

MODEL 150-RP



24000 Series Reduced Pressure Backflow Preventer 3/4" to 2"

APPLICATION AND DESCRIPTION

The 24000 Series Reduced Pressure device prevents backflow of water in high hazard applications. It consists of two spring loaded check valves with a differential pressure valve situated between the check valves. These valves are used in irrigation systems, water service to industrial plants, hospitals, morgues, mortuaries, chemical plants, wells used for chemical or fertilizer injection, and other toxic applications.

FEATURES AND BENEFITS

- Certification by USC Foundation for Cross Connection Control and Hydraulic Research. ASSE, AWWA, IAPMO, and City of New York.
- Optional replaceable brass valve seats for improved serviceability.
- Spring loaded Y check valves reduce friction loss.
- All internal parts are easily serviceable without removing the valve body.
- Internal sensing passages for relief valve, eliminating the damage that occurs to external tubing.
- Pressure rated to 175 psi and hydrostatically tested to 350 psi.
- Temperature rated to 180 degrees F.
- Corrosion resistant internal parts.
- All test cocks are blowout resistant.

OPTIONS

- Without ball valves -NBV (/60)
- BSPT without ball valves -BSPT-NBV (/55)
- Replaceable brass seats -RS (/25)

PERFORMANCE

CAT. NO.	MODEL NO.	SIZE NPT	FLOW IN GPM														
			5	10	15	20	30	40	50	60	70	80	100	120	150	170	180
24000	075-RP	3/4"	10.2	9.1	9.1	9.2	11.6	--	--	--	--	--	--	--	--	--	--
24001	100-RP	1"	--	9.1	9.0	9.0	9.2	10.0	11.4	13.7	--	--	--	--	--	--	--
24002	125-RP	1 1/2"	--	--	9.0	9.0	9.1	9.3	9.5	10.1	10.4	12.4	--	--	--	--	--
24003	150-RP	1 1/2"	--	--	--	--	9.1	9.0	9.0	9.0	9.0	9.2	10.0	11.6	--	--	--
24004	200-RP	2"	--	--	--	--	--	9.0	9.0	9.0	9.0	9.1	9.1	9.7	11.3	12.8	16.0

HOW TO SPECIFY

1 2 5 - R P - R S

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SIZE TYPE OPTION

This specifies a 1 1/4" reduced pressure backflow preventer with replaceable seats.



MODEL DESCRIPTIONS

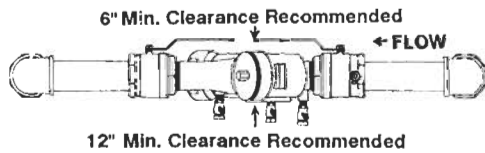
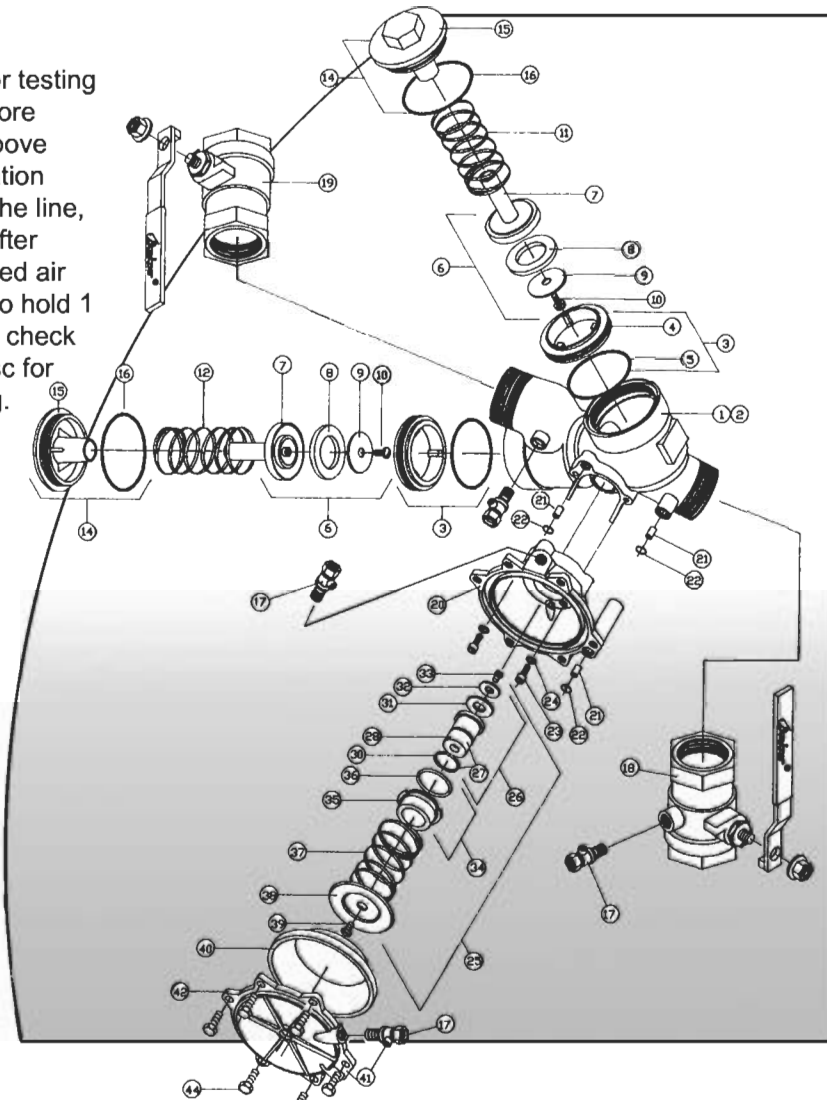
CATALOG NO.	MODEL NO.	SIZE NPT	DIMENSIONS - inches		
			Height	Width	Length
24000	075-RP	3/4"	7 3/8"	4"	12 1/4"
24001	100-RP	1"	7 3/8"	4"	12 1/4"
24002	125-RP	1 1/4"	9 1/4"	5 1/2"	17 1/4"
24003	150-RP	1 1/2"	9 1/4"	5 1/2"	17 1/4"
24004	200-RP	2"	9 1/4"	5 1/2"	18 1/2"

MATERIALS

Body: cast brass
Internal assemblies: engineered polymer check valves
Guides: engineered polymer
Springs: stainless steel
Rubber seats: Buna-A or EPDM

INSTALLATION

Assembly must be installed where accessible for testing and maintenance. Flush pipeline thoroughly before installation. Assembly should be installed 12" above grade (30" max). Consult local codes for installation requirements. When threading the device onto the line, place wrench only on the ball valve hex ends. After install, open the inlet ball valve to fill device. Bleed air from unit via the test cocks. If check valve fails to hold 1 PSI, close ball valves, bleed test cocks, remove check valve bonnet and check the seat and/or seat disc for fouling. Device must be protected from freezing.



SERVICE KITS

	3/4"	1"	1-1/4"	1-1/2"	2"
Check Valve Rubber Kit (#8 & 16)	520143	520143	520144	520144	520144
Relief Valve Repair Kit (#22-3, 24-2, 30, 31, 36, & 40)	520149	520149	520150	520150	520150
Check Valve Kit (#6-2, 16-2, 11, & 12)	520151	520151	520152	520152	520152
Ring Seal Kit (#3)*	520147	520147	520148	520148	520148
Relief Valve Kit (#21-3, 22-3, 24-2, 25, & 40)	520153	520153	520154	520154	520154

Commercially Available Parts for Series 24000 Valves

ITEM	DESCRIPTION	MATERIAL	3/4"	1"	1 1/4"	1 1/2"	2"
5	O-Ring	BUNA-N	AS568-127	AS568-127	AS568-144	AS568-144	AS568-144
10	Screw	St. Steel	1/4-20 x 3/8" Truss Head	1/4-20 x 3/8" Truss Head	1/4-20 x 3/8" Truss Head	1/4-20 x 3/8" Truss Head	1/4-20 x 3/8" Truss Head
16	O-Ring	BUNA-N	AS568-226	AS568-226	AS568-236	AS568-236	AS568-236
22	O-Ring	BUNA-N	AS568-108	AS568-108	AS568-108	AS568-108	AS568-108
23	Capscrew	St. Steel	1/4-20 x 5/8" Allen Head	1/4-20 x 5/8" Allen Head	5/16-18 x 3/4" Allen Head	5/16-18 x 3/4" Allen Head	5/16-18 x 3/4" Allen Head
30	O-Ring	BUNA-N	AS568-113	AS568-113	AS568-120	AS568-120	AS568-120
33	Screw	St. Steel	1/4-20 x 3/8" Truss Head	1/4-20 x 3/8" Truss Head	1/4-20 x 3/8" Truss Head	1/4-20 x 3/8" Truss Head	1/4-20 x 3/8" Truss Head
36	O-Ring	BUNA-N	AS568-022	AS568-022	AS568-127	AS568-127	AS568-127
39	Screw	St. Steel	1/4-20 x 5/8" Slotted, Counter-sunk Head	1/4-20 x 5/8" Slotted, Counter-sunk Head	1/4-20 x 5/8" Slotted, Counter-sunk Head	1/4-20 x 5/8" Slotted, Counter-sunk Head	1/4-20 x 5/8" Slotted, Counter-sunk Head
44	Bolt	St. Steel	5/16-18 x 3/4" Hex Head	5/16-18 x 3/4" Hex Head	3/8-16 x 7/8" Hex Head	3/8-16 x 7/8" Hex Head	3/8-16 x 7/8" Hex Head

American Backflow Specialties

www.americanbackflow.com

(800) 66-BKFLO

(619) 527-2525

Fax: (619) 527-2527

RP Series 24000 Replacement Parts



ITEM	DESCRIPTION	QTY.	¾" 24000	1" 24001	1¼" 24002	1½" 24003	2" 24004
1	Body Assembly, Check Valve - Includes:	1	510682	510686	510645	510644	510681
2	Body	1	501372	501373	501492	501414	501371
3	Replaceable Ring Seal Assembly*	2	510687	510687	510683	510683	510683
4	Seat, Replaceable	1	501383	501383	501374	501374	501374
5	Seal, O-ring	1	630130	630130	630126	630126	630126
6	Poppet Seat Assembly, - Includes:	2	510689	510689	510684	510684	510684
7	Poppet	1	501482	501482	501377	501377	501377
8	Seat Disc	1	501384	501384	501469	501469	501469
9	Washer	1	501496	501496	501486	501486	501486
10	Screw	1	602093	602093	602093	602093	602093
11	Spring, Upstream	1	501410	501410	501437	501437	501437
12	Spring, Downstream	1	501448	501448	501436	501436	501436
14	Bonnet Assembly, - Includes:	2	510725	510725	510685	510685	510685
15	Bonnet	2	501378	501378	501375	501375	501375
16	Seal, O-ring	2	630127	630127	630019	630019	630019
17	Test Cock	4	611901	611901	611900	611900	611900
18	Valve Assembly, Ball Upstream	1	510648	510726	510755	510757	510759
19	Valve Assembly, Ball Downstream	1	510649	510727	510756	510758	510760
29	Body Assembly, Relief Valve - Includes:	1	510728	510728	510690	510690	510690
20	Body, Relief Valve	1	501349	501349	501379	501379	501379
21	Quil	3	501430	501430	501430	501430	501430
22	Seal, O-ring	3	630114	630114	630114	630114	630114
23	Screw, Socket Cap	2	602082	602082	602066	602066	602066
24	Washer, Nylon	2	641207	641207	641206	641206	641206
25	Relief valve Assembly, - Includes:	1	510729	510729	510691	510691	510691
26	Piston Seat Assembly, - Includes:	1	510732	510732	510692	510692	510692
27	Piston Seal Assembly	1	510733	510733	510693	510693	510693
28	Piston	1	501480	501480	501438	501438	501438
30	Seal, O-ring	1	630136	630136	630001	630001	630001
31	Seat Disc	1	501464	501464	501439	501439	501439
32	Washer	1	—	—	501440	501440	501440
33	Screw	1	602093	602093	602093	602093	602093
34	Cylinder Assembly	1	510730	510730	510694	510694	510694
35	Cylinder	1	501506	501506	501441	501441	501441
36	Seal, O-ring	1	630129	630129	630130	630130	630130
37	Spring	1	501507	501507	501442	501442	501442
38	Button	1	501487	501487	501443	501443	501443
39	Screw	1	602078	602078	602078	602078	602078
40	Diaphragm	1	501509	501509	501444	501444	501444
41	Bonnet Assembly, Relief Valve – Includes:	1	501731	501731	501695	501695	501695
42	Bonnet	1	501510	501510	501380	501380	501380
44	Screw, Cap	6	700018	700018	700117	700117	700117



* Applies to units with optional replaceable bronze seats.