

400 Series

Deluge, Pre-Action  
& Dry Pipe

Model FP-400E-1M

## Hydraulically Controlled Deluge Valve

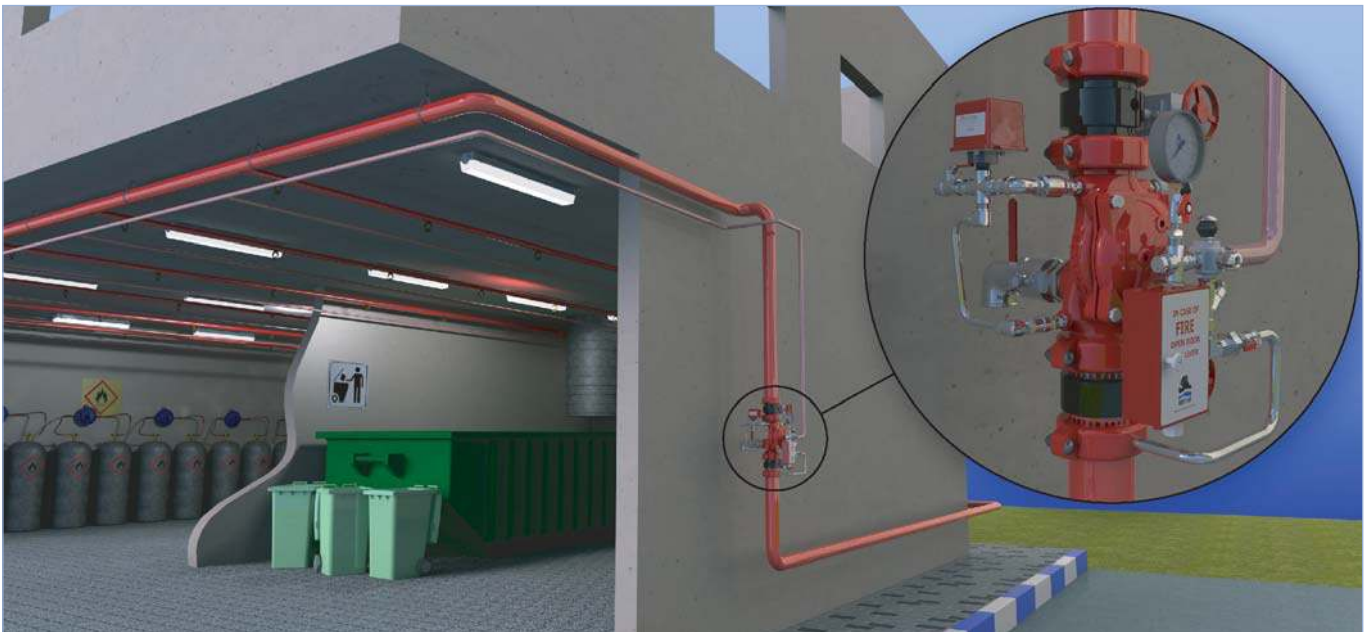
### with EasyLock™ Manual Reset

BERMAD's hydraulically controlled deluge fire protection system for buildings is designed for use in systems that include wet pilot lines with closed fusible plugs (thermal releases) and piping with wide variety of open nozzles. The wet pilot lines are installed along the area protected by the main system. This deluge system is capable of delivering large quantities of water over a large area in a relatively short period of time. BERMAD's deluge valves are specially designed to open fast and smoothly while preventing water hammer.

The WW-400E-WBF-1M system controls open nozzles sprinklers; this UL-Listed system admits water into the sprinkler piping when the pressure in the pilot line drops due to a thermal release or manual operation.



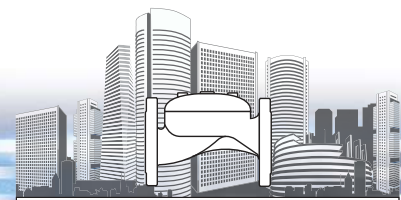
UL LISTED



For illustration only

### Typical Application

- Controlling open nozzles sprinkler systems in buildings, parking areas, warehouses, workshops, water curtains, central gas repositories, etc.
- In installations where electricity is not available or where hydraulic control operation is preferred.
- In buildings separated to several fire zones using a common water source, where false tripping of the system should be eliminated.
- In deluge fire protection systems that require UL approval.



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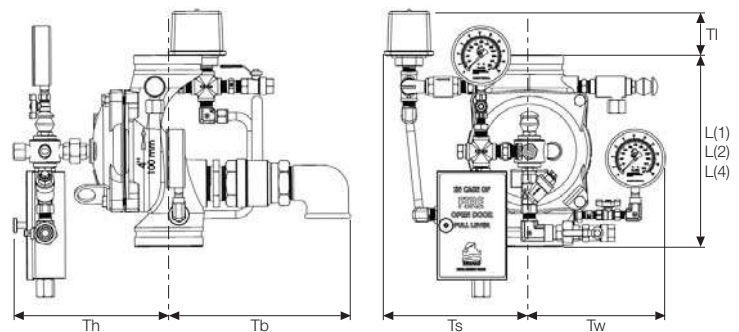
## Features and Benefits

- Compact structure – vertically installed small footprint specially designed for tight and confined areas such as water cabinets and technical floors
- Integral factory assembled unit – easy and simple installation reducing assembly errors and logistics difficulties
- Factory calibrated and on site adjustable – saving time and reducing engineering, operating and inspecting workloads
- Hydraulic latch open – patented “easy lock” that closes only upon local manual reset
- Drip check and Leaks control – visual and electrical indication for leaking valve
- High quality construction materials ensure reliable long lasting operation
- Full bore valve port area and hydrodynamic body provide unobstructed flow path, with minimal pressure loss and low cavitation damage
- Immediate valve response – ensures operation after long standby periods; specially designed for fire protection systems
- Integral drain port – external drain valves not required

## Technical Data

Size		Kv	L1 <sup>(1)</sup>	L4 <sup>(2)</sup>	TI	Tw	Ts	Th	Tb
DN	Inch								
50	2"	57	205	205	142	228	228	305	278
65	2½"	78	205	N/A	142	220	220	242	289
80	3"	136	257	250	119	243	243	262	300
100	4"	204	320	320	84	253	253	261	337
150	6"	458	415	415	57	312	318	356	378
200	8"	781	500	500	0	326	326	407	405

Notes:  
<sup>(1)</sup> L1 is for flanged ANSI #150 and ISO PN16.  
<sup>(2)</sup> L4 is for grooved end connections (Ductile Iron Only).



## End Connections:

**Grooved:** ANSI/AWWA C606

Optional: Flanged ANSI B16.42 (Ductile Iron), ISO PN16

**Pressure Rating:** Max. working pressure: 250 psi (17 bar)

**Valve Pattern:** Globe

**Water Temperature:** Water up to 50°C (122°F)

## Main Construction Materials:

**Body, cover & Actuator:** Ductile Iron ASTM A-536

**Internals:** Stainless Steel & Elastomer

**Control Trim System:** Brass control components / accessories

Copper & Brass tubing & fittings

Optional: Stainless Steel 316

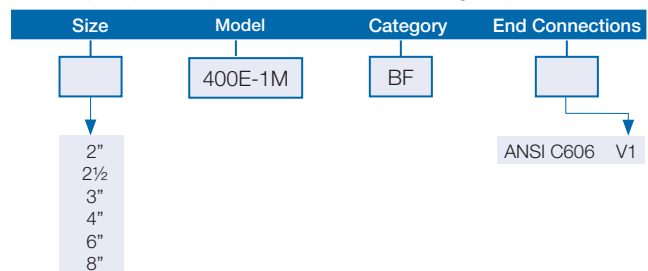
**Elastomers:** Nylon fabric reinforced polyisoprene NR

**Coating / colour:** Electrostatic Powder Coating Polyester Red

For other optional materials consult BERMAD

## How to Order

Please specify the requested valve in the following sequence:



For full technical specifications, see Engineering section or consult BERMAD

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