

## **K7 UNLOADER VALVE**

| K7.0 | 2.1 - 2.9 GPM @ 0 - 3000 PSI  |
|------|-------------------------------|
| K7.1 | 2.9 - 4.2 GPM @ 0 - 3000 PSI  |
| K7.2 | 4.2 - 6.6 GPM @ 0 - 3000 PSI  |
| K7.3 | 6.6 - 10.8 GPM @ 0 - 3000 PSI |



Features all stainless and brass internal parts. New design reduces sensitivity to entrapped air. No external moving parts or springs.

Unique barb and flow balance design provides gradual pressure build-up when system is closed. Eliminates high pressure in all lines while unit is in bypass mode.

Bypass restrictor eliminates pressure peaks during bypass.

Unique balanced piston design permits precise pressure adjustments.

Minimum 5% bypass required for operation. Simple design for easy maintenance and service. Adjusting knob is optional.

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 for this valve when used in a customer's high pressure system.

| SPECIFIC                      | CATIONS                   |   |   |   |   |
|-------------------------------|---------------------------|---|---|---|---|
| Part Number                   |                           | ZK7.0   | ZK7.1   | ZK7.2   | ZK7.3   |
| Maximum Volume                |                           | 2.1-2.9 GPM   | 2.9-4.2 GPM   | 4.2-6.6 GPM   | 6.6-10.8 GPM  |
| Maximum Discharge<br>Pressure |                           | 0-3000 PSI  | SI 0-3000 PSI 0-3000 PSI                              | 0-3000 PSI  |   |
| Max. Tempe                    | erature                   | 165°F   | 165°F   | 165°F   | 165°F   |
| Port Sizes:                   | Inlet<br>Bypass<br>Outlet | 3/8-19 BSPP - F<br>3/8-19 BSPP - F<br>3/8-19 BSPP - M | 3/8-19 BSPP - F<br>3/8-19 BSPP - F<br>3/8-19 BSPP - M | 3/8-19 BSPP - F<br>3/8-19 BSPP - F<br>3/8-19 BSPP - M | 3/8-19 BSPP - F<br>3/8-19 BSPP - F<br>3/8-19 BSPP - M |
| Dimensions                    | 3                         | 7.50 x 3.75 x 3.50 in.                                |
| Weight                        |                           | 4.5 lb.   | 4.5 lb.   | 4.5 lb.   | 4.5 lb.   |

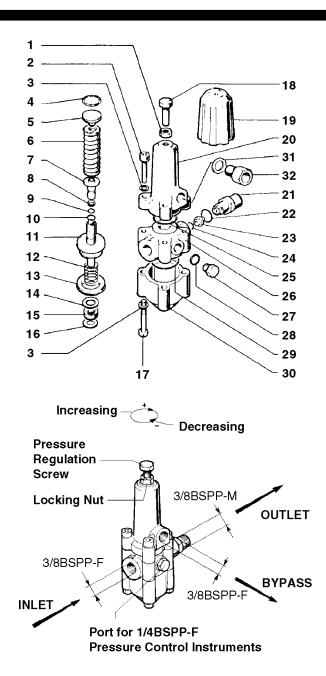




## **PARTS LIST**

| K7 Unloader Valve                           |            |                            |         |      |  |  |  |  |
|---|------------|----------------------------|---------|------|--|--|--|--|
| NO.   | PART NO.   | DESCRIPTION                | KIT NO. | QTY. |  |  |  |  |
| 1.  | 92.2368.00 | Nut                        |         | 1    |  |  |  |  |
| 2.  | 99.3084.00 | Screw                      |         | 4    |  |  |  |  |
| 3.  | 96.7014.00 | Washer                     |         | 8    |  |  |  |  |
| 4.  | 90.3849.00 | O-Ring                     | 70      | 1    |  |  |  |  |
| 5.  | 36.3095.70 | Spring Plate               |         | 1    |  |  |  |  |
| 6.  | 94.7466.00 | Spring                     |         | 1    |  |  |  |  |
| 7.  | 36.3094.66 | Seat Valve                 | 70      | 1    |  |  |  |  |
| 8.  | 90.5052.00 | Anti-Extrusion Ring        | 70      | 1    |  |  |  |  |
| 9.  | 90.3820.00 | O-Ring                     | 70      | 1    |  |  |  |  |
| 10.   | 90.3582.00 | O-Ring                     | 70      | 1    |  |  |  |  |
| 11.   | 36.3097.02 | Piston Assembly            | 70      | 1    |  |  |  |  |
| 12.   | 94.7464.00 | Spring                     | 70      | 1    |  |  |  |  |
| 13.   | 90.2766.00 | Packing                    | 70      | 1    |  |  |  |  |
| 14.   | 96.7215.00 | Washer                     |         | 1    |  |  |  |  |
| 15.   | 90.2565.00 | Packing                    | 70      | 1    |  |  |  |  |
| 16.   | 90.5063.00 | Anti-Extrusion Ring        | 70      | 1    |  |  |  |  |
| 17.   | 99.3127.00 | Screw                      |         | 4    |  |  |  |  |
| 18.   | 99.3663.00 | Screw                      |         | 1    |  |  |  |  |
| 19.   | 36.3098.02 | Optional Adjust. Knob      |         | 1    |  |  |  |  |
| 20.   | 36.3090.41 | Upper Body                 |         | 1    |  |  |  |  |
| 21.   |            | Nipple                     |         | 1    |  |  |  |  |
|   | 10.0078.70 | <b>K7.0</b> , 3/8 BSPP, Ø3 | 3.0 mm  |      |  |  |  |  |
|   | 10.0078.70 | <b>K7.1</b> , 3/8 BSPP, Ø3 | 3.0 mm  |      |  |  |  |  |
|   | 10.0160.70 | K7.2, 3/8 BSPP, Ø3         | 3.25 mm |      |  |  |  |  |
|   | 10.0161.70 | <b>K7.3</b> , 3/8 BSPP, Ø3 | 3.5 mm  |      |  |  |  |  |
| 22.   | 90.3833.00 | O-Ring                     | 70      | 1    |  |  |  |  |
| 23.   |            | Nozzle                     |         | 1    |  |  |  |  |
|   | 10.0076.66 | <b>K7.0</b> , Ø2.2 mm      |         |      |  |  |  |  |
|   | 10.0077.66 | <b>K7.1</b> , Ø2.5 mm      |         |      |  |  |  |  |
|   | 10.0162.66 | <b>K7.2</b> , Ø2.75 mm     |         |      |  |  |  |  |
|   | 10.0163.66 | <b>K7.3</b> , Ø3.0 mm      |         |      |  |  |  |  |
| 24.   | 90.3823.00 | O-Ring                     | 70      | 1    |  |  |  |  |
| 25.   | 90.3863.00 | O-Ring                     | 70      | 1    |  |  |  |  |
| 26.   | 36.3091.41 | Central Body               |         | 1    |  |  |  |  |
| 27.   | 98.2041.00 | Cap Screw                  |         | 2    |  |  |  |  |
| 28.   | 90.3585.00 | O-Ring                     | 70      | 2    |  |  |  |  |
| 29.   | 90.3871.00 | O-Ring                     | 70      | 1    |  |  |  |  |
| 30.   | 36.3092.41 | Lower Body                 |         | 1    |  |  |  |  |
| 31.   | 96.7380.00 | Washer                     |         | 1    |  |  |  |  |
| 32.   |            | Nipple                     |         | 1    |  |  |  |  |
|   | 36.3117.70 | <b>K7.0</b> , 3/8 BSPP     |         |      |  |  |  |  |
|   | 36.3116.70 | <b>K7.1</b> , 3/8 BSPP     |         |      |  |  |  |  |
|   | 36.3118.70 | <b>K7.2</b> , 3/8 BSPP     |         |      |  |  |  |  |
|   | 36.3119.70 | K7.3, 3/8 BSPP             |         |      |  |  |  |  |
| Repair Kit 70                               |            |                            |         |      |  |  |  |  |
| Includes No.'s: 4, 7, 8, 9, 10, 11, 12, 13, |            |                            |         |      |  |  |  |  |
| 15, 16, 22, 24, 25, 28, 29                  |            |                            |         |      |  |  |  |  |
| ,,,,,,                                      |            |                            |         |      |  |  |  |  |

V7 Unloader Valve



## **INSTALLATION**

Select an unloader appropriate for the pressure and flow of your system (see specification chart). This unloading valve is a flow-through design and should be mounted on the discharge line of the pump in any position (horizontal or vertical) which allows easy access to the adjusting bolt. A pressure gauge should be installed on either side of the port of the unloader to accurately read pressure during adjustment. Minumum 5% bypass is required for proper operation.

## WARRANTY

General Pump accessories are warranted by the manufacturer to be free from defects in material and workmanship Period of warranty shall be 90 days from date product is received by original buyer. Liability of manufacturer under the foregoing warranty is limited to **repair or replacement** at the option of manufacturer of that product which according to the manufacturer's investigation was deemed defective at time of shipment. Damage resulting from neglect, abuse, tampering or misapplication voids this warranty. This warranty is in lieu of all other warranties, expressed or implied, including any warranty of merchantability and/or any and all other obligations or liabilities on the part of the manufacturer.

