



▲ Model 71 DE/EL

OCV's DE/EL, electronically actuated, remote-reset deluge valve, is held shut drip-tight in its standby position. When a fire alarm control panel energizes the 2/2 way N.C. solenoid, the deluge valve's control chamber is vented. The deluge valve opens instantly and allows water to flow into the pipeline and through the open sprinklers over the protected area.

## DESIGNED FOR

- ▶ High-pressure (375psi/PN25), high-flow deluge systems
- ▶ Automatic or local manual emergency actuation
- ▶ Hazardous-flammable and explosion classified area fire suppression
- ▶ Onshore & Offshore, Naval, Industrial, Commercial & Residential fire suppression

## FEATURES

- ▶ Superior design featuring exceptionally low pressure losses at high flow rates
- ▶ Low to negligible lifelong maintenance costs
- ▶ Simple, comprised of 3 main parts, facilitates easy maintenance
- ▶ Fresh or Brackish water, seawater and foam
- ▶ Out of box fully assembled & tested valves
- ▶ All valves are factory trimmed for both vertical & horizontal installations without modification
- ▶ Extensive valve & trim material selection and corrosion protection coating

## OPERATION

This electrically actuated, remote reset deluge valve is designed for fire protection systems controlled by a fire alarm control panel and actuated by a solenoid valve acting as the automatic release device. The basic control valve type used in this deluge system is a direct-sealing elastomeric diaphragm, hydraulically operated control valve engineered specifically for Fire Protection systems. The system includes a 2/2 way N.C. solenoid as the interface between the fire alarm control panel - monitoring heat, smoke or flames - and the deluge valve.

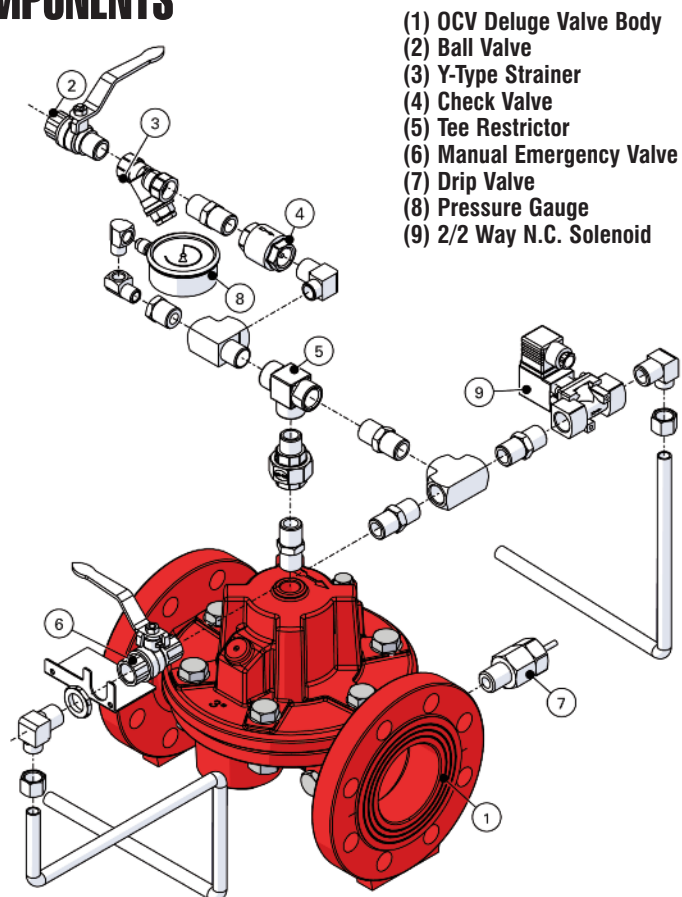
In the stand-by position, the deluge valve is held closed by the upstream water pressure, trapped in the valve's control chamber. The water pressure enters the control chamber through the priming line ball valve (2), a Y-Type strainer (3), a check valve (4), and a tee restrictor (5).

Under fire conditions, a fire alarm control panel energizes the 2/2 way N.C. solenoid (9) forcing it open. This causes the 2/2 way N.C. solenoid (9) to vent the water pressure from the deluge valve's control chamber. The deluge valve opens instantly and allows water to flow into the pipeline and through the open sprinklers over the protected area.

Manual emergency actuation is enabled by opening the emergency manual activation ball valve (6). The deluge valve opens instantly and allows water to flow into the pipeline and through the open sprinklers over the protected area.

Resetting, maintenance, and periodic testing instructions must be followed as described in detail in the relevant OCV DE/EL model's O&M (Operation & Maintenance) manual.

## COMPONENTS



- (1) OCV Deluge Valve Body
- (2) Ball Valve
- (3) Y-Type Strainer
- (4) Check Valve
- (5) Tee Restrictor
- (6) Manual Emergency Valve
- (7) Drip Valve
- (8) Pressure Gauge
- (9) 2/2 Way N.C. Solenoid

## Technical Data:

- Media up to 176°F (80°C)
- Elastomers suitable for extreme climates are available upon request.

## Basic Valve Material:

Options: Ductile Iron A-536 65-45-12; Cast Steel WCB A-216; Cast Steel A-352 LCB; Austenitic Stainless Steel A-351/CF8M; Super Duplex 2507; Nickel-Aluminium-Bronze B-148 UNS C95800

## Sizes:

- Straight Flow: 2"-24"
- Angle: 1.5" - 8"

## End Connections:

- Flanged: ISO PN10, ISO-PN16 & ISO-PN25 ANSI B16.42 Class # 150 and # 300
- Grooved: Sizes: 2"-8"

## Pressure Rating:

- 250 psi for Class #150
- 375 psi for Class #300

## UL Listed Sizes:

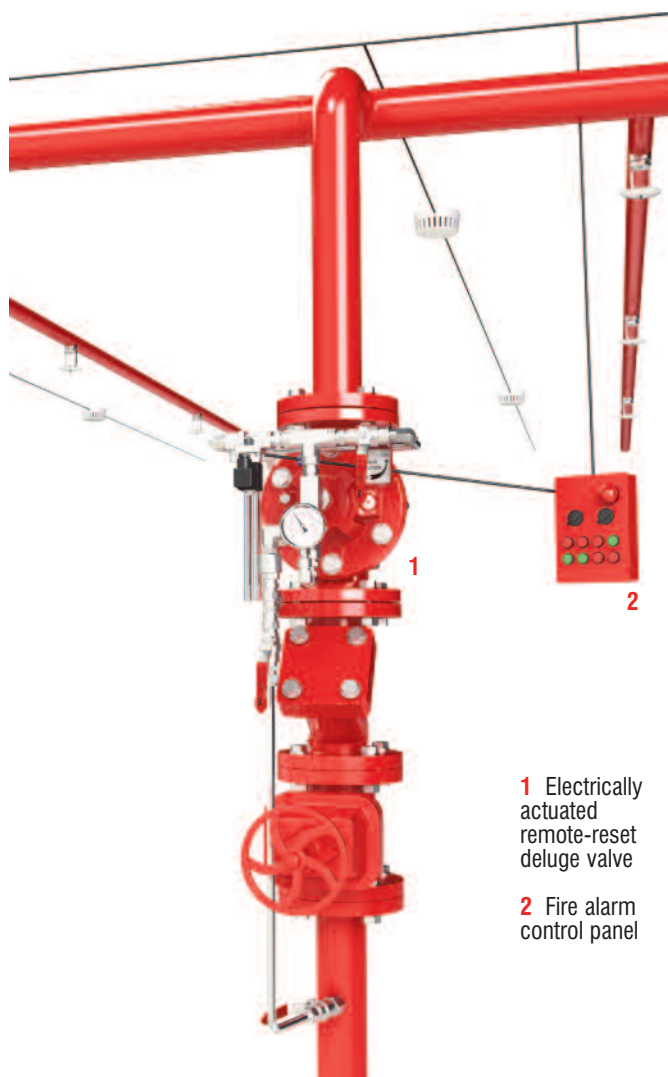
- 2"-10"

## Please specify in addition to the above:

- Electrical features other than standard (24VDC, IP65/NEMA4)
- Control trim material other than standard (Brass/Copper)
- Required standards, certifications and approval

## SPECIFICATIONS

The deluge valve shall be hydraulically operated, direct elastomeric diaphragm-seal, single chamber weir type. The valve shall consist of three major components: the body, cover and the diaphragm assembly. The diaphragm shall be the only moving part. The diaphragm forms a sealed control chamber in the upper portion of the valve, separating operating pressure from line pressure. Packing glands' stuffing boxes and dynamic o-ring seals are not permitted and there shall be no shafts, discs, bearings or pistons operating the main valve. No hourglass-shaped disc retainers shall be permitted and no V-type, U-type or other slotted type disc guides shall be used. The valve shall contain a nylon reinforced rubber diaphragm, elastic & resilient through its entire surface without vulcanized radial discs and/or reinforcements. The diaphragm shall not be guided by any shafts or bearings and shall not be in close contact with other valve parts except for its sealing surface. Maintenance, disassembly and reassembly of all the valve's components shall be made possible on site and in-line, without the need to remove the valve from the line. Standard material valves such as Ductile Iron (ASTM A-536 65-45-12) and Cast Steel (WCB A-216) should be coated with epoxy, followed by a coat of fire red enamel paint. Special considerations should be made for deluge valves being used in seawater supply systems. The valve should be UL listed under category VLF for fire protection service.

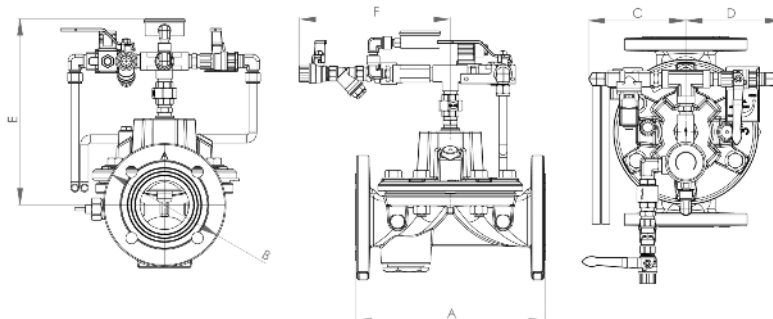


1 Electrically actuated remote-reset deluge valve

2 Fire alarm control panel

Valve	2 (50)		3 (80)		4 (100)		6 (150)		8 (200)		10 (250)	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
A	10	254	12	310	14	355	17	443	21	530	25	635
B	6 <sup>5</sup> / <sub>8</sub>	168	8	200	9	238	12	306	14	360	17	430
C	4 <sup>7</sup> / <sub>8</sub>	126	6	159	7	173	8	202	10	242	11	291
D	6 <sup>3</sup> / <sub>16</sub>	157	6	157	6	157	6	160	8	200	10	249
E	9 <sup>7</sup> / <sub>16</sub>	234	12	300	12	296	15	379	16	399	17	422
F	9 <sup>1</sup> / <sub>16</sub>	246	10	246	10	246	10	246	10	265	12	317
Approx. Weight	lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg
	29	13	73	33	90	41	172	78	278	126	425	193

\* Approximate dimensions



QUALITY SYSTEM REGISTERED TO ISO 9001

OCV FLUID SOLUTIONS

OCV pressure control valves are UL/ULC Listed for mounting in the horizontal or vertical position. Space should be taken into consideration when mounting valves and their pilot systems.

A routine inspection & maintenance program should be established and conducted yearly by a qualified technician. Consult our factory @ 1-888-628-8258 for parts and service.

## When ordering your 71 DE/EL, please provide:

Series Number - Valve size - Globe or Angle - Flanged 150#, 300# - ANSI, screwed or grooved ends - Trim Material - Special needs / or Installation Requirements

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