

Model 850 Double Check Assembly Sizes 2-1/2"-10"

Characteristics

Max. Working Pressure	175 PSI (1200 KPa)
Hydrostatic Test Press.	350 PSI (2400 KPa)
Temperature Range	32° F to 140° F (0° C to 60° C)
End Connections	Flanged ANSI B16.1 Class 125

Specifications

Double check valve backflow preventer assemblies shall include two independently acting check valves mounted between two tightly closing resilient seated shutoff valves, and the necessary four seated test cocks.

Each valve shall be internally loaded and shall at times be drip-tight in the normal direction of flow with the inlet pressure at least 1 PSI and the outlet under atmospheric pressure.

Each valve shall permit no leakage in a direction reverse to normal flow under all conditions of a pressure differential.

The assembly shall include flanged, full port resilient wedge shut-off valve and four vandal resistant full port ball valve test cocks. Assemblies must be factory assembled and tested.

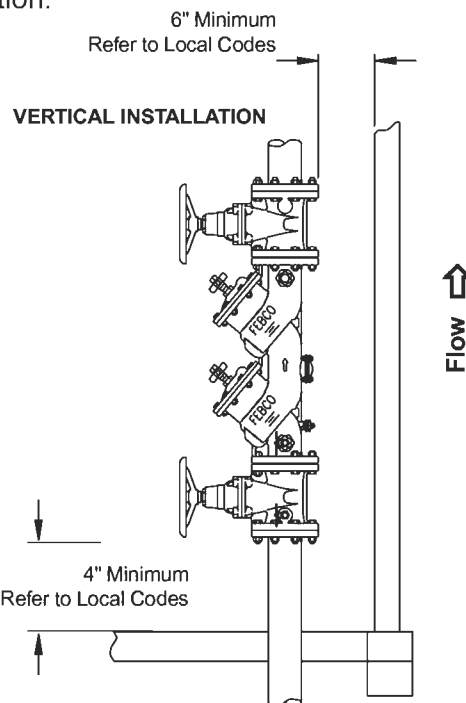
All assemblies shall be constructed to enable servicing with common tools, and without removing the device from the line.

Options

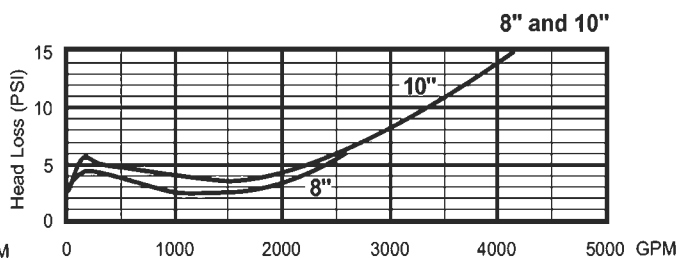
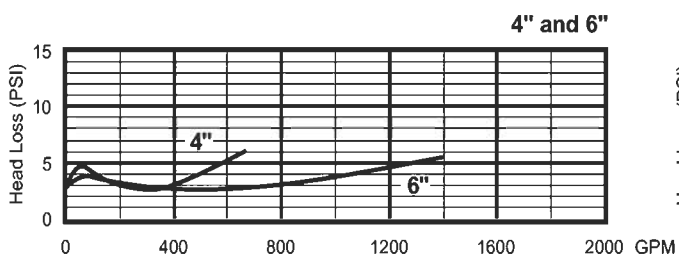
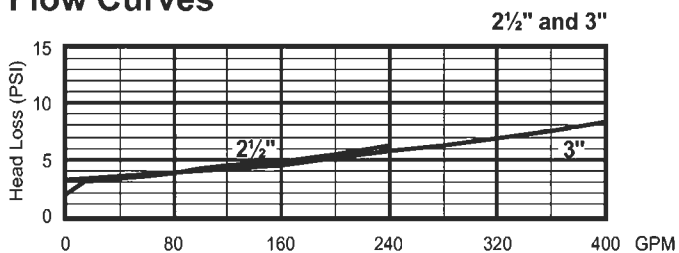
- UL/FM OS&Y RW Gate Valves
- Wye - Strainer

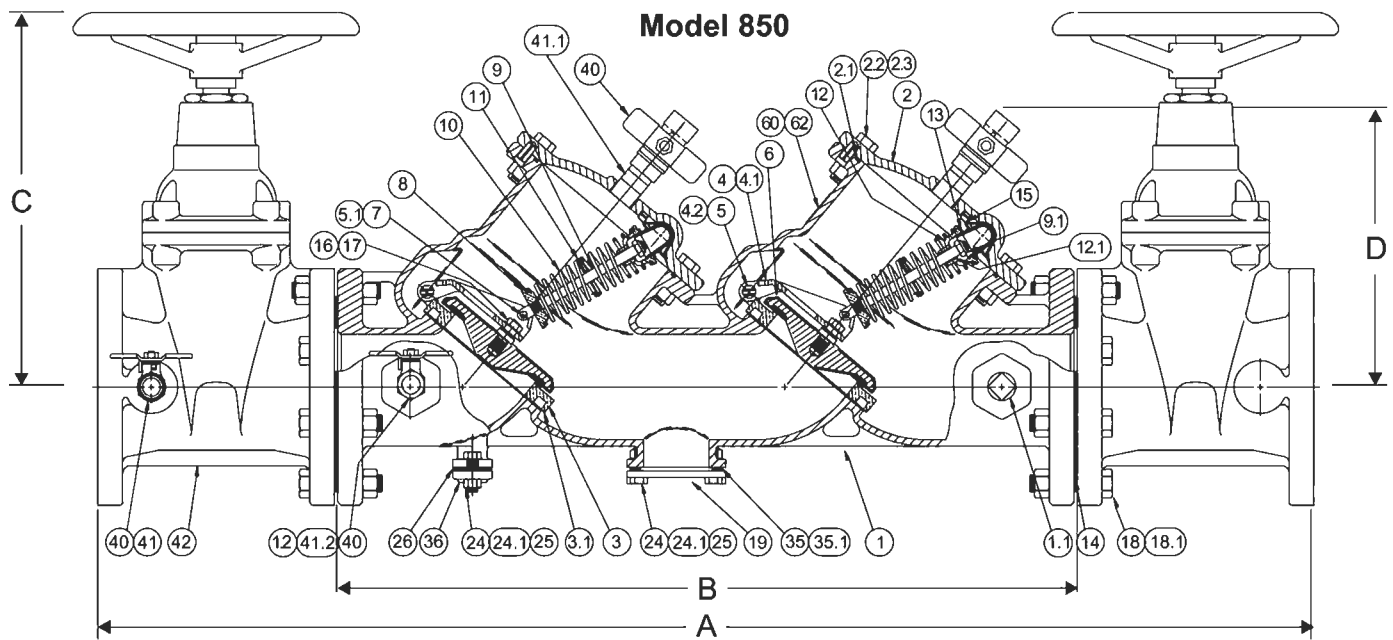
Applications

- Used to prevent backflow of pollutants that are objectionable but not toxic.
- May be installed under continuous pressure and may be subjected to backpressure.
- For use in sprinkler systems and fire protection systems without chemical additives.
- For use in industrial plants, industrial in-plant plumbing systems and other systems requiring protection.



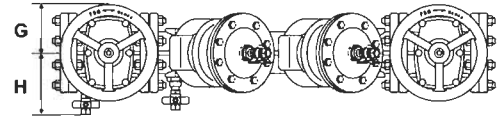
Flow Curves





Materials of Construction

850 Top View



ITEM	DESCRIPTION	MATERIALS
1	Body	A536 GR 65-45-12
1.1	Pipe Plug	Galv. Steel
1.2	Bushing (2 1/2 - 4 only)	Brass
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
5.1	Retaining Clip	302 SS
6	Check Disk Assy	EPDM Coated GR, 45 Ductile Iron with type 304 SS stem
7	Load Pin	304 SS
8	Lwr 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
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
19	Cover	A36 Stl Epoxy Coated
24	Bolt	Plated Steel
24.1	Washer	Plated Steel
25	Bolt	Plated Steel
26	Gasket	EPDM ASTM D2000
35	O-Ring	EPDM ASTM D2000
35.1	Back-Up Ring	Acetal Resin
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	AWWA C509
60	Id Plate	B36 Alloy C26000
62	Drive Screw	SS
70	Clamp (10" Only, Not Shown Above)	AWWA 606

Dimensions and Weights

SIZE	A	B	C	D	G	H	(lbs.) NRS	(lbs.) OS&Y
2 1/2"	40 3/4	25 1/2	12 5/8	10	4 1/2	7 1/8	199	203
3"	41 7/8	25 5/8	12 7/8	10	4 1/2	7 3/8	211	213
4"	46 1/4	28	14 3/8	10 1/8	5 1/2	8 1/8	288	312
6"	56	34 3/4	18 7/8	12 3/4	6 1/2	9 7/8	450	494
8"	65	41 3/4	23 1/2	15 5/8	7	11 1/8	711	773
10"	72 5/8	46 3/8	27 1/2	15 5/8	9	12 3/8	980	1080

Compliance

- FCCC & HR - 2-1/2" - 8" (Horizontal & Vertical Up)
- ASSE (Std. 1015) - 2 1/2" - 8" (Horizontal & Vertical Up), 10" (Horizontal)
- ANSI/AWWA (C510-89) - 2 1/2" - 8" (Horizontal & Vertical Up), 10" (Horizontal)
- CAN/CSA (B64.5) - 2 1/2" - 8" (Horizontal & Vertical Up)
- cUL - 2 1/2" - 8" (Horizontal & Vertical Up)
- FM Approved* - 2 1/2" - 8" (Horizontal & Vertical Up) w/GV's
- UL Listed* - 2 1/2" - 8" (Horizontal & Vertical Up) w/GV's

Repair Kits

	2-1/2"	3"	4"	6"	8"	10"
Check Replacement Kit (items 2.1, 3, 3.1, 3.2, 3.4, 4, 4.1, 4.2, 5, 5.1, 6, 7, 8, 9, 9.1, 10, 11, 12, 12.1, 13, 15, 16, 17)	905-527	905-527	905-534	905-537	905-539	905-539
850/870 DC Inlet Spring Module (items 5.1, 7, 8, 9, 9.1, 10, 11, 12, 12.1) (8" - item 10.2)	905-142	905-142	905-143	905-144	905-145	905-145
850/870 DC Outlet Spring Module (items 5.1, 7, 8, 9, 9.1, 10, 11, 12, 12.1) (8" - item 10.2)	905-142	905-142	905-143	905-144	905-145	905-145
850/856 Disc Assembly (items 6, 16, 17) (10" - item 6 only)	905-182	905-182	905-153	905-154	905-155	905-155
Seat Ring / Arm Assembly (items 3, 3.1, 3.2, 3.4, 4, 4.1, 4.2, 5)	905-157	905-157	905-158	905-159	905-160	905-160
850/856 Rubber Kit (items 2.1, 3.1, 6, 15, 26, 35, 35.1, 45, 45.1)	905-249	905-249	905-163	905-164	905-165	905-165
850/856 Cover Assembly both checks (items 2, 2.1, 15)	905-167	905-167	905-168	905-169	905-170	905-170
Bulkhead Fittings Assembly Cover (items 43.1, 45.1, 46.1, 47.1)	905-275	905-275	905-275	-	-	-
Bulkhead Fittings Assembly Cover (items 43, 45, 46, 47)	905-276	905-276	905-276	-	-	-
Bulkhead Fittings Assembly Body & Cover (items 43, 45, 46, 47)	905-277	905-277	905-277	905-277	905-277	905-277
Bulkhead Plug Assembly 2nd Check Cover (N & V Units) Early Prod. (items 44, 45.1, 46.1, 47.1)	905-278	905-278	905-278	-	-	-
Bulkhead Plug Assembly 2nd Check Cover (N & V Units) Early Prod. (items 44, 45, 46, 47)	-	-	-	905-279	905-279	905-279