



TECHNICAL DATA

HP DRY SYSTEM

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058

Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com

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1. DESCRIPTION

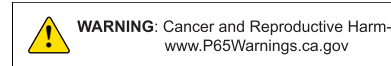
Viking High Pressure (HP) Dry Systems utilize a Viking Model E or Model F Deluge Valve to control the water supply to system piping equipped with closed sprinklers. The system piping is pressurized with compressed air or nitrogen. A riser check valve is required to isolate the system air pressure from the outlet chamber of the deluge valve.

High pressure dry systems are commonly used when sprinkler system supply pressures are above 175 psi (12 bar), as well as in small systems where anti-freeze solutions are undesirable.

2. LISTINGS AND APPROVALS



UL Listed: Refer to Individual data pages for components used.



3. TECHNICAL DATA

Refer to the technical data describing the individual components used.

4. INSTALLATION

Refer to current Viking Technical Data describing individual components of the Viking HP Dry System. Technical Data describing the Viking Deluge Valve, and other system components are packed with product and on the Viking website.

Also, refer to applicable installation standards, codes, and Authorities Having Jurisdiction.

Important Settings: (Refer to Figures 1 - 12)

1. Provide a minimum or maximum pneumatic air pressure to anti-flood device (E.1) for system water pressures to 250 psi (17.2 bar) maximum.
 - a. Set release system air pressure supervisory switches to activate at 5 psi less than the set pneumatic supervisory air pressure on pressure drop.
 - b. Air supervisory switch should be wired to activate an alarm to signal a "low air" pressure condition. Activation of an alarm to signal a high pressure condition may be installed. Refer to applicable installation standards and Authority Having Jurisdiction.
2. Alarm Pressure Switch (C.1) should activate when pressurized to 4 to 8 psi (0.27 to 0.55 bar) on pressure rise. Alarm pressure switch (C.1) should be wired to activate the water flow alarm.

Air Supply Design:

The air supply compressor should be sized to establish total required air pressure in 30 minutes. The air supply must be regulated, restricted, and maintained automatically. The air supply must be regulated to maintain the pressure desired in the system piping. The air supply must be restricted to ensure that the automatic air supply cannot replace air as fast as it escapes when a sprinkler on the system operates.

It is a required practice to provide an inspectors test connection on the system piping. The inspectors test connection should be equipped with a shut-off valve (normally closed) capable of being opened to simulate the opening of a sprinkler on the system. Locate the connection and the valve at the highest, most demanding, location of the system piping. Test connections, provided on dry pipe systems, should terminate in an orifice equal to the smallest orifice sprinkler on the system piping. The inspectors test connection may be used to verify that the automatic air supply cannot replace air as fast as it escapes when a releasing device operates. Refer to paragraph 6.A Inspections, Tests and Maintenance.

5. OPERATION (Refer to Figures 1 - 12)

In the SET position:

System water supply pressure enters the priming chamber of the deluge valve (A.1) through the 1/4" (8 mm) priming line which includes a normally open priming valve (B.1), strainer (B.2), restricted orifice (B.3), check valve (B.4), pressure operated relief valve (PORV) (B.10). In the SET position, the water supply pressure is trapped in the priming chamber by check valve (B.4), and anti-flood device (E.1). The anti-flood device (E.1) is held closed by air pressure maintained on the system riser.

Air pressure is isolated from the deluge valve outlet on 3" systems and above by a Viking Easy Riser® or in-line soft seat check valve. The pressure in the priming chamber holds the deluge valve (A.1) clapper closed, keeping the outlet chamber and system piping dry.

In Fire Conditions:

In fire conditions, when a Viking sprinkler head operates, pressure in the system piping escapes causing alarms controlled by air supervisory switch to activate and anti-flood device (E.1) to open. When anti-flood device (E.1) opens, pressure is released from the priming chamber faster than it is supplied through restricted orifice (B.3). The deluge valve (A.1) clapper opens to allow water to flow into the system piping and alarm devices, causing the water motor alarm (C.2) and water flow alarms connected to the alarm pressure switch (C.1) to activate. Water will flow from any open sprinklers on the system.



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When the deluge valve operates, water is drained from the PORV inlet. When the 10:1 differential is overcome, the push rod opens, allowing the prime water to drain to prevent the deluge valve from resetting. Downstream of the discharge outlet, a check valve is installed to isolate the discharge outlet from system air pressure. When the water from the discharge outlet passes by the check valve, it will enter to air connection to the system riser.

Trouble Conditions:

In the event of an air supply failure and slow leakage of air from the system piping, alarms connected to the air supervisory switch will signal a low air pressure condition. Failure to restore air supply to the system will result in operation of the anti-flood device (E.1) and the deluge valve (A.1) will open. Similarly, if the system piping is damaged due to mechanical damage, the anti-flood device (E.1) will operate and the deluge valve (A.1) will open. Water will flow from any open sprinklers or piping on the system. The water motor alarm (C.2) and alarms connected to alarm pressure switch (C.1) will activate.

Manual Operation:

Any time the handle inside the emergency release (B.11) is pulled, pressure is released from the priming chamber; the deluge valve (A.1) will open. Water will flow into the system piping and from any open sprinklers on the system. Alarm devices (C.1 and C.2) will operate.

Emergency Instructions: (Refer to figures 1 - 12)

1. To Take System Out of Service:

⚠ WARNING

Placing a control valve or detection system out of service may eliminate the Fire Protection capabilities of the system. Prior to proceeding, notify all Authorities Having Jurisdiction. Consideration should be given to employment of a Fire Patrol in the affected areas.

After a fire, verify that the fire is OUT and that placing the system out of service has been authorized by the appropriate Authority Having Jurisdiction.

- a. Close the water supply valve (D.1).
- b. Open the auxiliary drain (B.6).
- c. Silence alarms (optional)
 - i. To silence electric alarms controlled by pressure switch (C.1) and to silence water motor alarm (C.2), close the alarm shut-off valve (B.9).

NOTE: ELECTRIC ALARMS CONTROLLED IN THE ½" (15 mm) NPT CONNECTION FOR A NON-INTERRUPTIBLE ALARM PRESSURE SWITCH CANNOT BE SHUT OFF UNTIL THE DELUGE VALVE (A.1) IS RESET OR TAKEN OUT OF SERVICE.

- d. Shut off the air supply.
- e. Close the priming valve (B.1).

SPRINKLER SYSTEMS THAT HAVE BEEN SUBJECTED TO A FIRE MUST BE RETURNED TO SERVICE AS SOON AS POSSIBLE. THE ENTIRE SYSTEM MUST BE INSPECTED FOR DAMAGE, AND REPAIRED OR REPLACED AS NECESSARY.

- f. Replace any sprinkler heads that have operated.
 - g. Perform all maintenance procedures recommended in Technical Data describing individual components of the system that has operated.
 - h. Return the system to service as soon as possible. Refer to 2: PLACING THE SYSTEM IN SERVICE.
- #### 2. Placing the System In Service:
- a. Verify that the system has been properly drained. The auxiliary drain (B.6) should be open. Verify that the emergency release (B.11) is closed. The priming valve (B.1) should be closed. Open the sprinkler system main drain (D.3). Once sprinkler piping is drained, close the system drain (D.3).
 - b. Restore pneumatic pressure to the system piping. Maintain as required to the anti-flood device (E.1). Refer to item 4. Important Settings.
 - c. Open the priming valve (B.1). Water pressure should be present on priming water gauge (B.12).
 - d. Open the flow test valve (B.15).
 - e. Partially open the main water supply control valve (D.1).
 - f. When full flow develops from the flow test valve (B.15), close the flow test valve (B.15).
 - g. Close the auxiliary drain (B.6).
 - h. Fully open and secure the main water supply control valve (D.1).
 - i. Verify that the alarm shut-off valve (B.9) is open and that all other valves are in their normal operating position.
 - j. Depress the plunger of the drip check (B.7). No water should flow from the drip check (B.7) when the plunger is pushed.



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6. INSPECTIONS, TESTS AND MAINTENANCE

A. Inspection

It is imperative that the system is inspected and tested on a regular basis. Refer to Inspections and Tests recommended in current Viking Technical Data describing individual components of the Viking HP Dry System used. The frequency of the inspections may vary due to contaminated water supplies, corrosive water supplies, corrosive atmospheres, as well as the condition of the air supply system. For minimum maintenance and inspection requirements, refer to NFPA 25 for Inspection, Testing, and Maintenance of Water Based Systems. In addition, the Authority Having Jurisdiction may have additional maintenance, testing, and inspection requirements that must be followed.

⚠ WARNING

Any system maintenance that involves placing a control valve or detection system out of service may eliminate the fire protection capabilities of that system. Prior to proceeding, notify all Authorities Having Jurisdiction. Consideration should be given to employment of a fire patrol in the affected areas.

B. Tests

To test Sprinkler system "Low Air" Alarm:

1. To prevent operation of the deluge valve and system piping filling with water during the test, close main water supply control valve (D.1).
2. Fully open inspectors test valve to simulate operation of a sprinkler head.
3. Verify that low air alarms operate within an acceptable time period and continue without interruption.
4. Close the inspectors test valve.
5. Close the priming valve (B.1).
6. Establish recommended pneumatic pressure to be maintained on system piping. Refer to paragraph 6: INSTALLATION.
7. Alarms should stop.
8. Open the priming valve (B.1).

When testing is complete, return the system to service following steps 1 through 8 below.

⚠ CAUTION

This procedure applies only when done in conjunction with "Low Air" Alarm testing described above.

Returning the System to Service:

1. Verify that the pressure indicated on the priming pressure water gauge (B.12) indicates that the priming chamber is pressurized with system water supply pressure.
2. Depress the plunger of the drip check (B.7). No water should flow from the drip check (B.7) when the plunger is pushed.
3. Open the flow test valve (B.15).
4. Partially open the main water supply control valve (D.1).
5. When full flow develops from the flow test valve (B.15), close the flow test valve.
6. Fully open and secure the main water supply control valve.
7. Verify that the alarm shut-off valve (B.9) is open, that priming valve (B.1) is open, and that all other valves are in their normal operating position.
8. Depress the plunger of the drip check (B.7). No water should flow from the drip check (B.7) when plunger is pushed.

C. Maintenance

NOTICE

The owner is responsible for maintaining the fire protection system and devices in proper operating condition.

Refer to MAINTENANCE INSTRUCTIONS provided in current Viking Technical Data describing individual components of the Viking HP Dry System used.

7. AVAILABILITY

The Viking HP Dry System is available through a network of Domestic, Canadian, and International Distributors. See the Viking Corp. Web site for your closest distributor or contact The Viking Corporation.

8. GUARANTEES

For details of warranty, refer to Viking's current list price schedule or contact Viking directly.

9. ORDERING INSTRUCTIONS

To order a complete HP Dry System, order the Deluge Valve, Conventional Trim, System Check Valve and HP Dry System Release Trim together.



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Deluge Valves

DESCRIPTION	NOMINAL SIZE	PART NUMBER
Angle Style		
Threaded NPT		
Model & Pipe O.D.		
Model E-3 48 mm	1½" / DN40	09889
Model E-1 60 mm	2" / DN50	05852C
Flange/Flange		
Flange Drilling	Model E-1	
ANSI	3"	05912C
ANSI	4"	05909C
ANSI	6"	05906C
ANSI/Japan	6"	07136
PN10/16	DN80	08626
PN10/16	DN100	08629
PN10/16	DN150	08631
Flange/Groove		
Flange Drilling/Pipe O.D.	Model E-1	
ANSI / 89 mm	3"	05835C
ANSI / 114 mm	4"	05839C
ANSI / 168 mm	6"	05456C
PN10/16 / 89 mm	DN80	09539
PN10/16 / 114 mm	DN100	09540
PN10/16 / 168 mm	DN150	05456C

HP Dry System Release Trim

	Galvanized	Brass
Same release trim is used on all sizes of valves	15488-1	15488-2
<p><i>This release trim can be used with all types of conventional trim in conjunction with the Model F Deluge Valves. This trim can be used with conventional trim that uses a Model D PORV with the Model E Deluge Valve.</i></p>		

DESCRIPTION	NOMINAL SIZE	PART NUMBER
Straight Through		
Threaded		
Pipe O.D.	Model F-1	
NPT 48 mm	1½"	12126
NPT 60 mm	2"	12059
NPT 65 mm	2½"	12401
BSP 48 mm	DN40	12682
BSP 60 mm	DN50	12686
Flange/Flange		
Flange Drilling	Model F-1	
ANSI	3"	12014
ANSI	4"	11953
ANSI	6"	11955
ANSI	8"	11991
ANSI/Japan	6"	11964
PN10/16	DN80	12026
PN10/16	DN100	11965
PN10/16	DN150	11956
PN10	DN200	11995
PN16	DN200	11999
Groove/Groove		
Pipe O.D.	Model F-1	
48 mm	1½" / DN40	12125
60 mm	2" / DN50	12057
73 mm	2½" / DN65	12403
76 mm	DN80	12729
89 mm	3" / DN80	12022
114 mm	4" / DN100	11513
165 mm	DN150	11910
168 mm	6" / DN150	11524
219 mm	8" / DN200	11018
Flange/Groove		
Flange Drilling / Pipe O.D.	Model F-1	
ANSI / 89 mm	3"	12018
ANSI / 114 mm	4"	11952
ANSI / 168 mm	6"	11954
PN10/16 / 89 mm	DN80	12030
PN10/16 / 114 mm	DN100	11958
PN10/16 / 165 mm	DN150	12640
PN10/16 / 168 mm	DN150	11954

Conventional Trim (Angle Style Valve) - Galvanized

	1-1/2"	2"	2-1/2"	3"	4"	6"	8"
Loose Trim (includes accessory package 09316)	14629-1	14630-1	N/A	14631-1	14632-1	14633-1	N/A

Conventional Trim (Straight Through Valve) - Galvanized

	1-1/2"	2"	2-1/2"	3"	4"	6"	8"
Loose Trim (includes accessory package 09316)	14634-1	14634-1	14636-1	14636-1	14639-1	14641-1	14642-1

Easy Riser® Swing Check Valve Trim - Galvanized

	2-1/2"	3"	4"	6"	8"
Loose Trim	07236	07236	07237	07237	07237

In-Line Check Valve Trim - Galvanized

	1-1/2"	2"
Model K-1 / L-1	12960	12960

Check Valves

DESCRIPTION	NOMINAL SIZE	PART NUMBER
EASY RISER® SWING CHECK VALVE		
Flange/Flange		
Flange Drilling	Model F-1	
ANSI	3"	08505
ANSI	4"	08508
ANSI	6"	08511
ANSI/Japan	DN100	09039
ANSI/Japan	DN150	09385
ANSI/Japan	DN200	14023
PN10/16	DN80	08796
PN10/16	DN100	08797
PN10/16	DN150	08835
PN10	DN200	08836
PN16	DN200	12355
Flange/Groove		
Flange Drilling / Pipe O.D.	Model F-1	
ANSI / 89 mm	3"	08506
ANSI / 114 mm	4"	08509
ANSI / 168 mm	6"	08512
ANSI / 219 mm	8"	08515
PN10/16 / 89 mm	DN80	12648
PN10/16 / 114 mm	DN100	12649
PN10/16 / 165 mm	DN150	12652
PN10/16 / 168 mm	DN150	08512
PN10 / 219 mm	DN200	12651
PN16 / 219 mm	DN200	12650
Groove/Groove		
Pipe O.D.	Model E-1	
73 mm	2½" / DN65	07929
	Model F-1	
89 mm	3" / DN80	08507
114 mm	4" / DN100	08510
165 mm	DN150	12356
168 mm	6" / DN150	08513
219 mm	8" / DN200	08516
IN-LINE CHECK VALVE		
Threaded NPT		
Pipe O.D.	Model K-1	
48 mm	1½" / DN40	10659
60 mm	2" / DN50	10667
Groove/Groove		
	Model L-1	
48 mm	1½" / DN40	11054
60 mm	2" / DN50	11059

Note: When viewing this data page online, Part Numbers displayed in **BLUE** are hyperlinks. Clicking the part number will open the corresponding Technical Data Page.



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SYSTEM COMPONENTS

A. Valve

- A.1 Deluge Valve
- B. Deluge Valve Conventional Trim
 - B.1 Priming Valve (Normally Open)
 - B.2 Strainer
 - B.3 1/16" Restricted Orifice
 - B.4 Spring Loaded Check Valve
 - B.5 Alarm Test Valve (Normally Closed)
 - B.6 Auxiliary Drain Valve (Normally Closed)
 - B.7 Drip Check Valve
 - B.8 Drain Check Valve
 - B.9 Alarm Shut-Off Valve (Normally Open)
 - B.10 Pressure Operated Relief Valve (P.O.R.V.)
 - B.11 Emergency Release
 - B.12 Priming Pressure Water Gauge and Valve
 - B.13 Water Supply Pressure Gauge and Valve
 - B.14 Drain Cup
 - B.15 Flow Test Valve (Normally Closed)

C. Water Flow Alarm Equipment

- C.1 Alarm Pressure Switch and/or
- C.2 Water Motor Alarm (Strainer Required)
- C.3 Strainer

D. Riser

- D.1 Water Supply Control Valve
- D.2 L-1 or K-1 Check Valve
- D.3 Sprinkler System Main Drain
- D.4 System Pressure Gauge and valve

E. HP Dry Release Trim

- E.1 Anti-Flood Device
- E.2 Air Pressure Gauge and Valve
- E.3 Check Valve

F. Air Supply

For Tank Mounted Air Compressor:

- F.1 Tank Mounted Air Compressor
- F.2 Air Supervisory Pressure Switch
(Compressor On/Off Control Switch)
- F.3 Soft Seat Check Valve
- F.4 Shut Off Valve
- F.5 D-2 Air Maintenance Device & By-Pass Trim
- F.6 Dehydrator
- F.7 Air Pressure Supervisory Switch

--- OR ---

For Riser Mounted Air Compressor:

- F.1 F-1 Riser Mounted Compressor, Including:
 - F.2 Air Supervisory Pressure Switch
(Compressor On/Off Control Switch)
 - F.3 Soft Seat Check Valve
 - F.4 Air Pressure Supervisory Switch

———— Piping included with trim

----- Piping required but not included

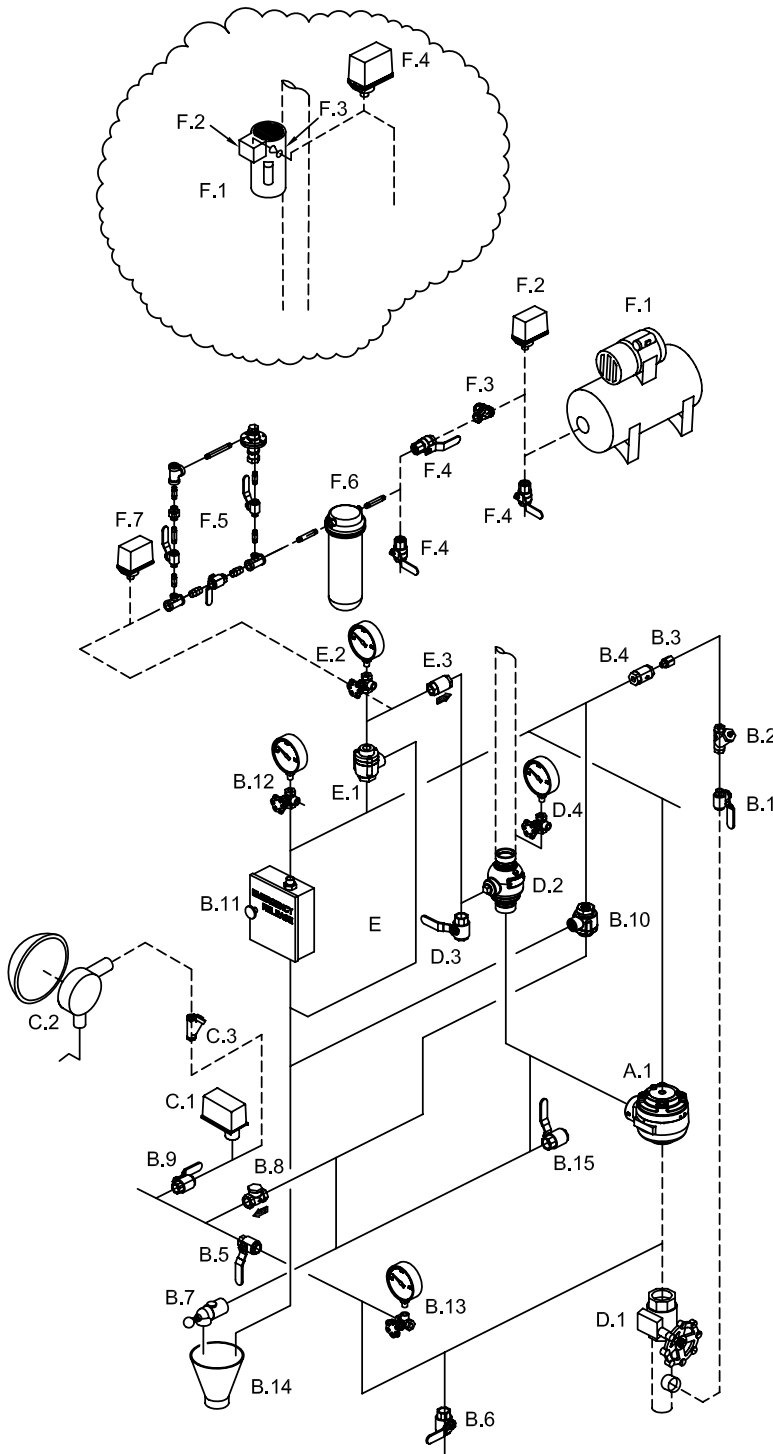


Figure 1 - System Components
1-1/2" Angle Style Valve with
Tank-Mounted or Riser-Mounted Compressor



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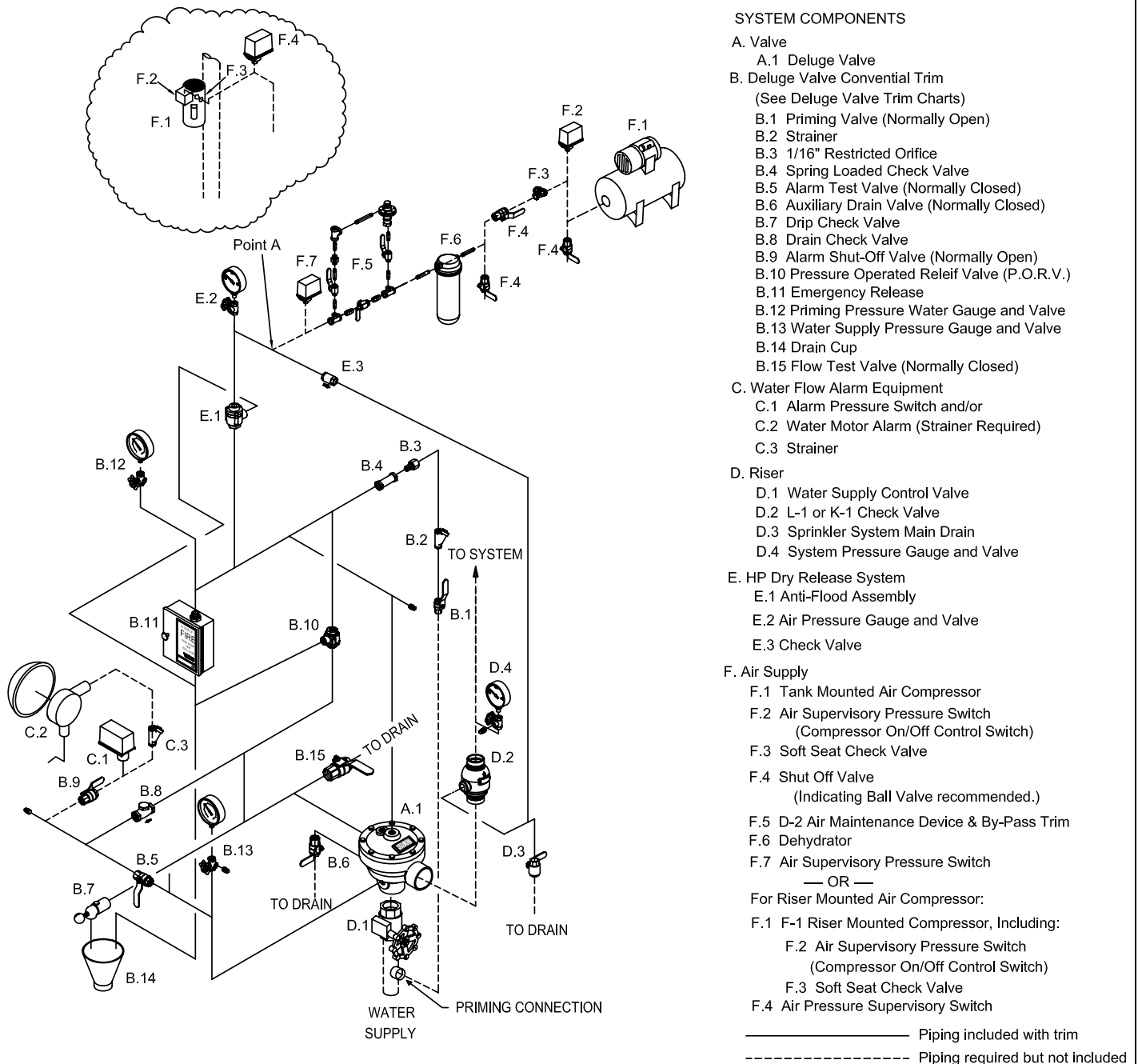


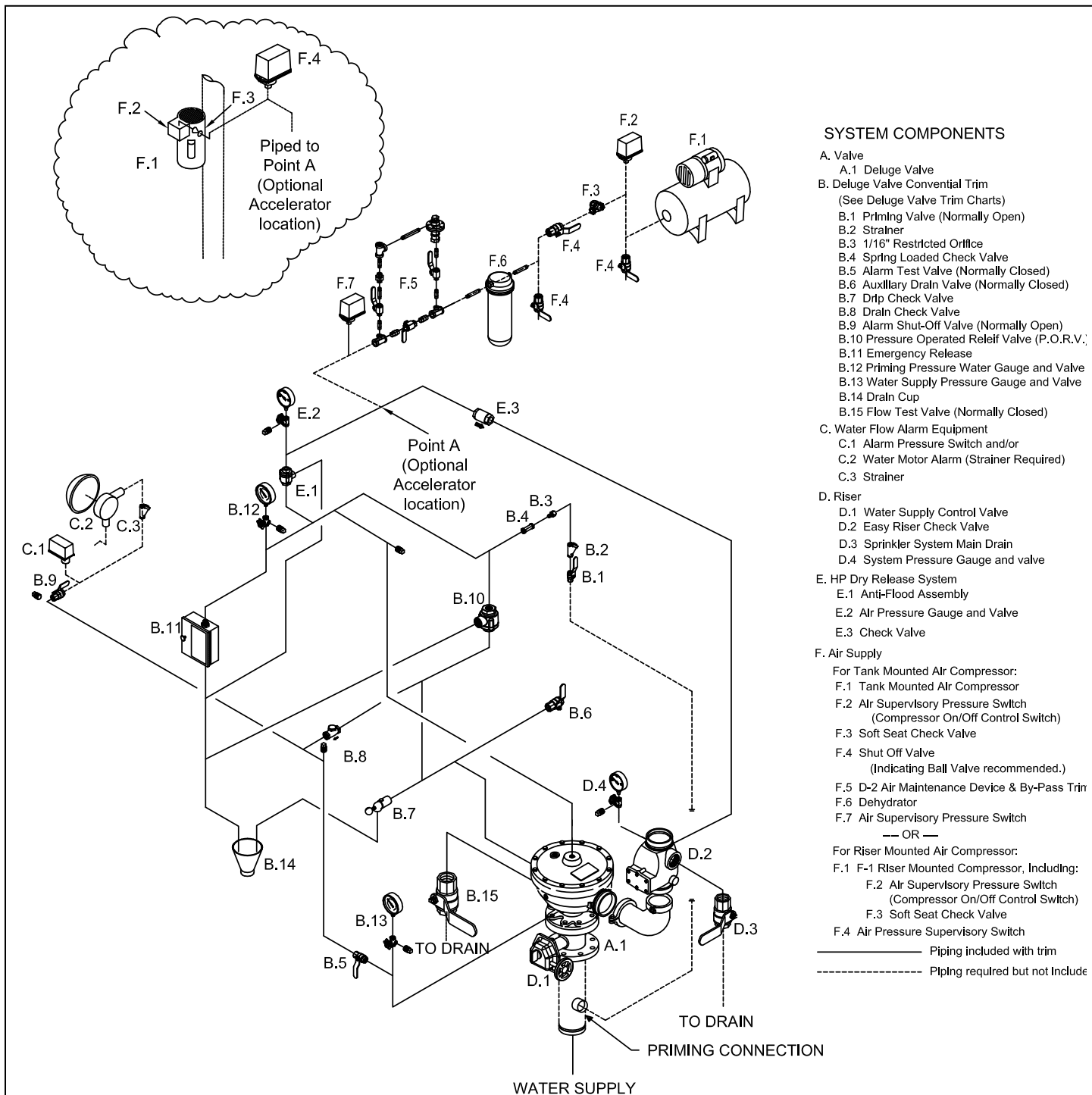
Figure 2 - System Components
2" Angle Style Valve with
Tank-Mounted or Riser-Mounted Compressor



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SYSTEM COMPONENTS

- A. Valve
 - A.1 Deluge Valve
 - B. Deluge Valve Conventional Trim (See Deluge Valve Trim Charts)
 - B.1 Priming Valve (Normally Open)
 - B.2 Strainer
 - B.3 1/16" Restricted Orifice
 - B.4 Spring Loaded Check Valve
 - B.5 Alarm Test Valve (Normally Closed)
 - B.6 Auxiliary Drain Valve (Normally Closed)
 - B.7 Drtp Check Valve
 - B.8 Drain Check Valve
 - B.9 Alarm Shut-Off Valve (Normally Open)
 - B.10 Pressure Operated Relief Valve (P.O.R.V.)
 - B.11 Emergency Release
 - B.12 Priming Pressure Water Gauge and Valve
 - B.13 Water Supply Pressure Gauge and Valve
 - B.14 Drain Cup
 - B.15 Flow Test Valve (Normally Closed)
 - C. Water Flow Alarm Equipment
 - C.1 Alarm Pressure Switch and/or
 - C.2 Water Motor Alarm (Strainer Required)
 - C.3 Strainer
 - D. Riser
 - D.1 Water Supply Control Valve
 - D.2 Easy Riser Check Valve
 - D.3 Sprinkler System Main Drain
 - D.4 System Pressure Gauge and valve
 - E. HP Dry Release System
 - E.1 Anti-Flood Assembly
 - E.2 Air Pressure Gauge and Valve
 - E.3 Check Valve
 - F. Air Supply
 - For Tank Mounted Air Compressor:
 - F.1 Tank Mounted Air Compressor
 - F.2 Air Supervisory Pressure Switch (Compressor On/Off Control Switch)
 - F.3 Soft Seat Check Valve
 - F.4 Shut Off Valve (Indicating Ball Valve recommended.)
 - F.5 D-2 Air Maintenance Device & By-Pass Trim
 - F.6 Dehydrator
 - F.7 Air Supervisory Pressure Switch
 - OR —
 - For Riser Mounted Air Compressor:
 - F.1 F-1 Riser Mounted Compressor, Including:
 - F.2 Air Supervisory Pressure Switch (Compressor On/Off Control Switch)
 - F.3 Soft Seat Check Valve
 - F.4 Air Pressure Supervisory Switch
- _____ Piping included with trim
 - - - - - Piping required but not include

**Figure 3 - System Components
 3, 4" & 6" Angle Style Valve with
 Tank-Mounted or Riser-Mounted Compressor**



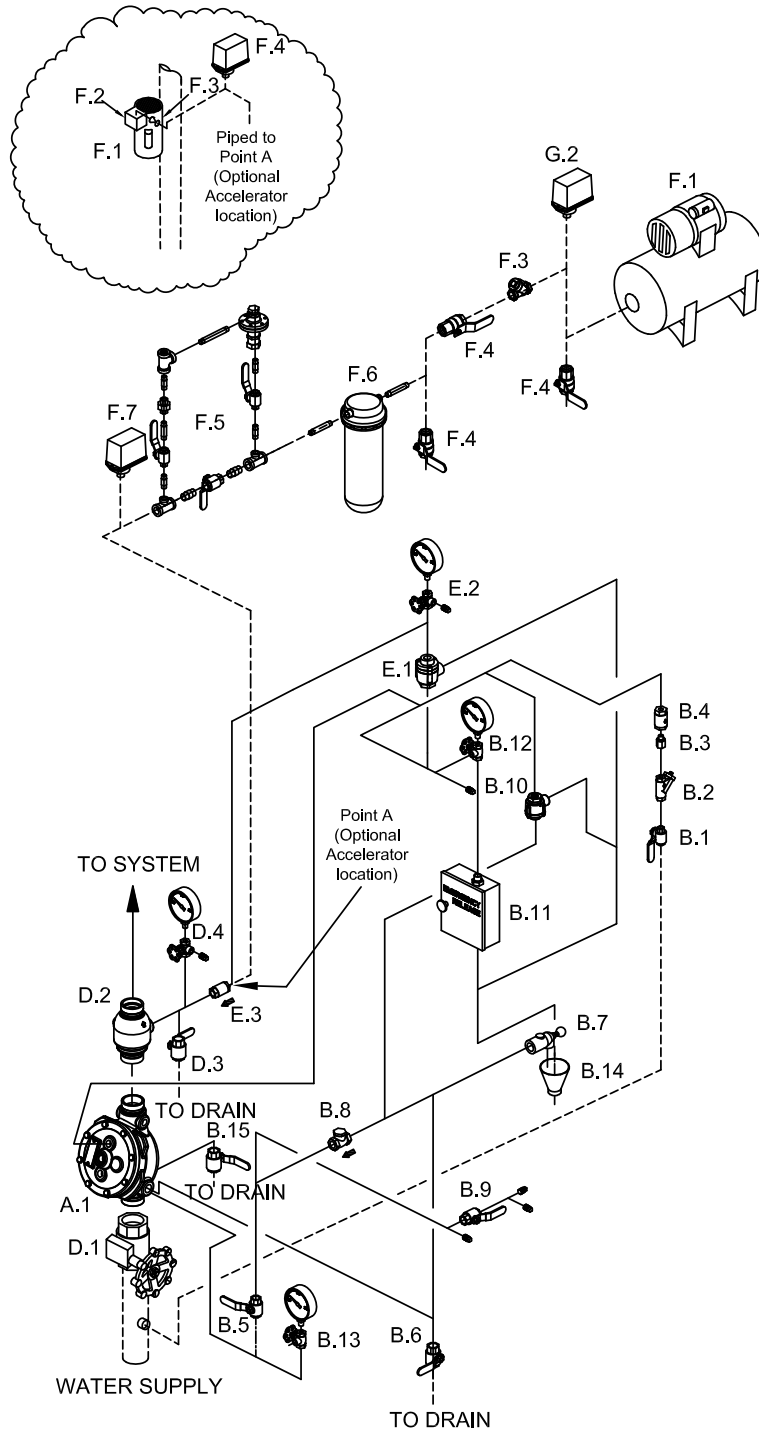
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SYSTEM COMPONENTS

- A. Valve**
 A.1 Deluge Valve
- B. Deluge Valve Conventional Trim**
 (See Deluge Valve Trim Charts)
 B.1 Priming Valve (Normally Open)
 B.2 Strainer
 B.3 1/16" Restricted Orifice
 B.4 Spring Loaded Check Valve
 B.5 Alarm Test Valve (Normally Closed)
 B.6 Auxiliary Drain Valve (Normally Closed)
 B.7 Drip Check Valve
 B.8 Drain Check Valve
 B.9 Alarm Shut-Off Valve (Normally Open)
 B.10 Pressure Operated Relief Valve (P.O.R.V.)
 B.11 Emergency Release
 B.12 Priming Pressure Water Gauge and Valve
 B.13 Water Supply Pressure Gauge and Valve
 B.14 Drain Cup
 B.15 Flow Test Valve (Normally Closed)
- C. Water Flow Alarm Equipment**
 C.1 Alarm Pressure Switch and/or
 C.2 Water Motor Alarm (Strainer Required)
 C.3 Strainer
- D. Riser**
 D.1 Water Supply Control Valve
 D.2 L-1 or K-1 Check Valve
 D.3 Sprinkler System Main Drain
 D.4 System Pressure Gauge and valve
- E. HP Dry Release System**
 E.1 Anti-Flood Assembly
 E.2 Air Pressure Gauge and Valve
 E.3 Check Valve
- F. Air Supply**
 F.1 Tank Mounted Air Compressor
 F.2 Air Supervisory Pressure Switch
 (Compressor On/Off Control Switch)
 F.3 Soft Seat Check Valve
 F.4 Shut Off Valve
 (Indicating Ball Valve recommended.)
 F.5 D-2 Air Maintenance Device & By-Pass Trim
 F.6 Dehydrator
 F.7 Air Supervisory Pressure Switch
 --- OR ---
 For Riser Mounted Air Compressor:
 F.1 F-1 Riser Mounted Compressor, Including:
 F.2 Air Supervisory Pressure Switch
 (Compressor On/Off Control Switch)
 F.3 Soft Seat Check Valve
 F.4 Air Pressure Supervisory Switch
- Piping included with trim
 - - - - - Piping required but not included

Figure 4 - System Components
1-1/2" & 2" Straight Through Valve with
Tank-Mounted or Riser-Mounted Compressor



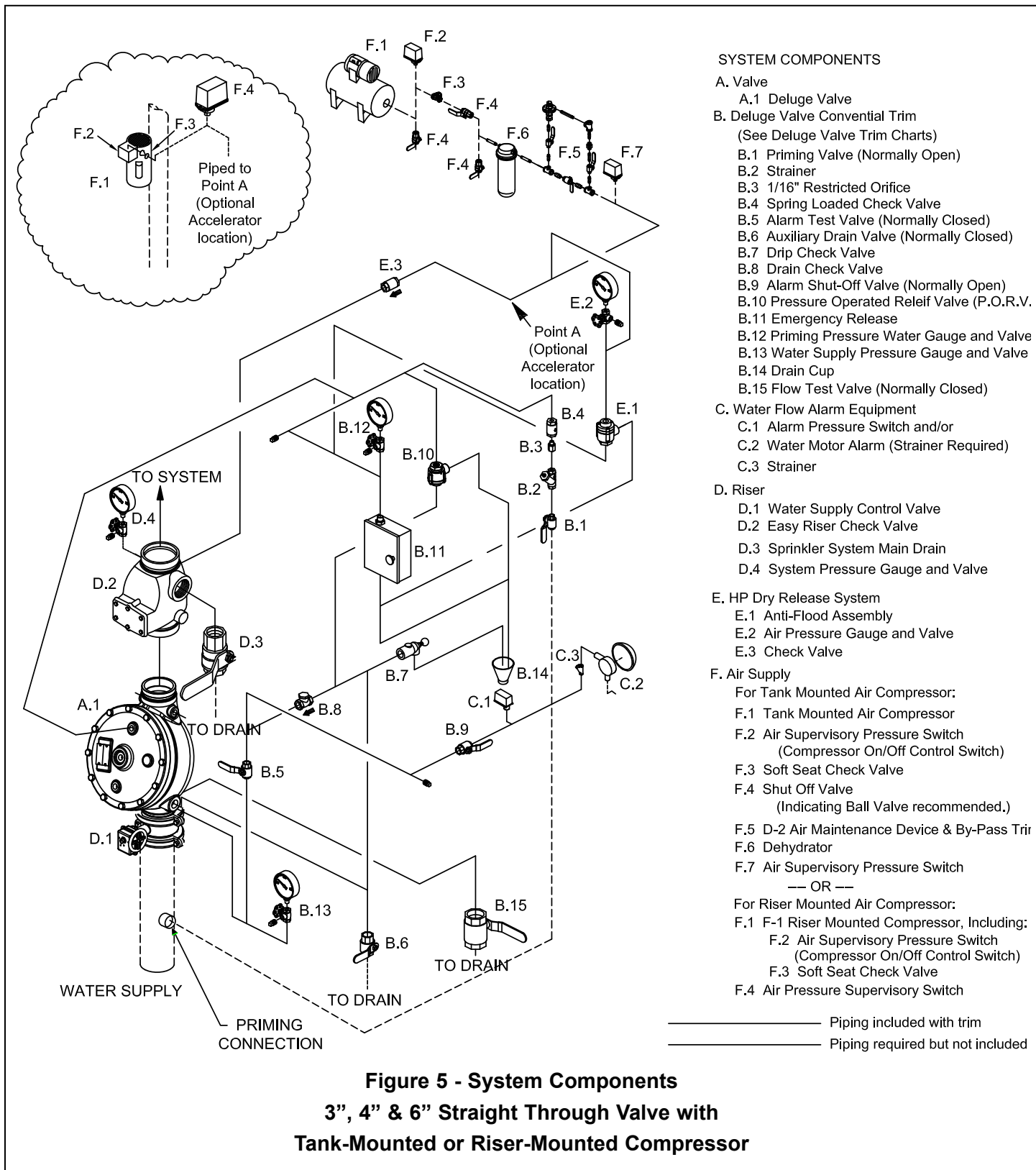
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- A. Valve
 - A.1 Deluge Valve
 - B. Deluge Valve Conventional Trim
(See Deluge Valve Trim Charts)
 - B.1 Priming Valve (Normally Open)
 - B.2 Strainer
 - B.3 1/16" Restricted Orifice
 - B.4 Spring Loaded Check Valve
 - B.5 Alarm Test Valve (Normally Closed)
 - B.6 Auxiliary Drain Valve (Normally Closed)
 - B.7 Drip Check Valve
 - B.8 Drain Check Valve
 - B.9 Alarm Shut-Off Valve (Normally Open)
 - B.10 Pressure Operated Relief Valve (P.O.R.V.)
 - B.11 Emergency Release
 - B.12 Priming Pressure Water Gauge and Valve
 - B.13 Water Supply Pressure Gauge and Valve
 - B.14 Drain Cup
 - B.15 Flow Test Valve (Normally Closed)
 - C. Water Flow Alarm Equipment
 - C.1 Alarm Pressure Switch and/or
 - C.2 Water Motor Alarm (Strainer Required)
 - C.3 Strainer
 - D. Riser
 - D.1 Water Supply Control Valve
 - D.2 Easy Riser Check Valve
 - D.3 Sprinkler System Main Drain
 - D.4 System Pressure Gauge and Valve
 - E. HP Dry Release System
 - E.1 Anti-Flood Assembly
 - E.2 Air Pressure Gauge and Valve
 - E.3 Check Valve
 - F. Air Supply
 - For Tank Mounted Air Compressor:
 - F.1 Tank Mounted Air Compressor
 - F.2 Air Supervisory Pressure Switch (Compressor On/Off Control Switch)
 - F.3 Soft Seat Check Valve
 - F.4 Shut Off Valve (Indicating Ball Valve recommended.)
 - F.5 D-2 Air Maintenance Device & By-Pass Trim
 - F.6 Dehydrator
 - F.7 Air Supervisory Pressure Switch
 - OR —
 - For Riser Mounted Air Compressor:
 - F.1 F-1 Riser Mounted Compressor, Including:
 - F.2 Air Supervisory Pressure Switch (Compressor On/Off Control Switch)
 - F.3 Soft Seat Check Valve
 - F.4 Air Pressure Supervisory Switch
- _____ Piping included with trim
 - - - - - Piping required but not included

Figure 5 - System Components
3", 4" & 6" Straight Through Valve with
Tank-Mounted or Riser-Mounted Compressor



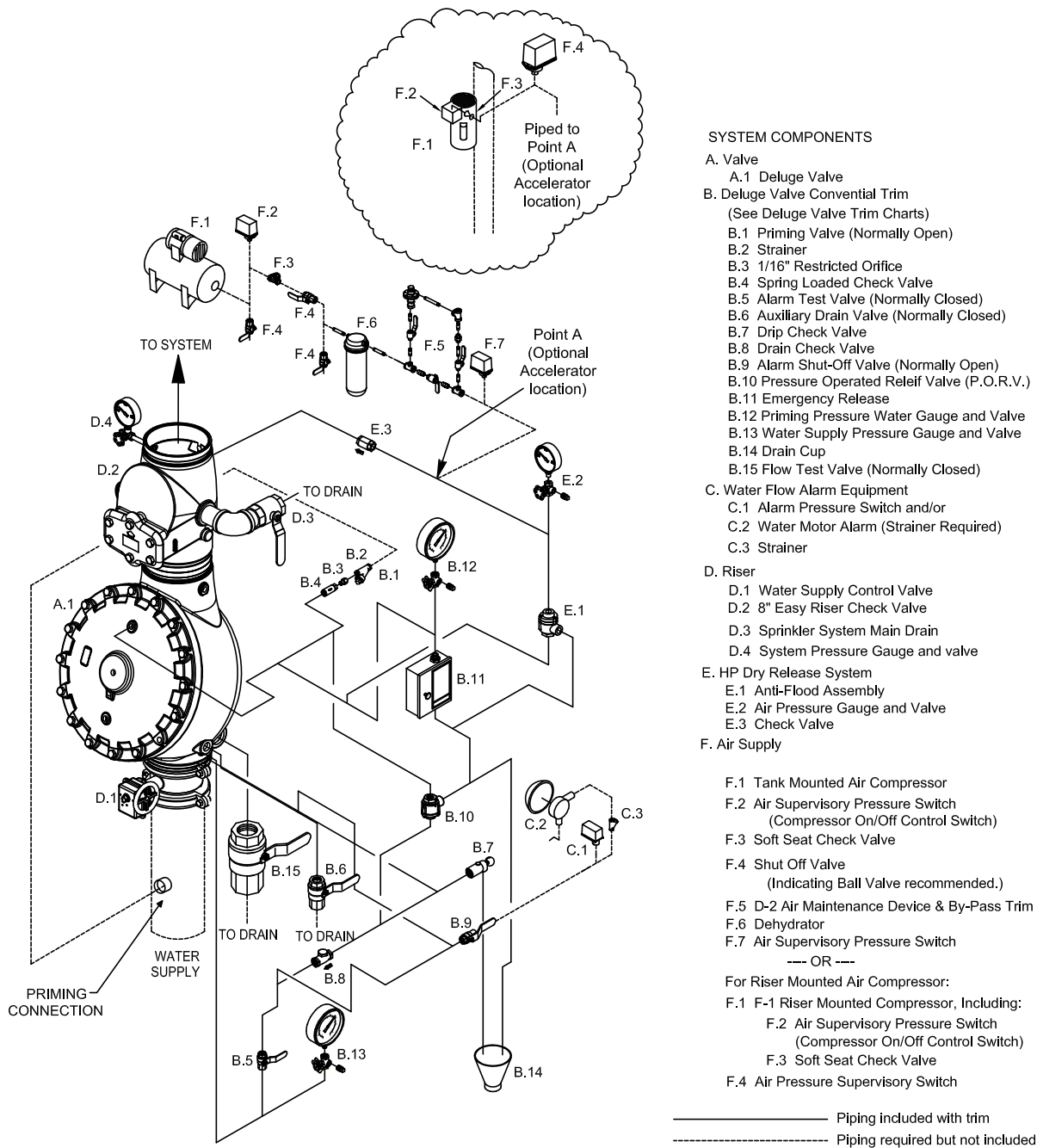
TECHNICAL DATA

HP DRY SYSTEM

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058

Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com

Visit the Viking website for the latest edition of this technical data page www.vikinggroupinc.com



**Figure 6 - System Components
 8" Straight Through Valve with
 Tank-Mounted or Riser-Mounted Compressor**



TECHNICAL DATA

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HP Dry System Release Trim

	Galvanized	Brass
<i>Same release trim is used on all sizes of valves</i>	15488-1	15488-2

This release trim can be used with all types of conventional trim in conjunction with the Model F Deluge Valves. This trim can be used with conventional trim that uses a Model D PORV with the Model E Deluge Valve.

Note: For 1-1/2" & 2" Check Valves, the connection is made at the 3/4" outlet.

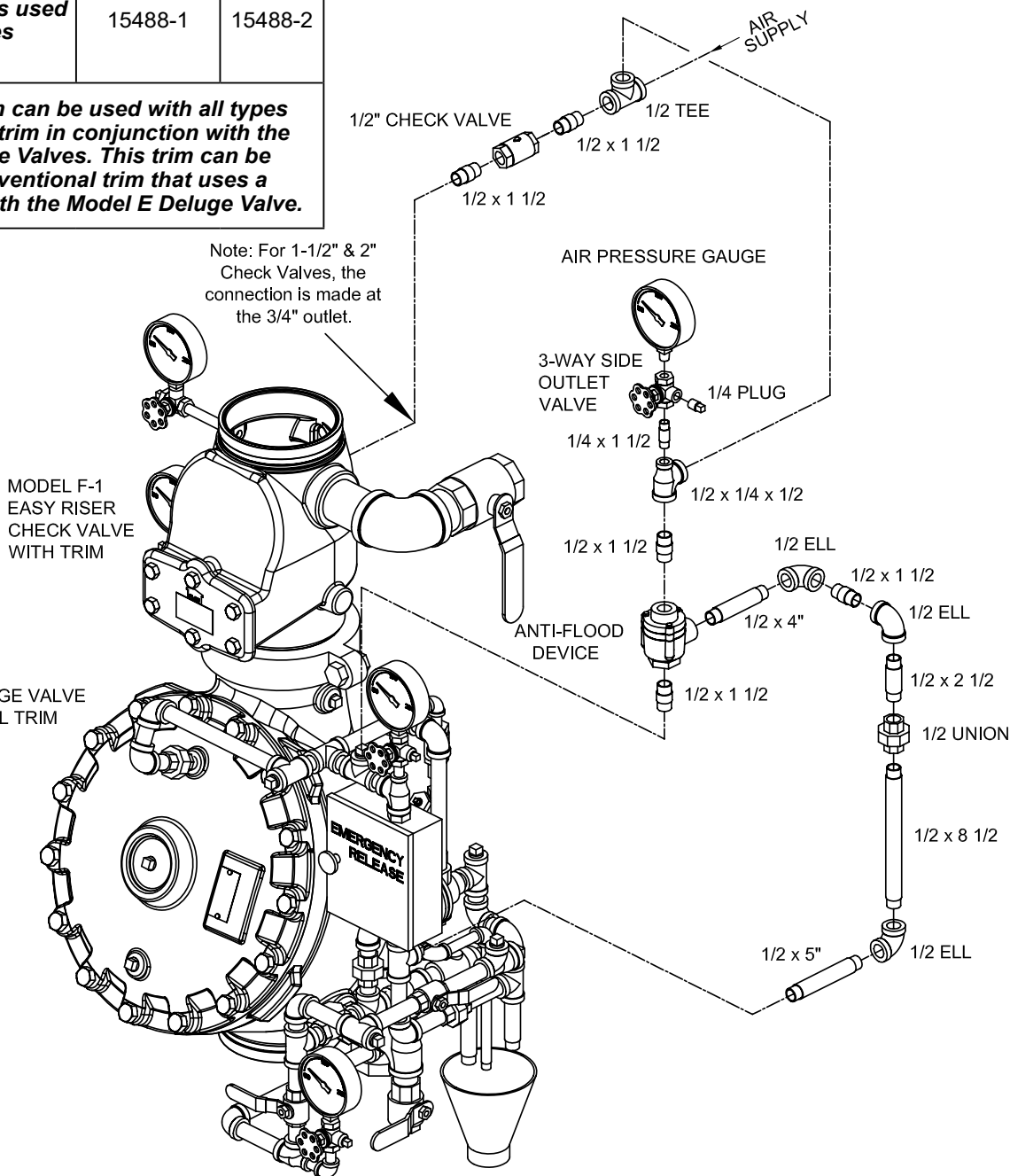


Figure 7 - Release Trim
(Straight Through Valve shown)
Also available for Angle Style Valve