

FEBCO

825Y/ LF825Y/ 825YR

SIZE

3/4", 1", 1 1/4", 1 1/2", 2"

DESCRIPTION

This is a reduced pressure assembly. Production of this unit began approximately 1978. It is a plastic poppet check wye patterned bronze bodied assembly. The check covers screw into the body. The check seats are cast in the valve body and are not replaceable. In 1994 a replaceable check seat became available as an option and is shown as the model 825YR and is available in sizes 3/4", 1", 1 1/2", and 2". In 2006 replaceable check seats became standard in the 825Y 3/4", 1", 1 1/2", 2". A seat removal tool is needed to change the check seats. In 1989 all sizes except the 1 1/4" adopted a replaceable relief valve seat design as the standard. No special tool is needed to change the relief valve seat. To know which type you have, the serial number is helpful to differentiate them or visual inspection of the seat can also tell the difference. The check springs are not contained when the check covers are removed. The relief valve spring is contained when the relief cover is removed. R.V. spring tension had to be released for a proper repair. This design utilizes an internal relief valve sensing line. Rubber repair kits for the same size unit are the same for the 825Y and 825YR. In 2010 an LF825Y model was introduced which was constructed with lead free bronze. All internal repair parts are the same as the leaded bronze models. The 1 1/4" LF 825Y was produced in 2010 through 2011 with the smaller 1" body (end to end less shutt offs 7 3/4"). In 2011 the longer 1 1/2" body (end to end less shutt offs 10 1/2") with pipe bushings placed in the ends was produced.

BASIC REPAIR KIT

Repair kit contains all rubber discs, diaphragm, O-rings, and washers.

<u>LF825Y</u>	<u>825Y</u>	<u>PART NO</u>	<u>AIR GAP DRAIN</u>
<u>SIZE</u>	<u>SIZE</u>		
3/4"-1"	3/4"-1 1/4"	905111	AGDY
1 1/4"-2"	1 1/2"-2"	905112	AGDY

IMPORTANT FEATURES

~Bronze body

~Check seats are not replaceable

~Check springs are not contained

~Internal relief valve sensing line

~Factory repair information enclosed





Model 825Y (3/4" through 2") Reduced Pressure Backflow Preventer For High Hazard Service

Characteristics and Materials

Maximum working pressure	— 175 PSI
Hydrostatic test pressure	— 350 PSI
Temperature range	— 32°F to 140°F
Fluid	— Water
End detail	— Threaded ANSI B2.1
Main valve body	— Bronze ASTM B584-78
Relief valve body	— Bronze ASTM B584-78
Elastomers	— Nitrile ASTM D-2000 Seat Discs.† Diaphragms: Nitrile, fabric reinforced
Springs	— Stainless Steel, 300 series

* On water systems that experience an excess of a constant 140°F, must be ordered with HW (825Y 1" HW).

† Can be supplied with optional silicone seat disc.

Materials LF825Y

Main valve body:	Lead Free* Cast Copper Silicon Alloy
Relief valve body:	Lead Free* Cast Copper Silicon Alloy
Elastomers:	Nitrile Seat Discs
Diaphragms:	Nitrile, fabric reinforced
Springs:	Stainless Steel

Features

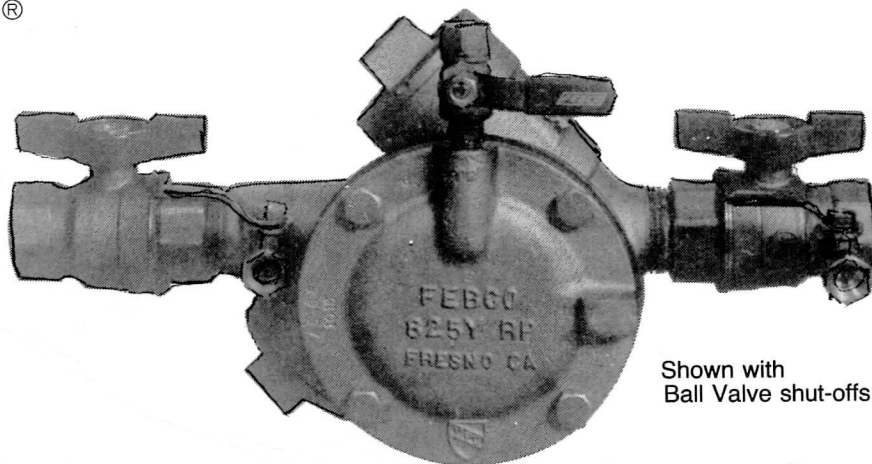
- Ultimate mechanical protection of potable water, against hazards of cross connection contamination.
- Meets all specifications of AWWA, ASSE and USC Foundation for Cross Connection Control and Hydraulic Research.
- Documented flow curves established by University of Southern California Foundation for Cross Connection Control and Hydraulic Research.
- Modular relief valve for ease of maintenance.
- Simple Service procedures. All internal parts serviceable in line.
- Low head loss.
- Spring loaded "Y" type check valves.
- Internal relief valve pressure sensing passages.
- Replaceable relief valve seat ring on 3/4", 1", 1 1/2" and 2".

Dimensions – Weights Model 825Y

(U.S. - Inches)						
SIZE	A	B*	C	D	E	NET WT. (Lbs.)
3/4	12	7 3/4	3 1/4	3 1/4	4 1/8	11.5
1	12 3/4	7 3/4	3 1/4	3 1/4	4 1/8	12.5
1 1/4	13 5/8	7 3/4	3 1/4	3 1/4	4 1/8	14.0
1 1/2	17	10 1/2	4 1/2	4 1/2	5	26.5
2	17 3/4	10 1/2	4 1/2	4 1/2	5	29.0

* B Dimension is less shutoffs

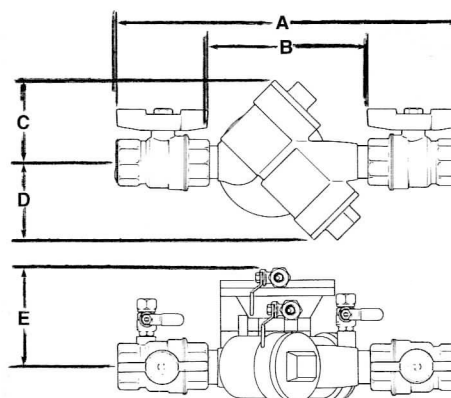
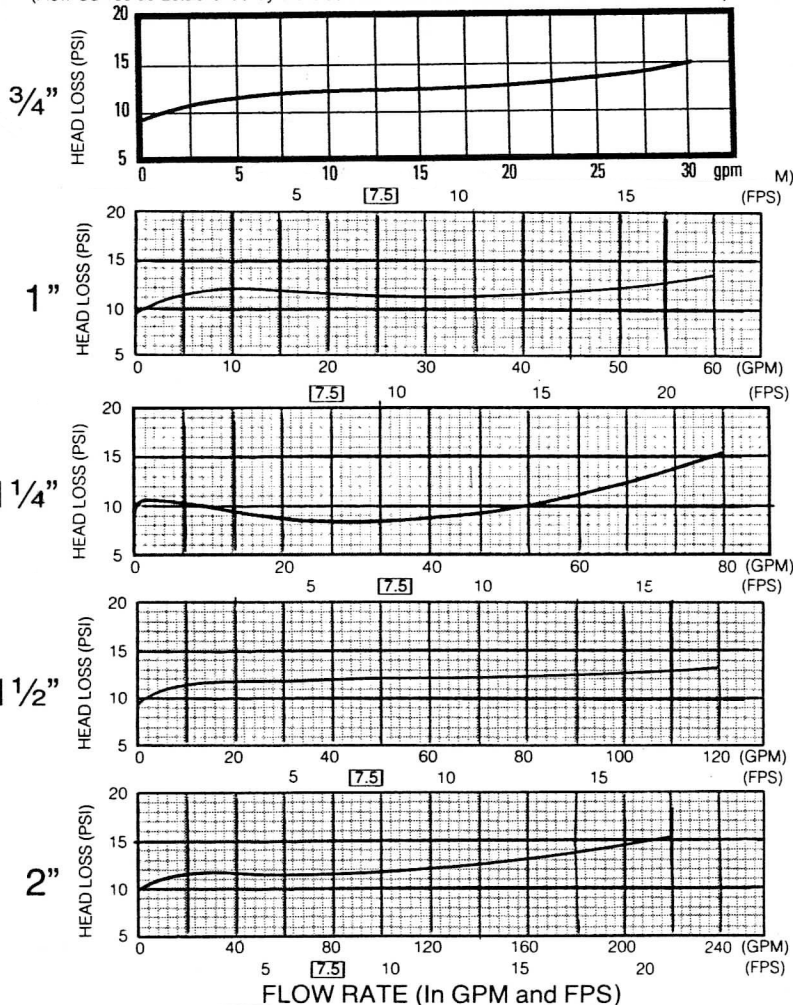
Note: Weights shown are approximate. Dimensions shown are nominal, allowance must be made for normal manufacturing tolerances.



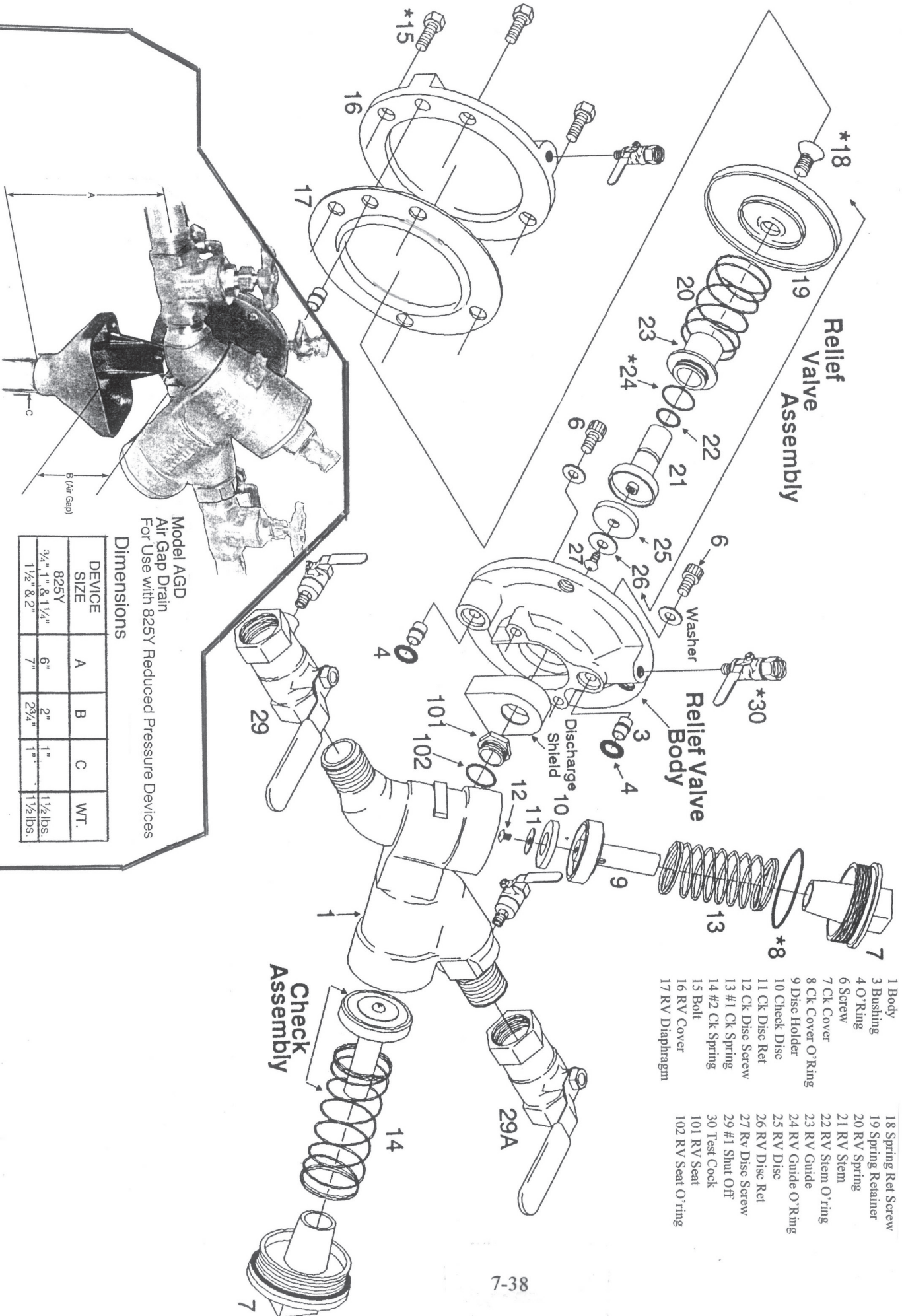
Shown with
Ball Valve shut-offs.

Model 825Y Flow Curves

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



FEBCO 825Y & 825YR 3/4" - 2"



- 1 Body
- 3 Bushing
- 4 O Ring
- 6 Screw
- 7 Ck Cover
- 8 Ck Cover O Ring
- 9 Disc Holder
- 10 Check Disc
- 11 Ck Disc Ret
- 12 Ck Disc Screw
- 13 #1 Ck Spring
- 14 #2 Ck Spring
- 15 Bolt
- 16 RV Cover
- 17 RV Diaphragm
- 18 Spring Ret Screw
- 19 Spring Retainer
- 20 RV Spring
- 21 RV Stem
- 22 RV Stem O ring
- 23 RV Guide
- 24 RV Guide O Ring
- 25 RV Disc
- 26 RV Disc Ret
- 27 RV Disc Screw
- 29 #1 Shut Off
- 30 Test Cock
- 101 RV Seat
- 102 RV Seat O ring

Model AGD
Air Gap Drain
For Use with 825Y Reduced Pressure Devices

Dimensions

DEVICE SIZE	A	B	C	WT.
825Y	6"	2"	1"	1 1/2 lbs.
3/4" 1" & 1 1/4"	7"	2 3/4"	1 1/4"	1 1/2 lbs.