

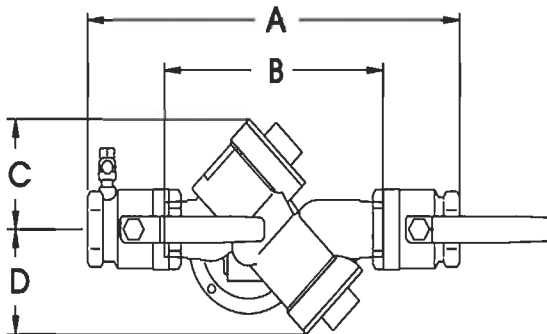
Model 825Y (3/4"-2") Reduced Pressure Principle

FEATURES

- Ultimate mechanical protection of potable water, against hazards of cross connection contamination.
- 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 all sizes.

SPECIFICATIONS

The reduced pressure backflow preventer shall consist of two independently operating, spring loaded, "Y" pattern check valves and one hydraulically dependent differential relief valve. The assembly shall automatically reduce the pressure in the "zone" between the check valves to at least 5 PSI lower than inlet pressure. Should the differential between the upstream and the zone of the unit drop to 2 PSI, the differential relief valve shall open and maintain the proper differential.

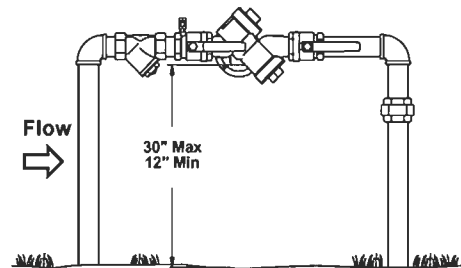


SIZE	A	B*	C&D	E	LBS.
3/4	12	7 3/4	3 1/4	4 1/8	11.5
1	12 3/4	7 3/4	3 1/4	4 1/8	12.5
1 1/4	13 5/8	7 3/4	3 1/4	4 1/8	14.0
1 1/2	17	10 1/2	4 1/2	5	26.5
2	17 3/4	10 1/2	4 1/2	5	29.0

B* = dimensions less shut-offs.

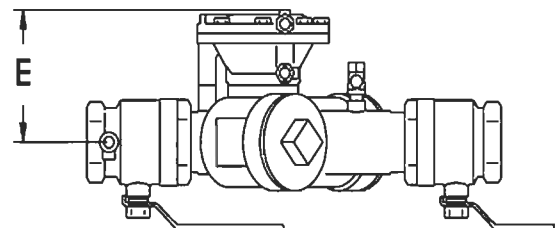
APPLICATIONS

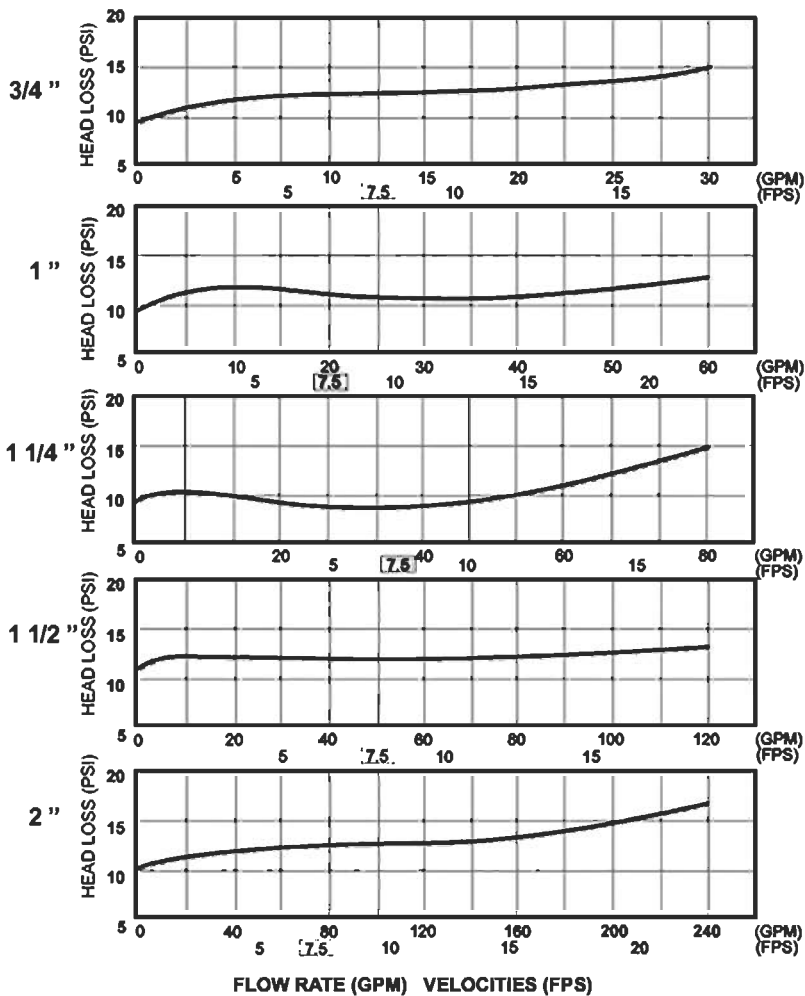
Reduced Pressure assemblies are used to protect against high hazard (toxic) fluids in water services to industrial plants, hospitals, morgues, mortuaries, and chemical plants. They are also used in irrigation systems, boiler feed, water lines and other installations requiring maximum protection.



INSTALLATION

Reduced Pressure Backflow preventers should be installed with minimum clearance of 12" between relief valve discharge port and floor or grade. They must be installed where discharge will not be objectionable and can be positively drained away. They should be installed where easily accessible for testing and maintenance and must be protected from freezing. Thermal water expansion and/or water hammer downstream of the backflow preventer can cause excessive pressure. Excessive pressure situations should be eliminated to avoid possible damage to the system and assembly.





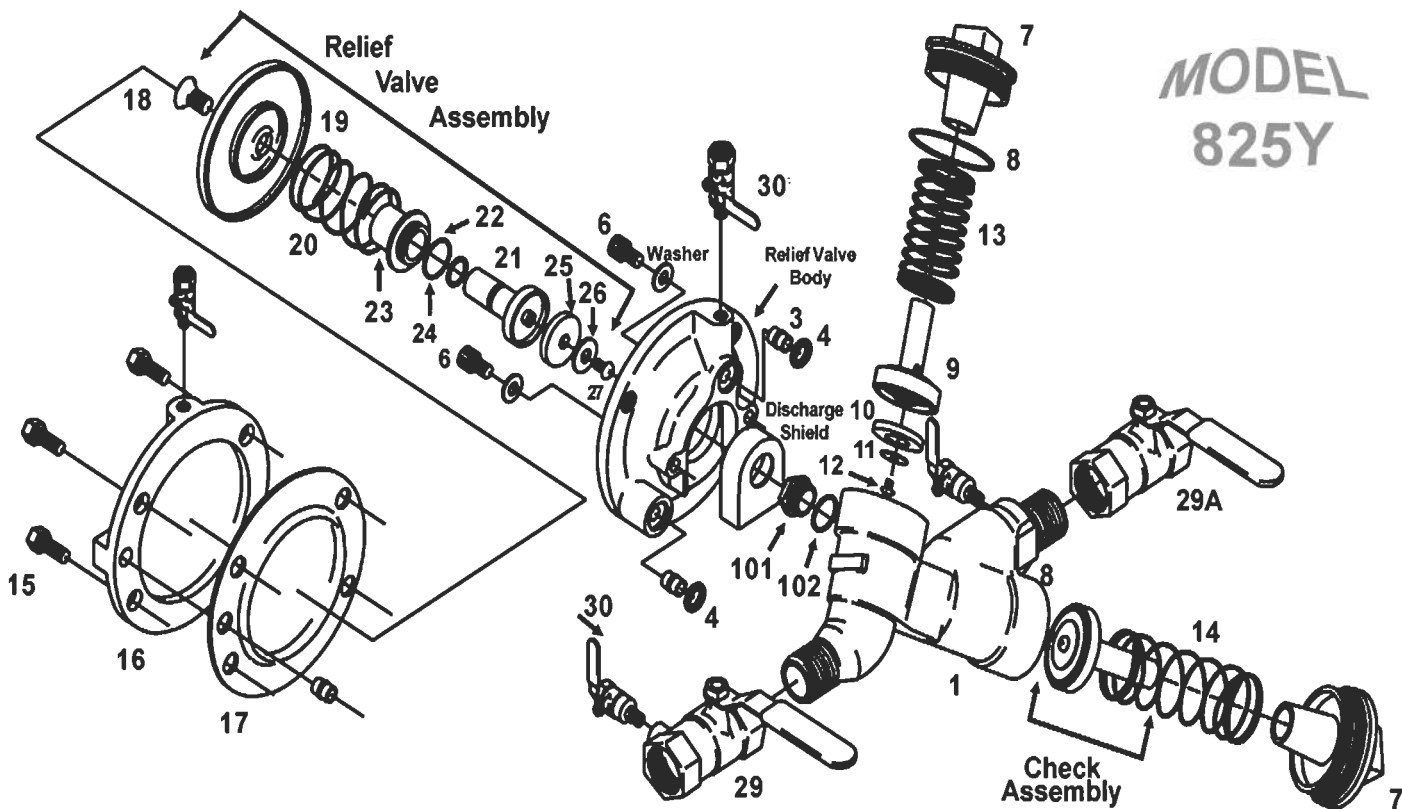
Characteristics & Materials

Maximum pressure	175 PSI (1200 KPa)
Hydrostatic test pressure	350 PSI (2400 Kpa)
Temperature range	32°F to 140°F
Fluid	Water
End detail	Threaded ANSI B2.1
Main valve body	Bronze
Relief valve body	Bronze
Elastomers	Nitrile Seat Discs† Diaphragms: Nitrile, fabric reinforced
Springs	Stainless Steel

† Can be supplied with optional silicone seat disc.

APPROVALS

- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.Ⓞ
- AWWA C511-89 Conformance
- ASSE (Std 1013)
- CSA B64.4 Certified
- IAPMO® Listed



**MODEL
825Y**

American Backflow Specialties

(800) 66-BKFLO (619) 527-2525 Fax: (619) 527-2527
www.americanbackflow.com

PARTS: 825Y, 825YA, 845

Item	Description	Qty*	3/4	1	1 1/4	1 1/2	2
3	Bushing	3	500-290	500-290	500-290	500-290	500-290
4	O-Ring	2	398-202-72	398-202-72	398-202-72	398-202-72	398-202-72
5	Gasket	2	340-078	340-078	340-078	340-079	340-079
6	Capscrew**	2	515-513-05	515-513-05	515-513-05	515-514-06	515-514-06
7	Cap**	2	101-134	101-134	101-134	101-135	101-135
8	O-Ring	2	398-226-72	398-226-72	398-226-72	398-235-72	398-235-72
9	Disc Holder	2	500-270	500-270	500-270	500-278	500-278
10	Seat Disc	2	400-099	400-099	400-099	400-103	400-103
11	Washer	2	300-084	300-084	300-084	300-108	300-108
12	Screw	2	516-543-03	516-543-03	516-543-03	516-543-03	516-543-03
13	Spring (Inlet)	1	630-125	630-125	630-125	630-137	630-137
14	Spring (Outlet)	1	630-115	630-115	630-115	630-118	630-118
15	Bolt**	4	511-514-06	511-514-06	511-514-06	—	—
15	Bolt**	8	—	—	—	511-515-07	511-515-07
16	Cover**	1	101-029	101-029	101-046	101-035	101-035
17	Diaphragm**	1	400-101	400-101	400-101	400-104	400-104
18	Screw**	1	700-107	700-107	700-107	519-513-03	519-513-03
19	Button	1	500-284	500-284	500-284	300-107	300-107
20	Spring	1	630-126	630-126	630-126	630-138	630-138
21	Mainstem	1	500-273	500-273	500-273	500-280	500-280
22	O-Ring	1	398-113-72	398-113-72	398-113-72	398-120-72	398-120-72
23	Guide	1	500-277	500-277	500-277	500-281	500-281
24	O-Ring	1	398-022-72	398-022-72	398-022-72	398-127-72	398-127-72
25	Seat Disc	1	400-102	400-102	400-102	400-105	400-105
26	Washer	1	300-104	300-104	300-104	300-105	300-105
27	Screw	1	700-137	700-137	700-137	519-513-03	519-513-03
101	Seat Ring (RV)	1	200-779	200-779	—	200-780	200-780
102	O-Ring (RV)	1	398-019-72	398-019-72	—	398-026-72	398-026-72
103	Elbow (YA only)	2	101-194	101-194	—	101-189	101-190
104	O-Ring (YA only)	2	398-223-72	398-223-72	—	398-230-72	398-230-72

Shut-offs: Model 825Y, 845, 825YA

Item No.	Description	Qty.*	3/4	1	1 1/4	1 1/2	2
29	Ball Valve (Inlet)	1	781-053	781-054	781-055	781-056	781-057
29.1	Ball Valve (Outlet)	1	781-048	781-049	781-050	781-051	781-052
30	Testcock	4	781-074	781-074	781-075	781-075	781-075

* Quantity required per valve. Some sizes require different quantities

** 825Y and 825YA only. 845 uses different part numbers not shown. Refer to 845 assemblies/kits on model 845 catalog page.

REPAIR KITS

	QTY.*	3/4"	1"	1 1/4"	1 1/2"	2"
Check Valve Rubber Kit (2 ea. 8, 10)	1 Kit	905-042	905-042	905-042	905-053	905-053
Relief Valve Rubber (1 ea. 17, 22, 24, 25)	1 Kit	905-043	905-043	905-043	905-054	905-054
Check Valve Assembly (1 ea. 8, 9, 10, 11, 12)	2 Assy.	905-044	905-044	905-044	905-055	905-055
Relief Valve Assembly (1 ea. 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27)	1 Assy.	905-045	905-045	905-045	905-056	905-056
RV Seat Ring Kit (101, 102)	1 Kit	905-113	905-113	-----	905-114	905-114
Complete Rubber Parts Kit (3, 4, 5, 8, 10, 17, 22, 24, 25, 102)	1 Kit	905-111	905-111	905-111	905-112	905-112
825YR Seat Ring Repair Kit (35, 36)	1 Kit	905-280	905-280	-----	905-281	905-281



MODEL
825Y