

Model RP7L

Reduced Pressure Principle 2-1/2" to 10"

FEATURES

- All stainless steel check assemblies
- Low head loss
- Ductile iron body
- Easy in-line maintenance
- All bronze modular relief valve
- Serial number needed for ordering parts

DESCRIPTION

The Cla-Val Model RP7L Backflow Preventer protects potable water lines against contamination. This assembly combines protection against backflow with exceptionally low head loss characteristics. Operating on the reduced pressure principle, an accepted method of safeguarding potable water supplies for high hazard service.

The Model RP7L consists of two stainless steel check valves, an automatic pressure differential relief valve located between the two check valves, two shut-off valves and four test cocks that enable easy field testing. The internal parts are accessible in-line.

DESCRIPTION

RP assemblies are used to protect against high hazard (toxic) fluids in water services to industrial plants, hospitals, morgues, mortuaries, and chemical plants. They are also used in many other systems for maximum protection.

OPERATION

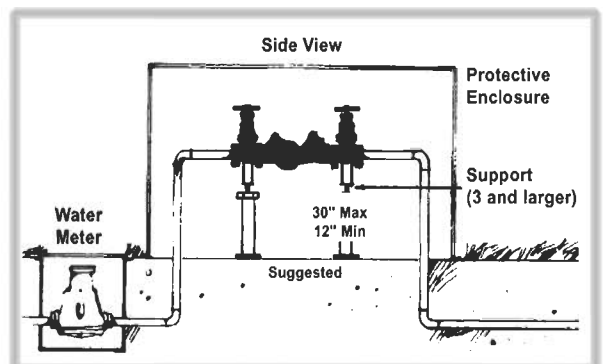
Under a normal flow condition, both check valves are open with the pressure between the checks at least 5 psi lower than inlet pressure.

Should abnormal conditions occur under a no flow or reverse flow situation, the differential relief valve will open and discharge to maintain the zone at least 2 psi lower than the supply. Upon resumption of normal flow, the zones differential pressure will resume and the relief valve will close.

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Cla Val

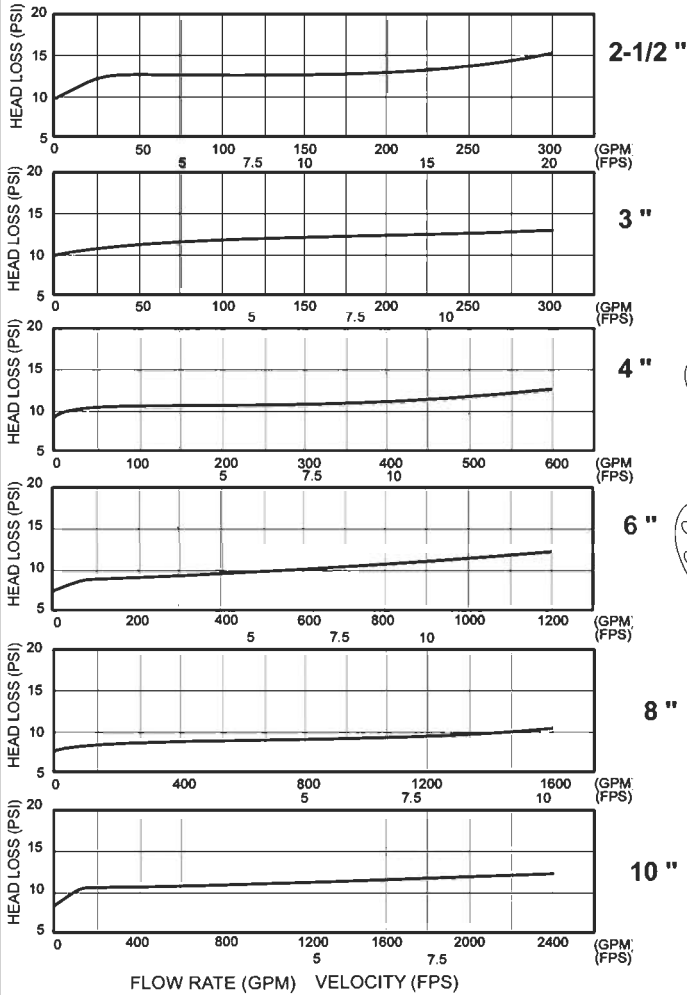
INSTALLATION

Reduced pressure principles should be installed with a minimum 12" of clearance. They must be installed where drainage will not be objectionable. After installation, the assembly must be easily accessible for maintenance and testing, and should not be exposed to freezing temperatures. Larger size RPs require support blocks. Excessive pressure situations should be avoided to protect the device.

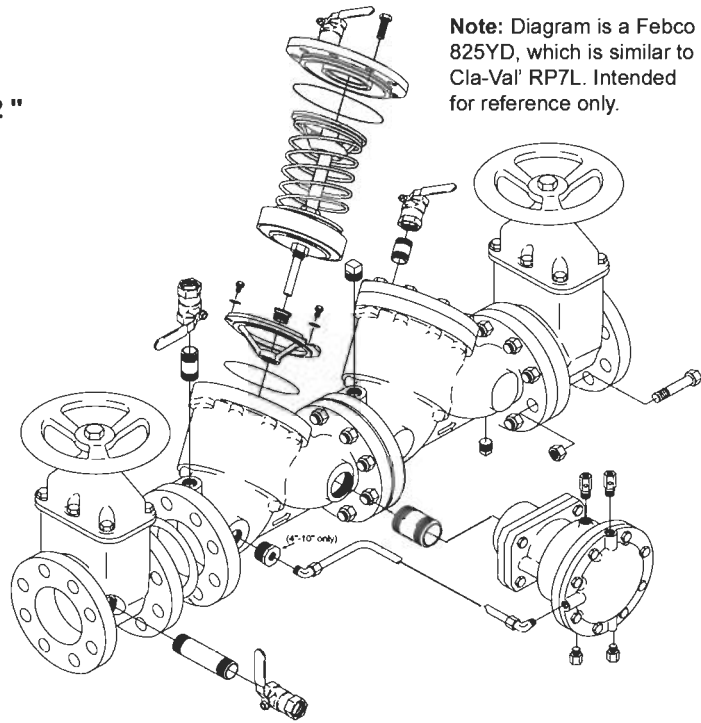


Model RP7L (2-1/2" - 10") Reduced Pressure Assembly

Model 825YD Flow Curves

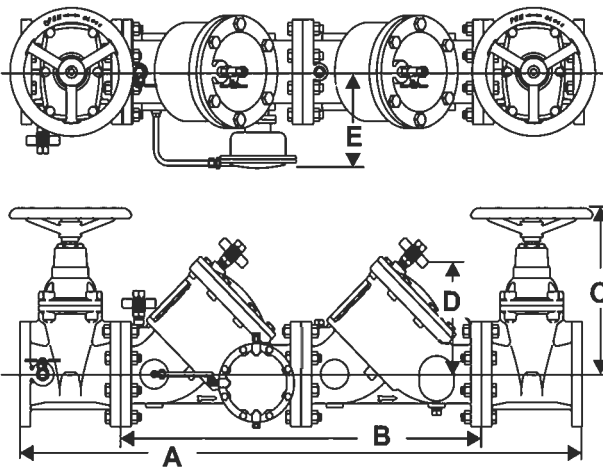


Note: Diagram is a Febco 825YD, which is similar to Cla-Val' RP7L. Intended for reference only.



Characteristics and Materials

Maximum working pressure	175 PSI
Hydrostatic test pressure	350 PSI
Temperature range	32°F to 140°F
Fluid	Water
End detail	2-1/2" - 10"
Main valve body	Flanged ANSI B16.1 Ductile iron 65-45-12 fusion epoxy coated internal and external
Main valve trim	Bronze
Internal check assembly	Stainless steel
Relief valve body and trim	Bronze
Elastomers	Nitrile
Diaphragms:	Nitrile, fabric reinforced
Springs	Stainless steel
Internal check assembly	Stainless steel
Shut-offs	Non-rising stem, resilient seated gates



Dimensions & Weights**

SIZE	A	B	C*	D	E	NET WT. (Lbs.)**
2.5	37 3/16	22 1/16	12 5/8	7 1/2	11	178.0
3	41 11/16	25 9/16	12 7/8	8 1/16	12	213.0
4	50 7/16	32 5/16	14 3/8	11	13	360.0
6	59 11/16	38 9/16	18 7/8	14	15	601.0
8	69 3/16	46 1/16	23 1/2	18	16	892.0
10	84 3/16	58 1/16	27 1/2	22	17	1593.0

* Applies to NRS gated units only.

** Subject to manufacturing tolerance.

American Backflow Specialties

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