

## Pressure Trapping Unloader w/Adjustable Injector



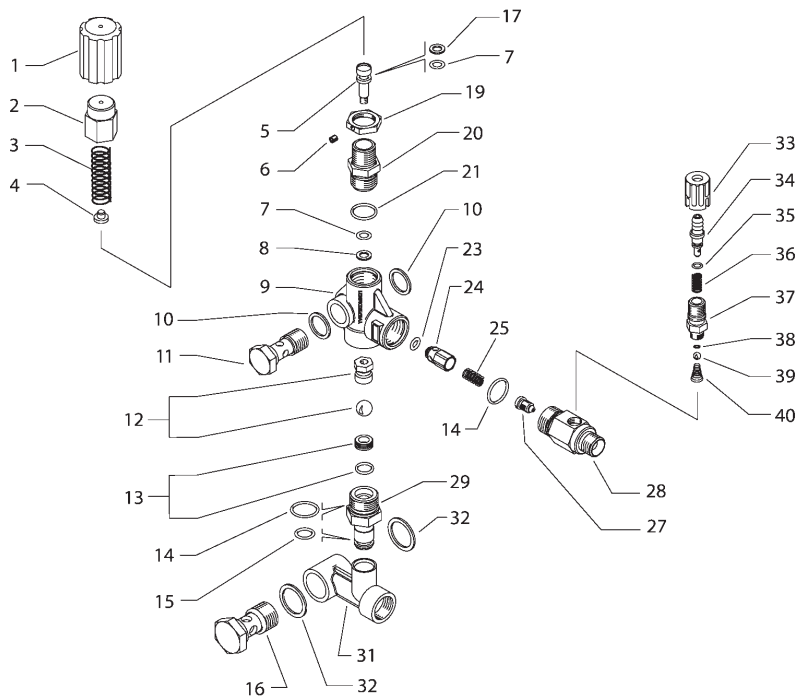
### SPECIFICATIONS

|                     |   |             |
|---------------------|---|-------------|
| Part Number         | YVB75KDMN21                             |             |
| Operating Pressure  | 3200 PSI                                |             |
| Maximum Pressure    | 3650 PSI                                |             |
| Maximum Flow        | 8.0 GPM                                 |             |
| Maximum Temperature | 195°F                                   |             |
| Port Size:          | Inlet                                   | 1/2" BSPP-F |
|                     | Discharge                               | 3/8" BSPP-M |
| Banjo Size:         | Inlet                                   | 1/2" BSPP-M |
|                     | Discharge                               | 3/8" BSPP-M |
| Dimensions          | 3.8" x 1.8" x 5.7"                      |             |
| Weight              | 1.89 lb.                                |             |
| Material            | Brass, Stainless Steel, Plastic, Buna-N |             |

*General Pump recommends using a safety relief device in conjunction with this unloader valve when installed on a positive displacement pump. General Pump assumes no responsibility for this valve when used in a customer's high pressure system.*

### PARTS LIST

| No. | Part No.  | Kit | Description                      | Qty. |
|-----|-----------|-----|----------------------------------|------|
| KIT | Y60071924 | *   | Unloader Repair Kit (Valve Only) | 1    |
| 1.  | Y60031584 |     | Plastic knob                     | 1    |
| 2.  | Y60030431 |     | Brass cap                        | 1    |
| 3.  | Y60031361 |     | White spring                     | 1    |
| 4.  | Y60031061 |     | Spring seat, zincplated          | 1    |
| 5.  | Y60070451 |     | S.S. piston                      | 1    |
| 6.  | Y16210000 |     | Grub screw M4x4                  | 1    |
| 7.  | Y10316900 | *   | O-ring 2.62 x 6.02 mm            | 2    |
| 8.  | Y10402400 | *   | Backup ring 11.6 x 7 mm          | 1    |
| 9.  | Y60078435 |     | Brass valve body                 | 1    |
| 10. | Y14410000 |     | Washer 3/8 Bsp rubber + steel    | 2    |
| 11. | Y60100731 |     | Hollow screw 3/8 Bsp             | 1    |
| 12. | Y60170821 | *   | S.S. shutter M6                  | 1    |
| 13. | Y60025920 | *   | Seat assy                        | 1    |
| 14. | Y10307002 | *   | O-ring 1.78 x 18.77 mm           | 2    |
| 15. | Y10310996 |     | O-ring 2.4 x 10.3 viton          | 1    |
| 16. | Y60100831 |     | Hollow screw 1/2 Bsp             | 1    |
| 17. | Y10402300 | *   | Backup ring 11 x 64 mm           | 1    |
| 19. | Y60101831 |     | Lock nut M18x1                   | 1    |
| 20. | Y60070831 |     | Piston housing                   | 1    |
| 21. | Y10306801 | *   | O-ring 1.78 x 17.17              | 1    |
| 23. | Y10321300 | *   | O-ring 3 x 6 mm                  | 1    |
| 24. | Y60005231 |     | Hex check valve                  | 1    |
| 25. | Y60005351 |     | S.S. spring                      | 1    |
| 27. | Y21021351 |     | Orifice, 2.1mm                   | 1    |
| 28. | Y21026131 |     | Injector body, Bsp3/8MM, brass   | 1    |
| 29. | Y60093131 |     | Seat holder L=30mm               | 1    |
| 31. | Y60078335 |     | Manifold 1/2                     | 1    |
| 32. | Y14410100 |     | Washer 1/2 Bsp rubber + steel    | 2    |
| 33. | Y21017184 |     | Injector cap. plastic            | 1    |
| 34. | Y21015531 |     | Adjustable hose barb             | 1    |
| 35. | Y10304301 |     | O-ring 1.78 x 4.48 viton         | 1    |
| 36. | Y21015851 |     | Spring, sst                      | 1    |
| 37. | Y21017331 |     | Fitting Bsp 1/4                  | 1    |
| 38. | Y10304900 |     | O-ring 1.78 x 5.28 viton         | 1    |
| 39. | Y14742001 |     | 7/32" ball, sst                  | 1    |
| 40. | Y21016051 |     | Spring, conical, sst             | 1    |



# YVB75KDMN21

**GENERAL PUMP** *A member of the Interpump Group*

## Pressure Trapping Unloader w/Adjustable Injector

### 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 check valve o-ring<br>Fitting leaking<br>Restricted bypass   | Replace<br>Check and repair<br>Clean or adapt   |
| Unloader does not come up to pressure    | Unloader not properly sized<br>Piston o-ring worn out<br>Foreign materials among seat and shutter<br>Nozzle worn out | Select a new unloader<br>Replace<br>Clean the seat<br>Replace   |
| Pressure spikes                          | Spring totally compressed.<br>Excessive flow in bypass.<br>There is not a min. 5% of total flow in bypass.           | Loosen unloader adjustment<br>Change unloader<br>Change size of nozzle<br>Adjust unloader and/or replace nozzle |
| Unloader does not bypass at low pressure | Check valve jammed<br>Check valve o-ring worn out<br>Foreign materials on check valve                                | Clean or replace<br>Replace<br>Clean  |

### DIMENSIONAL DRAWING

