



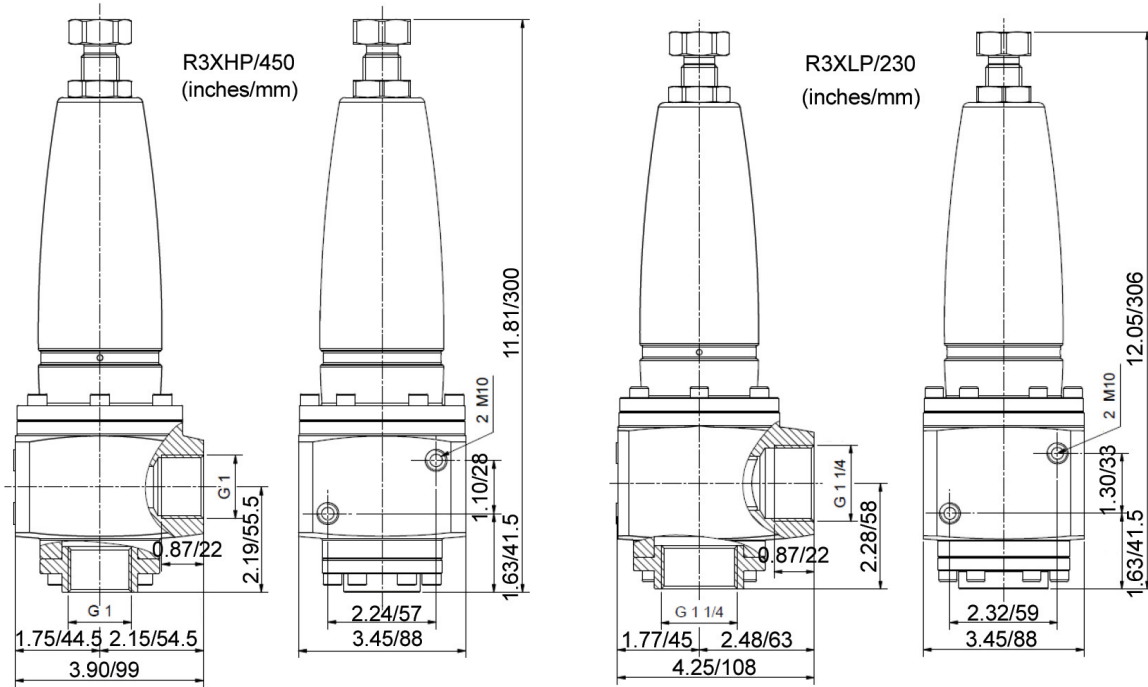
## FEATURES

- Regulates the operating pressure of the system by releasing excess volume through the by-pass
- Protects the system from over pressurization

## SPECIFICATIONS

| Part Number         | R3XLP/230 | R3XHP/450 |
|---------------------|-----------|-----------|
| Maximum Pressure    | 3,335 PSI | 6,525 PSI |
| Maximum Flow        | 132 GPM   | 90 GPM    |
| Maximum Temperature | 185° F    |           |
| Port Sizes:         | Inlet     | G 1.25"   |
|                     | Bypass    | G 1"      |
| Weight              | 13.2 lbs. | 11.7 lbs. |

## DIMENSIONS



General Pump  
is a member of  
the Interpump Group

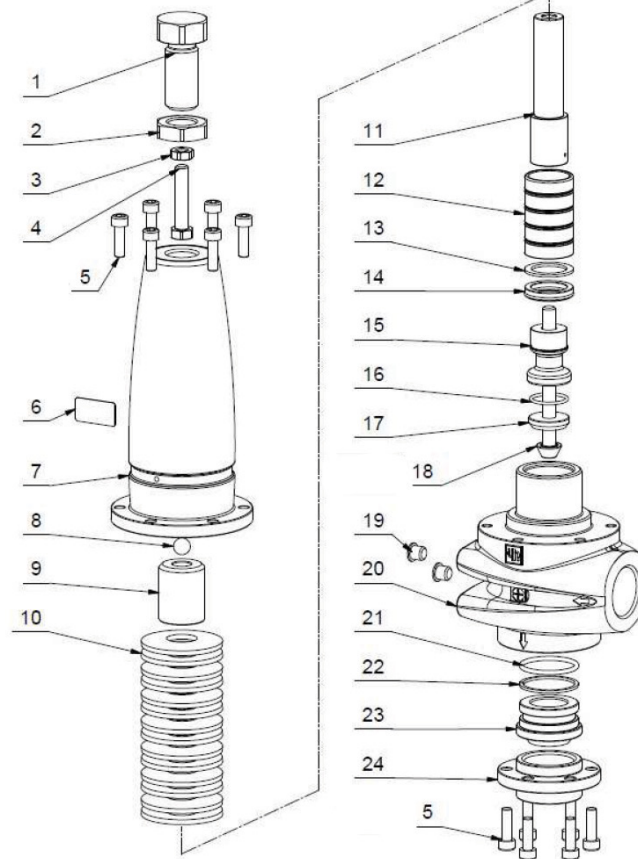


# R3XLP/230 R3XHP/450

Pressure Regulating Valve

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

## PARTS LIST



| No. | Part No.  | Description                    | Qty. |
|-----|-----------|--------------------------------|------|
| 1   | F36018866 | Regulating Screw               | 1    |
| 2   | F92264500 | Nut, M20x30x9                  | 1    |
| 3   | F92221600 | Washer, M8x5x13                | 1    |
| 4   | F99311500 | Screw, TE M8x40                | 1    |
| 5   | F99188300 | Screw, TCEI, M6x20             | 12   |
| 7   | F36725701 | Sleeve with Bushing            | 1    |
| 8   | F97483800 | Ball, 13/32                    | 1    |
| 9   | F36011964 | Spring                         | 1    |
| 10  | F94857500 | Spring Cup, R3XHP/450          | 14   |
|     | F94857400 | Spring Cup, R3XLP/230          | 14   |
| 11  | F36012066 | Spring Guide                   | 1    |
| 12  | F36018666 | Piston, R3XHP/450              | 1    |
|     | F36018766 | Piston, R3XLP/230              | 1    |
| 13* | F90514425 | Anti-extrusion Ring, R3XHP/450 | 1    |
|     | F90517050 | Anti-extrusion Ring, R3XLP/230 | 1    |
| 14* | F90271400 | Packing Ring, R3XHP/450        | 1    |
|     | F90275200 | Packing Ring, R3XLP/230        | 1    |

| No. | Part No.  | Description                    | Qty. |
|-----|-----------|--------------------------------|------|
| 15  | F36018466 | Spacer, R3XHP/450              | 1    |
|     | F36018566 | Spacer, R3XLP/230              | 1    |
| 16* | F90359800 | O-ring Ø20.3x1.78, R3XHP/450   | 1    |
|     | F90360400 | O-ring Ø25.12x1.78, R3XLP/230  | 1    |
| 17  | F36012607 | Shutter, R3XHP/450             | 1    |
|     | F36012507 | Shutter, R3XLP/230             | 1    |
| 18  | F36006766 | Screw, M8x88                   | 1    |
| 19  | F98195000 | Plug, Ø8.5x11.5x7.5            | 2    |
| 20  | F36018056 | Body, R3XHP/450                | 1    |
|     | F36018156 | Body, R3XLP/450                | 1    |
| 21* | F90386700 | O-ring Ø31.42x2.62, R3XHP/450  | 1    |
|     | F90387500 | O-ring Ø37.77x2.62, R3XLP/230  | 1    |
| 22* | F90517950 | Anti-extrusion Ring, R3XHP/450 | 1    |
|     | F90520500 | Anti-extrusion Ring, R3XLP/230 | 1    |
| 23  | F36018266 | Seat, R3XHP/450                | 1    |
|     | F36018366 | Seat, R3XLP/230                | 1    |
| 24  | F36013066 | Flange, R3XHP/450              | 1    |
|     | F36012966 | Flange, R3XLP/230              | 1    |
| *   | F293      | Repair Kit, R3XHP/450          |      |
| *   | F294      | Repair Kit, R3XLP/230          |      |

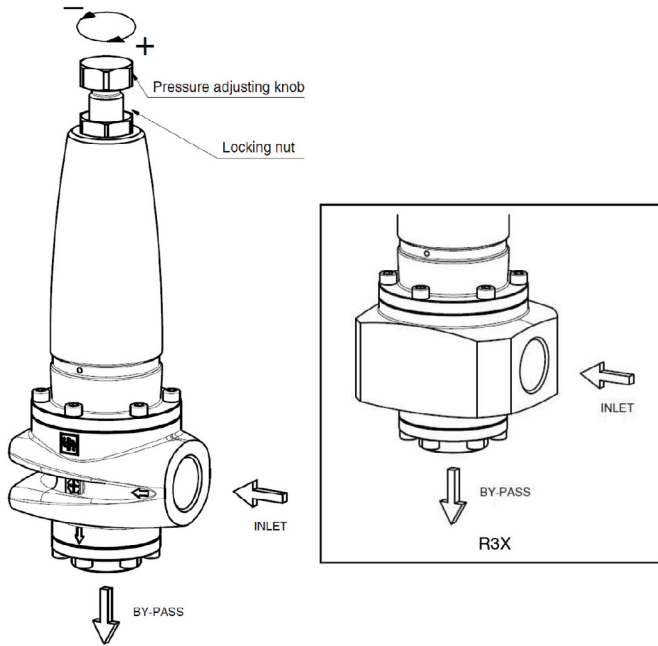
| Torque Specs |                          |
|--------------|--------------------------|
| 5            | 7.36 ft. lbs<br>(10 Nm)  |
| 18           | 14.75 ft. lbs<br>(20 Nm) |

# R3XLP/230 R3XHP/450

## Pressure Regulating Valve

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

### INSTALLATION AND INSTRUCTIONS FOR USE



This manual gives indications for the installation, operation and regulation of the valve, so it is an integral part of it and must be read carefully before any operation and preserved with care.

Strictly comply with the instructions contained in this document in view of a safe and effective use of the valve. Failure to comply with these instructions might cause early faults and result in situations of danger, in addition to voiding any warranty.

#### 1 GENERAL INFORMATION

1.1 The R3XLP/230 - R3XHP/450 is a manually-adjustable, pressure-operated device which, according to its setting, limits the pump/system pressure by conveying the excess of water to the by-pass.

Furthermore, when the outlet flow is blocked, completely exhaust the flow rate leaving the system section after the valve pressurized and reducing the pressure in the part of the system that precedes the valve.

#### 2 INSTRUCTIONS FOR PRESSURE SETTING:

The positions mentioned in the following instructions refer to those shown in the parts list.

3.2- Connect the valve to the water system and follow these steps:

3.2.1- Unloose the nut pos. 2.

3.2.2- Unscrew the screw pos. 1 in order to completely release the springs.

3.2.3- Open the gun or the water control device and start the system. Make sure that the air contained in it is fully removed.

3.2.4- Keeping the gun or the water control device open, start adjusting the pressure by screwing down the screw pos.1.

Alternate the adjusting operations with a few openings and closings of the gun or of the control device. When the desired pressure has been reached, open and close the gun/control device a few times again in order to stabilize the various components (seals, springs etc.). Check the pressure value again and correct if necessary.

3.2.5- Screw down the lower nut pos. 2 up to contact and lock it on the body.

3.2.6- In order to obtain working pressures lower than the maximum set pressure, unscrew the screw pos. 1.

#### 3- WARNINGS

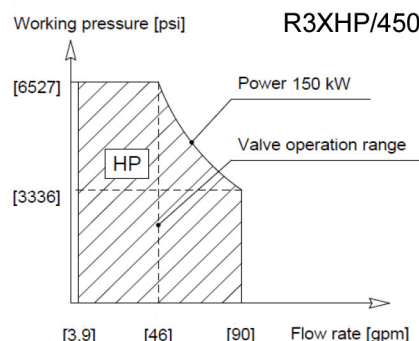
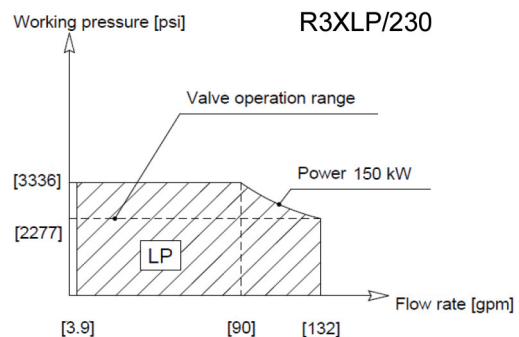
3.1- R3XLP In order to optimize the pump-valve coupling, it is necessary to keep the valve operation range, as a function of the pump pressure and flow rate, within a maximum power of 205 HP (150 kW). As shown in the chart below, this means using pumps producing a flow rate of approx. 90 GPM (341 l/min.) for maximum working pressures of 3336 PSI (230 bar), and generating a pressure of approx. 2277 PSI (157bar) for maximum flow rates of 132 GPM (500 l/min.)

3.3- R3XHP In order to optimize the pump-valve coupling, it is necessary to keep the valve operation range, as a function of the pump pressure and flow rate, within a maximum power of 205 HP (150 kW). As shown in the chart below, this means using pumps producing a flow rate of approx. 46.10 GPM (174.5 l/min.) for maximum working pressures of 6527 PSI (450 bar), and generating a pressure of approx. 3336 PSI (230 bar) for maximum flow rates of 90 GPM (341 l/min.)

In case of doubts, do not hesitate to contact the **GP Customer Service Department**.



**IMPORTANT: During use, never exceed the maximum values of pressure, flow-rate and temperature as stated in this document and/or indicated on the valve.**



# R3XLP/230 R3XHP/450

## Pressure Regulating Valve

**GENERAL PUMP**

*A member of the Interpump Group*

### INSTRUCTIONS FOR USE (CONT.)

The valve should be mounted on the pressure line in any position (horizontal or vertical) which will allow easy access to the pressure adjusting screw. For proper operation the by-pass line internal diameter should be at least 1.25" (R3XLP/230) or 1.00" (R3XHP/450) at the narrowest point, and should not be connected directly to the pump inlet line (see below for correct installation).

