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"

FEBCO Series LF800 Detector Check 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 Detector Check is not a backflow prevention assembly and should not be used as such.

Series 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.

The ductile iron body is fused with ArmorTek™ coating technology to resist corrosion due to microbial induced corrosion (MIC) or exposed metal substrate.

Features

- UL Listed and FM Approved for horizontal or vertical installation
- Spring-loaded swing check for reliability and minimum head loss
- 250 psi (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
- Advanced ArmorTek™ coating technology to resist corrosion of internals
- Simple service procedures
- Cast lifting ring for ease of installation
- Available in sizes 4", 6", 8", and 10"
- Standard bypass size 3/4"; optional size 1"
- 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 run through the standard ¾" 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 open the mainline check valve, causing flow to occur through the mainline assembly and the bypass line.



Specification

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 3 psi (21 kPa) at velocities from zero up to and including 15 fps (4 mps).

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. The valve body shall utilize a coating system with built-in electrochemical corrosion inhibitor and microbial inhibitor. Detector Check shall be rated at 250 psi (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 Laboratories and FM Approvals. Detector Check shall be FEBCO Series LF800 or prior approved equal.

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.

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



Materials

Main valve body: Ductile iron Grade 65-45-12

Coating: Fusion epoxy coated

internal and external AWWA C550-90

Trim: Stainless steel

Elastomers: Silicon rubber check disc
O-rings and seals: Peroxide cured EPDM

Spring: Stainless steel

Bypass meter: Totalizing type GPM/CFM

Size: 5/8" x 3/4"

Pressure - Temperature

Maximum working pressure: 250 psi (17.2 bar) Hydrostatic test pressure: 500 psi (34.5 bar)

Temperature range: 32°F to 110°F (0°C to 60°C)

Approvals

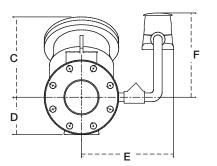
Sizes 4", 6", 8", and 10"

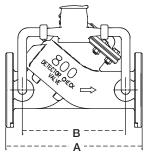






Dimensions - Weights



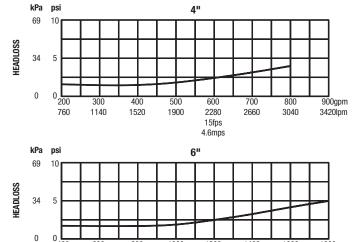


U.S. Patent No. 4,989,635

BYPASS SIZES							
ST	ANDA	OPTIONAL					
in.	in.	mm	in.	mm			
	3/4	20	1"	25			
4	✓	✓	✓	✓			
6	✓	✓	✓	✓			
8	✓	✓	✓	✓			
10	✓	✓	✓	✓			

SIZE	DIMENSIONS									WEIGHT				
	,	A B		С		D		E		F				
in	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
4	16½	419	121/2	318	93/4	248	41/2	114	10½	267	11	279	76	34.5
6	221/2	572	17	432	13%	346	5½	140	11%	295	11	279	157	71.2
8	26½	673	21	533	16¾	425	6¾	171	12%	321	11	279	215	97.5
10	361/4	921	28	711	20	508	8	203	13¾	349	11	279	370	167.8

Capacity



1000

3800

1200

4540

15fps

4.6mps

5300

1600

6060

1800gpm

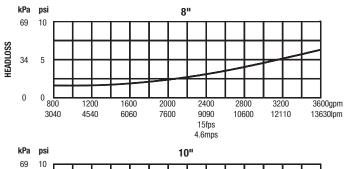
6810lpm

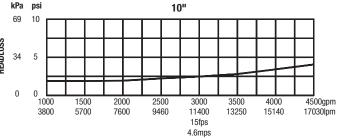
800

3040

1520

2280







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