

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

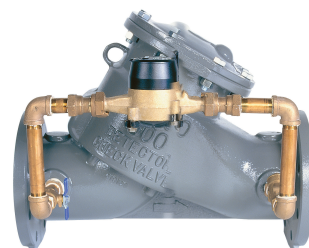
Representative \_\_\_\_\_

**LEAD FREE\***

## Series LF800

### Detector Check for Automatic Fire Sprinkler Systems

Size: 4" - 10"



**LF800  
with Optional  
Bypass**

The FEBCO Series LF800 is used in the protection of potable water supplies from unauthorized water usage. This requires installation of the proper valving to measure water loss. The Series LF800 Detector check is not a backflow prevention assembly and should not be used as such.

The LF800 features Lead Free\* construction to comply with low lead installation requirements. The Lead Free\* Detector Check shall comply with state codes and standards, where applicable, requiring reduced lead content.

### Features

- UL listed and FM approved for horizontal or vertical installation
- Spring-loaded swing check for reliability and minimum head loss
- 250psi (17.2 bar) working pressure for superior strength
- DuraCast ductile iron body for superior strength and lighter weight
- Stainless steel disc holder with silicone rubber disc for chemical and heat resistance
- Fusion epoxy coated, inside and out, for corrosion protection
- Simple service procedures
- Cast lifting ring for ease of installation
- 4", 6", 8", and 10" Sizes
- ¾" standard bypass; optional 1" size
- End Connections – Flanged ANSI B16.42, Class 150

### Operation

In a non-flow condition, the mainline check and bypass check are closed and the meter is idle. All flows up to approximately 10 gpm will flow through the standard ¾" (20mm) bypass. This operation at low flow rates is accomplished by designing the differential pressure drop across the bypass line to be slightly less than the mainline check valve. Therefore, the mainline check valve remains closed so that low flows through the fireline system are registered by the bypass meter.

Flows in excess of approximately 10 gpm will open the mainline check valve causing flow to occur through the mainline assembly and the bypass line.

### Approvals

4", 6", 8" and 10"



### Specifications

Detector check shall consist of a single spring-loaded swing check in parallel with a bypass meter assembly. Seat rings shall be stainless steel, bolted to the valve bodies with an elastomer seal.

The main check assembly shall be hinge guided. Head loss through the assembly shall not exceed 3psi (21 kPa) at velocities from zero up to and including 15fps (4.6mps).

Mainline check body and cover shall be manufactured of Ductile Iron ASTM A536 Grade 6545-12. Ductile iron bodies shall be flanged ANSI B16.42, class 150 and fusion epoxy coated 8 mills minimum to meet A.W.W.A. C550-90. Detector check shall be rated at 250psi (17.2 bar) working pressure and be UL listed and FM approved for both horizontal and vertical installation. Disc holder shall be stainless steel with a silicone rubber disc.

Detector check shall meet or exceed requirements of Underwriters Laboratory and Factory Mutual Research Corporation. Detector check shall be FEBCO Series LF800 or prior approved equal.

### Pressure – Temperature

Maximum working pressure: 250psi (17.2 bar)  
Hydrostatic test pressure: 500psi (34.5 bar)  
Temperature range: 32°F to 110°F (0°C to 60°C)

### Materials

Main valve body: Ductile iron Grade 65-45-12  
Fusion Epoxy coated  
Internal and External  
AWWA C550-90

Trim: Stainless Steel  
Elastomers: Check disk - silicone rubber

O-rings and seals - peroxide cured EPDM  
Spring: Stainless Steel  
Bypass meter: Totalizing type GPM/CFM  
Size: ⅝" x ¾"

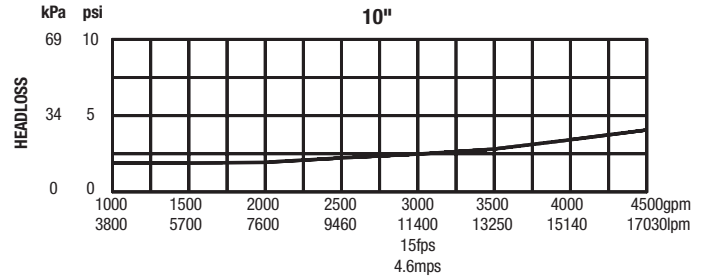
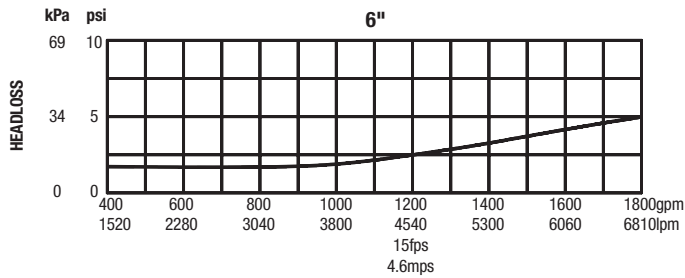
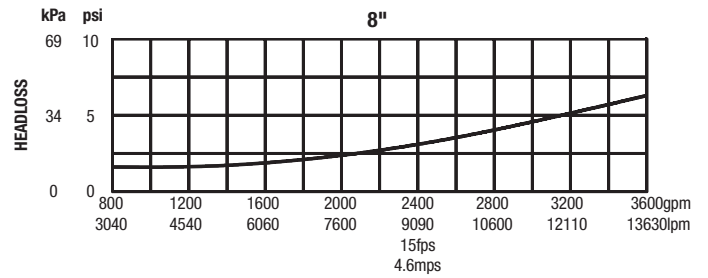
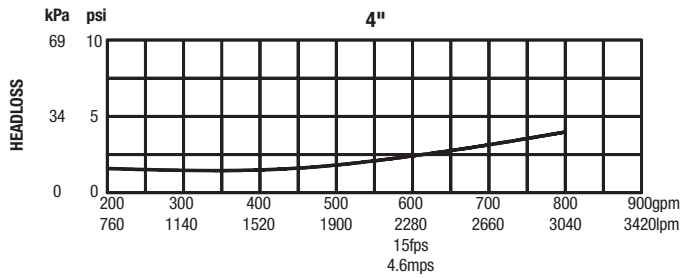
**\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.**



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FEBCO product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact FEBCO Technical Service. FEBCO reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on FEBCO products previously or subsequently sold.

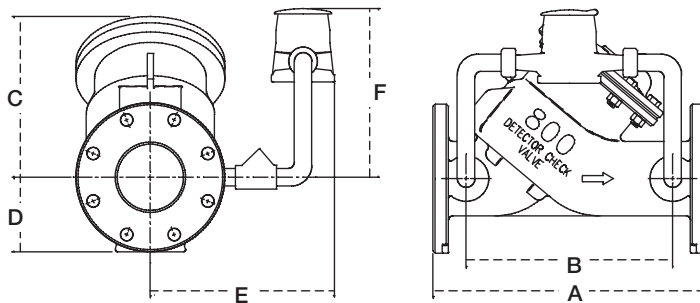
## Capacity



### NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

## Dimensions – Weights



U.S. Patent No. 4,989,635

### BYPASS SIZES

	STANDARD			OPTIONAL	
	in.	in.	mm	in.	mm
		3/4	20	1"	25
4	✓	✓	✓	✓	✓
6	✓	✓	✓	✓	✓
8	✓	✓	✓	✓	✓
10	✓	✓	✓	✓	✓

### Size: 4" - 10"

SIZE		DIMENSIONS										WEIGHT		
	A		B		C		D		E		F			
<i>in.</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>lbs.</i>	<i>kgs.</i>
4	16½	419	12½	318	9¾	248	4½	114	10½	267	11	279	76	34.5
6	22½	572	17	432	13¾	346	5½	140	11¾	295	11	279	157	71.2
8	26½	673	21	533	16¾	425	6¾	171	12¾	321	11	279	215	97.5
10	36¼	921	28	711	20	508	8	203	13¾	349	11	279	370	167.8



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