

# FEBCO 775

## SIZE

3", 4", 6", 8", 10"

## DESCRIPTION

This was a two check pressure vacuum breaker assembly. It was produced from approximately 1975 to 1988. The 3" and 4" checks are the same as the Model 805 with an air inlet mounted on the second check cover. The 6"-10" uses the same check design as the 805Y. The air inlet is the same on all sizes and is the same basic design as the air inlet of the 2" Model 765.

## BASIC REPAIR KIT

The repair kit contains all rubber discs, and O'rings.

<u>SIZE</u>	<u>KIT NO</u>
3"	775300 *
4"	775400 *
6"	775600 *
8"	775800 *
10 "	775001 *

## IMPORTANT FEATURES

~ 3"-4" checks see 805

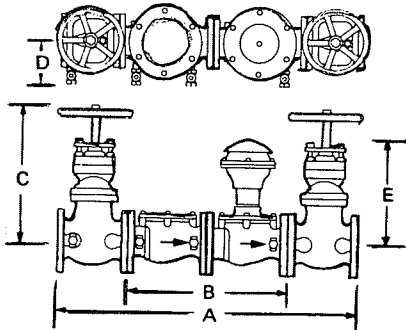
~ 6"-10" checks see 805Y

~ Factory repair information enclosed



## Dimensions and Weights

SIZE	A	B	C	D	E	Net WT/LBS
3"	34 $\frac{1}{2}$ "	18 $\frac{1}{8}$ "	14 $\frac{5}{8}$ "	5 $\frac{7}{8}$ "	10 $\frac{1}{2}$ "	222
4"	38 $\frac{1}{8}$ "	19 $\frac{7}{16}$ "	16 $\frac{1}{2}$ "	6 $\frac{1}{2}$ "	11 $\frac{1}{4}$ "	307
6"	59 $\frac{1}{16}$ "	38 $\frac{9}{16}$ "	21 $\frac{1}{4}$ "	8 $\frac{1}{4}$ "	14"	755
8"	69 $\frac{3}{16}$ "	46 $\frac{1}{16}$ "	26"	9 $\frac{1}{2}$ "	18"	1250
10"	84 $\frac{3}{16}$ "	58 $\frac{1}{16}$ "	30"	10 $\frac{1}{2}$ "	22"	1700



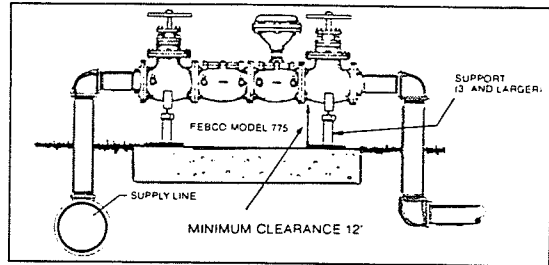
## Typical Applications

Pressure Vacuum Breaker Assemblies are used to protect against toxic and non-toxic backsiphonage conditions in industrial plants (in-plant applications), cooling towers, laboratories, laundries, swimming pools and lawn sprinkler systems.

## Installation

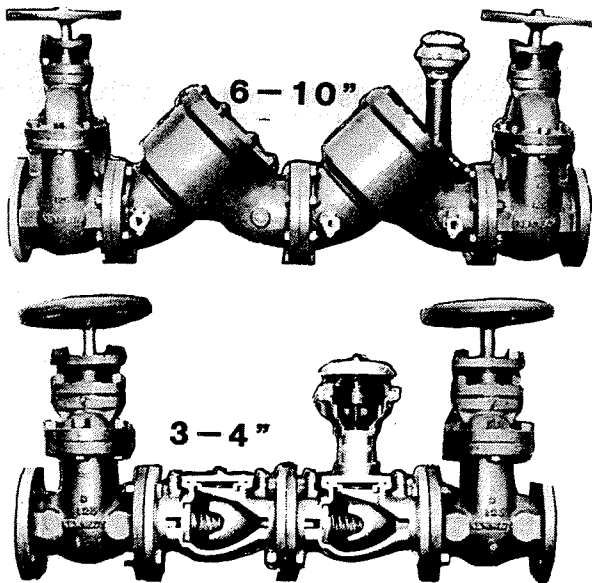
Pressure Vacuum Breaker Assemblies should be installed at least 12" above the highest piping or outlet downstream of the device and in a manner to preclude back pressure. They should be installed so they are easily accessible for maintenance, periodic testing, and where discharge will not be objectionable. They should be protected from freezing. They must not be installed where back pressure could occur.

The discharge pressure shall be maintained above 5.0 PSI to insure seating of the spring loaded air inlet poppet.



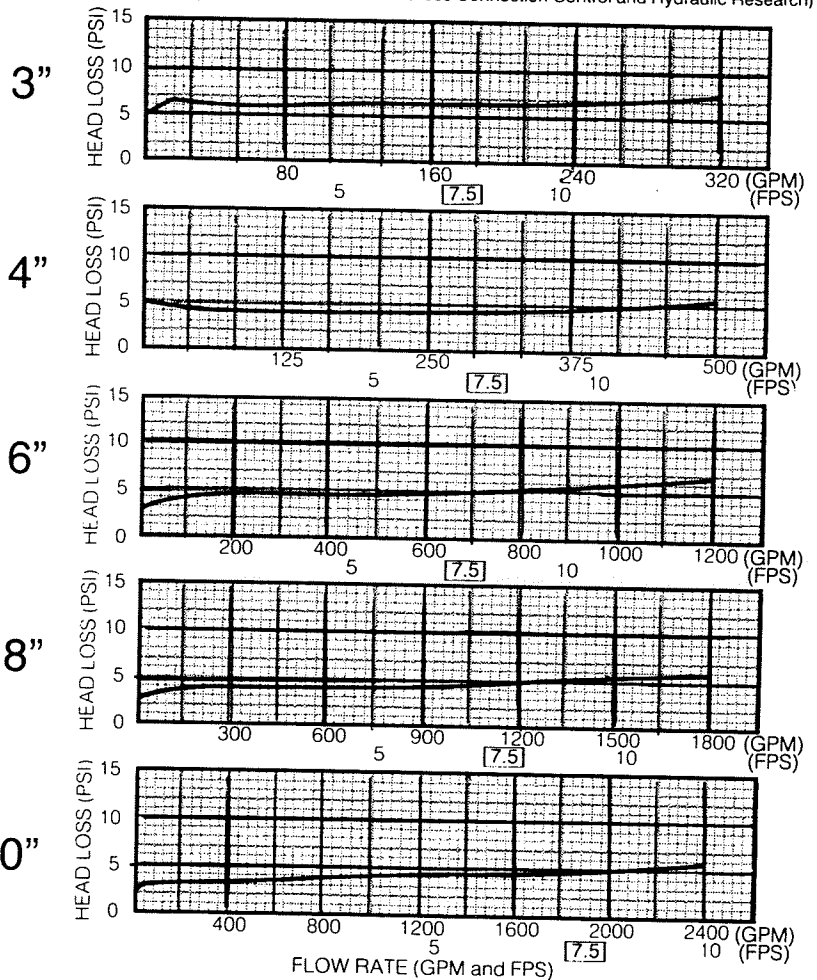
## Characteristics

Max. Working Pressure	150 PSI
Hydrostatic Test Pressure	300 PSI
Temperature Range	32°F to 140°F
Fluid	Water
End Detail	3" and 4" Flanged ANSI B16.24, 6" thru 10" Flanged ANSI B16.1
Main Valve Body	Bronze ASTM B-584-78 (3" and 4") Gray iron ASTM A-126 (6" thru 10") epoxy coated internal
Valve Trim	Bronze ASTM B-61
Vacuum Breaker Head	Bronze ASTM B-584-78
Elastomers	Nitrile ASTM D-2000



## Model 775 Flow Curves

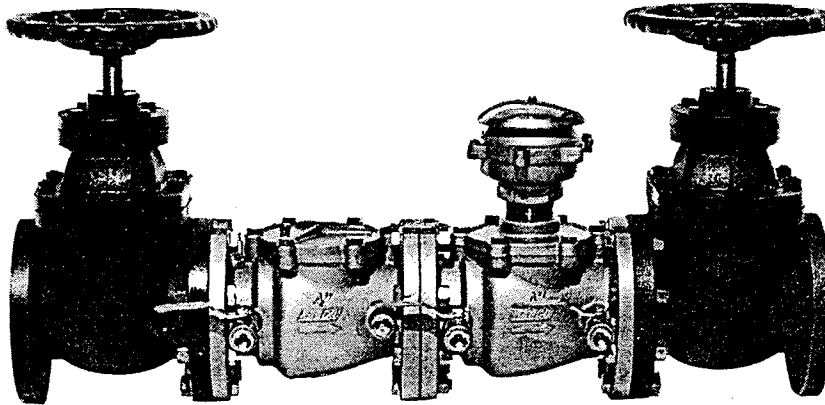
(Flow Curves as established by the USC Foundation for Cross Connection Control and Hydraulic Research)



### 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.

## Model 775 Pressure Vacuum Breaker Assembly For High Hazard Service



### Features

- Meets all specifications of USC Foundation for Cross Connection Control and Hydraulic Research.
- All bronze body and covers 3" and 4", cast iron body and covers 6" through 10" with internal epoxy coating standard.
- Two independent inline spring loaded checks on 3" and 4" units and two independent "Y" pattern spring loaded check assemblies standard on 6" through 10" devices.
- Corrosion resistant internal parts.
- Designed for minimum head loss.

### Specifications

The Pressure Vacuum Breaker Backflow Preventer shall consist of two independently operating spring loaded check valves with a vacuum breaker air inlet head mounted on the second check and three testcocks. An inlet gate valve and outlet gate valve comprise a complete serviceable device.

The 3" and 4" devices shall consist of two inline bronze bodies, covers, and vacuum breaker head assembly. Corrosion resistant internal parts standard. The 6" through 10" devices consist of two independent "Y" pattern cast iron spring loaded check valves and one bronze bodied vacuum breaker head. Internal epoxy coating is standard and all internal parts are corrosion and wear resistant. Gate valves supplied are flanged non rising stem. The devices are rated to 150 PSI working pressure and will withstand water temperatures of 32°F to 140°F.

Both check valves and vacuum breaker head shall be constructed so they may be serviced without removing the device from the line. The device shall meet the requirements of USC Foundation for Cross Connection and Hydraulic Research.

### Description

The Febco Model 775 Pressure Vacuum Breaker Assembly consists of two independent spring loaded check valve assemblies; a vacuum breaker head and three testcocks. An inlet gate valve with a fourth testcock and an outlet shutoff gate valve comprises a complete and serviceable unit. In normal operation both check valves open with flow demand and the pressure vacuum breaker head air inlet is closed.

In the event of a backsiphonage condition the two check valves close and the vacuum breaker head air inlet opens, allowing air to be drawn into the downstream piping thus stopping backsiphonage of contaminated water into the supply.

**NOTE:** The 775 Vacuum Breaker Head may be installed on any approved double check sizes 2-1/2" through 10".

### Materials

All bronze bodies and covers with bronze vacuum breaker heads are standard on Model 775 3" and 4". Corrosion and wear resistant materials are used throughout. Gate valves supplied are flanged non rising stem. Testcocks supplied on the devices shall be of the ball valve type.

Pressure Vacuum Breakers 6" through 10" have "Y" pattern cast iron bodies with spring loaded modular checks, bronze vacuum breaker head and trim, and internal epoxy coating standard. Corrosion and wear resistant materials are used throughout. Gate valves supplied are flanged non rising stem.

### Approvals

SBCC, IAPMO, USC