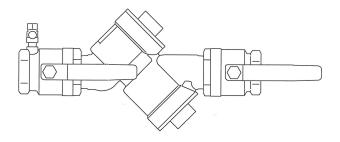
# SPECIFICATION SHEET MODEL 805Y (3/4" - 2")



# **Double Check Assembly**



#### **Features**

- Low head loss.
- Spring loaded "Y" type check valves.
- Flow curve generated by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California.
- Simple service procedures. All internal parts are serviceable inline.
- Meets all specifications of AWWA and ASSE.
- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.
- Bronze bodies, caps, shut-off valves and test cocks.

## Operation

In a nonflow condition the check valves hold 1 PSI minimum in the direction of flow. In a flow condition the check valves are open, proportional to the flow demand. In a backflow condition both checks will close until the resumption of normal flow.

# **Specifications**

The Double Check Valve assembly 3/4" through 2" shall consist of a bronze body with bronze caps. The body shall be a "Y" pattern design incorporating two spring loaded, center guided check assemblies. The assembly shall include threaded inlet and outlet, full port ball valve shutoff valves and four ball valve test cocks. All internal parts shall be of corrosion resistant materials.

All Double Check Valves shall be constructed so all internal parts can be serviced without removing the assembly from the line. Seat discs shall be reversible. The assembly shall operate when installed in any position. Double Check Valves shall be rated to 175 PSI water working pressure and water temperature from 32°F to 140°F.

The assembly shall meet the requirements of ASSE Standard 1015, AWWA Standard C510-89,

CAN/CSA Certified (B64.4) and the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.

# **Typical Applications**

Double Check assemblies are used to prevent backflow of pollutants that are objectionable but not toxic, Double checks may be installed under continuous pressure service and may be subjected to backpressure. Double Checks can be used in sprinkler irrigation systems, fire protection without chemical additives, protection of industrial plants, industrial in-plant plumbing systems and other systems requiring protection. Local codes may vary; consult authorities for specific approved applications.

# **Agency Compliance**

Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.\*

ANSI/AWWA Conformance (C510-89)

ASSE Listed (Std. 1015)

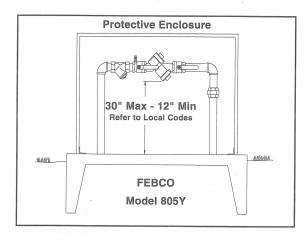
CAN/CSA Certified (B64.5)

ULC Listed (1", 1-1/2", 2")

\* Valves must be supplied with resilient seated shut-off valves for USC.

## Installation

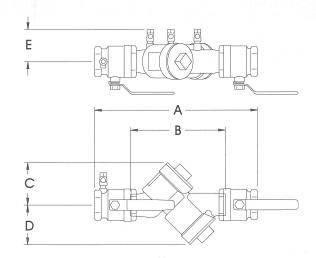
Model 805Y Double Check Backflow Preventers should be installed with adequate clearance and easy accessibility for testing and maintenance and must by protected from freezing. The assembly may be installed horizontally or vertically. Refer to local codes for specific installation requirements. Some codes may prohibit vertical installation. Thermal water expansion and/or water hammer down stream of the backflow preventer can cause excessive pressure. Excessive pressure situations should be eliminated to avoid possible damage to the system and assembly.



# **Dimensions and Weights**

(U.S Inches)									
SIZE	Α	В	C	D	E	NET WT. (Lbs.)			
3/4	11 1/8	6 7/8	3 1/4	3 1/4	2 3/4	7.0			
1	12 5/8	6 3/4	3 1/4	3 1/4	2 7/8	7.5			
1 1/2	16 5/8	10 1/8	4 5/8	4 1/2	3 1/2	17.5			
2	17 1/2	10 1/8	4 5/8	4 1/2	3 1/2	20.0			

(Metric - Min)										
SIZE	Α	В	С	D	E	NET WT. (Kgs.)				
20	282.6	174.6	82.6	82.6	69.9	3.2				
25	320.7	171.5	82.6	82.6	73.0	3.4				
30	422.3	257.2	117.5	114.3	88.9	7.9				
40	444.5	257.2	117.5	114.3	88.9	9.1				



## **Characteristics and Materials**

Maximum working pressure 175 PSI (1200 KPa)

Hydrostatic test pressure 350 PSI (2400 KPa)

Temperature Range 32°F to 140°F

Fluid Water

End Detail Threaded ANSI B2.1

Main Valve Body Bronze 1"

Elastomers Nitrile seat discs

Springs Stainless steel 1-1/2 "

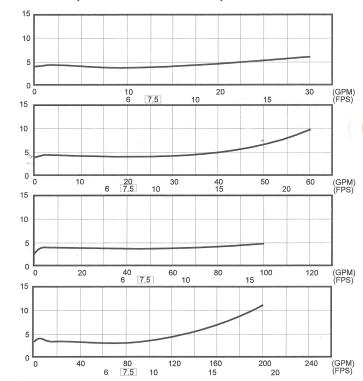
HEAD LOSS (PSI)

HEAD LOSS (PSI)

3/4 "

#### **Model 805Y Flow Curves**

Documented flow curve established by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.



## FLOW RATE (GPM AND FPS)

NOTES: 1. Velocities are calculated for flows in Schedule 40 steel pipe.
2. Typical water system flow velocities of 0 to 7.5 FPS should be used for head loss efficiency comparisons.

