Now available with integral plumbers unions!

Reduced Pressure Backflow Prevention Assembly

Sizes 3/4" – 1" – 1 1/4" – 1 1/2" – 2"

FEATURES

Exclusive Aergap® system protection.

Replaceable seats and springs.

Rugged bronze body construction for long, dependable service.

Ball type shut-off valves (standard).

In-line maintenance.

Test cocks for in-line field testing.

Integral plumbers unions available to ease installation.

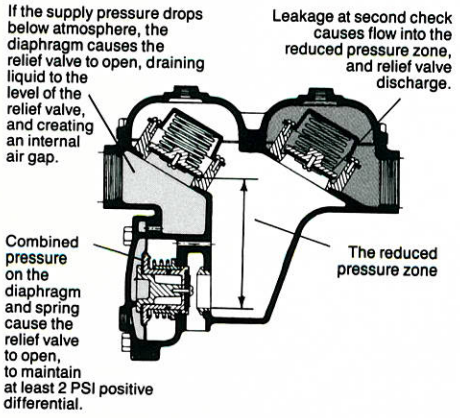
Internal sensing passage.

Hot water approval to 210°F.

Air Gap Drain Funnel available as an option.

Approvals (¾, 1, 1½, 2) by: USC, CSA B64.5, ASSE 1013, AWWA C511; IAPMO listed; UL, ULC (except 2") classified.

The Aergap® Principle



DESCRIPTION

The Hersey Model FRP II Reduced Pressure Backflow Prevention Assembly features the exclusive Hersey Aergap® system. This design provides the highest level of protection against backflow.

The unit consists of two independent spring loaded poppet-type check valve assemblies, and a relief valve. The relief valve is a diaphragm actuated, spring loaded, double seat valve assembly. Issolation valves and four test cocks for field testing complete the basic features.

OPERATION

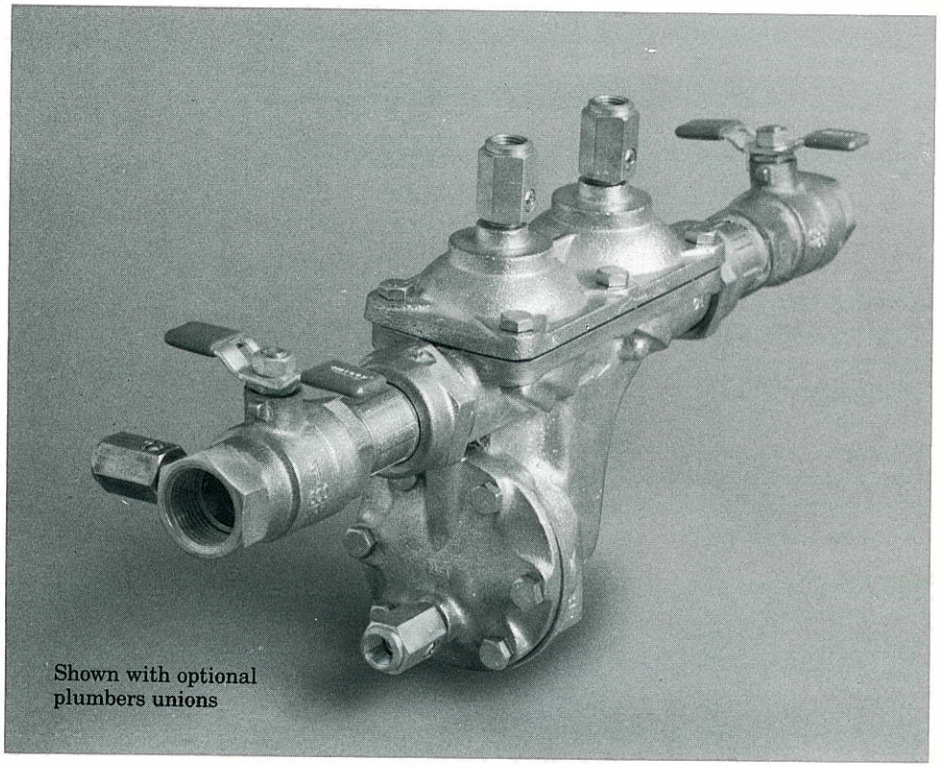
Normal operation – The independent, spring loaded check valves remain closed until there is a demand for water. The relief valve remains closed because of the differential between the supply pressure and the reduced pressure in the zone between the check valves.

Backpressure – In the event pressure increases downstream, tending to reverse direction of flow, both check valves are closed to prevent backflow. If the second check valve is prevented from closing tightly, leakage into the reduced pressure zone increases the zone pressure to within a few pounds of the supply pressure. This causes the relief valve to open, and backflow is discharged.

Backsiphonage – If the supply pressure drops to atmosphere or lower than the reduced pressure zone, the relief valve will open, creating an internal air gap at least twice the diameter of the inlet pipe. This air gap is maintained between the first check valve and the second check valve as all the water in the reduced pressure zone is released to the atmosphere.

APPLICATION

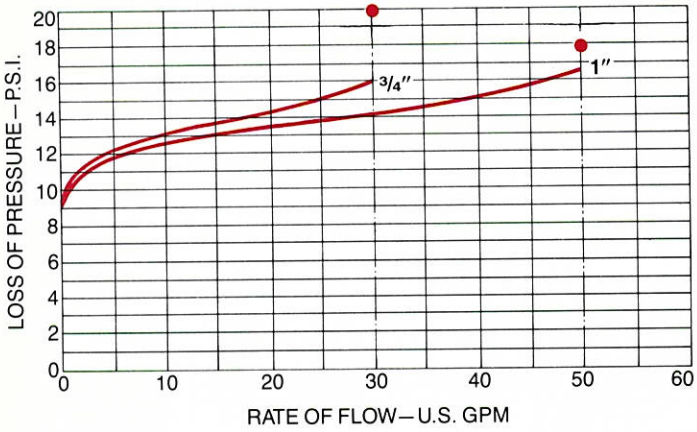
For use at cross-connections when the danger from backflow presents a health-hazard.



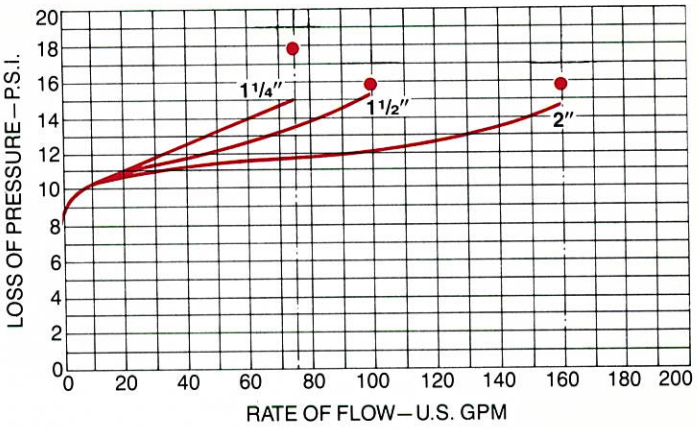
Shown with optional plumbers unions

PERFORMANCE (Performance curves are typical only and not a guarantee of performance)

Head Loss – 3/4" and 1"



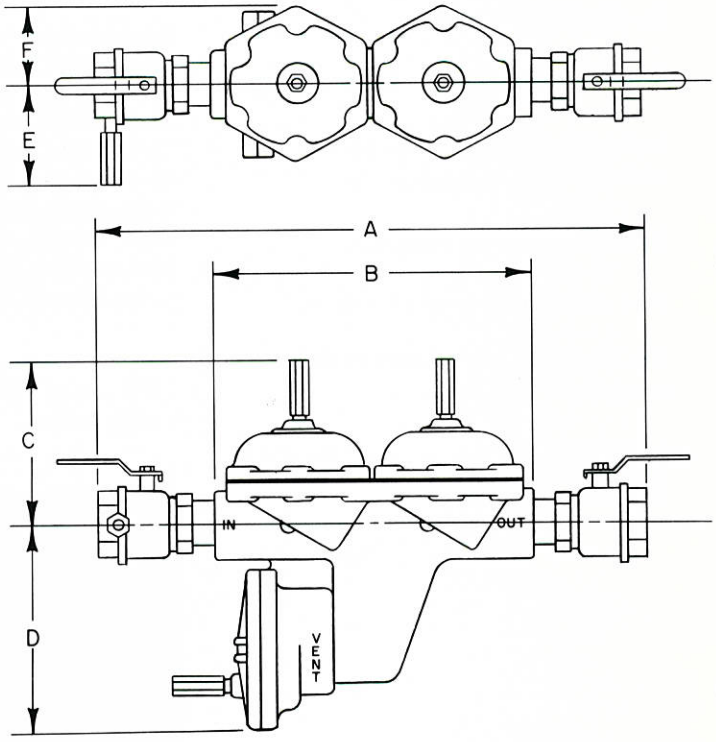
Head Loss – 1 1/4", 1 1/2" and 2"



NOTE: ● Maximum Allowable Pressure Loss allowed by USC at indicated flow.

DIMENSIONS

SIZE	3/4"	1"	1 1/4"	1 1/2"	2"
A - WO/Unions	14 1/4"	15 1/4"	19 3/4"	20 1/4"	23 1/4"
A - W/Unions	15 3/4"	17 1/2"	—	—	—
B	8"	8"	11"	11"	12 3/8"
C	3 5/8"	3 5/8"	5"	5"	5 3/4"
D	4 15/16"	4 15/16"	6 13/16"	6 13/15"	7 1/16"
E	3 1/2"	3 1/2"	3 3/4"	3 3/4"	3 3/4"
F	1 9/16"	1 9/16"	2 13/16"	2 13/16"	2 7/8"
Size Test Cocks	1/4"	1/4"	1/4"	1/4"	1/4"



Device shown without plumbers unions

WEIGHTS

SIZE	3/4"	1"	1 1/4"	1 1/2"	2"
Net Wt. WO/Valves, Lbs.	10	10	24	24	31
Net Wt. W/Valves, Lbs.	12	13	29	31	42
W/Plumbers Unions	13	14	—	—	—
Gross Wt. WO/Valves, Lbs.	11	11	28	28	36
Gross Wt. W/Valves, Lbs.	13	15	33	35	47
W/Plumbers Unions	14	17	—	—	—

MATERIALS AND SPECIFICATIONS

Mainline case ..... bronze
Working parts ..... bronze and stainless steel
Springs ..... stainless steel
Diaphragms ..... Buna N and nylon
Valve discs ..... silicone rubber
O Ring ..... Buna N
Check Valve Enclosures ..... glass reinforced plastic
Maximum rated working pressure ..... 150 psi
Temperature range ..... 33°-210°F