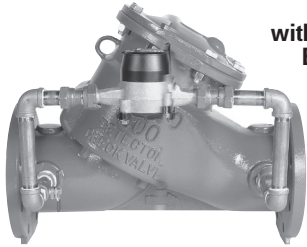


**SPECIFICATION SHEET** **FEBCO®**

# Series 800

## Detector Check for Automatic Fire Sprinkler Systems

Size: 4" - 10" (100mm - 250mm)



800  
with Optional  
Bypass

The patented FEBCO Series 800 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 800 Detector check is not a backflow prevention assembly and should not be used as such.

**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.
- Fully rubber encapsulated ductile iron disc for strength.
- 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
- 3/4" standard bypass; optional sizes: 1", 1 1/2" and 2"
- 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 3/4" (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 bronze, 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 mils 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 shall be rubber encapsulated ductile iron.

Detector check shall meet or exceed requirements of Underwriters Laboratory and Factory Mutual Research Corporation. Detector check shall be FEBCO Series 800 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:	Bronze
Elastomers:	Nitrile
Spring:	Stainless Steel
Bypass:	
Bypass meter:	Totalizing type GPM/CFM
Size:	5/8" x 3/4"

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

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

Engineer \_\_\_\_\_

Approval \_\_\_\_\_

Contractor \_\_\_\_\_

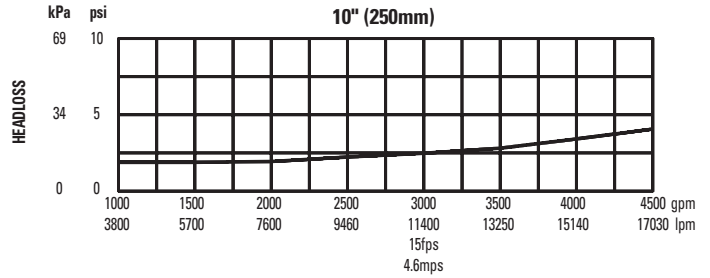
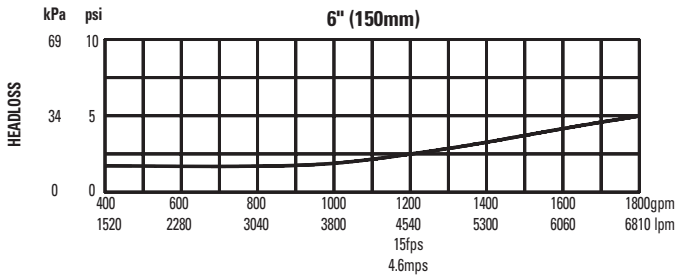
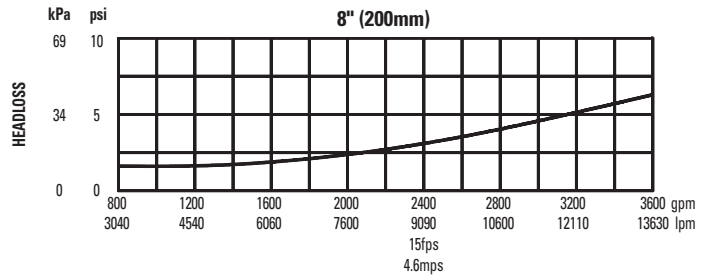
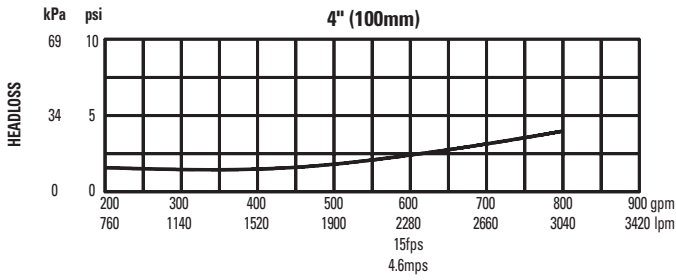
Approval \_\_\_\_\_

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

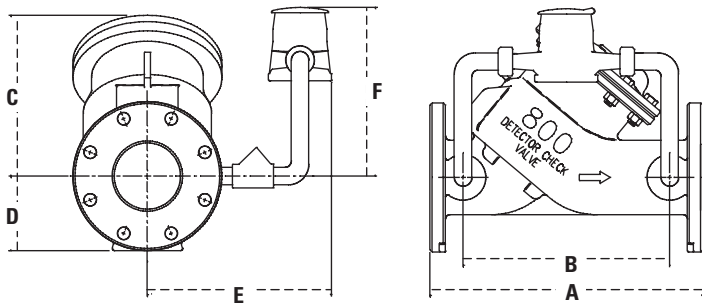
Representative \_\_\_\_\_

FEBCO product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact FEBCO. 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



# Dimensions – Weights



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

BYPASS SIZES									
STANDARD				OPTIONAL					
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
4	100	3/4	20	1"	25	1 1/2"	40	2"	50
6	150	✓	✓	✓	✓	✓	✓		
8	200	✓	✓	✓	✓	✓	✓	✓	✓
10	250	✓	✓	✓	✓	✓	✓	✓	✓

Size: 4" - 10" (100 - 250mm)

SIZE (DN)		DIMENSIONS								WEIGHT					
in.	mm	A		B		C		D		E		F		lbs.	kgs.
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
4	100	16 1/2	419	12 1/2	318	9 3/4	248	4 1/2	114	10 1/2	267	11	279	76	34.5
6	150	22 1/2	572	17	432	13 5/8	346	5 1/2	140	11 5/8	295	11	279	157	71.2
8	200	26 1/2	673	21	533	16 3/4	425	6 3/4	171	12 5/8	321	11	279	215	97.5
10	250	36 1/4	921	28	711	20	508	8	203	13 3/4	349	11	279	370	167.8

Dimensions shown are nominal, allowance must be made for normal manufacturing tolerances.



A Watts Water Technologies Company



ISO 9001-2000  
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