

Trapped Pressure Unloader



FEATURES

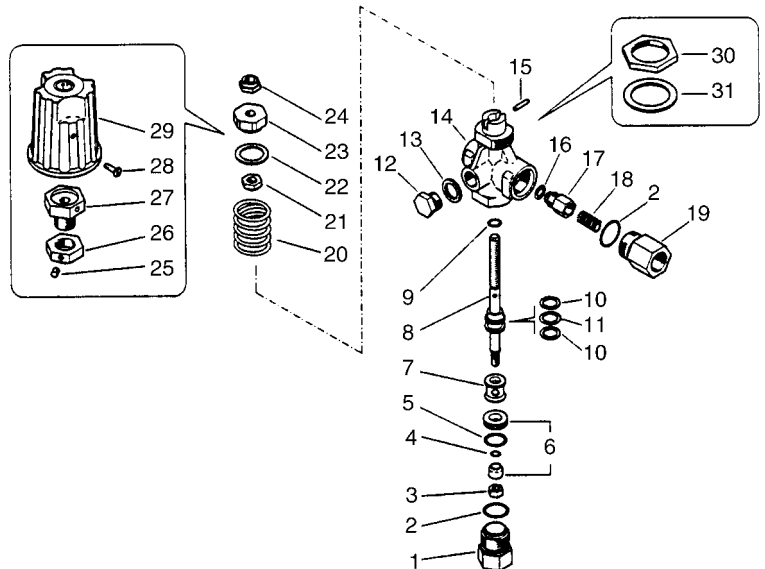
- Extremely durable construction in stainless steel and brass
- Easy Start-up due to low re-arm pressure (27% of operating pressure)
- Hexagonal discharge check valve to prevent binding

SPECIFICATIONS

Part Number:	YVB9K
Maximum Volume	8.0 GPM
Maximum Discharge Pressure	3650 PSI
Maximum Temperature	195° F
Port Sizes:	
Inlet	3/8"-18 NPT- F
Outlet	3/8"-18 NPT- F
Bypass	3/8"-18 NPT- F
Dimensions	5.8" x 3.3" x 2.3"
Weight	1.6 lbs.
Materials	Brass, Stainless Steel, Plastic, Buna-N

PARTS LIST

Item	Part Number	Description	Kit	Qty
1.	Y60220431	Fitting, Bypass, 3/8"-18 NPT		1
2.	Y10307002	O-Ring, 1.78 x 18.77	*	2
3.	Y11454000	Nut, M6, SS		1
4.	Y10300101	O-Ring, 1 x 4mm	*	1
5.	Y10306601	O-Ring, 1.78 x 15.6	*	1
6.	Y60222120	Seat and Retainer	*	1
7.	Y60221031	Spacer		1
8.	Y60220251	Piston, VB9		1
9.	Y10402100	Antri-Extrusion Ring	*	2
10.	Y10317500	O-Ring, 2.62 x 10.77	*	1
11.	Y10317008	O-Ring, 2.62 x 7.6	*	1
12.	Y28001331	Plug, 1/4"-18 NPT, Brass		1
13.	Y14391100	Washer, Ø13 x 5		1
14.	Y60220135	Body, VB9		1
15.	Y15102100	Pin, 3 x 14 mm, Steel		1
16.	Y10321300	O-Ring, 3 x 6mm	*	1
17.	Y60005231	Check Valve		1
18.	Y60005351	Spring, 4.2mm		1
19.	Y60005931	Fitting, Outlet, 3/8"-18 NPT, Brass		1
20.	Y60220361	Spring		1
21.	Y60220731	Lock, Piston		1
22.	Y60220884	Washer		1
23.	Y60220931	Nut, Adjusting, Brass		1
24.	Y11458910	Nut, Locking Ring		1
25.	Y16210500	Screw		1
26.	Y60225231	Guide, Spring		1
27.	Y60225331	Nipple, Adjusting		1
28.	Y16183800	Screw, M4		1
29.	Y60225184	Cap, Plastic		1
30.	Y60225431	Ring, Brass		1
31.	Y14358200	Washer, Steel		1
*	YKITVB9	Repair Kit		



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APPLICATION

This product is to be used with clean, fresh water. For different or corrosive liquids, contact GP Companies Inc. technical support department. With not-clean liquids, appropriate filtration should be installed.

Select the valve based on the nominal operating rating: system rated pressure, max flow and max temperature.

Under no circumstances should the pressure of the system exceed the **maximum** rated pressure of any component.

When installed on hot water cleaners, this valve is to be installed before the boiler.

INSTALLATION

On a system that produces hot water, consider installing safety devices which limit the accidental increase of the fluid temperature.

Always install a safety valve to protect the operator and system.

Choose a correct nozzle size, able to discharge regularly, on bypass, at least 5% of the total flow of the system, in order to achieve a constant pressure, and avoid troublesome pressure spikes.

When the nozzle wears, the pressure drops. After installing a new nozzle, re-adjust the system to the original pressure setting.

PROBLEMS & SOLUTIONS

PROBLEMS	PROBABLE CAUSES	SOLUTIONS
Unloader cycles	Damaged seat or cone Fitting leaking Restricted bypass	Replace Check and renew Clean or adapt
Unloader does not come up to pressure	Unloader not properly sized Foreign materials between seat and shutter Piston o-ring worn out Nozzle worn out	Select a proper spring or a new unloader Clean the seat Replace Replace
Pressure peaks	Spring totally compressed Excessive flow in bypass There is not a min. 5% of total flow in bypass	Loosen and change nozzle size Select another unloader Adjust size of piping Adjust
Unloader does not bypass at low pressure	Check valve jammed Check valve o-ring worn out Foreign materials on check valve	Clean or replace Replace Clean

DIMENSIONAL DRAWING

