

# SPECIFICATION SHEET MODEL 850



## DOUBLE CHECK ASSEMBLY

### Characteristics

#### Physical Properties

Size of Mainline	2½", 3", 4", 6", 8", 10"
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

#### Materials

Main Valve Body	Ductile iron Grade 65-45-12
Coating	Fusion epoxy coated internal and external, AWWA C550-90
Shut Off Valves	NRS resilient wedge gate valves AWWA C509
Trim	Bronze
Elastomer Discs	EPDM
Spring	Stainless steel

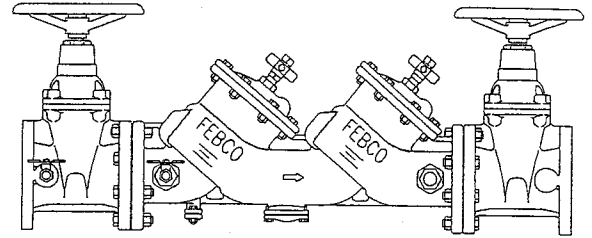
### Application

Non-Health Hazard

### Options

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

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

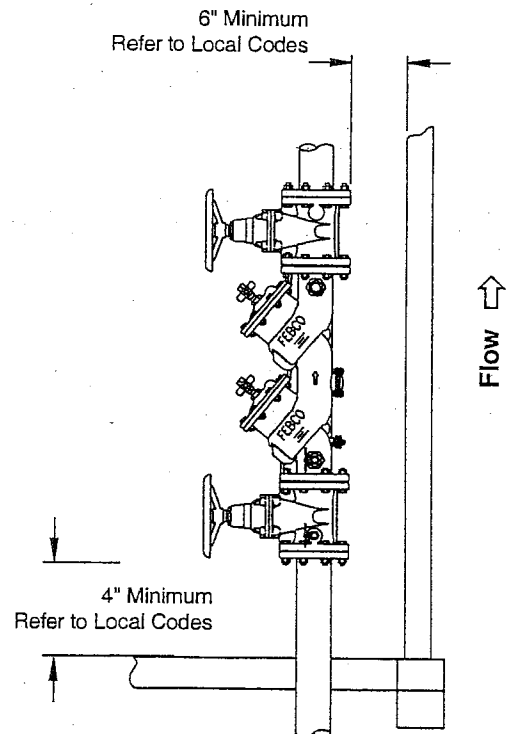
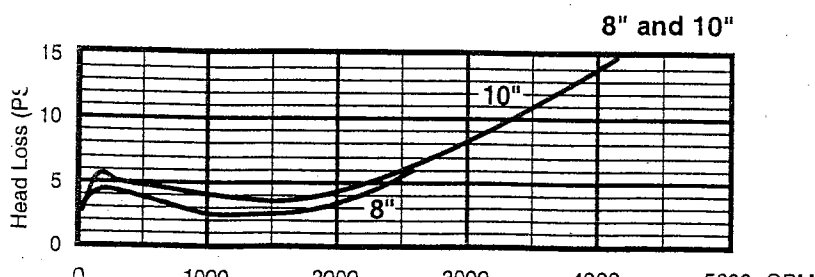
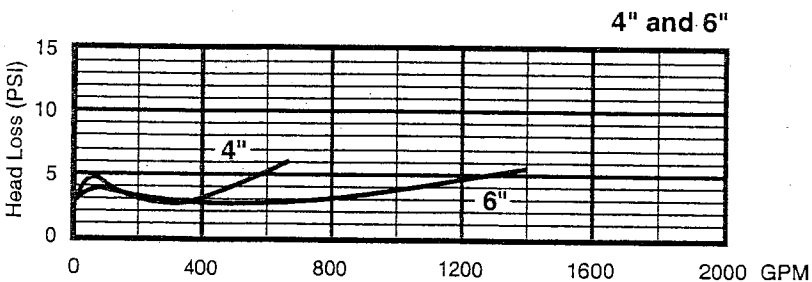
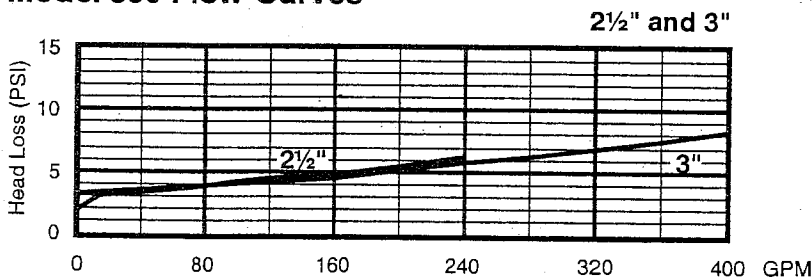


MODEL 850 DOUBLE CHECK ASSEMBLY

### Agency Compliance

- Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California. - 2½" - 8" (Horizontal & Vertical Up)
  - ASSE (Std. 1015) - 2½" - 8" (Horizontal & Vertical Up), 10" (Horizontal)
  - ANSI/AWWA (C510-89) - 2½" - 8" (Horizontal & Vertical Up), 10" (Horizontal)
  - CAN/CSA (B64.5) - 2½" - 8" (Horizontal & Vertical Up)
  - cUL - 2½" - 8" (Horizontal & Vertical Up)
  - FM Approved\* - 2½" - 8" (Horizontal & Vertical Up)
  - UL Listed\* - 2½" - 8" (Horizontal & Vertical Up)
- \* Less gates not FM approved. Less gates not UL listed unless installed with UL listed gate valves.

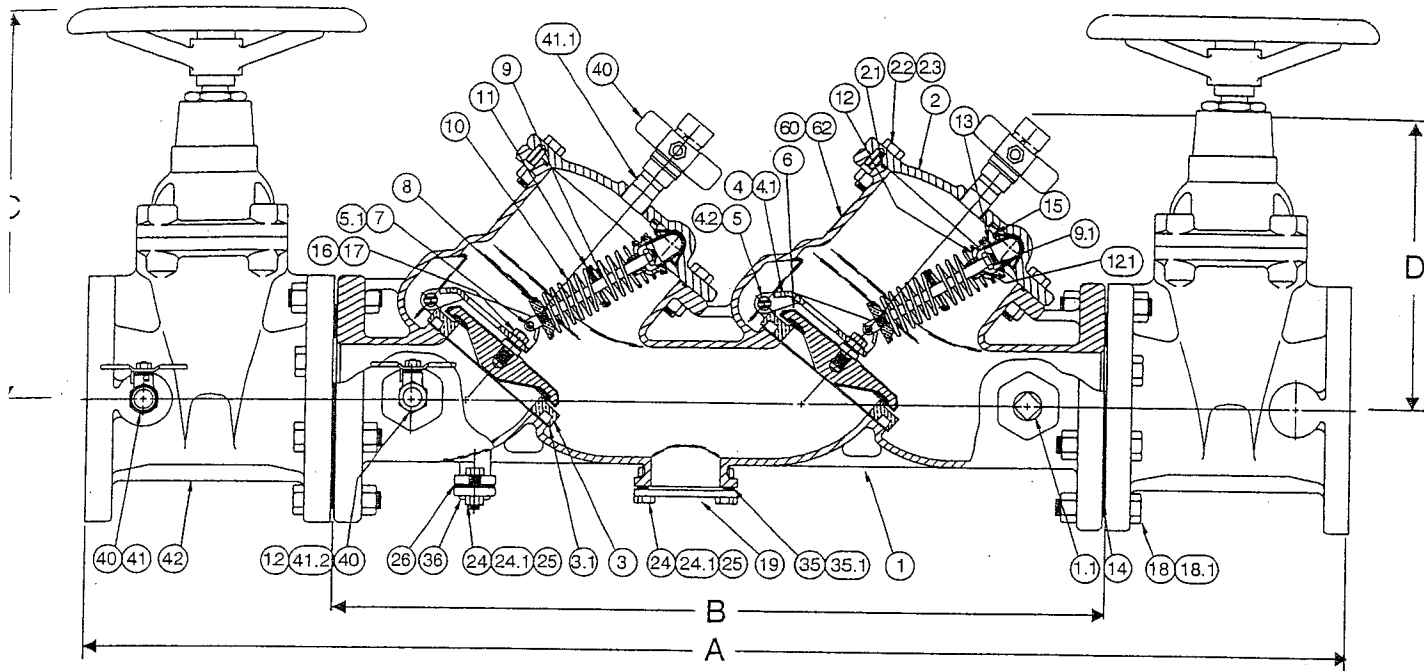
### Model 850 Flow Curves



MODEL 850  
VERTICAL INSTALLATION

**MASTER**  
SERIES

## Model 850



### Dimensions and Weights

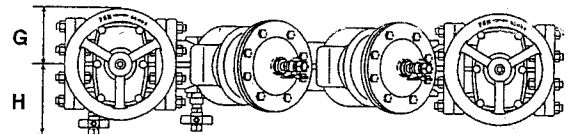
(U.S. - Inches)

SIZE	A	B	C*	D	G	H	NET (lbs.) NRS	NET (lbs.) OS&Y
1/2"	40 3/4	25 1/2	12 5/8	10 1/4	4 1/2	7 1/8	199	203
3"	41 7/8	25 5/8	12 7/8	10 1/4	4 1/2	7 3/8	211	213
1"	46 1/4	28	14 3/8	10 1/4	5 1/2	8 1/8	288	312
3"	3	34 3/4	18 7/8	13	6 1/2	9 7/8	450	494
5"	41 3/4	23 1/2	15 5/8	15 5/8	7	11 1/8	711	773
6"	46 3/8	27 1/2	15 5/8	15 5/8	9	12 3/8	980	1080

(Metric - MM)

SIZE	A	B	C*	D	G	H	NET (kg) NRS	NET (kg) OS&Y
1/2	1035.05	647.70	320.68	260.35	114.30	180.98	90	92
3/4	1063.63	650.88	327.03	260.35	114.30	187.33	96	97
1	1174.75	711.20	365.13	260.35	139.70	206.38	131	142
1 1/2	1422.40	882.65	479.43	330.20	165.10	250.83	204	224
2	1651.00	1060.45	596.90	396.88	177.80	282.58	323	351
2 1/2	1844.68	1177.93	698.50	396.88	228.60	314.33	445	490

### 850 Top View



with NRS Gate Valves

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

### Materials of Construction

ITEM	DESCRIPTION	MATERIALS	ITEM	DESCRIPTION	MATERIALS	ITEM	DESCRIPTION	MATERIALS
1	Body	A536 GR 65-45-12	7	Load Pin	304 SS	24.1	Washer	Plated Steel
1.1	Pipe Plug	Galv. Steel	8	Lwr Spring Retnr	B584 Alloy C83600	25	Bolt	Plated Steel
2	Bushing (2 1/2 - 4 only)	Brass	9	Spring Stem	304 SS	26	Gasket	EPDM ASTM D2000
3	Cover	A536 GR 65-45-12	9.1	Elastic Stop Jam Nut	18-8 SS	35	O-Ring	EPDM ASTM D2000
3.1	O-Ring	EPDM ASTM D2000	10	Spring	A313 Type 631 SS	35.1	Back-Up Ring	Acetal Resin
3.2	Cap Screw	Plated Steel	11	Spring Guide	B130 Alloy C22000	36	Cover	B584 Alloy C83600
3.3	Hex Nut	Plated Steel	12	Upr Spring Retnr	B584 Alloy C83600	40	Ball Valve	B584 Alloy C84400
4	Seat Ring	B584 Alloy C83600	12.1	Bushing-Spr. Stem	Acetal Resin	41	Nipple	Brass
4.1	Gasket	EPDM ASTM D2000	13	Pivot Bearing	B585 Alloy C83600	41.1	Nipple	Brass
4.1.1	Arm	B584 Alloy C83600	14	Flange Gasket	Rubber/Fabric	41.2	Nipple	Brass
4.1.2	Bushing-Swing Pin	Acetal Resin	15	Bearing Socket	Acetal Resin	42	Gate Valve	AWWA C509
4.2	Swing Pin	304 SS	16	Hex Jam Nut	18-8 SS	60	Id Plate	B36 Alloy C26000
4.2.1	Swing Pin	302 SS	17	Washer	302 SS	62	Drive Screw	SS
4.2.2	Swing Pin	302 SS	18	Flange Nut	Plated Steel			
4.2.3	Swing Pin	302 SS	18.1	Flange Nut	Plated Steel			
4.2.4	Swing Pin	302 SS	19	Cover	A36 Stl Epoxy Coated			
4.2.5	Swing Pin	302 SS	24	Bolt	Plated Steel			
4.2.6	Swing Pin	302 SS						
4.2.7	Swing Pin	302 SS						
4.2.8	Swing Pin	302 SS						
4.2.9	Swing Pin	302 SS						
4.2.10	Swing Pin	302 SS						
4.2.11	Swing Pin	302 SS						
4.2.12	Swing Pin	302 SS						
4.2.13	Swing Pin	302 SS						
4.2.14	Swing Pin	302 SS						
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4.2.45	Swing Pin	302 SS						
4.2.46	Swing Pin	302 SS						
4.2.47	Swing Pin	302 SS						
4.2.48	Swing Pin	302 SS						
4.2.49	Swing Pin	302 SS						
4.2.50	Swing Pin	302 SS						

CO Backflow Prevention  
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