

Shown with Ball Valve shut-offs.

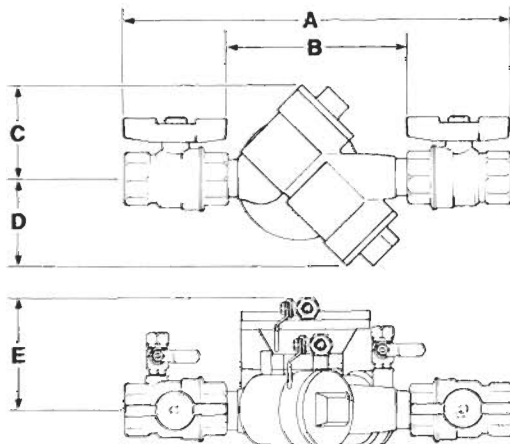
Model 845 (3/4" and 1") Engineered Plastic Reduced Pressure Backflow Preventer For Toxic Service

Features

- Glass fiber reinforced nylon body and relief valve resist chemical attack and scale build-up.
- Exceeds all performance specifications of AWWA, ASSE and USC Foundation for Cross Connection Control and Hydraulic Research.
- Simple service procedures. All internal parts serviceable in-line.
- Low head loss.
- All internal hydraulic control passages.
- Stainless steel shut-off valves and testcocks available.

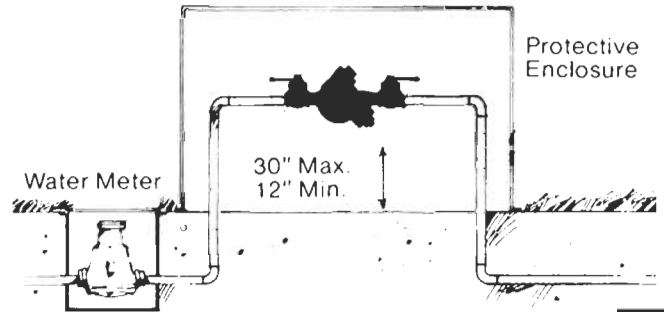
Specifications

The reduced backflow preventer shall consist of two independently operating, spring loaded, "Y" pattern check valves and one hydraulically dependent differential relief valve. The relief valve port shall be located below the lowest portion of the main valve seat. The device 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. Check valve moving member shall be center stem guided. All hydraulic sensing passages shall be internally located within the mainline and relief valve bodies and relief valve cover. Check valve and relief components shall be constructed so they may be serviced without removing the valve body from the line. Shutoff valves shall be full ported.



Typical Applications

RP devices are used to protect against toxic fluids in water services to industrial plants, hospitals, morgues, mortuaries, and chemical plants. They are also used in irrigation systems, water lines and other installations requiring maximum protection.



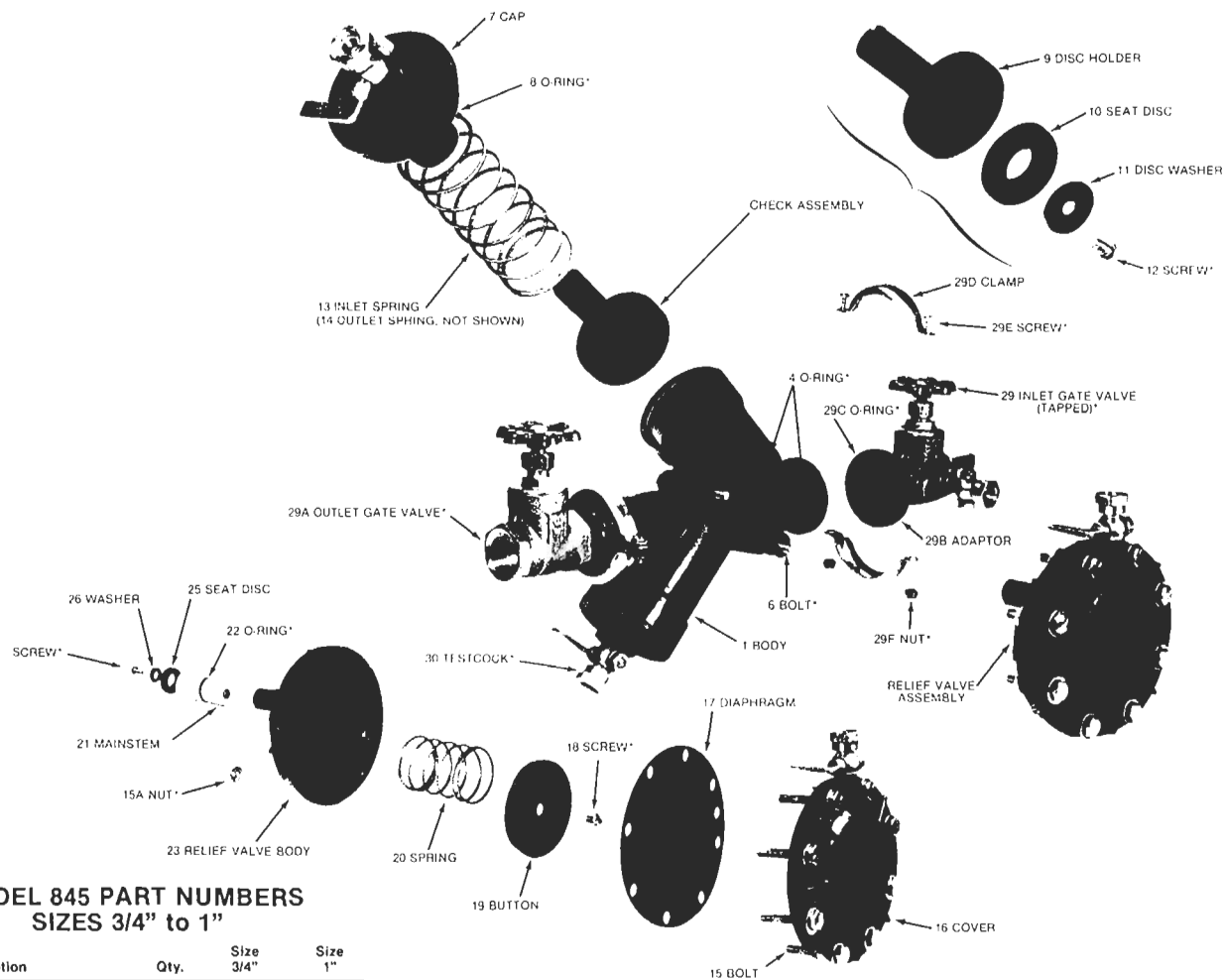
Installation

Reduced Pressure Backflow Preventers should be installed with minimum clearance of 12" between 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.

Designed to be installed horizontally. For vertical installation requirements, contact local authorities.

Dimensions and Weights

SIZE	A	B	C	D	E	F	WT. (LBS)
3/4"	13-1/2"	6-3/4"	3-7/8"	3-1/2"	4"	3"	5-1/2
1"	14-1/4"	6-3/4"	3-7/8"	3-1/2"	4"	3"	6



**MODEL 845 PART NUMBERS
SIZES 3/4" to 1"**

Fig. No.	Description	Qty.	Size 3/4"	Size 1"
4	O-Ring	2	568-012	568-012
6	Bolt	2	700-132	700-132
7	Cap	2	500-269	500-269
8	O-Ring	2	568-226	568-226
9	Disc Holder	2	500-270	500-270
10	Seat Disc	2	400-099	400-099
11	Washer	2	300-084	300-084
12	Screw	2	700-130	700-130
13	Inlet Spring	1	630-114	630-114
14	Outlet Spring	1	630-115	630-115
15	Bolt	8	700-131	700-131
15A	Nut	8	720-051	720-051
16	Cover	1	500-272	500-272
17	Diaphragm	1	400-100	400-100
18	Screw	1	700-107	700-107
19	Button	1	500-284	500-284
20	Spring	1	630-116	630-116
21	Mainstem	1	500-273	500-273
22	O-Ring	1	568-113	568-113
25	Seat Disc	1	400-102	400-102
26	Washer	1	300-104	300-104
27	Screw	1	700-126	700-126
29	Gate Valve	1	780-659	780-660
29A	Gate Valve	1	780-131	780-106
29B	Nipple Adaptor	2	500-274	500-275
29C	O-Ring	2	568-125	568-125
29D	Clamp	4	360-072	360-072
29E	Screw	4	700-133	700-133
29F	Nut	4	720-036	720-036
30	Testcock	4	780-114	780-114

Assemblies/Kits			
Check Valve Rubber (8, 10)	2 ea.	905-042	904-042
Relief Valve Rubber (17, 22, 25)	1 ea.	905-068	905-068
Check Valve Assembly (8 to 12)	1 ea.	905-044	905-044
Relief Valve Assembly (#2 ea., #5 to 27)	-	905-069	905-069

Characteristics

Maximum Working Pressure	150 PSI
Hydrostatic Test Pressure	300 PSI
Temperature Range	32°F to 110°F
Fluid	Water
End Detail	Threaded ANSI B2.1
Main Valve Body and Relief Valve	Nylon, glass fiber reinforced. (Tensile Strength 20,000 PSI)
Elastomers	Nitrile ASTM D-2000 Seat Discs. Diaphragms: Nitrile, fabric reinforced
Springs	Stainless Steel, 300 series

Flow Curves

