## GENERAL PUMP A member of the Interpump Group



Pressure Regulating Valves



### FEATURES

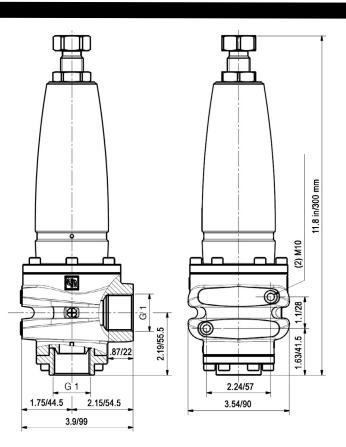
- Feature new, lighter design and hot water capability
- Regulates the operating pressure of the system by releasing excess volume through the by-pass
- Protects the system from over pressurization

#### SPECIFICATIONS

Part Number		R3HP/450			
Maximum Pressure		6,525 PSI			
Maximum Flow		90 GPM			
Maximum Temperature		185°F			
Port Sizes:	Inlet	G 1"			
	Bypass	G 1"			
Weight		11.7 lbs.			

### DIMENSIONS

**REGULATING & RELIEF VALVES** 





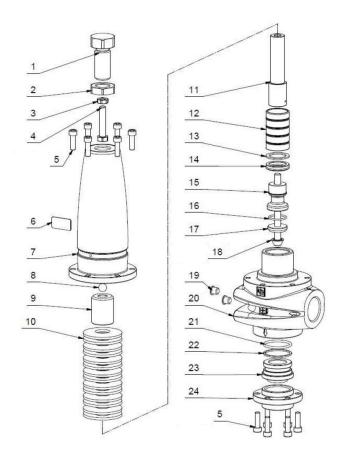
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## R3HP/450

Pressure Regulating Valve

## PARTS LIST



No.	Part No.	Description	Qty.	No.	Part No.	Description	Qty.
1	F36011834	Regulating Screw, M20		14*	F90275200	Seal Ring, 28x36x6, LP	1
2	F92264200	Bushing, M20-8	1	15	F36012466	Spacer, HP	1
3	F92221600	Nut, M8x5x13	1	16*	F90359800	O-ring, Ø 20.35x1.78	1
4	F99311500	Screw, M8x40	1	17	F36012607	Shutter, HP	1
5	F99188400	Screw, M6x20	12	18	F36006766	Screw, M8x88	1
7	F36725701	Sleeve	1	19	F98195000	Plug, Ø 8.5x11.5x7.5	2
8	F97483800	Ball, 13/32	1	20	F36011641	Body	1
9	F36011964	Spring Bushing	1	21*	F90386700	O-ring, Ø 31.43x2.62	1
10	F94857500	Spring Disk, 50x18.3x3	14	22*	F90517950	Anti-extrusion Ring, Ø 31.9x36x1.5	1
11	F36012066	Spring Guide	1	23	F36012866	Seat	1
12	F36012266	Piston, HP	1	24	F36013066	Flange for Seat	1
13*	F90514425	Anti-extrusing Ring, 22x30x1.5	1	*	F293	Repair Kit	

	Torque Specs				
5	7.36 ft. lbs (10 Nm)				
18	14.75 ft. lbs (20 Nm)				

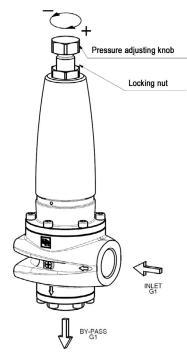
Ref 300932 Rev. B 05-20



# R3HP/450

Pressure Regulating Valve

### 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 R3LP/230 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 clos-

ings 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.

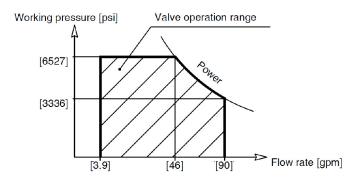
#### **3- WARNINGS**

3.1- R3HP 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 , this means using pumps producing a flow rate of approx. 38.97 GPM (174.5 I/ 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 90.1 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.







# R3HP/450

Pressure Regulating Valve

#### **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 1.00" at the narrowest point, and should not be connected directly to the pump inlet line (see below for correct installation).

