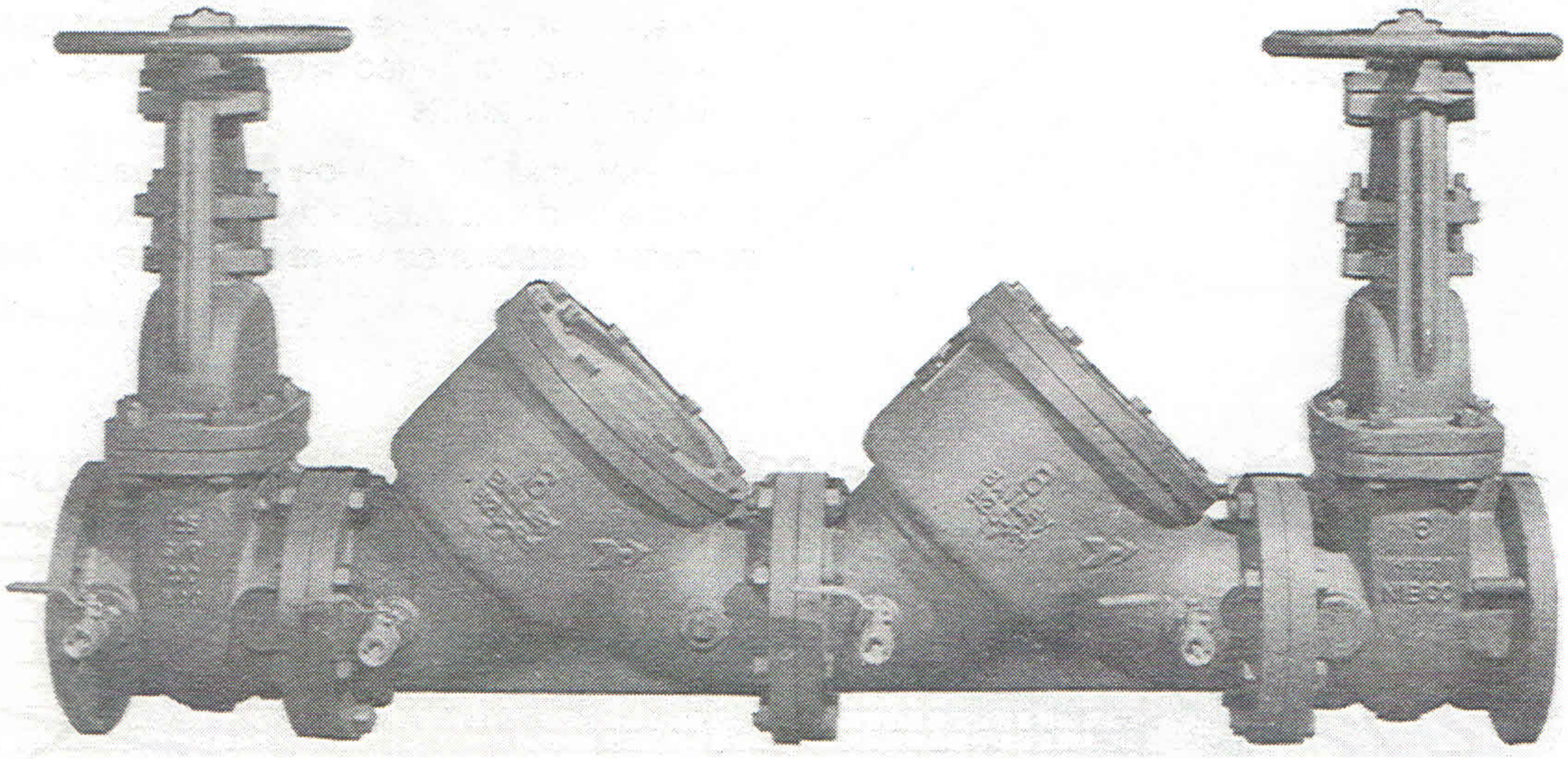
FEBCO®

SPECIFICATION SHEET NO. 805Y (2½" – 10")

Model 805Y (2½" through 10") Double Check Backflow Preventer For Low Hazard Service



* Shown with optional O S & Y gate valves.

Features

- **Low head loss.**
- Spring loaded "Y" type check valves.
- **Documented flow curves established by University of Southern California Foundation for Cross Connection Control and Hydraulic Research.**
- Simple service procedures. All internal parts serviceable inline.
- Approved by ASSE and USC Foundation for Cross Connection Control and Research.
- Cast iron bodies with internal epoxy coating standard.

Description

The Febco 805Y Double Check Valve consists of two independently operating check valves with an inlet and outlet shutoff valve and four testcocks. Each check valve is a "Y" pattern, spring loaded, poppet type. In normal operation the check valves open with flow demand. During no-flow conditions, each check valve will hold 1 PSI in the flow direction. End connections are flanged.

Materials

Valves have cast iron bodies and covers with bronze trim, and internal epoxy coating. All springs are stainless steel. Gate valves are non-rising stem. OS&Y and resilient wedge valves are optional.

Specifications

The Double Check device 2½" through l0" shall consist of internally epoxy coated cast iron bodies and covers. The bodies shall be a "Y" pattern design incorporating two spring loaded, center guided check assemblies with bronze seat rings and stainless steel springs. The device shall include flanged inlet and outlet full port shutoff valves and four testcocks. 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 device from the line. Seat discs shall be reversable. Double Check Valves shall be rated to 175 PSI water working pressure and water temperature from 32°F to 140°F.

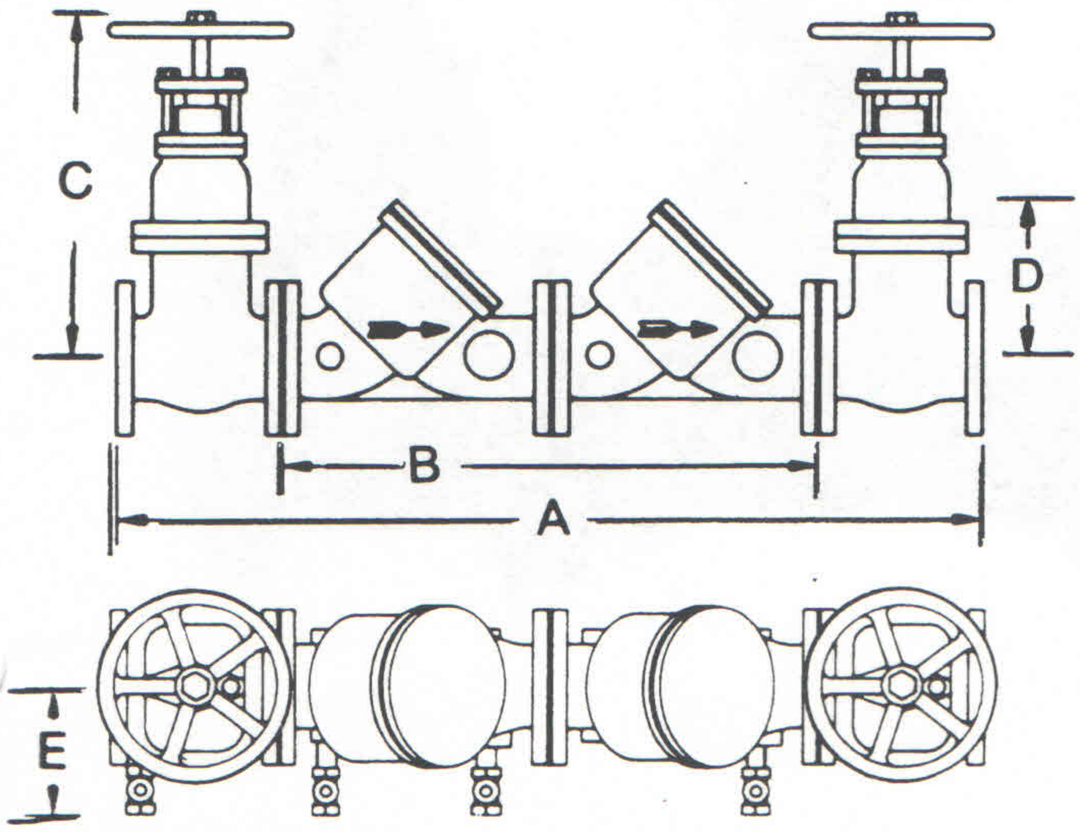
The device shall meet requirements of ASSE Standard 1015, AWWA Standard C506-78, and USC Foundation for Cross Connection Control and Hydraulic Research, Sixth Edition

Typical Applications

Double Check Devices 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 back pressure. 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.

Dimensions and Weights

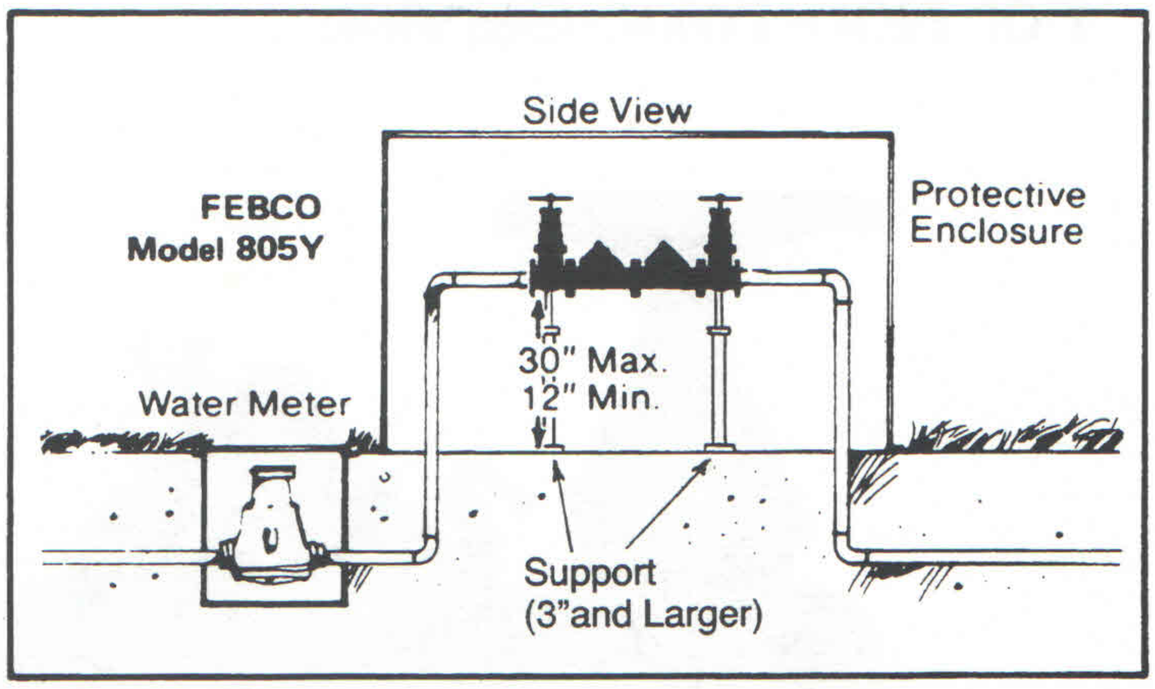
SIZE	A	B	C*	D	E	WT.(LBS)
2½"	37 3/16"	22 1/16"	12½"	7½"	5¼"	240
3"	41 11/16"	25 9/16"	14"	8 1/16"	6"	250
4"	50 7/16"	32 5/16"	17 3/8"	11"	6¾"	420
6"	59 11/16"	38 9/16"	21¼"	14"	8¼"	735
8"	69 3/16"	46 1/16"	26"	18"	9½"	1230
10"	84 3/16"	58 1/16"	30"	22"	10½"	1680



*** Dimension applies to NRS gate valve only.**

Installation

Model 805Y Double Check Backflow Preventers should be installed with adequate clearance and easy accessibility for testing and maintenance and must be protected from freezing. The device may be installed horizontally or vertically with flow up. Consult local codes for special requirements concerning device installation. Larger sizes should be installed horizontally for ease of service. 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 device.

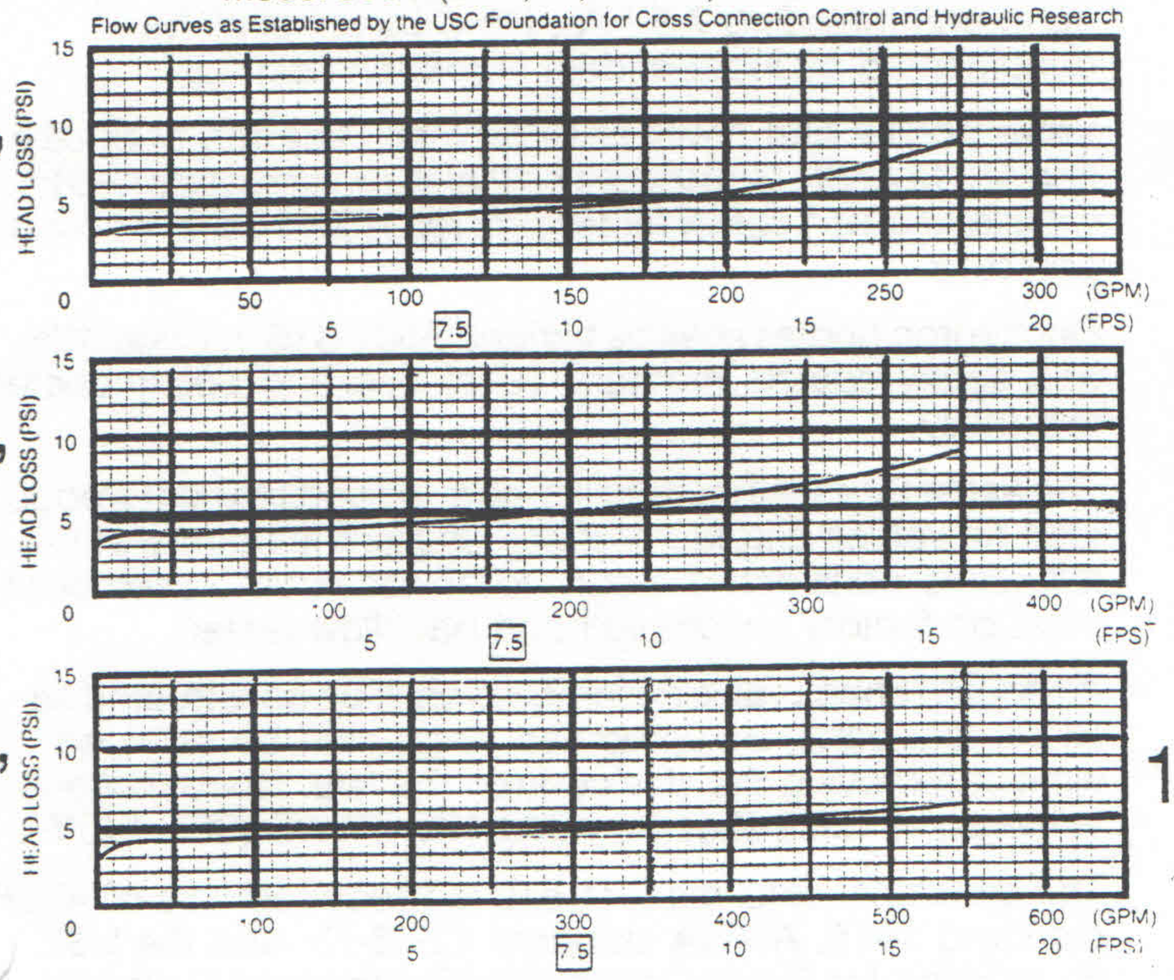


Characteristics

Maximum working pressure	175 PSI
Hydrostatic test pressure	350 PSI
Temperature range	32°F to 140°F
Fluid	Water
End Detail	Flanged ANSI B16.1
Main Valve Body	Grey Iron ASTM A-126, epoxy coated internal
Main Valve Trim	Bronze ASTM B-61
Elastomers	Nitrile ASTM D-2000 seat discs
Springs	Stainless steel, 300 series

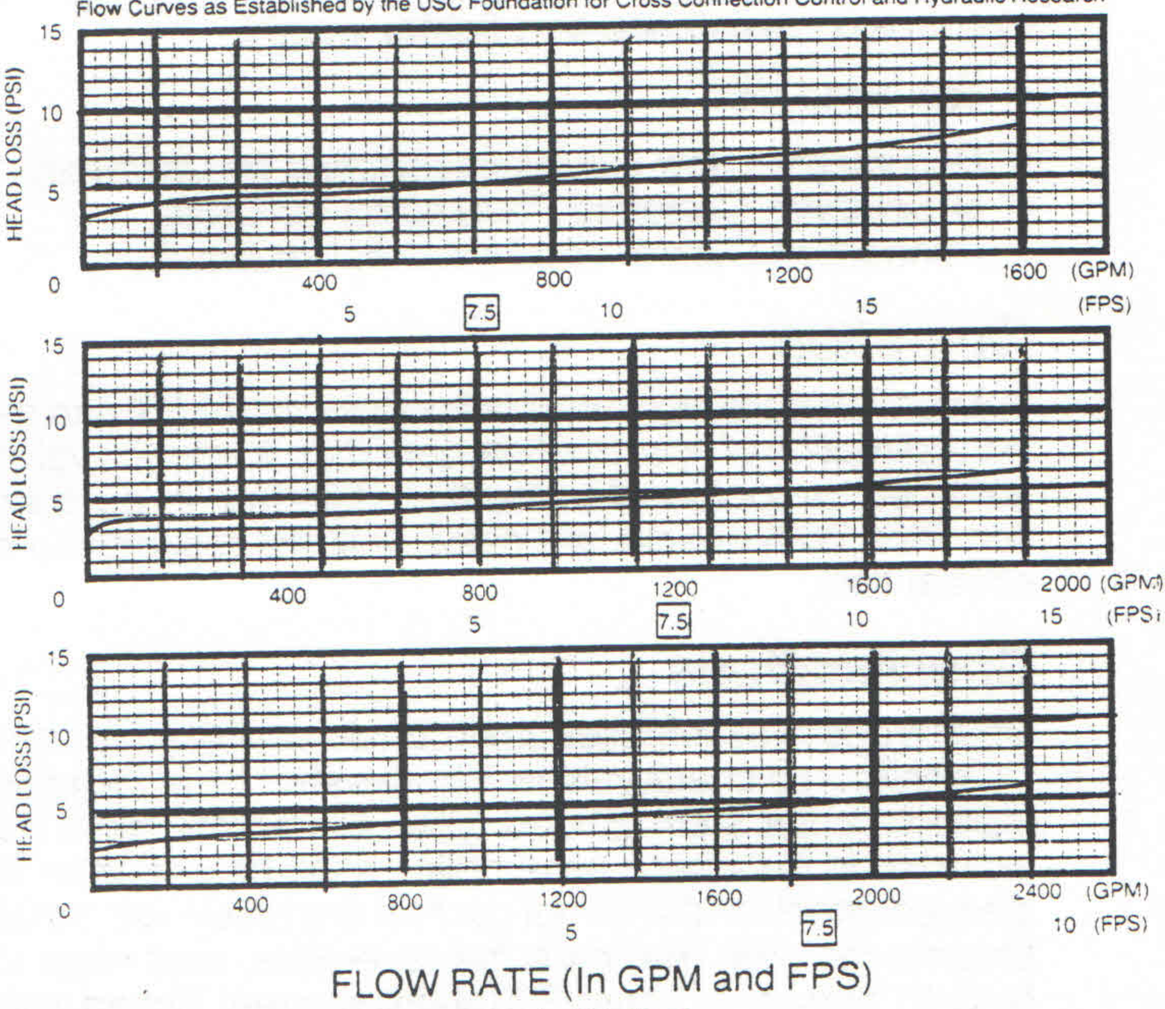
Model 805Y (2½", 3", and 4") FLOW CURVES

Flow Curves as Established by the USC Foundation for Cross Connection Control and Hydraulic Research



Model 805Y (6", 8", and 10") FLOW CURVES

Flow Curves as Established by the USC Foundation for Cross Connection Control and Hydraulic Research



FLOW RATE (In 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.
*Contact factory for sizes.