

**FEATURES**

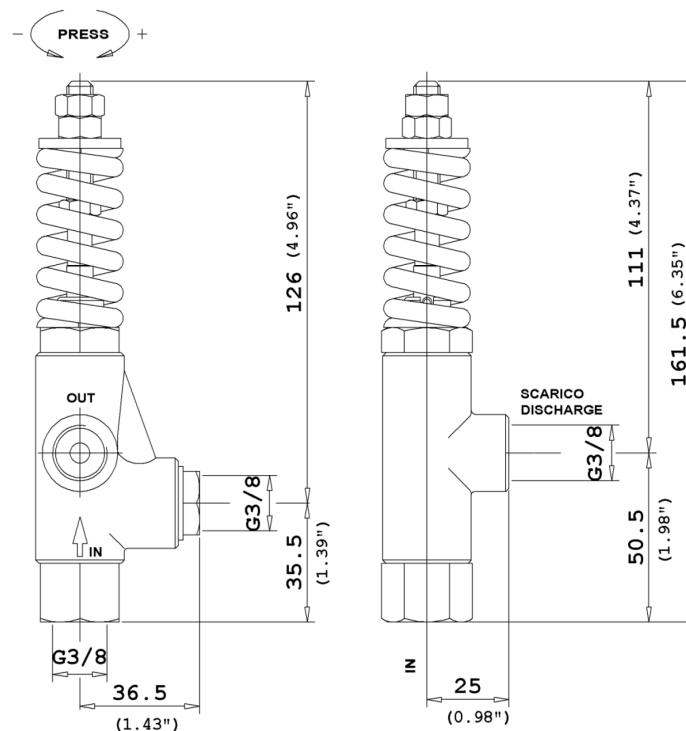
- Prompt and effective damping action against pressure spikes
- Safety and pressure regulating valve
- Sturdy construction in Stainless Steel and brass
- Multiple connections for quick installation
- Easy Maintenance

*General Pump recommends using a safety relief device in conjunction with this unloader valve when installed on a positive displacement pump. General Pump is not liable and assumes no responsibility when used in a customer's high pressure system.*

**SPECIFICATIONS**

Part Number	YVRP15W	
Max. Temperature	194° F <sup>1</sup>	
Max. Volume	7.9 GPM	
Rated Pressure	1,450 PSI	
Min. Adjustable Pressure	145 PSI	
Pressure Increase	261 PSI <sup>2</sup>	
Port Size	Inlet:	3/8" NPT-F
	Bypass:	3/8" NPT-F
Dimensions	6.35" x 1.43" x 1.39"	
Weight	1.6 lbs.	
Materials	Brass, Stainless Steel	

1. 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.
2. This is the pressure reduction necessary in comparison to the set up, in order that the valve brings back pressure in the circuit (% figures of the pressure set up).

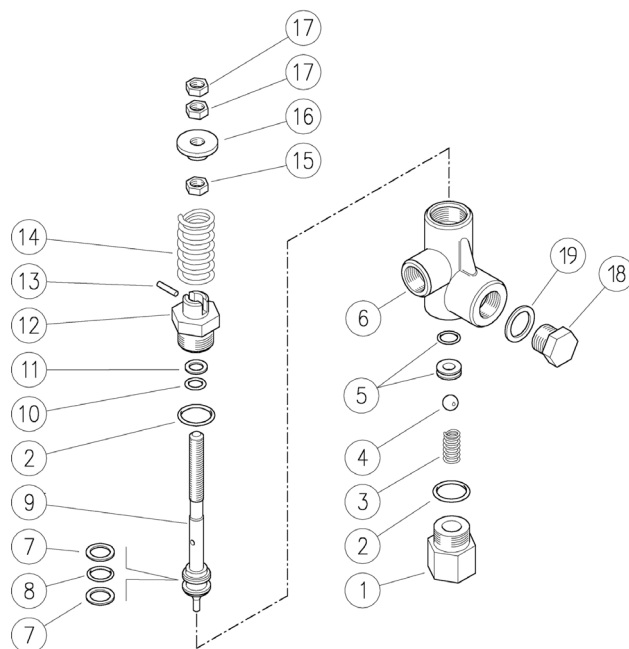
**DIMENSIONS**

General Pump  
is a member of  
the Interpump Group

Ref 310220 Rev A  
02-21



## PARTS LIST



Pos.	Part #	Description	QTY
1	Y60003031	Inlet Coupler, 3/8 NPT-F	1
2*	90359400	O-ring, 1.78x17.17mm	2
3	Y60001551	Spring, 1.4x10x16mm, SST	1
4*	Y14746100	Ball, 13/32, SST	1
5*	Y60025920	Seat, 8mm + O-ring, 1.78mm	1
6	Y60025235	Housing, 3/8 NPT-F, brass	1
7*	Y10402100	Back-up ring, open, 11.5x15.9x1.2mm	2
8*	701111	O-ring, 2.62x10.77mm	1
9	Y60006123	Valve piston, SST	1
10*	Y10317000	O-ring, 2.62x7.6mm	1
11*	Y10402000	Back-up ring, 8x12.6x1.2mm	1

Pos.	Part #	Description	QTY
12	Y60006431	Piston holder, brass	1
13	Y15102100	Roll pin, 3x14mm, SST	1
14	Y60001261	Spring, 5x25x50mm, white	1
15	Y11457631	Hex. nut, M8, brass	1
16	Y60001131	Spring holder ring, brass	1
17	Y11457400	Hex nut, M8	2
18	Y60002531	Grub screw, brass, 3/8 NPT-M	1
19	Y14404200	Washer, 16.7x22x1.5mm, alum.	1
*	Y60005424	Repair kit	

## 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. Appropriate filtration should be installed when using water that may contain any sort of debris. Choose the valve appropriate for the system rated pressure, maximum flow rate and maximum temperature. In any case, the pressure of the machine should not exceed the permissible pressure rate imprinted on the valve. The feed through the lower fitting is possible with a reduced flow rate (see point 1). When in use as pressure regulator, use a nozzle that allows a bypass of at least 5% of the total flow, bearing in mind that a worn out nozzle causes pressure loss. The valve assembled in line with these indications avoids pressure spikes while the machine is in operation.

### INSTALLATION

On a system that produces hot water, this accessory 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. As a SAFETY Valve: in the case when frequently combined with unloader valve and low pressure in the pump, it has to be fitted in the section that remains pressurized when the gun is shut off.

### OPERATIONS

The discharge should be returned to a baffled tank. If, on the contrary, the pump is fed directly from the water mains, it is advisable to install a pressure reducing valve, before the pump, to avoid dangerous pressure spikes which could badly damage manifolds and inlet valves. In case of extended conditions of bypass directed to the inlet side of the pump, it is recommended to install a thermal valve to avoid dangerous water temperature built-up.

### INSTRUCTIONS (cont.)

#### PRESSURE ADJUSTMENT/SETTING

As a SAFETY VALVE: the adjustment has to be made in such a way that its pressure setting is not higher to the system working pressure and its accessories; this prevents numerous pressure increases in hot water systems and static pressure (gun shut off).

As a PRESSURE REGULATOR: adjust the valve when the system is pressurized and the gun open. The operation will be easy and smooth if the proper nozzle is chosen. When rotating the adjustment knob, it has to correspond to a consequent pressure increase; should the pressure stop increasing before reaching the desired value, do not force, but check the correct nozzle size in relation to flow and pressure. On reaching the desired pressure, tighten the nut (po. 15) with a drop of paint in order to prevent any tampering.

**ATTENTION:** the nut (pos. 15) must never be removed or a mechanical safety feature that limits the max pressure will fail, potentially causing serious damage to persons and machine.

### TROUBLESHOOTING

PROBLEMS	PROBABLE CAUSES	SOLUTIONS
Frequent Unloader Cycles	Damaged check valve o-ring Leaking connections Restricted bypass	Replace Check and renew Clean or adapt
Unloader does not come up to pressure	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
Unloader does not bypass at low pressure	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.**