

SERIES 4S-200 Model RP Reduced Pressure Principle 2-1/2" to 4"

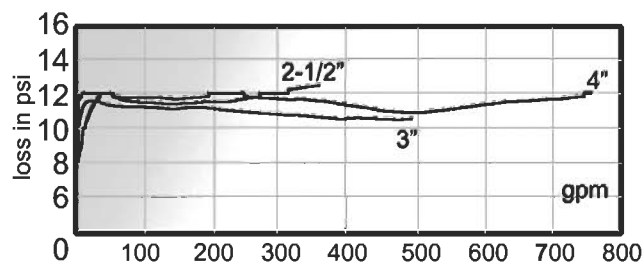
FEATURES

- Corrosion resistant
- Replaceable EPDM seat discs
- Low head loss
- Economical, Short lay length, Light weight
- Damage resistant Sensing Passage
- Designed for easy maintenance
- Maximum working pressure 175 psi
- Operating temperature range 33°F-140°F

DESCRIPTION

Model RP gives maximum protection against backflow from back-pressure or back-siphonage. The unit has two independently acting, spring-loaded swing-check valves with a differential pressure relief valve located between the checks. The relief valve assembly can be easily removed from the compact check valve body. The pressure sensing passage is hard piped to prevent possible damage from mishandling or vandalism. The unit is available with inlet and outlet shut-off valves, and 90° elbows within the shut-off valve envelope for compact installations. Four test cocks complete the assembly.

FLOW CURVES



OPERATION

During normal flow conditions, the two check valves supply water downstream. The relief valve is held shut by supply pressure in the internal sensing passage, on the relief valve diaphragm. The zone between the checks maintains pressure at 7 psi lower than supply. Should a back-pressure or back-siphonage condition occur, the second check valve will seal, prohibiting the backflow of water. Should that check valve become fouled, the zone pressure increases, opening the differential relief valve to atmosphere. Pressure then stays 2 psi below supply.



MODELS

4S - 2 X X - 0 X X			
0-Standard	9 - 2-1/2"	1- less gates	U - U flow
1-Y-strainer	0 - 3"	2- NRS gats	Z - Z flow
	A - 4"	3- OS&Y gats	
		5- epoxy coated ball valves	
		6- with post indicator	
		7- flanged inlet x grooved outlet OS&Y	
		8- grooved x grooved OS&Y	

MATERIALS

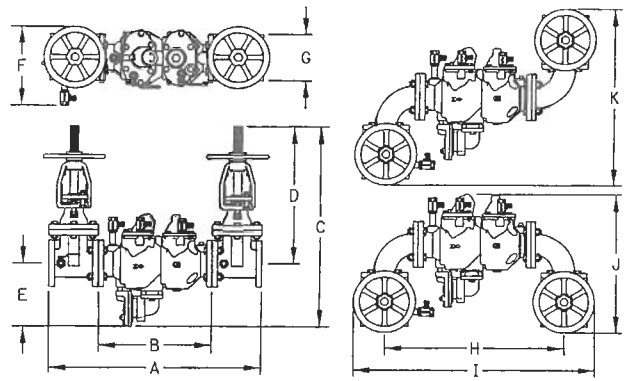
Body and covers	Epoxy Coated Ductile Iron
Relief Valve body	Bronze
Springs/Fasteners	Stainless Steel
Seats	Bronze
C.V. Seat Discs	EPDM
R.V. Seat Discs	Silicone
Test Cocks	Bronze

APPROVALS

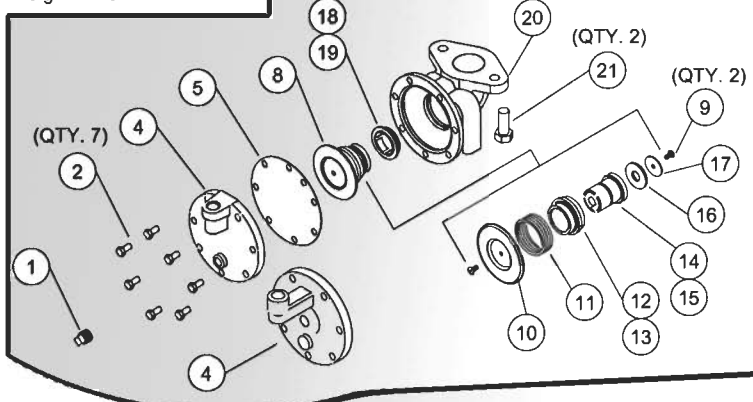
ASSE 1013, CSA B64.4, FM, and UL Classified. UL and FM approved backflow preventers must include OS&Y gate valves.

DIMENSIONS

	2-1/2"	3"	4"
A	32-1/4	33-1/2	36-3/4
B	17	17	18-1/2
C (NRS)	21-1/2	22-1/4	23
C (OS&Y) OPEN	30-1/2	32	32-3/4
D (NRS)	12	12-3/4	13-1/2
D (OS&Y) OPEN	21	22-1/2	23-1/4
E	9-1/2	9-1/2	9-1/2
F	12	12-1/4	12-1/2
G	7	7-1/2	9
H	27	28	31-1/2
I	36-1/2	38	41-1/2
J	21	22	23-3/4
K	27	29	32
Test Cocks	1/2 NPT	1/2 NPT	1/2 NPT
Net Wt. (Less Gate Valves)	100	102	112
Net. Wt. (w/NRS Valves)	195	228	298
Net. Wt. (w/OS&Y Valves)	206	236	310
Shpg. Wt. (Less Gate Valves)	164	166	176
Shpg. Wt. (w/NRS Valves)	263	296	368
Shpg. Wt. (w/OS&Y Valves)	273	303	382



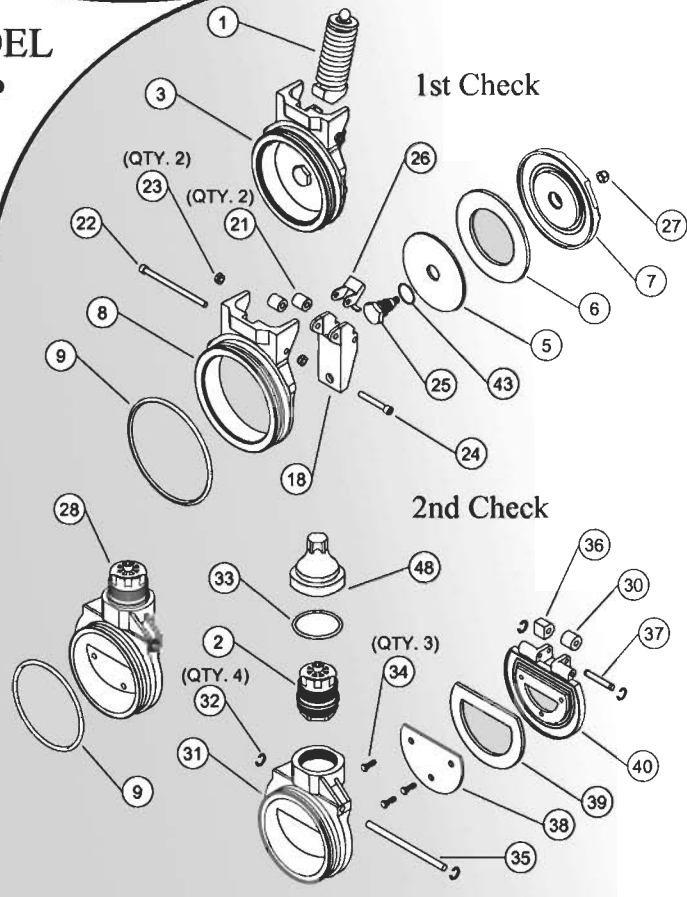
Weights are without elbows



Relief Valve Parts

ITEM	DESCRIPTION	2-1/2", 3", 4"
1	Plug	K-3019-00
2	3/8 x 1" HHC Screw	B-1792-00
4	Relief Valve Cover Plate	Q-5782-05
5	Relief Valve Diaphragm	D-2515-00
8	Relief Valve Sub-Assembly	W-6622-05
9	1/4-20 x .5" PHM Screw	B-1753-00
10	Diaphragm Plate	D-2516-00
11	Relief Valve Spring	A-1702-00
12	Relief Valve Bushing	I-4257-15
13	Relief Valve Bushing O-ring	D-2512-00
14	Relief Valve Stem	G-3213-00
15	Relief Valve Stem O-ring	D-2513-00
16	Relief Valve Seat Disc	D-2514-00
17	Relief Valve Seat Washer	D-2499-00
18	Relief Valve Seat	L-4867-00
19	Relief Valve Seat O-ring	D-2274-00
20	Relief Valve Body	Q-5783-05
21	1/2-13 x 1.25" HHC Screw	B-2550-00

MODEL RP



1st & 2nd Check Valve Parts

ITEM	DESCRIPTION	2-1/2", 3", 4"
1	First Check Spring Assembly	W-4537-05
2	Second Check Spring Assembly	W-8393-00
3	First Check Assembly	W-4538-05
5	Disc Plate	E-2538-00
6	Seat Disc	D-4011-00
7	Clapper	F-3226-05
8	First Check Seat Housing	F-3227-05
9	Seat O-ring	D-3507-00
18	First Check Swing Arm	G-3950-05
21	First Check Roller	I-6476-00
22	1/4-20 x 4" HHC Screw	B-2252-00
23	1/4 Lock Nut	C-1900-00
24	1/4-20 x 1.75" HHC Screw	B-2286-00
25	Center Bolt	B-2544-06
26	Positioning Bracket	I-6480-00
27	5/16 Lock Nut	C-2052-00
28	Second Check Assembly	W-7590-05
30	Second Check Roller	I-5866-00
31	Second Check Seat Housing	F-3090-00
32	Retaining Ring	I-3144-00
33	Spring Cap O-ring	D-3506-00
34	1/4-20 x .75" HHC Screw	B-1793-00
35	Hinge Pin	I-5868-06
36	Hinge Bushing	D-3685-00
37	Roller Pin	I-5867-05
38	Disc Plate	E-2379-00
39	Seat Disc	D-3504-00
40	Clapper	G-3769-00
43	Center Bolt O-ring	D-2578-00
48	Spring Cap	S-4877-00