

Deluge Valve Model A

External Reset
Flange x Flange — Flange x Groove

Manufactured by: Central Sprinkler Company
451 North Cannon Avenue, Lansdale, Pennsylvania 19446



Product Description

The Central Model A Deluge Valve is a water flow control/alarm device which is designed for use in deluge or preaction type systems. This valve is to be installed in the vertical position only.

A **Preaction System** consists of closed sprinklers and is used in environments where a concern exists of water damage to sensitive areas due to a broken pipe, fitting or sprinklers head. Preaction systems do not contain water in the piping during normal conditions. However, the piping may contain compressed air or nitrogen for the purpose of supervising the system piping for leaks. Preaction systems may be of the single, double or non-interlock types with various releasing trims. These releasing trims may be electric, pneumatic (dry pilot), hydraulic (wet pilot) or a combination of two if double interlock is used.

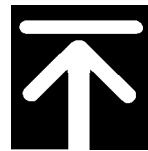
A **Deluge System** typically employs open sprinklers attached to a piping system which is supplied by a deluge valve that is opened by a fire detection system in the area(s) to be protected. This detection system may be either a pneumatic, electric, or hydraulic.

The Central Model A Deluge Valve provides the following means of fire alarm actuation: 1) Mechanically, by a means of water flow to a water motor alarm and; 2) Electrically, via flow detection devices which are connected to an electronic signaling device.

The 4" and 6" Model A Deluge Valves are UL Listed and FM Approved with the use of Central's Basic Deluge Trim Kit. This trim kit is designed for use with wet pilot line actuation. Other Listed/ Approved trim combinations are also available which provide connections for

dry pilot lines and electrical operation (see "Systems" section). Alarm and supervisory switches are not included in the above-mentioned trim kits, but can be provided separately from all Central locations.

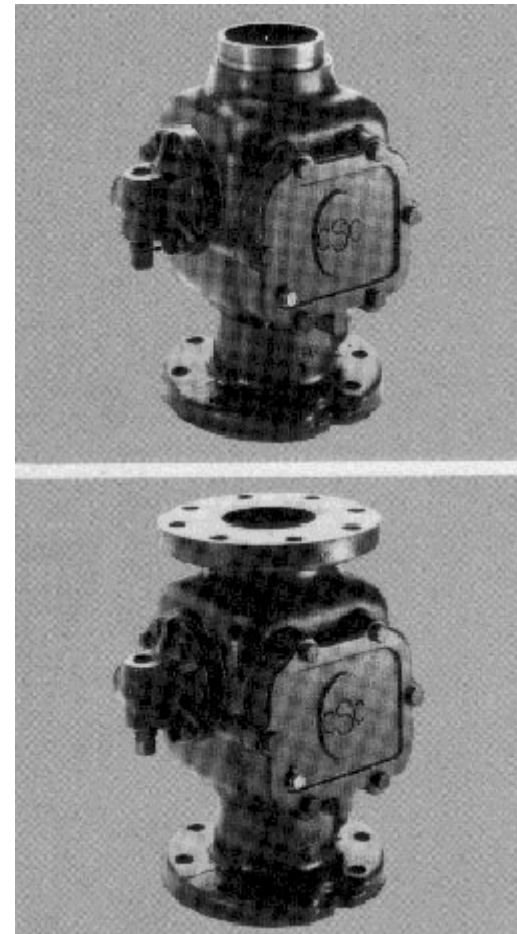
Note: See appropriate "system" data sheets for specific trim assembly drawings, approvals, ordering information, system description and setting, testing and maintenance procedures.



Technical Data

Model: A
Mfg. Source: Domestic
Style: Flange-x-Flange
Flange-x-Groove
Size: 4" & 6"
Approvals: Deluge: UL, ULC, FM,
MEA (143-93-E)
Orientation: Vertical Only
Maximum Working Pressure: 175 psi
Factory Hydro Test: 100% at 350 psi
Standard Finish: Blue Enamel Paint
Flange Specifications:
AF Inlet - Class 125 ANSI B16.1
AF Outlet - Class 125 ANSI B16.1
Grooved Outlet - Std. AWWA C-606
Clapper - bronze
Valve Seat - bronze
Body - ductile iron
Diaphragm - Buna-N
Nose Pin - brass
Retaining Ring, Clapper Pin, Clapper
Spring - stainless steel
Valve Lever - bronze
Clapper Seal - Buna-N
Friction Loss
4" = 12 feet
6" = 32 feet

Based on equivalent lengths of schedule 40, C=120 pipe.



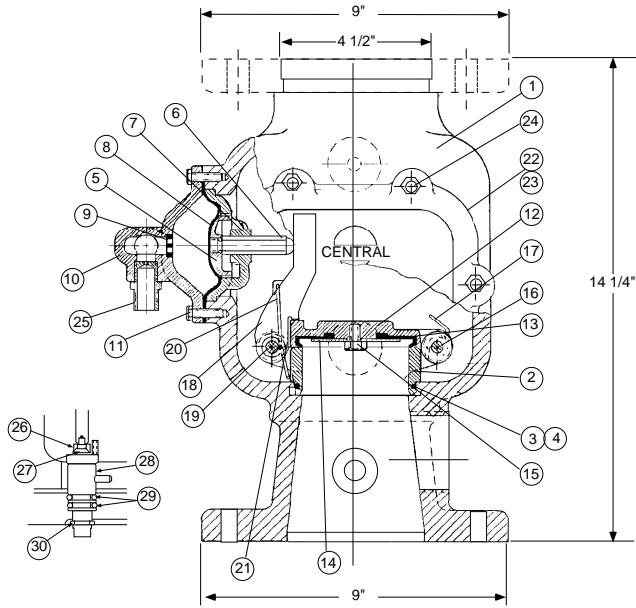
4" & 6" U.L. & F.M. Deluge Valve

Accessories: The wet pilot (basic) trim is required for all deluge valve system applications. This trim includes the following accessories along with the appropriate fittings and nipples as shown on the wet pilot (basic) trim literature:

- Manual (emergency) Release		
- Alarm Test Valve		
- Deluge Valve Drain		
- Automatic Ball Drip Valve		
- System Supply Pressure Gauge		
- Diaphragm Chamber Pressure Gauge		
- Diaphragm Supply Valve		
Weight:	<u>Deluge</u>	
<u>Valve</u>	4" FxG	65 lbs.
	4" FxF	78 lbs.
	6" FxG	93 lbs.
	6" FxF	108 lbs.
<u>Trim</u>	(Basic)	20 lbs.

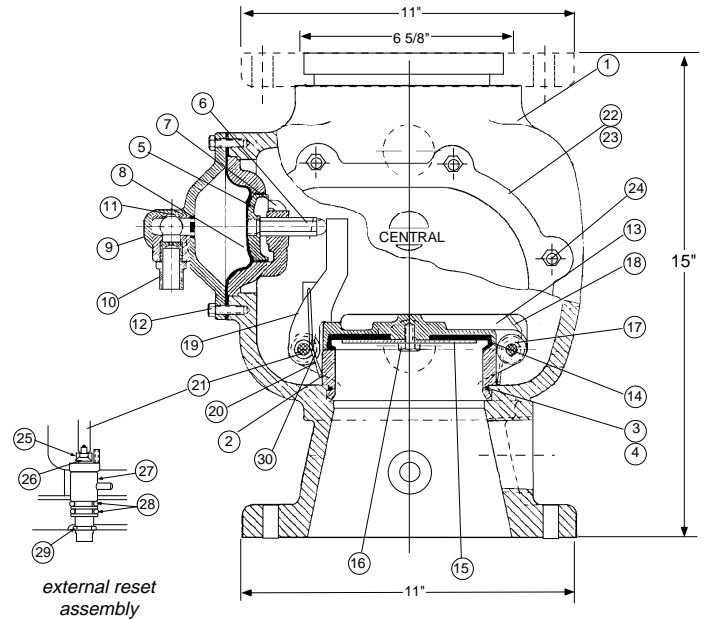
Note: See "wet pilot" actuation in the "systems" section for maximum wet pilot line heights.

Figure 1
4" Deluge Valve Sectional
(external reset)



*external reset
assembly*

Figure 2
6" Deluge Valve Sectional
(external reset)



*external reset
assembly*

Parts List - 4" Model A Flanged & Grooved

Detail Number	Number Required	Description	Part Number
1	1	Body	824-001-20 (<i>flanged</i>) 824-001-00 (<i>grooved</i>)
2	1	Seat Ring	824-004-00
3	1	O-Ring	824-029-00
4	AR	Grease	
5	1	Piston, Diaphragm	824-014-00
6	1	Nose Pin	824-012-00
7	1	Support	824-013-00
8	1	Diaphragm	824-015-00
9	1	Support Screen Bush.	824-023-00
10	1	Diaphragm Cover	824-016-00
11	6	Diaphragm Cover Bolts	890-23-100
12	1	Clapper	824-008-00
13	1	Clapper Seal	824-026-00
14	1	Retaining Ring	804-04-000
15	1	Cap Screw	816-11-000
16	1	Clapper Pin	824-027-00
17	1	Clapper Spring	826-024-00
18	1	Lever	824-032-00
19	1	Lever Pin	A-824-028-02
20	1	Lever Spring	824-031-00
21	1	Set Screw	B-198-106-02
22	1	Cover Gasket	824-003-00
23	1	Cover	824-002-00
24	6	Cover Bolts	824-019-00
25	1	Water Restrictor	824-033-00
26	1	Reset Link	824-034-00
27	1	Flat Head Screw	198-111-01
28	1	Reset Shaft Ass'y	824-035-01
29	2	O-Ring	198-007-17
30	1	Retaining Ring	198-021-01

Parts List - 6" Model A Flanged & Grooved

Detail Number	Number Required	Description	Part Number
1	1	Body	826-001-20 (<i>flanged</i>) 826-001-00 (<i>grooved</i>)
2	1	Seat Ring	826-004-00
3	1	O-ring	826-019-00
4	AR	Grease	
5	1	Piston, Diaphragm	826-011-00
6	1	Nose Pin	824-012-00
7	1	Support	826-010-00
8	1	Diaphragm	826-012-00
9	1	Diaphragm Cover	826-013-00
10	1	Water Restrictor	824-033-00
11	1	Support Screen Bush.	824-023-00
12	8	Diaphragm Cover Bolts	890-23-100
13	1	Clapper	826-007-00
14	1	Clapper Seal	826-015-00
15	1	Retaining Ring	826-025-00
16	1	Cap Screw	816-11-000
17	1	Clapper Pin	826-017-00
18	1	Clapper Spring	826-024-00
19	1	Lever	824-032-00
20	1	Lever Spring	824-031-00
21	1	Lever Pin	824-028-02
22	1	Cover Gasket	826-003-00
23	1	Cover	826-002-00
24	6	Cover Bolts	814-13-000
25	1	Reset Link	824-034-00
26	1	Flat Head Screw	198-111-01
27	1	Reset Shaft Ass'y	824-035-01
28	2	O-Ring	198-007-17
29	1	Retaining Ring	198-021-01
30	1	Set Screw	198-106-02

