

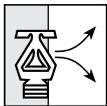
Electrically Controlled Deluge Valve

with EasyLock™ Manual Reset

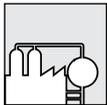
Model: FP 400E-2M



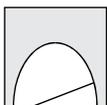
Typical Applications



Automatic spray or foam systems



Petrochemical facilities



Tunnels



Power plants & transformers



Flammable materials storage



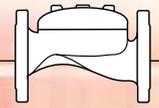
Aviation & airports

Features and Benefits

- **Latch open** – Closes upon local reset only
- **One-piece molded elastomeric moving part** – No maintenance required
- **Simple design** – Cost effective
- **Obstacle-free full bore** – Uncompromising reliability
- **Factory pre-assembled trim** – Out-of-box quality
- **In-line serviceable** – Minimal down time

Optional Features

- **Water motor alarm**
- **Alarm pressure-switch** (code: P or P7)
- **Explosion-proof** for hazardous locations (code: 7/8/9)
- **Seawater service** (add FS as prefix to model)
- **Hydraulic release**
- **Valve Position Single/Double Limit Switches**

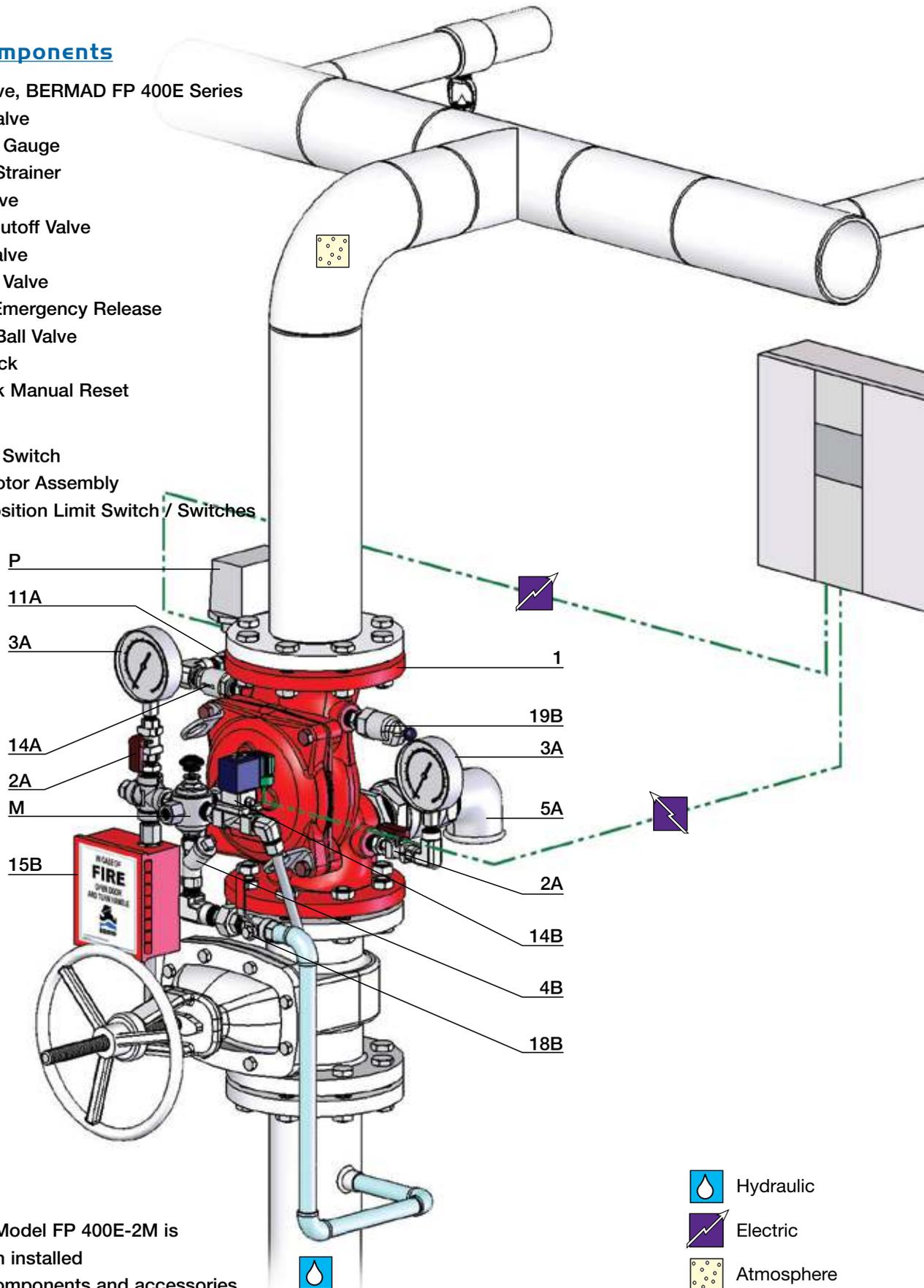


System Components

- 1 - Main Valve, BERMAD FP 400E Series
- 2A - Gauge Valve
- 3A - Pressure Gauge
- 4B - Priming Strainer
- 5A - Drain Valve
- 11A - Alarm Shutoff Valve
- 14A - Check Valve
- 14B - Solenoid Valve
- 15B - Manual Emergency Release
- 18B - Priming Ball Valve
- 19B - Drip Check
- M - EasyLock Manual Reset

Optional

- P - Pressure Switch
- W - Water Motor Assembly
- S - Valve Position Limit Switch / Switches

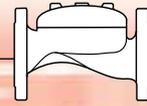


UL Listed

The BERMAD Model FP 400E-2M is UL-Listed when installed with specific components and accessories.

-  Hydraulic
-  Electric
-  Atmosphere

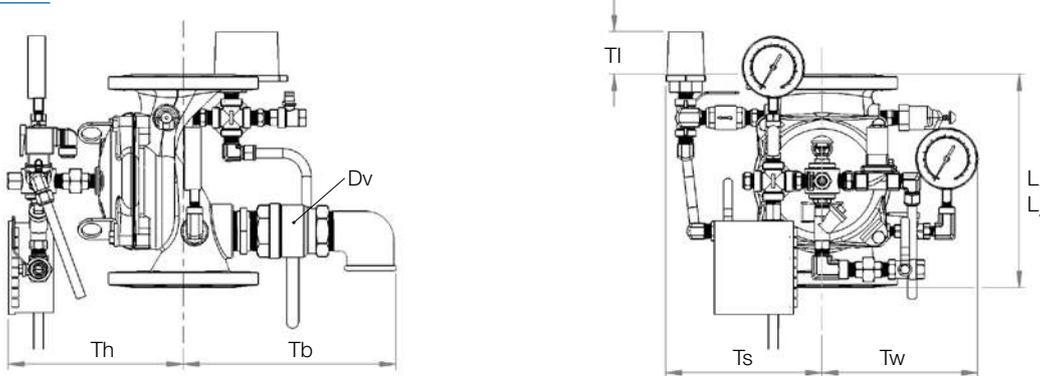
BERMAD Fire Protection



Model: FP 400E-2M

400 Series

Technical Data



Size	1½", 2"		2½"		3"		4"		6"		8"		10"		12"		
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
Dimensions	L ₁ ⁽¹⁾	205	8 ¹ / ₁₆	205	8 ¹ / ₁₆	257	10 ¹ / ₈	320	12 ⁵ / ₈	415	16 ⁵ / ₁₆	500	19 ¹¹ / ₁₆	605	23 ¹³ / ₁₆	725	28 ⁹ / ₁₆
	L ₂ ⁽²⁾	205	8 ¹ / ₁₆	N/A	N/A	250	9 ¹³ / ₁₆	320	12 ⁵ / ₈	415	16 ⁵ / ₁₆	500	19 ¹¹ / ₁₆	N/A	N/A	N/A	N/A
	TI	142	5 ⁵ / ₈	142	5 ⁵ / ₈	119	4 ¹¹ / ₁₆	84	3 ⁵ / ₁₆	57	2 ¹ / ₄	-	-	-	-	-	-
	Tw	228	9	220	8 ¹¹ / ₁₆	243	9 ⁹ / ₁₆	253	10	312	12 ⁵ / ₁₆	326	12 ¹³ / ₁₆	346	13 ⁵ / ₈	391	15 ³ / ₈
	Ts	228	9	220	8 ¹¹ / ₁₆	243	9 ⁹ / ₁₆	253	10	318	12 ¹ / ₂	326	12 ¹³ / ₁₆	326	12 ¹³ / ₁₆	391	15 ³ / ₈
	Th	226	8 ⁷ / ₈	242	9 ¹ / ₂	262	10 ⁵ / ₁₆	261	10 ⁵ / ₁₆	356	14	407	16	407	16	546	21 ¹ / ₂
	Tb	278	10 ¹ / ₁₆	289	11 ³ / ₈	300	11 ¹³ / ₁₆	337	13 ¹ / ₄	378	14 ⁷ / ₈	405	15 ¹⁵ / ₁₆	413	16 ¹ / ₄	473	18 ⁵ / ₈
	Dv Ø	¾"		1½"		1½"		2"		2"		2"		2"		2"	

- Notes:**
- L₁ is for flanged ANSI #150 and ISO PN16.
 - L₂ is for grooved end connections (Ductile Iron Only).
 - Provide adequate space around valve for maintenance.
 - Data is for envelope dimensions, specific component positioning may vary.

Connection Standard

- Flanged: ANSI B16.42 (Ductile Iron), B16.5 (Steel & Stainless Steel), B16.24 (Bronze)
- ISO PN16
- Grooved: ANSI/AWWA C606 for 2, 3, 4, 6 & 8"

Water Temperature

- 0.5 – 50°C (33 – 122°F)

Manufacturers Standard Materials

Main valve body and cover

- Ductile Iron ASTM A-536

Main valve internals

- Stainless Steel & Elastomer

Control Trim System

- Brass control components/accessories
- Stainless Steel 316 tubing & fittings

Elastomers

- Nylon fabric reinforced polyisoprene NR

Coating

- Electrostatic Powder Coating Red (RAL 3002)

Available Sizes

- 1½, 2, 2½, 3, 4, 6, 8, 10 & 12"
- UL-Listed for sizes 1½, 2, 2½, 3, 4, 6, 8 & 10"

Pressure Rating*

- Max. working pressure: 250 psi (17 bar)
- * Pressure rating might be limited due to solenoid valve rating

Optional Materials

Main valve body

- Carbon Steel ASTM A-216 WCB
- Stainless Steel 316
- Ni-Al-Bronze ASTM B-148

Control Trim

- Stainless Steel 316
- Monel® and Ni-Al-Bronze
- Hastalloy C-276

Elastomers

- NBR
- EPDM

Coating

- High Build Epoxy Fusion-Bonded with UV Protection, Anti-Corrosion

Wet Pilot Line Elevation

When used, refer to "Wet Pilot Line Maximum Elevation Above Valve" chart, Model FP 400E-1M

Solenoid Pilot Valves

Standard

- 2-Way Pilot Operated type
- Brass body
- Main valve closed when de-energized
- Enclosure: General purpose watertight, NEMA 4 and 4X / IP65, Class F
- Power: 24VDC, 8 watts
- UL – Listed

Options (see also ordering guide)

- Hazardous locations:
 - Class I Division 1, Gr. A, B, C, D, T4 (code 7)
 - ATEX, EEx em IIC T4 (code 8)
 - ATEX, EEx d IIC T4/5 (code 9)
- Voltage: see ordering guide (voltage options)
- Stainless Steel 316 body material (code K)



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