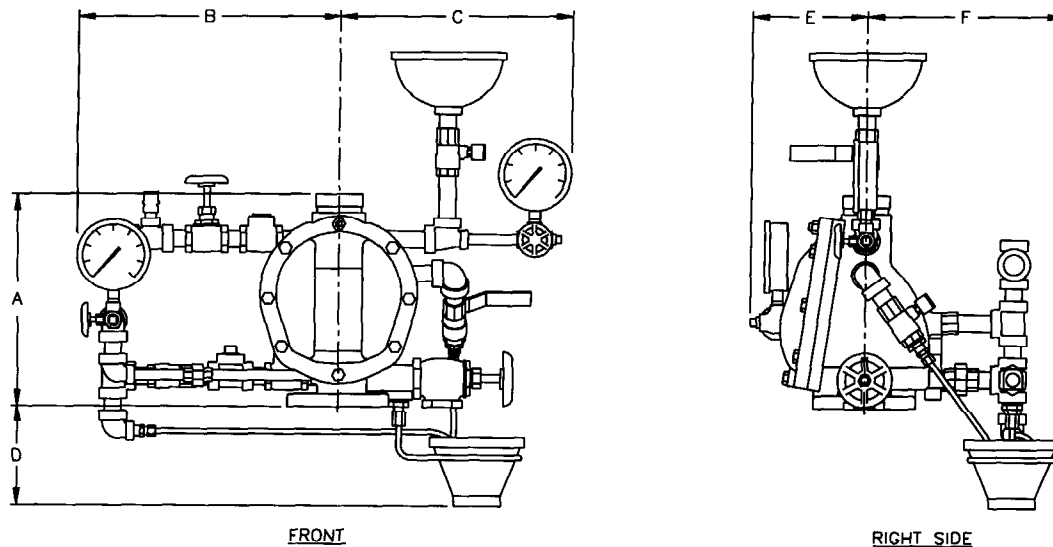


FIGURE C
MODEL F3061 DRY PIPE VALVES
— SET AND OPEN POSITIONS —



Nominal Installation Dimensions in Inches and (mm)						
VALVE SIZE	A	B*	C*	D	E	F
2 (50)	10-7/8 (265,4)	14 (350)	12 (300)	6 (150)	6 (150)	12 (300)

* MINIMUM CLEARANCE, ADDITIONAL 2" (50 mm) IS RECOMMENDED

FIGURE D-1
NOMINAL INSTALLATION DIMENSIONS FOR
2 INCH (50 mm) MODEL F3061 DRY PIPE VALVES

(2,8 bar). The Pressure Relief Valve may be reset to a lower or higher pressure; however, it must be reset to relieve at a pressure which is in accordance with the requirements of the Authority Having Jurisdiction.

To reset the Pressure Relief Valve, first loosen the jam nut and then adjust the cap accordingly — clockwise for a higher pressure setting or counterclockwise for a lower pressure setting. After verifying the desired pressure setting, tighten the jam nut.

9. Installation of an Air Maintenance Device, as described in the Technical Data Section, is recommended.
10. An Inspector's Test Connection as required By NFPA 13 must be provided on the system piping at the most remote location from the F3061 Valve.
11. Conduit and electrical connections are to be made in accordance with the requirements of the authority having jurisdiction and/or the National Electric Code.

VALVE SETTING PROCEDURE

Steps 1 through 13 are to be performed when initially setting the Model F3061 Dry Pipe Valve; after an operational test of the fire protection system; or, after system operation due to a fire.

1. Close the Main Control Valve, and close the Air Supply Control Valve.
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.
3. Depress the plunger of the Automatic Drain Valve to verify that it is open and that the F3061 Valve is completely drained.
4. Open the Alarm Control Valve (Fig. E-1 or E-2), if it was closed to silence local alarms.

It is recommended that the Alarm Control Valve be wire sealed in the open position with a No. 16 twisted wire, the ends of which are secured by a lead seal. The wire seal should be looped through the hole in the handle and tightly twisted around the pipe nipple adjacent to the handle.

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.

NOTE

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.

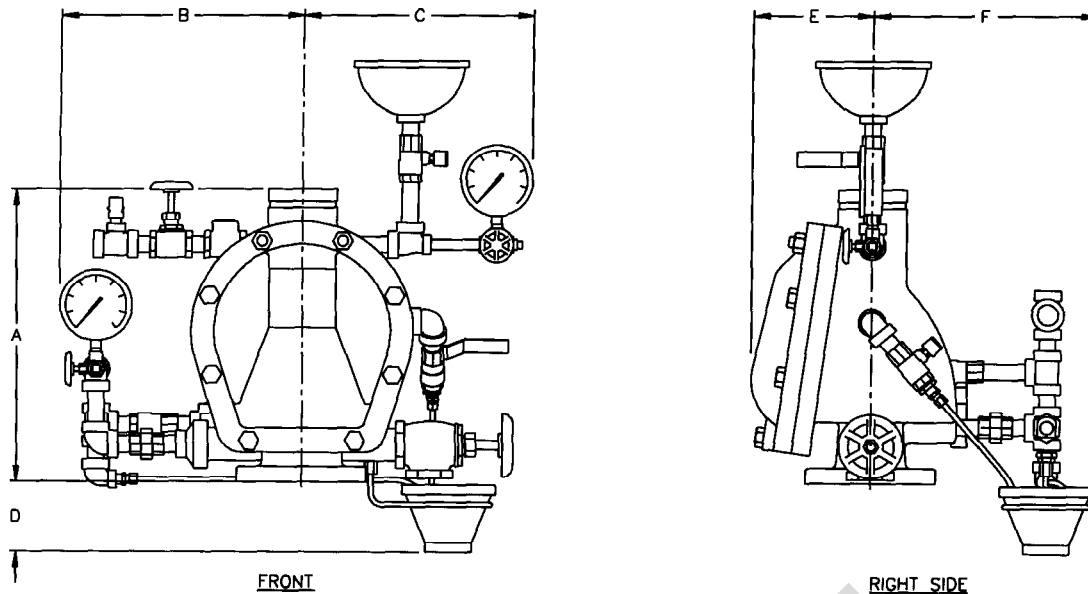
6. Remove the Handhole Cover and swing the Clapper Assembly outward. Clean all interior parts of the F3061 Valve, and use a clean cloth to wipe the Air/Water Seat Ring and the Clapper Facing. Inspect the Clapper Facing and Air/Water Seat Ring for damage and check the Clapper Arm and Latch for freedom of movement.

Worn or damaged parts must be replaced and the F3061 Valve must be reassembled in accordance with Figure B-1 or B-2, as applicable.

7. Reseat the Clapper Assembly.

NOTE

Make certain that the Latch is not caught on the lowest latch point



Nominal Installation Dimensions in Inches and (mm)						
VALVE SIZE	A	B*	C*	D	E	F
3 (80)	15-3/16 (385,8)	15 (380)	13-1/2 (340)	3-1/2 (90)	7 (175)	12 (300)

* MINIMUM CLEARANCE, ADDITIONAL 2" (50 mm) IS RECOMMENDED

FIGURE D-2
NOMINAL INSTALLATION DIMENSIONS FOR
3 INCH (80 mm) MODEL F3061 DRY PIPE VALVES

(Ref. Figure C-1). When the Clapper Assembly is properly seated, the Latch should be able to swivel freely.

8. Replace the Handhole Cover and Handhole Cover Gasket using the the longer Cap Screw(s) at the bottom edge of the Handhole Cover. Uniformly tighten the Cover Cap Screws and Nut(s) using a cross-draw sequence.
9. Open the Priming Valve, and open the Priming Test Valve.

Prime the F3061 Valve by slowly pouring water into the Priming Cup. When water discharges from the Priming Test Valve, cease pouring water into the Priming Cup. The 2 Inch (50 mm) F3061 Valve will require approximately 0.6 gallons (2.3 litres) of prime water, and the 3 Inch (80 mm) F3061 Valve will require approximately 1.2 gallons (4.5 litres) of prime water.

After water stops discharging from the Priming Test Valve, close the Priming Valve and the Priming Test Valve.

10. Pressurize the system with air (nitrogen) to 20 psi (1,4 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.

11. Refer to Table A and then restore the system to the normal system air pressure the necessary to hold the F3061 Valve closed.
12. Depress the plunger on the Automatic Drain Valve to make sure it is open and that there is no water or air discharging.

The absence of water and/or air discharging is an indication of a properly set air seat within the F3061 Valve. If water and/or air is discharging, refer to the Care and Maintenance section under Automatic Drain Valve Inspection to determine/correct the cause of the leakage problem.

13. Slowly open the Main Control Valve. Close the Main Drain Valve as soon as water discharges from the drain connection.

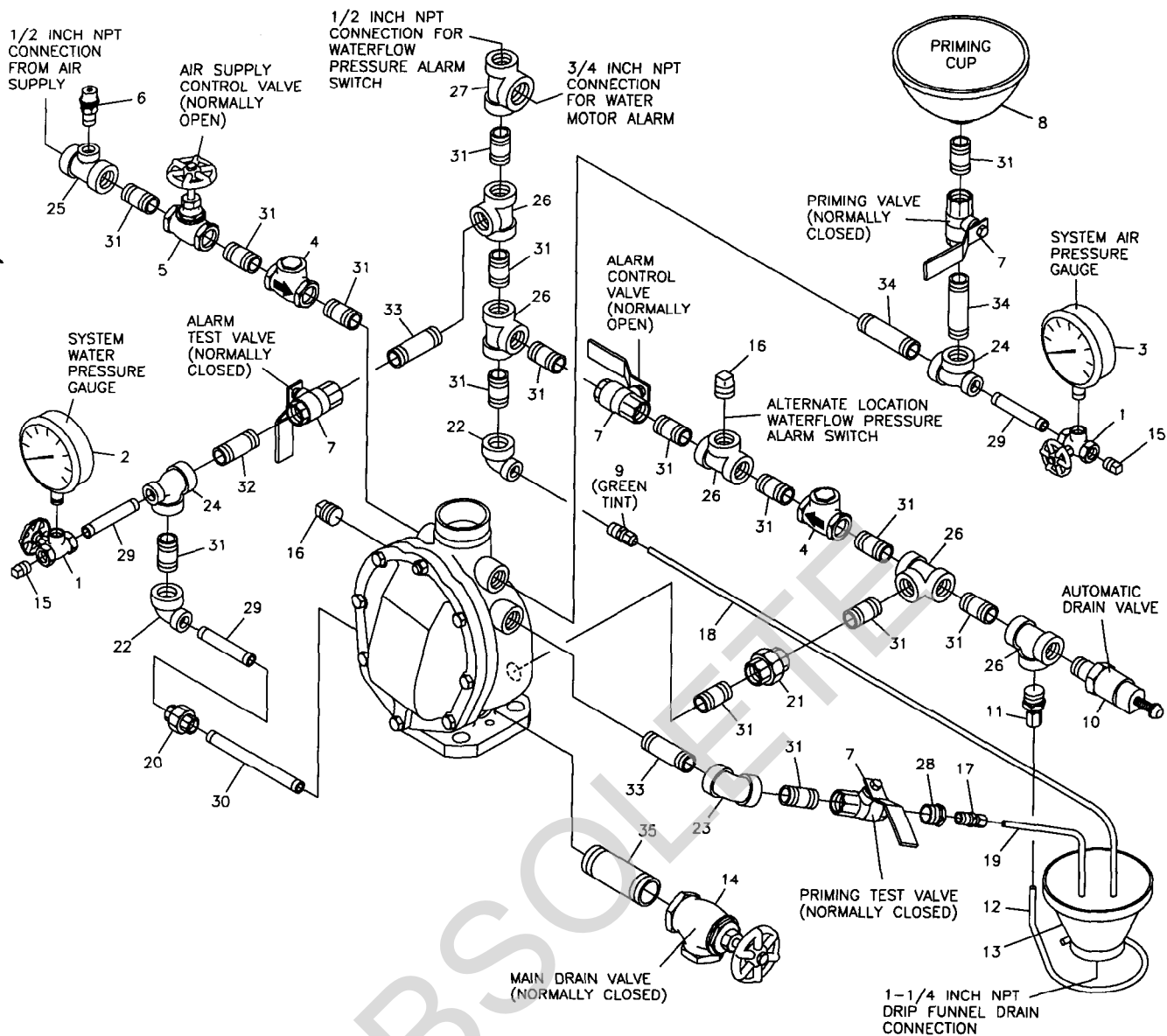
Depress the plunger on the Automatic Drain Valve to make sure that it is open and that there is no water discharging. The absence of water

discharging is an indication of a properly set water seat within the F3061 Valve. If water is discharging, refer to the Care and Maintenance section under the Automatic Drain Valve Inspection to determine/correct the cause of the leakage problem.

If there are no leaks, the F3061 Valve is ready to be placed in service and the Main Control Valve must then be fully opened.

NOTE

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

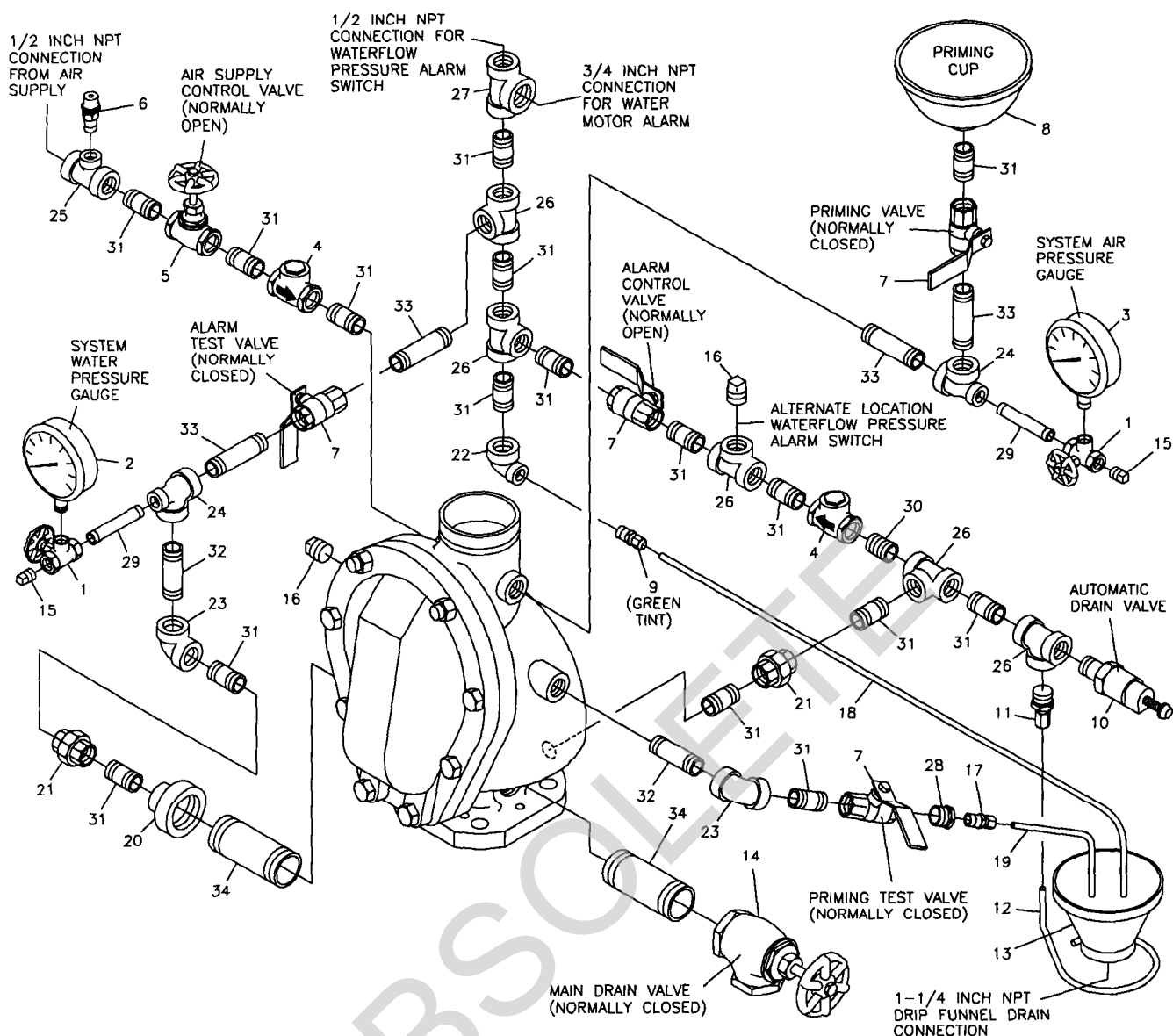


- | | | |
|---------------------------------------|---|---------------------------------------|
| 1 - 1/4" Gauge Test Valve | 11 - Drip Funnel Connector | 24 - 1/2" x 1/4" x 1/2" Tee (2 req'd) |
| 2 - 300 lb. Water Pressure Gauge | 12 - Drip Funnel Bracket | 25 - 1/2" x 1/2" x 1/4" Tee |
| 3 - 250 lb. Air Pressure Gauge | 13 - Drip Funnel | 26 - 1/2" Tee (5 req'd) |
| 4 - 1/2" Swing Check Valve (2 req'd) | 14 - 1" Angle Valve | 27 - 1/2" x 1/2" x 3/4" Tee |
| 5 - 1/2" Globe Valve | 15 - 1/4" Plug (2 req'd) | 28 - 1/2" x 1/4" Bushing |
| 6 - 1/4" Pressure Relief Valve | 16 - 1/2" Plug (2 req'd) | 29 - 1/4" x 3" Nipple (3 req'd) |
| 7 - 1/2" Ball Valve (4 req'd) | 17 - 1/4" Tube Connector | 30 - 1/4" x 5-1/2" Nipple |
| 8 - Priming Cup | 18 - 1/4" Tube, 24" long | 31 - 1/2" x 1-1/2" Nipple (16 req'd) |
| 9 - 3/32" Vent Fitting | 19 - 1/4" Tube, 12" long | 32 - 1/2" x 2" Nipple (2 req'd) |
| 10 - Model F793 Automatic Drain Valve | 20 - 1/4" Union | 33 - 1/2" x 2-1/2" Nipple (2 req'd) |
| | 21 - 1/2" Union | 34 - 1/2" x 3" Nipple (2 req'd) |
| | 22 - 1/2" x 1/4" Reducing Elbow (2 req'd) | 35 - 1" x 3-1/2" Nipple |
| | 23 - 1/2" 90° Elbow | |

NOTES:

- The nipples utilized in the trim arrangement are Schedule 40 steel per ASTM A53 or A135 and they are threaded per ANSI B1.20.1. The fittings are either malleable iron per ANSI B16.3 or cast iron per ANSI B16.4.
- "Standard order" trim is provided with black nipples and fittings; however, galvanized nipples and fittings are available on "special order".

**FIGURE E-1
EXPLODED VIEW OF 2 INCH (50 mm) MODEL F3061 VALVE TRIM**



- 1 - 1/4" Gauge Test Valve
- 2 - 300 lb. Water Pressure Gauge
- 3 - 250 lb. Air Pressure Gauge
- 4 - 1/2" Swing Check Valve (2 req'd)
- 5 - 1/2" Globe Valve
- 6 - 1/4" Pressure Relief Valve
- 7 - 1/2" Ball Valve (4 req'd)
- 8 - Priming Cup
- 9 - 3/32" Vent Fitting
- 10 - Model F793 Automatic Drain Valve

- 11 - Drip Funnel Connector
- 12 - Drip Funnel Bracket
- 13 - Drip Funnel
- 14 - 1-1/4" Angle Valve
- 15 - 1/4" Plug (2 req'd)
- 16 - 1/2" Plug (2 req'd)
- 17 - 1/4" Tube Connector
- 18 - 1/4" Tube, 24" long
- 19 - 1/4" Tube, 12" long
- 20 - 1-1/4" x 1/2" Reducer
- 21 - 1/2" Union (2 req'd)
- 22 - 1/2" x 1/4" Reducing Elbow
- 23 - 1/2" 90° Elbow

- 24 - 1/2" x 1/4" x 1/2" Tee (2 req'd)
- 25 - 1/2" x 1/2" x 1/4" Tee
- 26 - 1/2" Tee (5 req'd)
- 27 - 1/2" x 1/2" x 3/4" Tee
- 28 - 1/2" x 1/4" Bushing
- 29 - 1/4" x 3" Nipple (2 req'd)
- 30 - 1/2" x close Nipple
- 31 - 1/2" x 1-1/2" Nipple (16 req'd)
- 32 - 1/2" x 2-1/2" Nipple (2 req'd)
- 33 - 1/2" x 3" Nipple (4 req'd)
- 34 - 1-1/4" x 4" Nipple (2 req'd)

NOTES:

1. The nipples utilized in the trim arrangement are Schedule 40 steel per ASTM A53 or A135 and they are threaded per ANSI B1.20.1. The fittings are either malleable iron per ANSI B16.3 or cast iron per ANSI B16.4.
2. "Standard order" trim is provided with black nipples and fittings; however, galvanized nipples and fittings are available on "special order".

FIGURE E-2
EXPLODED VIEW OF 3 INCH (80 mm) MODEL F3061 VALVE TRIM

CARE AND MAINTENANCE

The following procedures and inspections should be performed as indicated, in addition to any specific requirements of the NFPA, and any impairment must be immediately corrected. It is also recommended that fire protection systems be inspected by a qualified Inspection Service.

NOTES

The operational test procedure and waterflow pressure alarm test procedure, 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 which it controls, permission to shut down the effected fire protection systems must first be obtained from the proper authorities and all personnel who may be affected by this decision must be notified.

Annual Operation Test Procedure

Proper operation of the F3061 Valve (i.e., opening of the F3061 Valve as during a fire condition) should be verified at least once a year as follows:

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.
2. Open the system's Inspector's Test Connection.
3. Verify that the F3061 Valve has operated, as indicated by the flow of water into the system and that all waterflow alarms operated properly.
4. Close the system's Main Control Valve.
5. Reset the F3061 Valve in accordance with the Valve Setting Procedure.

Quarterly Waterflow Alarm Test Procedure

Testing of the system waterflow alarms

should be performed quarterly. To test the waterflow alarm, open the Alarm Test Valve, which will allow a flow of water to the Waterflow Pressure Alarm Switch and/or Water Motor Alarm. Upon satisfactory completion of the test, close the Alarm Test Valve.

Water Pressure Inspection

The Water Pressure Gauge is to be inspected each week to ensure that normal system water pressure is being maintained.

Air Pressure Inspection

The Air Pressure Gauge is to be inspected each week to ensure that normal system air pressure is being maintained.

Automatic Drain Valve Inspection

The Automatic Drain Valve should be inspected each week by depressing the plunger and checking to ensure that the Automatic Drain Valve is not discharging water and/or air. Discharging 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 F3061 Valve out of service (i.e., close the main control valve, open the main drain valve, close the air supply 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, check the following items:

- A. **Seat Ring Nuts.** Make sure the Seat Ring Nuts are tightened evenly.
- B. **Clapper Facing:** 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. For a short-term fix, the Clapper Facing may be turned over.
- C. **Air/Water Seat Ring:** Inspect the Air/Water Seat Ring for nicks, damage, etc. Replace the Air/Water Seat Ring if there is any signs of wear.

Priming Water Inspection

The priming level is to be inspected quarterly. Partially open the Priming Test Valve, and then close the Priming Test Valve when the priming level has been correctly established (i.e., when

water stops discharging from the Priming Test Valve).

If no water discharges, close the Priming Test Valve and replenish the Priming Level by performing Steps 1, 2, 3, 9, 11, 12, and 13 in the Valve Setting Procedure section.

WARRANTY

Seller warrants for a period of one year from the date of shipment (warranty period) that the products furnished hereunder will be free from defects in material and workmanship.

For further details on Warranty, see Price List.

ORDERING PROCEDURE

All orders for Model F3061 Dry Pipe Valves, trim, accessories, and replacement parts must include the description and Product Symbol Number (PSN), where applicable.

Valves:

Specify: (specify size) Model F3061 Dry Pipe Valve, PSN (specify).

2" (50 mm) PSN 52-306-1-009
3" (80 mm) PSN 52-306-1-011

"Standard Order" Black Trim:

Specify: (size) Inch F3061 Black Trim, PSN (specify).

2 Inch (50 mm)
F3061
Black Trim PSN 52-306-1-201
3 Inch (80 mm)
F3061
Black Trim PSN 52-306-1-202

"Special Order" Galvanized Trim:

Specify: (size) Inch F3061 Black Trim, PSN (specify).

2 Inch (50 mm)
F3061
Galvanized Trim PSN 52-306-2-201
3 Inch (80 mm)
F3061
Galvanized Trim PSN 52-306-2-202

Accessories:

Refer to the following Technical Data Sheets (TD), as applicable.

Waterflow Pressure Alarm Switch	TD213
Water Motor Alarm	TD250
Model F324 Air Maintenance	
Device	TD111
Model F326 Air Maintenance	
Device	TD112
Model F328 Nitrogen Maintenance	
Device	TD113

Replacement Valve Parts:

Specify: (description) for use with (specify size) Model F3061 Dry Pipe Valve, PSN (specify).

2 inch (50 mm) Valve (Ref. Fig. B-1)

2 - Handhole Cover	PSN 92-306-1-201
3 - Clapper Arm	PSN 92-306-1-202
4 - O-Ring, Inner	PSN 92-306-1-203
5 - Air/Water	
Seat Ring	PSN 92-306-1-204
6 - Seat Ring	
Hex Nuts	PSN 92-306-1-205
7 - Seat Ring	
Studs	PSN 92-306-1-206
8 - Handhole Cover	
Gasket	PSN 92-306-1-207
13 - Hinge Pin	PSN 92-306-1-208
14 - O-Ring, Outer	PSN 92-306-1-209
15 - Clapper Facing	PSN 92-306-1-210
16 - Retaining Ring	PSN 92-306-1-211
17 - Retaining Ring	
Screws	PSN 92-306-1-212
18 - Latch	PSN 92-306-1-213
19 - Latch Pin	PSN 92-306-1-214
20 - Latch Cotter Pin	PSN 92-306-1-215
21 - Clapper Pin	PSN 92-306-1-216
22 - Clapper Cotter	
Pin	PSN 92-306-1-217
23 - Clapper	PSN 92-306-1-218

3 inch (80 mm) Valve (Ref. Fig. B-2)

2 - Handhole Cover	PSN 92-306-1-301
3 - Clapper Arm	PSN 92-306-1-302
4 - O-Ring, Inner	PSN 92-306-1-303
5 - Air/Water	
Seat Ring	PSN 92-306-1-304
6 - Seat Ring	
Hex Nuts	PSN 92-306-1-305
7 - Seat Ring	
Studs	PSN 92-306-1-306
8 - Handhole Cover	
Gasket	PSN 92-306-1-307
13 - Hinge Pin	PSN 92-306-1-308
14 - O-Ring, Outer	PSN 92-306-1-309
15 - Clapper Facing	PSN 92-306-1-310
16 - Retaining Ring	PSN 92-306-1-311
17 - Retaining Ring	
Screws	PSN 92-306-1-312
18 - Latch	PSN 92-306-1-313
19 - Latch Pin	PSN 92-306-1-314
20 - Latch Cotter Pin	PSN 92-306-1-315
21 - Clapper Pin	PSN 92-306-1-316
22 - Clapper Cotter	
Pin	PSN 92-306-1-317
23 - Clapper	PSN 92-306-1-318

Replacement Trim Parts :

Specify: (description) for use with Model F3061 Dry Pipe Valve, PSN (specify).

2 inch (50 mm) Valve Trim (Ref. Fig. E-1)

1 - 1/4" Gauge Test	
Valve	PSN 46-005-1-002
2 - 250 lb. Water	
Pressure	
Gauge	PSN 92-343-1-012
3 - 300 lb. Water	
Pressure	
Gauge	PSN 92-343-1-005
4 - 1/2" Swing	
Check Valve	PSN 46-049-1-004
5 - 1/2" Globe Valve	PSN 46-047-1-004
6 - 1/4" Pressure	
Relief Valve	PSN 92-343-1-020
7 - 1/2" Ball Valve	PSN 46-050-1-004
8 - Priming Cup	PSN 92-346-1-004
9 - 3/32" Vent	
Fitting	PSN 92-032-1-002
10 - F793 Automat-	
ic Drain Valve	PSN 52-793-1-004
11 - Drip Funnel	
Connector	PSN 92-211-1-005
12 - Drip Funnel	
Bracket	PSN 92-211-1-003
13 - Drip Funnel	PSN 92-343-1-007
14 - 1" Angle Valve	PSN 46-048-1-006

3 inch (80 mm) Valve Trim (Ref. Fig. E-2)

1 - 1/4" Gauge Test	
Valve	PSN 46-005-1-002
2 - 250 lb. Water	
Pressure	
Gauge	PSN 92-343-1-012
3 - 300 lb. Water	
Pressure	
Gauge	PSN 92-343-1-005
4 - 1/2" Swing	
Check Valve	PSN 46-049-1-004
5 - 1/2" Globe Valve	PSN 46-047-1-004
6 - 1/4" Pressure	
Relief Valve	PSN 92-343-1-020
7 - 1/2" Ball Valve	PSN 46-050-1-004
8 - Priming Cup	PSN 92-346-1-004
9 - 3/32" Vent	
Fitting	PSN 92-032-1-002
10 - F793 Automat-	
ic Drain Valve	PSN 52-793-1-004
11 - Drip Funnel	
Connector	PSN 92-211-1-005
12 - Drip Funnel	
Bracket	PSN 92-211-1-003
13 - Drip Funnel	PSN 92-343-1-007
14 - 1-1/4" Angle	
Valve	PSN 46-048-1-007

WEIGHTS

The following are the nominal weights for the valves and trim:

2 Inch (50 mm)	
Model F3061 Dry Pipe Valve	35 lbs. (16 kg)
3 Inch (80 mm)	
Model F3061 Dry Pipe Valve	82 lbs. (37 kg)
2 Inch (50 mm) Valve Trim	22 lbs. (10 kg)
3 Inch (80 mm) Valve Trim	28 lbs. (13 kg)

OBSOLETE