

Model RP-1 Reduced Pressure Principle 2" to 10"

FEATURES

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

DESCRIPTION

The Cla-Val Model RP-1 Backflow Preventer protects potable water lines against contamination. This assembly combines protection against backflow with exceptionally low head loss characteristics.

The Model RP-1 consists of two independently acting toggle lever check valves, an automatic pressure differential relief valve located between the two check valves, two shut-off valves and four test cocks.

DIMENSIONS

	2	2-1/2	3	4	6	8	10
A	10	13-1/2	13	15	20	25-3/8	29-3/4
B	5-1/2	6-1/2	6-1/2	8-5/8	9-3/4	9-3/4	15-1/8
C	5-1/4	7-1/4	7-1/4	8-5/16	11	13	15-3/4
D	1-7/8	3-5/16	3-5/16	3-3/8	4-9/16	5-11/16	8

OPERATION

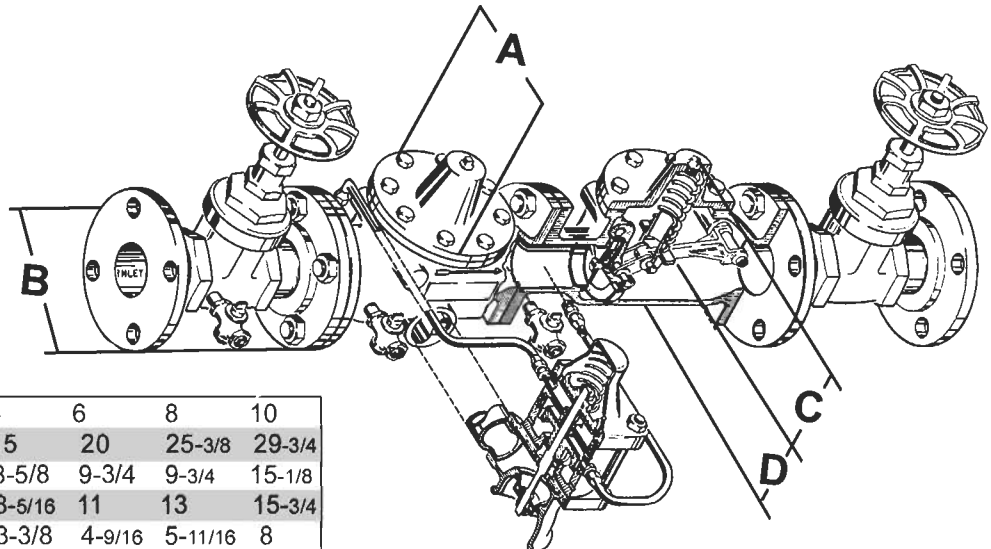
Under a normal flow condition, both check valves are open and the pressure differential relief valve is closed. During normal flow and at the cessation of flow, the pressure in the zone between the two check valves is maintained at least 2 psi less than the supply pressure by the pressure differential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



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.

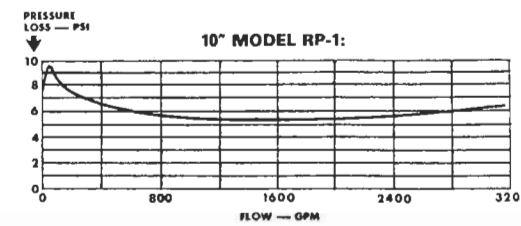
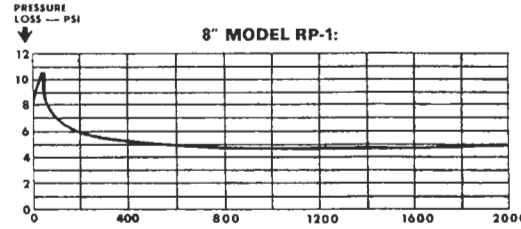
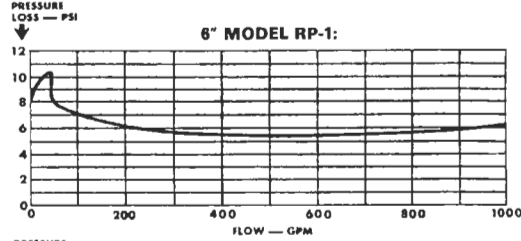
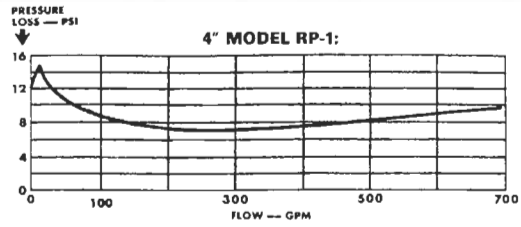
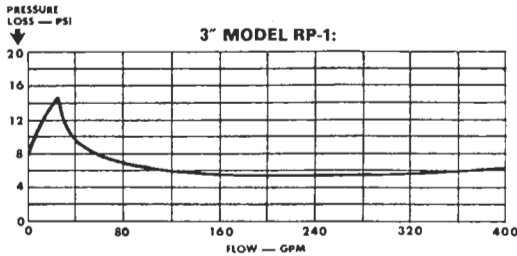
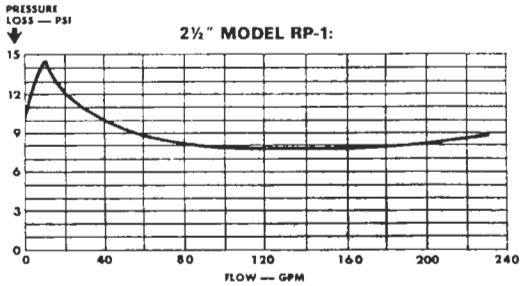
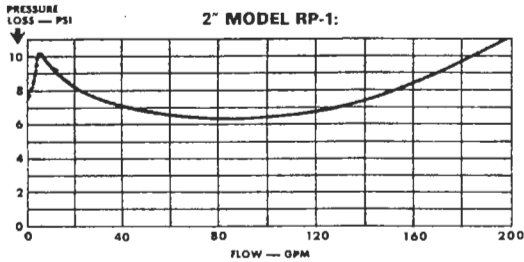
REPAIR KITS - CDHS-20 Relief Valves

- 1-1/4" - Used on 2" & 3" RP-1 88418-K
- 2" - Used on 4" to 10" RP-1 88419-H

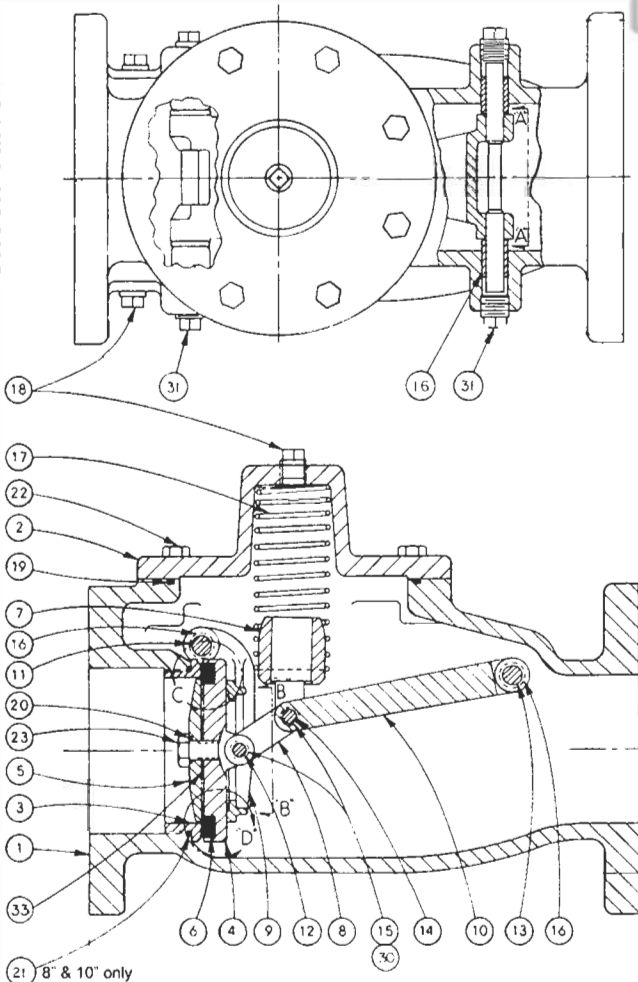


FLOW CURVES

MODEL RP-1

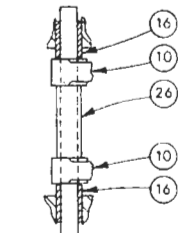


Check Valve

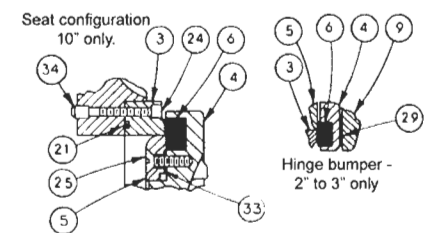
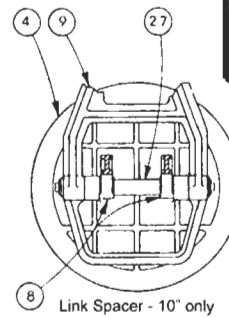


Parts List

PARTS LIST		
Item No.	Description	Remarks
1	Body	
2	Cover	
3	Seat	
4	Disc Retainer	
5	Disc Guide	
6	Disc	
7	Yoke	
8	Link	
9	Hinge	
10	Lever Arm	
11	Hinge Pin	
12	Disc Retainer Pin	
13	Lever Arm Pin	
14	Link Pin	
15	Pin Retainer Ring	
16	Bushing	2" thru 10" only
17	Spring	
18	Plug	
19	Cover Seal	
20	Disc Guide "O" Ring	4" thru 8" only
21	Seat "O" Ring	
22	Cap Screws	
23	Disc Guide Bolt	2"-8" only (2" uses Seal Screw)
24	Seat Screw	10" only
25	Disc Guide Screw	10" only
26	Lever Arm Spacer	8" thru 10" only
27	Link Spacer	10" only
29	Hinge Bumper	2" thru 3" and 6" only
30	Washer	
31	Pipe Plug	
33	Fiber Spacer	
34	Lee Plug	10" only



VIEW A-A
LEVER ARM SPACER
8" & 10" SIZE ONLY



Model RP-1

3081 / 3081EX Check Valve Repair Kits

(Valve is used on all RPs, Ds, 16s, 18s & 27s)

Note: When inquiring about parts, specify serial number of assembly, unit pipe size, and all name plate data.

SIZE	ITEM#
2"	81319G (10826B*)
2-1/2"	81320E
3"	81321E
4"	81322A (10863K*)
6"	81323J (10864H*)
8"	81324G (10865E*)
10"	81325D

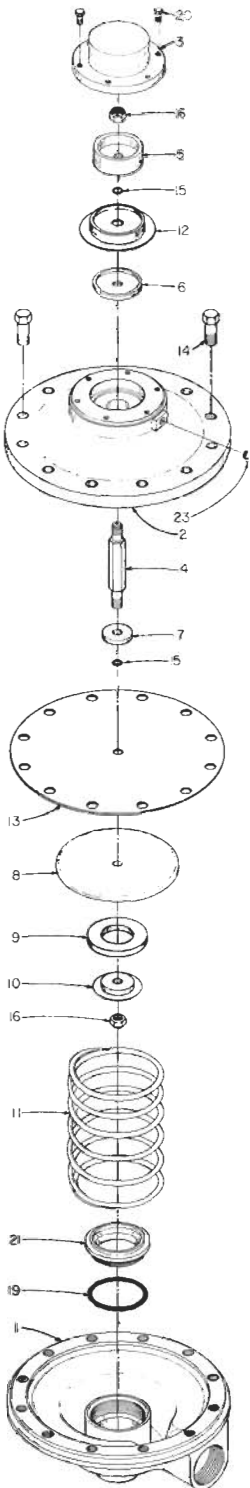
* Order part # in paranthesis if the serial # of valve begins with the following: XA - XL, YA - YL, ZA - ZL, AM - AX, BM - MX, CM - CX, DM - DX, EM - EX, FM - FX, GM - GX

Check Valve Parts Listing

ITEM NO.	DESCRIPTION	STOCK NO. & QTY.	STOCK NO. & QTY.	STOCK NO. & QTY.	STOCK NO. & QTY.	STOCK NO. & QTY.	STOCK NO. & QTY.	STOCK NO. & QTY.
1	BODY No. 1	38561	47501	41571	68309	67775	68310	68320
	CHECK VALVE							
	BODY No. 2	38890	47823	47320	40762	41511	41356	41497
	CHECK VALVE							
2	COVER	37446	41574	41574	38206	39252	40367	41337
3	SEAT No. 1	35702	48540	46557	46340	46341	46846	41271
	SEAT No. 2	35702	47502	41575	38208	39254	40361	41271
4	DISC RETAINER	37448	48542	48522	38209	39256	40363	41274
5	DISC GUIDE No. 1	37838	48541	46556	46498	46554	46936	41272
	DISC GUIDE No. 2	37838	47505	41578	38210	39257	40362	41272
6	DISC	38609	47504	41579	38677	39255	41301	41495
7	YOKE	37450	41584	41584	38214	39261	40368	41336
8	LINK	37452	41577	41577	38212	39259	40330	41266
		(2)	(2)	(2)	(2)	(2)	(2)	(2)
9	HINGE	37447	41572	41572	38211	39258	40360	41275
10	LEVER ARM	37451	41576	41576	38213	39260	40328	41273
11	HINGE PIN	37453	41581	41581	38216	39263	40359	41267
12	DISC RET. PIN	70181	70183	70183	70185	70186	70188	70190
13	LEVER ARM PIN	37453	41581	41581	38216	39263	40364	41268
14	LINK PIN	70181	70182	70182	70184	70186	70187	70189
15	PIN RET. RING	68185-05	68185-08	68185-08	68185-11	68185-11	68185-14	68185-17
		(4)	(4)	(4)	(4)	(4)	(4)	(4)
16	BUSHING	85375	49509	49509	42290	64903	45301	41335
		(4)	(4)	(4)	(4)	(4)	(4)	(4)
17	SPRING No. 1	42084	62359	45981	40941	40339	71297	61721
	SPRING No. 2	C-3148	62360	60031	40942	41512	41368	41320
19	COVER SEAL	37485	00837	00837	00850	00854	00863	00923
20	"O" RING (BOLT)				00714	00716	00718	
21	"O" RING (SEAT)	1072-	00785	00826	00792	00850	1072-	00865
22	COVER BOLT	67605-04	67606-02	67606-02	67607-28	67608-22	67608-22	67609-22
		(8)	(8)	(8)	(8)	(8)	(12)	(12)
23	DISC GUIDE BOLT No. 1	67985	67606-16	67607-24	67616-11	67608-21	67609-21	
	DISC GUIDE BOLT No. 2	67985	67606-16	67607-24	67616-11	67608-21	67609-21	
24	SEAT SCREW No. 1							67954-21 (10)
	SEAT SCREW No. 2							67954-21 (10)
25	DISC GUIDE SCREW							67972-24 (32)
26	LEVER ARM SPACER						45997	60648
27	LINK SPACER							60647
29	HINGE BUMPER	42348	42348	42348		93343		
		(2)	(4)	(4)				
30	WASHER	68124-02	68124-03	68124-03	68124-04	68124-04	68124-05	68124-06
		(4)	(4)	(4)	(4)	(4)	(4)	(4)
32	SPACE WASHER	65551						
34	LEE PLUG No. 1							65155 (10)
33	FIBER SPACER	88400	88401	88402	88402	88436	88437	88400

CDHS-20 Pressure Differential Relief Valves

1-1/4"



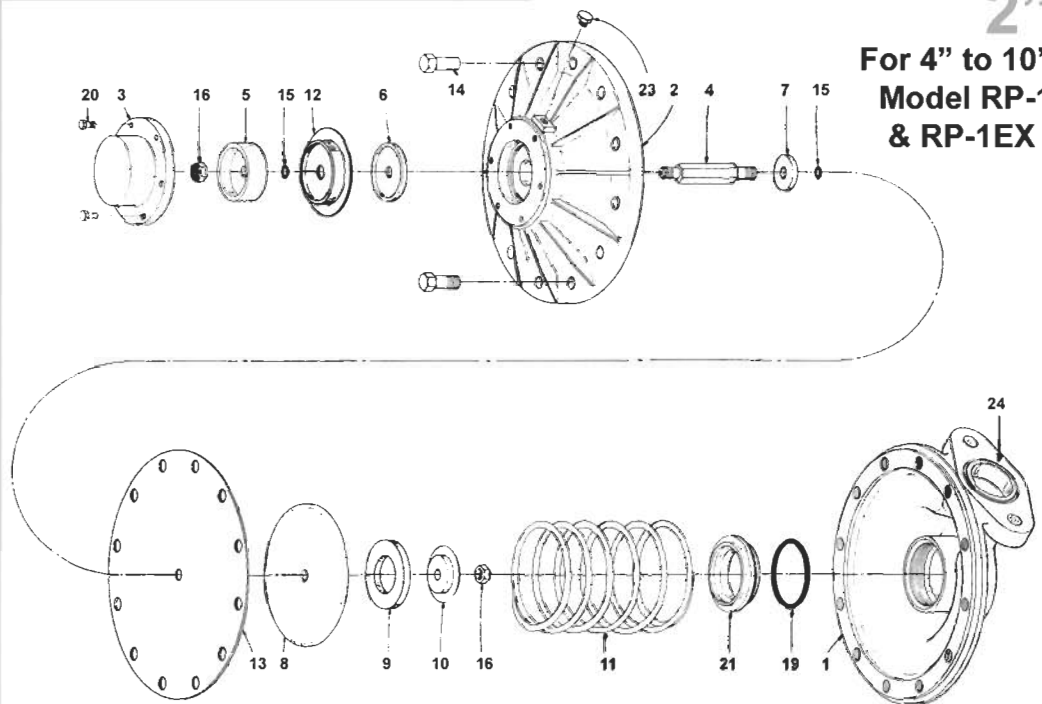
For 2" & 3"
Model RP-1 &
RP-1EX

KIT 88418K

ITEM NO.	DESCRIPTION	STOCK NO. & QTY.
1	Body	74415-001
2	Intermediate Body	74424-006
3	Cover	74421-002
4	Stem	74486-002
5	Piston	74420-004
6	Retainer Plate	74423-008
7	Diaphragm Washer	74426-001
8	Disc Retainer	74425-003
9	Disc	74422-000
10	Disc Guide	74428-008
11	Spring	74427-009
12	Bellofram	74428-007
13	Diaphragm	74428-007
14	Hex Head Screw	67625-048 (8)
15	Stem O-Ring	00710-004 (2)
16	Self Locking Nut	80638-133
17	Round Head Screw	
18	Washer	
19	Seat O-Ring	00729-004
20	Fill Head Screw	67573-203 (6)
21	Seat	76103-700
22	Gasket	
23	Pipe Plug	67847-012

KIT 88419H

ITEM NO.	DESCRIPTION	STOCK NO. & QTY.
1	Body	75376-004
2	Intermediate Body	79059-002
3	Cover	75393-000
4	Stem	75378-000
5	Piston	75392-002
6	Retainer Plate	75395-005
7	Diaphragm Washer	75397-001
8	Disc Retainer	75396-003
9	Disc	83717-009
10	Disc Guide	75390-006
11	Spring	75398-009
12	Bellofram	75390-005
13	Diaphragm	75390-007
14	Hex Head Screw	67626-038 (12)
15	Stem O-Ring	00712-000 (2)
16	Self Locking Nut	80638-042
17	Round Head Screw	
18	Washer	
19	Seat O-Ring	00817-003
20	Fill Head Screw	67603-043 (6)
21	Seat	77360-000
22	Gasket	
23	Pipe Plug	67847-020
24	"O" Ring	008190



2"
For 4" to 10"
Model RP-1
& RP-1EX

American Backflow Specialties

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