

Industrial Safety Relief Valves

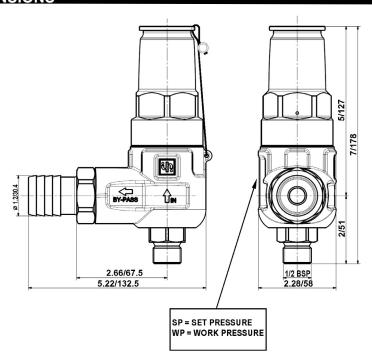
## **FEATURES**

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

## **SPECIFICATIONS**

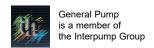
| Part Number         |           | S723/100    | S723/200    | S723/300    | S723/400    | S723/500    | S723/600    | S723/700    |
|---------------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Maximum Flow        |           | 60.8 GPM    |
| Maximum Pressure    |           | 1450 PSI    | 2900 PSI    | 4350 PSI    | 5800 PSI    | 7250 PSI    | 8700 PSI    | 10150 PSI   |
| Maximum Temperature |           | 140°F       |
| Port Sizes:         | Inlet     | 1/2" BSPP-M |
|                     | Discharge | Side        |
| Weight              |           | 3.8 lbs.    |

# **DIMENSIONS**



**ATTENTION: Safety valves** are set 15 to 20% above the maximum operating pressure of the system. The real cracking pressure of a S723/300 (for example) is 4,350 PSI plus 20% = 5,220 PSI.

When ordering, always refer to the maximum operating pressure, we will set the cracking pressure accordingly (15 to 20% higher).

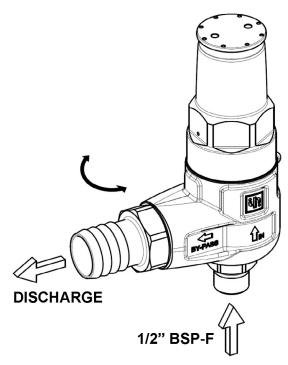






# Industrial Safety Relief Valves

### INSTALLATION AND INSTRUCTIONS FOR USE



### 1. GENERAL INFORMATION

- 1.1 The **S723 relief valve** is a manually adjustable, pressure operated device, which, according to its setting, releases excess water when the pressure inside the pump/ system exceeds the adjusted value, thus reducing the pressure. The normal working conditions can be restored by turning off and then restarting the system.
- 1.2 Since the **\$723** valve is used in conjunction with a high pressure water pump/system, which shall be called hereafter only "system", installation and use must be suited to the type of system used and comply with the safety regulations in force in the country where the valve is used.
- 1.3 Before using the valve, make sure that the system the valve is used with is certified to comply with the relevant directives and/or regulations.
- 1.4 Before installing and using the valve for the first time, we suggest you check that it is undamaged and make sure that the rated features correspond to the required ones. If this is not the case, do not use the valve and contact the Customer Service Department.

#### 2. INSTRUCTIONS FOR INSTALLATION

- 2.1 The setting pressure (SP) is adjusted and fixed by the factory and cannot be changed. The values of the setting pressure and suggested minimum working pressure (WP) are stated on the valve.
- 2.2 The maximum flow rate depends on the setting pressure and ranges from 11 to 60.8 GPM. The exact value is stated on the valve.
- 2.3 The setting pressure (SP) is the pressure at which the valve opens, thus determining the maximum pressure value that the system cannot exceed.
- 2.4 Installation must be done by qualified and authorized staff only, who must have the required skills to handle high pressure systems and be informed of the operating and safety instructions contained in this document.
- 2.5 The fastening and sealing system of the S723 valve is designed for General Pumps and/or products.



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



IMPORTANT: For correct use of the valve, it is necessary to install it in the area of the system reaching the higher pressure during use. Moreover, we suggest you install it by the component you wish to protect most from pressure spikes.

### 3. WARNINGS

- 3.1 The installer must provide the ultimate consumer with the proper instructions for the correct use of the system the valve is used in connection with.
- 3.2 The fittings used to connect the valve to the system must be suited to the valve performance features.
- 3.3 Use soft and filtered water only. In case of salt water and/or of water containing solid particles of a size exceeding  $20\mu m$ , the internal components of the valve will be subject to quick wear; furthermore, this might compromise the correct functioning of the valve. Addition agents can be used in the water, provided that they are biodegradable and always complying with the regulations in force in the country where the valve is used.

# Industrial Safety Relief Valve

# **INSTRUCTIONS FOR USE (CONT.)**



3.4 In the systems for hot water production, the temperature of the liquid that comes into contact with the valve must always be lower than the value stated in this instruction manual and/or indicated on the valve itself. Avoid the formation of steam or overheated water.



**IMPORTANT:** When the temperature of the liquid is close to the maximum value, the outside temperature of the valve body is only slightly lower. Therefore, take care in case of contact with the hot surface.

3.5 Before operating the system, it is advisable to start it for a preliminary test run in order check that the system is properly installed.



3.6 IMPORTANT: Do not obstruct or cover the water discharge area of the valve in any way. Do not try and collect the discharged water; instead, always release into the atmosphere. Failure to comply with these simple instructions will result in reduced safety of the system.

3.7 In order to optimize the pump/valve coupling, it is necessary to keep the valve operation, as a function of the pump pressure and flow rate, within a maximum power of 81.5 HP. As shown in the chart, this means using pumps producing a flow rate of approx. 12 GPM for maximum working pressures of 10,150 PSI, and generating a pressure of aprox. 1958 PSI for maximum flow rates of 60.8 GPM.

### 4. MAINTENANCE

4.1 Any maintenance and/or repair must be carried out by General Pump **ONLY**.



4.2 We suggest you check, at least every 2 years of or after reaching 500 working hours of the system, that the valve opens correctly in order to verify the correspondence with the setting pressure.

4.3 The valve is entirely made of non-toxic and safe materials; however, in case of disposal, we suggest you do not disperse it in the environment but take it to an authorized disposal center.

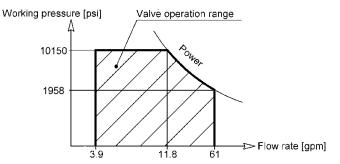


IMPORTANT: The valve shall not be tampered with for any reason and/or used for any purpose other than the use it has been designed for. In case of tampering, the manufacturer desclaims all responsibility as to the valve functioning and safety.

### 5. WARRANTY CONDITIONS

**5.1** The period and conditions of warranty are specified in the purchase contract.

**5.2** Warranty is voided in case the valve is used for improper purposes, used at higher performances than the rated ones, repaired with non-original spare parts or if it turns out to be damaged due to the non-compliance with the operating instructions or to unauthorized tampering.



3.8 Should the relief valve open, turn off the system and find out what is the cause of the pressure increase.

