

Model RP-2 Reduced Pressure Principle 3/4" to 1-1/2"

FEATURES

- Serial number needed for parts inquiries
- Replaceable seats
- Springs are not contained
- Detachable RV assembly
- 2" model has bronze body
- 2-1/2" to 10" have fused epoxy coated body

DESCRIPTION

The Cla-Val Model RP-2 Backflow Preventer protects potable water lines against contamination. This assembly combines protection against backflow with exceptionally low head loss characteristics.

The Model RP-2 consists of two independently acting poppet-type 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. This unit must be installed horizontally with the relief valve discharging vertically down.

REPAIR KITS

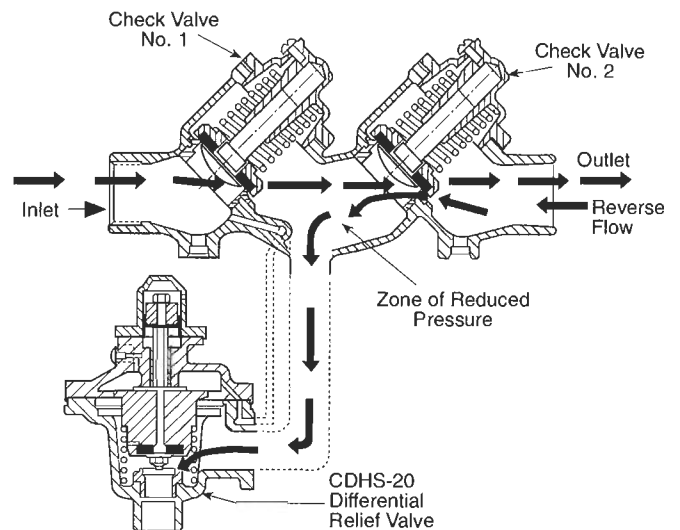
CDHS-20 RV Kit: 3/4" to 1-1/2" RP-2 - 88417-B

OPERATION

Under a normal flow condition, both check valves are open and the pressure differential relief valve is closed. During normal flow and at the cessation of flow, the pressure in the zone between the two check valves is maintained at least 2 psi less than the inlet pressure.

Under a no flow condition, both check valves are closed. When supply pressure drops to 2 psi above the "zone" pressure, then the relief valve discharges as necessary to maintain the "zone" pressure at 2 psi below supply pressure. When supply pressure drops below 2 psi above the "zone" pressure, the relief valve opens fully.

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Cla Val



MODEL RP-2

SPECIFICATIONS

End Detail: ANSI B16.15 (Screwed)
 Maximum working pressure: 175 PSI
 Hydrostatic test pressure: 350 PSI
 Temperature range: up to 110°F
 Fluid: Water

MATERIALS

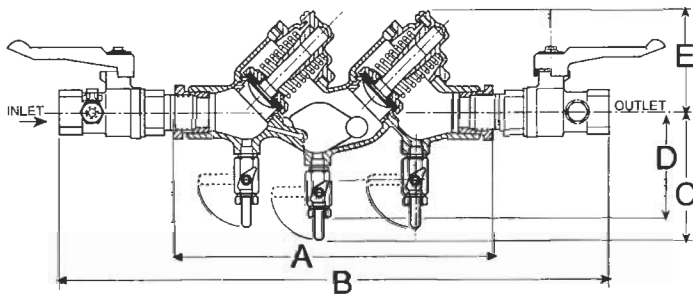
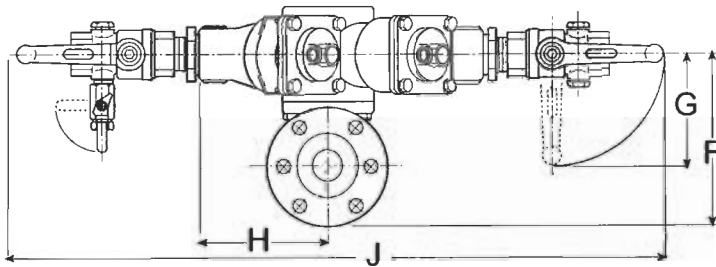
Body, valve & cover: Bronze ASTM B-61
 Main valve trim: Bronze ASTM B-61 & Delrin
 Differential relief valve: Bronze ASTM B-61
 with stainless steel 316 trim

APPROVALS

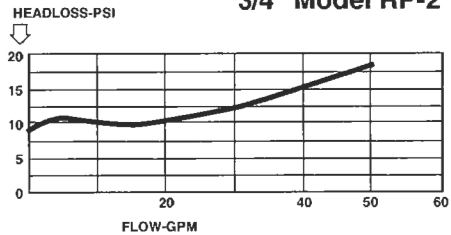
As of 2000, all sizes of this model are USC
 FCCC & HR Approved.

FLOW CURVES

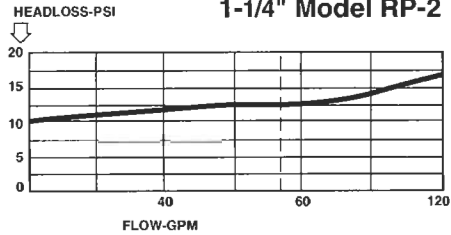
DIMENSIONS



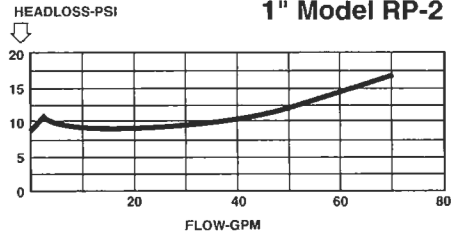
3/4" Model RP-2



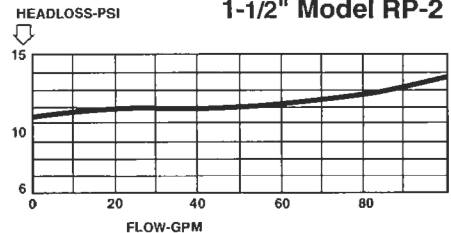
1-1/4" Model RP-2



1" Model RP-2



1-1/2" Model RP-2



DIMENSION TABLE

VALVE SIZE	A	B	C (MAX)	D (MAX)	E (MAX)	F	G	H (TYP)	J (MAX)
3/4"	10.12	17.06	4.06	3.31	3.00	6.00	3.62	4.09	20.62
1"	9.00	16.81	4.06	3.31	3.00	6.00	4.62	4.09	21.75
1 1/4"	13.25	21.25	4.50	3.75	4.00	6.12	4.44	4.81	26.00
1 1/2"	11.75	21.62	4.50	3.75	4.00	6.12	6.00	4.81	28.38

Model RP-2 Repair Kits

Kit 88415F - 3/4" & 1" Sizes

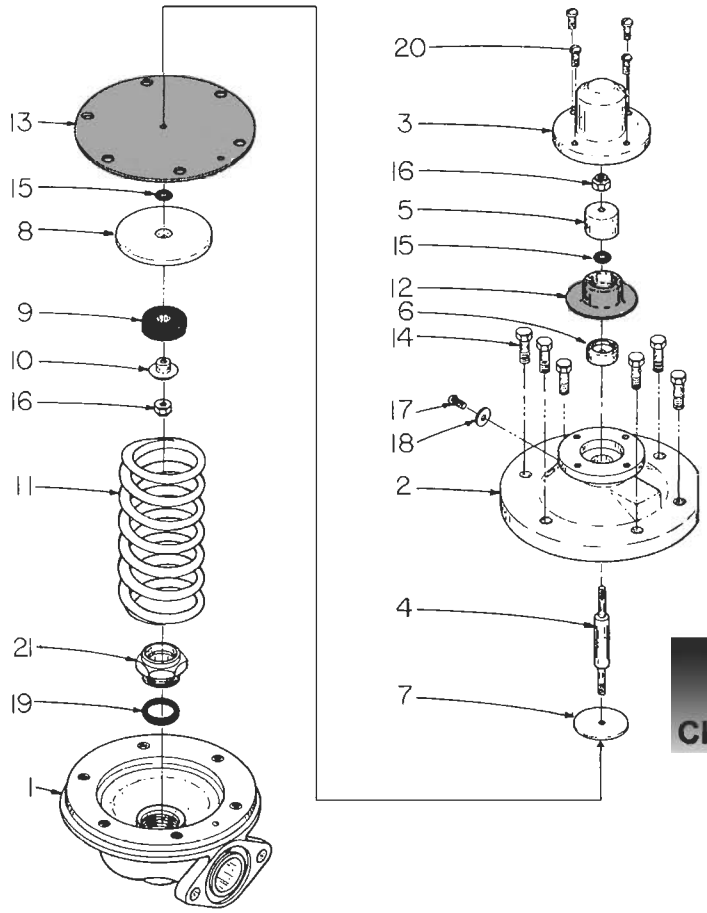
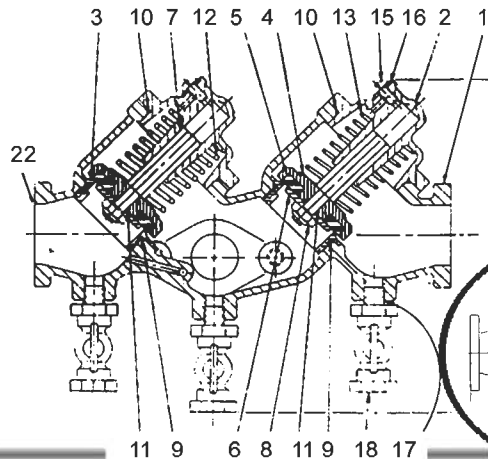
ITEM NO.	PART DESCRIPTION	PART NO.	QUAN. PER UNIT
1	Body	80439	1
2	Cover Assembly	89943	2
3	Seat	80443	2
4	Disc Retainer	80469	2
5	Disc	41705	2
6	Disc Guide	80470	2
7	Stem	80471	2
8	Nut, Self-locking	74891	2
9	O-Ring, Seat	00728	2
10	O-Ring, Cover	00769	2
11	O-Ring, Stem	00710	2
12	Spring, ± 1 Check	75923	1
13	Spring, ± 2 Check	75924	1
14	Bolt, Hex Head	67603-04	8
15	Screw, Round Head	67983-10	2
16	Washer	88403	2
17	Nipple, Close	67585-01	3
18	Cock, Plug Type	67783-01	3
19	Gasket	80780	1
21	Bolt, Hex Head	67604-04	2

Item 12 — Free length approx. 3.5 inches
Item 13 — Free length approx. 4 inches

Kit 88416D - 1-1/4" & 1-1/2" Sizes

ITEM NO.	PART DESCRIPTION	PART NO.	QUAN. PER UNIT
1	Body	83775	1
2	Cover Assembly	88413	2
3	Seat	83777	2
4	Retainer, Disc	83779	2
5	Disc	81895	2
6	Guide, Disc	83780	2
7	Stem	83781	2
8	Nut, Self-locking	60761	2
9	O-Ring, Seat	00772	2
10	O-Ring, Cover	00782	2
11	O-Ring, Stem	00746	2
12	Spring, ± 1 Check	83790	1
13	Spring, ± 2 Check	83791	1
14	Bolt, Hex Head	67604-05	8
15	Screw, Round Head	67983-10	2
16	Washer	88403	2
17	Nipple, Close	67585-01	3
18	Cock, Plug Type	67783-01	3
19	Gasket	80780	1
21	Bolt, Hex Head	67604-04	2
22	O-Ring	00765J	2

Item 12 — Free length approx. 4 inches
Item 13 — Free length approx. 4.5 inches



3/4" CDHS-20 Pressure Differential Relief Valve Kit 88417B Parts List

ITEM NO.	PART DESCRIPTION	PART NO.	QUAN. PER UNIT
1	Body	80328	1
2	Body Assembly, Intermediate	80344	1
3	Cover	80330	1
4	Stem	80332	1
5	Piston	80333	1
6	Plate, Retainer	80334	1
7	Washer, Diaphragm	80336	1
8	Retainer, Disc	80337	1
9	Disc	80338	1
10	Guide, Disc	80339	1
11	Spring	80340	1
12	Bellofram	80342	1
13	Diaphragm	80343	1
14	Screw, Hex Head	67603-05	6
15	O-Ring, Stem	00708	2
16	Nut, Self-locking	80638-141	2
17	Screw, Round Head	67983-06	1
18	Washer	88403	1
19	O-Ring, Seat	00718	1
20	Screw, Fil. Head	67578-20	4
21	Seat	80331	1