

**SPECIFICATION SHEET**



# MasterSeries® 856

## Double Check Detector Assemblies

**Size: 2½" - 10" (65mm - 250mm)**

The FEBCO Master Series® 856 Double Check Detector Assemblies are designed for Non-Health Hazard Fire Sprinkler Systems. End Connections – Flanged ANSI B16.1, Class 125

### Pressure – Temperature

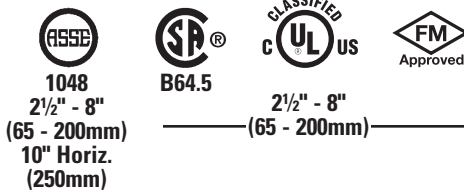
Temperature Range: 32°F to 140°F (0°C to 60°C)  
 Max. Working Pressure: 175psi (12.1 bar)  
 Hydrostatic Test Press: 350psi (24.1 bar)

### Materials

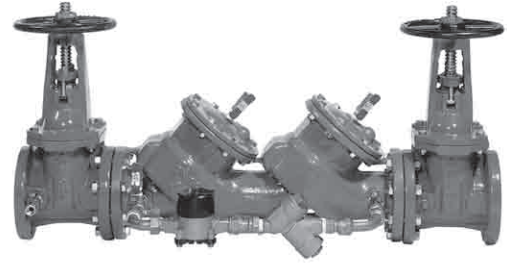
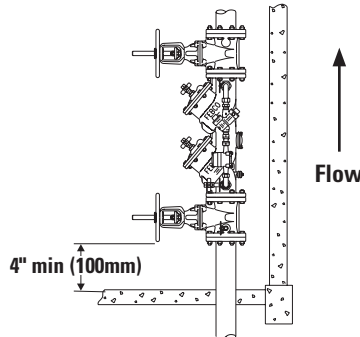
Main Valve Body: Ductile iron Grade 65-45-12  
 Coating: Fusion epoxy coated internal and external AWWA C550  
 Shutoff Valves: OS&Y resilient wedge gate valves AWWA C509  
 Trim: Bronze  
 Elastomer Discs: EPDM  
 Spring: Stainless steel  
 Clamp: AWWA C606 (10" only, 250mm)

### Approvals – Standards

- Approved by the Foundation for Cross-connection Control and Hydraulic Research at the University of Southern California. - 2½" - 8" (65 - 200mm)
- ANSI/AWWA (C510) - 2½" - 8" (10" Horizontal)

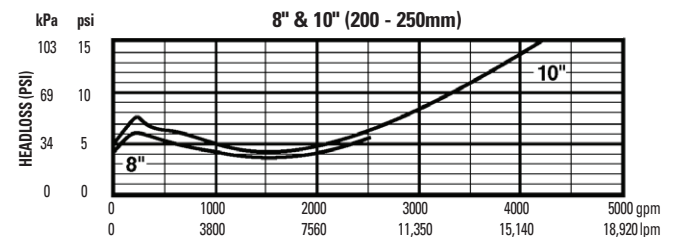
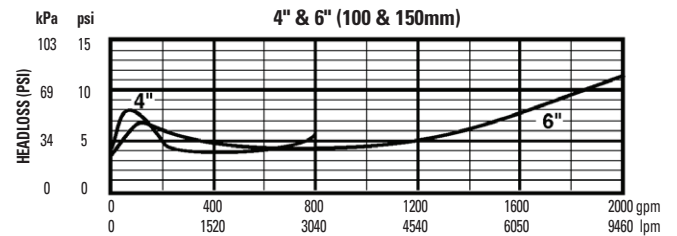
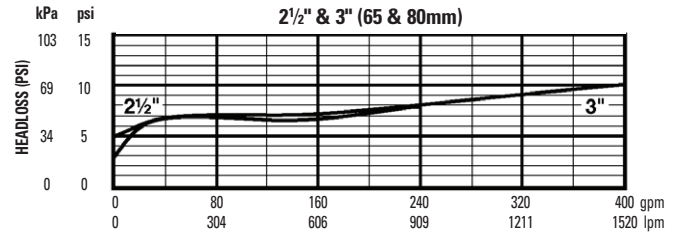


### Model 856 / Vertical Installation



**Model 856 Double Check Detector Assembly**

### Capacity



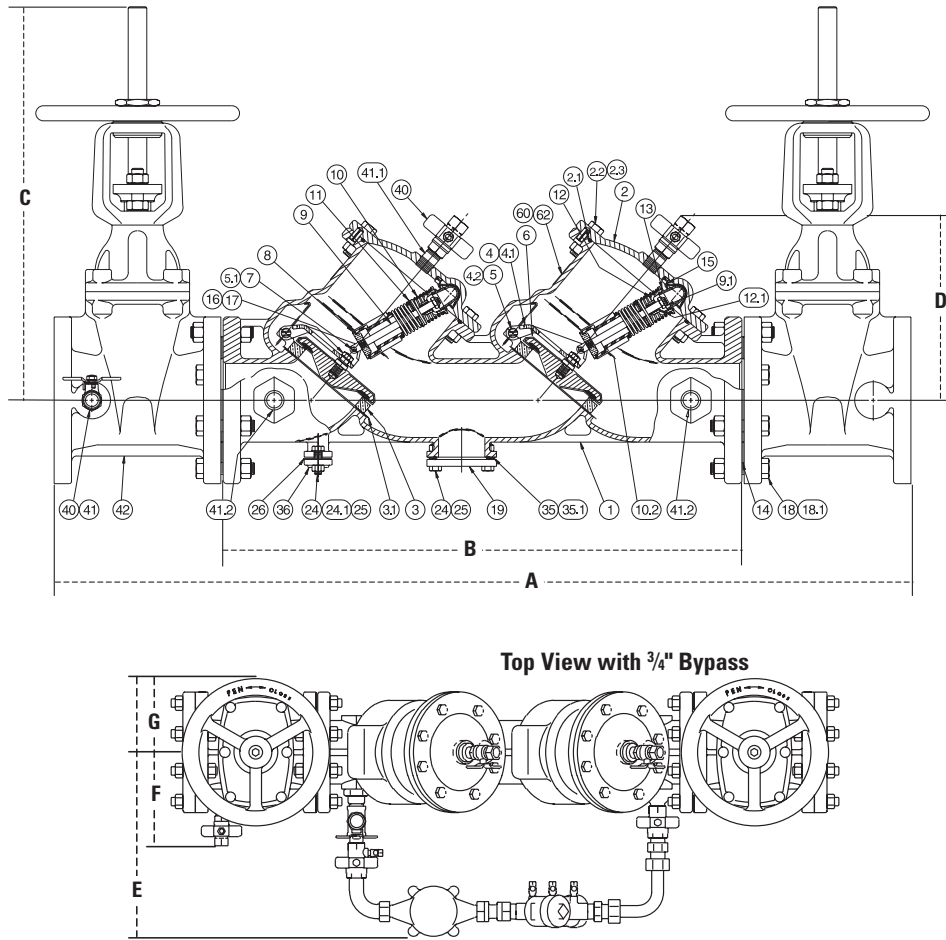
**IMPORTANT: INQUIRE WITH GOVERNING AUTHORITIES FOR LOCAL INSTALLATION REQUIREMENTS**

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.

# Model 856 / Materials of Construction



ITEM	DESCRIPTION	MATERIAL
1	Body	A536 GR 65-45-12
2	Cover	A536 GR 65-45-12
2.1	O-Ring	EPDM ASTM D2000
2.2	Cap Screw	Plated Steel
2.3	Hex Nut	Plated Steel
3	Seat Ring	B584 Alloy C83600
3.1	Gasket	EPDM ASTM D2000
4	Arm	B584 Alloy C83600
4.1	Bushing-Swing Pin	Acetal Resin
4.2	Swing Pin	304 SS
5	Retaining Clip	302 SS
6	Check Disk Assy	EPDM Coated GR, 45 Ductile Iron with type 304SS stem
7	Load Pin	304 SS
8	Lvr Spring Retrnr	B584 Alloy C83600
9	Spring Stem	304 SS
9.1	Elastic Stop Jam Nut	18-8 SS
10	Spring	A313 Type 631 SS
10.2	Spring Shim 2nd Check	Acetal Resin
11	Spring Guide	B130 Alloy C22000
12	Upr Spring Retrnr	B584 Alloy C83600
12.1	Bushing-Spr. Stem	Acetal Resin
13	Pivot Bearing	B585 Alloy C83600
14	Flange Gasket	Rubber/Fabric
15	Bearing Socket	Acetal Resin
16	Hex Jam Nut	18-8 SS
17	Washer	302 SS
18	Flange Nut	Plated Steel
18.1	Flange Nut	Plated Steel
24	RV Mtg Bolt	Plated Steel
24.1	Washer	Plated Steel
25	Nut	Plated Steel
26	Gasket	EPDM
35	O-ring	EPDM ASTM D2000
35.1	O-Ring	EPDM ASTM D2000
36	Cover	B584 Alloy C83600
40	Ball Valve	B584 Alloy C84400
41	Nipple	Brass
41.1	Nipple	Brass
41.2	Nipple	Brass
42	Gate Valve (NRS)	AWWA C509
60	Identification Plate	B36 Alloy C26000
62	Drive Screw	Stainless Steel
70	Clamp	AWWA C606 (10" Only)

## Dimensions – Weights

Size: 2½" - 10" (65 - 250mm)

SIZE (DN)		DIMENSIONS														OS&Y	
in.	mm	A		B		C*		D		E		F		G		lbs.	kg.
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
2½	65	40¾	1035	25½	648	16¾	416	10	254	13¾	340	7½	181	4½	114	218	98.9
3	80	41¾	1064	25½	651	22¼	565	10	254	13¾	340	7¾	187	4½	114	228	103.5
4	100	46¼	1175	28	711	23¼	591	10½	257	14	356	8½	206	5½	140	327	148.3
6	150	56	1422	34¾	883	30¾	765	12¾	324	15	381	9¾	251	6½	165	509	230.9
8	200	65	1651	41¼	1061	37¾	959	15½	397	15¼	400	11½	283	7	178	789	357.9
10	250	72¾	1845	46¾	1178	48	1219	15½	397	15¼	400	12¾	314	9	229	909	412.3

\* With OS&Y Gate Valves (Full Open)

Note: Dimensions shown are nominal. Allowances must be made for normal manufacturing tolerances.



A Watts Water Technologies Company



USA: Fresno, CA • Tel: (559) 441-5300 • Fax: (559) 441-5301 • www.FEBCOonline.com  
 Canada: Burlington, ON • Tel: (905) 332-4090 • Fax: (905) 332-7068 • www.FEBCOonline.ca