GENERAL PUMP <u>A member of the Interpump Group</u>





FEATURES

- Prompt and effective damping action against pressure spikes
- · Tamper-proof cap to prevent pressure adjustments
- Solid Stainless Steel housing
- · Stainless steel and brass internal components
- Easy Maintenance

NOTE: Valves are not set. Contact GP Customer Service for per-set valves

SPECIFICATIONS

Part Number		YVS4500SS
Max. Temperature		195° F¹
Max. Volume		21.0 GPM
Pressure		4,500 PSI
Min. Adjustable Pressure		440 PSI
Port Size	Inlet:	1/2" G-F
	Outlet:	1/2" G-F
	Bypass:	1/2" G-F
Dimensions		5.58" x 1.57" x 3.56"
Weight		2.03 lbs.
Materials		Brass, Stainless Steel

 This unloader has been designed to operate at a continuous water temperature of 140° F. It can be operated for short periods at a maximum temperature of 195° F.

DIMENSIONS







Ref 301168 Rev B 11-24



Π

PRESSURE REDUCING VALV

GENERAL PUMP A member of the Interpump Group

YVS4500SS Pressure Reducing Valve

PARTS LIST

	22	Pos.	Part #	Description	Qty.
		1	Y60540155	Housing, 1/2F BSP	
		2	Y10403617	Back-up Ring, 14 x 2 x 17 x 1.5 mm	
	23	3	Y10306010	O-ring, 1.78 x 12.42	
(14)	24	4	Y60540451	Seat, 9.2 x 17 x 7.5 mm	
		5	Y60540351	Shutter Pin	
	21	6	Y10403900	Back-up Ring, 15.7 x 18.5 x 1.5 mm	
		7	Y10306610	O-ring, 1.78 x 15.6	
		8	Y60541051	Lower Spacer Ring, 8 x 21.4 x 11.5 mm	
O		9	Y10200800	Stem Seal, 8 x 13 x 2.2 mm	
		10	Y10307010	O-ring, 1.78 x 18.77 mm	
		11	Y10405700	Back-up Ring, 18.7 x 21.5 1.5 mm	
9		12	Y60540951	Upper Spacer Ring, 8.3 x 21.5 x 17 mm	
	(16)	13	Y10201300	Stem Seal, 12 x 17 x 2.2 mm	
		14	Y60540851	Piston	
		15	Y60540751	Piston Holder	
5		16	Y14744310	Ball, 11/32"	
		17	Y60540631	Spring Rest Pin	
		18	Y60097561	Spring, 4.2 x 19.7 x 42 mm	
		19	Y16210000	Set Screw, M4 x 4 mm	
2	7	20	Y60181431	Ring Nut, M27 x 1	
		21	Y60172731	Valve Regulating Bolt	
		22	Y60141841	Knob	
		23	Y60511431	Pin, 4 mm	
and a company		24	Y13121403	Lead Seal, 14 mm	
				·	•

INSTRUCTIONS

SELECTION

This product is to be used with clean water which can contain the addition of normal detergents. For use involving different or corrosive liquids, contact the General Pump Customer Service Department. Choose a relief valve in line with the specifications of normal running (rated pressure max flow and max temperature). In any case, **DO NOT** exceed the pressure rating of the valve.

INSTALLATION

On a system that produces hot water, this valve must be fitted upstream of the heat generator. On a system that generates hot water, it is advisable to fit in accessories that limit the accidental increase of fluid temperature. If the valve is combined with unloader valves it must be installed downstream from the valve in the channel that remains under pressure at gun closure or, in a cold water system, directly to the pump manifold.

DISCHARGE SYSTEM AND WATER ADDUCTION

It is advised to remove the bypass discharge or channel into a tank. If the pump is fed directly from the outside, it would be recommended to install pressure reducer, before the pump itself, in order to avoid dangerous pressure spikes which can damage fittings and inlet valves. **OPERATIONS**

The valve adjusts the maximum pressure of the system by means of a piston which operates on a cone that, when normally positioned, shuts the bypass.

PRESSURE ADJUSTMENT/SETTING

The setting has to be made in such a way that the pressure setting is not superior to the maximum working pressure of the system and its accessories; in this manner the complete apparatus is protected by the numerous pressure increases which occur at gun closure or in case of malfunction. When the desired pressure is reached tighten the nut (pos. 17) with the screw (pos. 16) and a drop of paint to emphasize possible tampering or loosening.



TROUBLESHOOTING

PROBLEMS	PROBABLE CAUSES	SOLUTIONS	
Frequent Unloader Cycles	Damaged check valve o-ring Leaking connections Restricted bypass	Replace Check and renew Clean or adapt	
Valve does not come up to pres- sure	Unloader not properly sized Piston O-rings worn out Debris between seat and shutter Worn nozzle	Change spring or type of valve Replace Clean the seat Replace	
Excessive pressure spike	There is not a minimum of 5% flow in bypass Excessive flow in bypass Spring totally compressed	Reset Change type of valve or adjust passages Loosen knob and change nozzle	
Water Leaking for Bypass	Jammed check valve Check valve O-ring worn Debris in check valve	Clean or replace Replace Clean	

MAINTENANCE

Maintenance must be carried out by Qualified Technicians.

STANDARD: Every 400 working hours (10,000 cycles), check and lubricate the seals with water resistant grease.

SPECIAL: Every 800 working hours (20,000 cycles), check the wear of the seals and internal parts and, if necessary, replace with original General Pump parts taking care during installation and to lubricate with water resistant grease.

The manufacturer is not responsible for damage as a result of incorrect fitting and maintenance.

WARNING: High Pressure Systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices properly could result in personal injury or damage to pump or property. GP does not assume any liability or responsibility for the operation of the user's high pressure system.



WARNING: This product can expose you to chemicals including lead, which is know to the state of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov



Ref 301168 Rev B 11-24