

GENERAL PUMP *A member of the Interpump Group*

S1503

Industrial Relief Valve



FEATURES

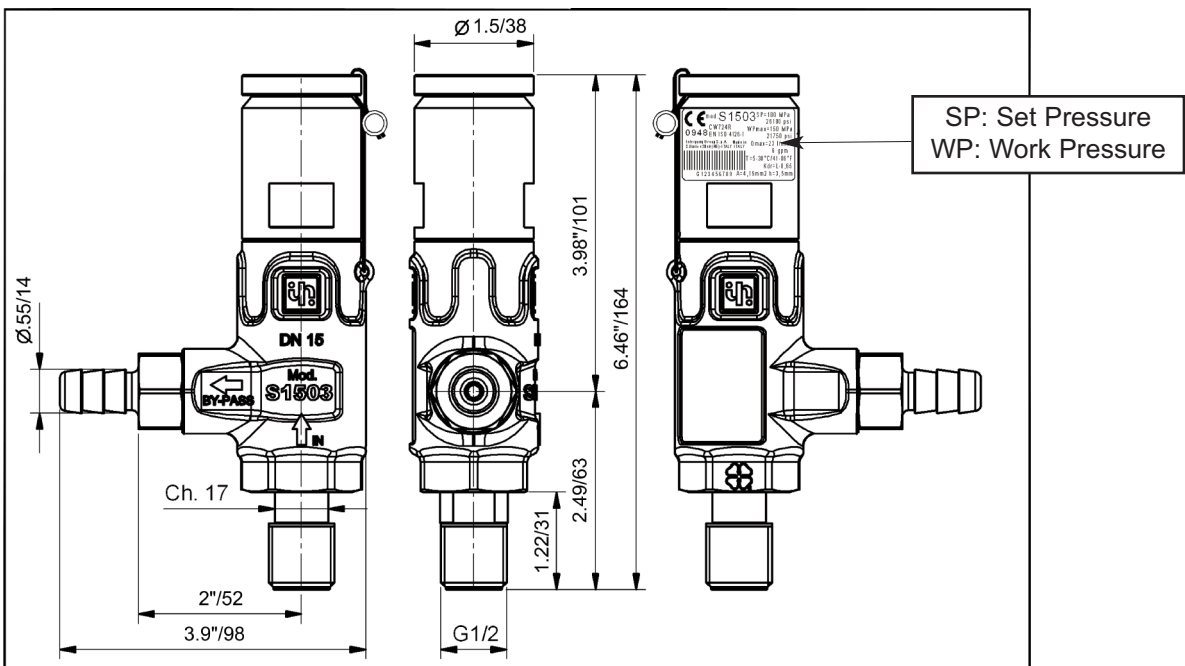
- Limits the pressure to the maximum working pressure of the system.
- When the max working pressure is exceeded it opens and discharges the total pump flow, eliminating the high pressure in the system.
- Pre-set and leaded according to the working pressure stamped on the valve body.

SPECIFICATIONS

Minimum Flow		2.6 GPM
Maximum Flow		7.9 GPM
Minimum Pressure		10,150 PSI
Maximum Pressure		26,100 PSI
Maximum Temperature		86°F
Port Sizes:	Inlet	1/2" BSP-M
	Outlet	14mm Hose Barb
Weight		2.2 lbs.

MODEL	PRESET PRESSURE
S1503/700	10,150 PSI
S1503/800	11,600 PSI
S1503/1000	14,500 PSI
S1503/1100	15,950 PSI
S1503/1200	17,500 PSI
S1503/1400	20,300 PSI
S1503/1600	23,200 PSI
S1503/1800	26,100 PSI

DIMENSIONS

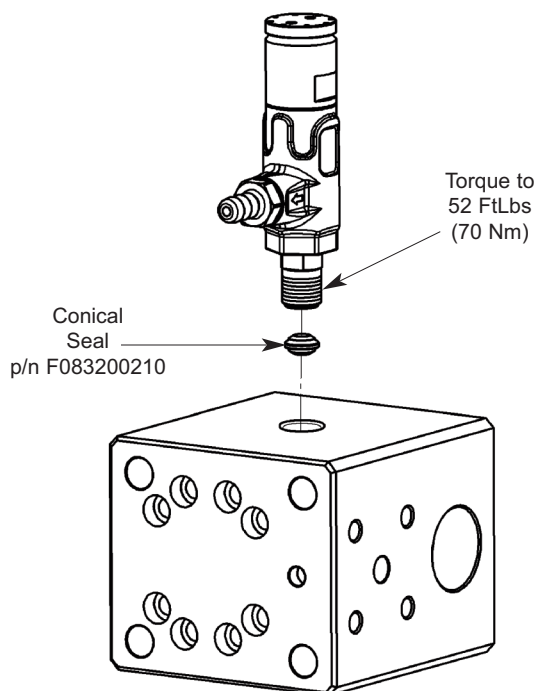


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Industrial Relief Valve

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INSTALLATION AND INSTRUCTIONS FOR USE



1. GENERAL INFORMATION

1.1 The **S1503 relief valve** is a manually adjustable, pressure operated device, which, according to its setting, releases the excess of 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 S1503 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 manufacturer and cannot be changed. The values of the setting pressure and suggested maximum working pressure (WP) are stated on the valve.

2.2 The maximum flow rate depends on the setting pressure and ranges from 2.6 to 7.9 GPM (10 to 30 l/min). 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 The installation must be made 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 S1503 valve is designed for General Pumps and/or products.

2.6 The seal of the 1/2" fitting is made using conical seal part number F083200210.

2.7 Before installing the valve, slightly lubricate the 1/2" thread with a grease specific for very high pressures (EP=extreme pressure) containing Graphite or Molybdenum, then tighten the fitting by means of a torque wrench (70 Nm).

2.2.5 Screw down the nut (pos. 19) up to contact with the body.

2.2.6 In order to obtain working pressures lower than the maximum set pressure, unscrew the nut (pos. 22).



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.



IMPORTANT: For a 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 that you wish to protect most from pressure peaks.

3. WARNINGS

3.1 The installer must provide the ultimate consumer with the proper instructions for the correct use of the system the valve will be 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 μm , 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 delicate, biodegradable and always complying with the regulations in force in the country where the valve is used.

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INSTRUCTIONS FOR USE (CONT.)



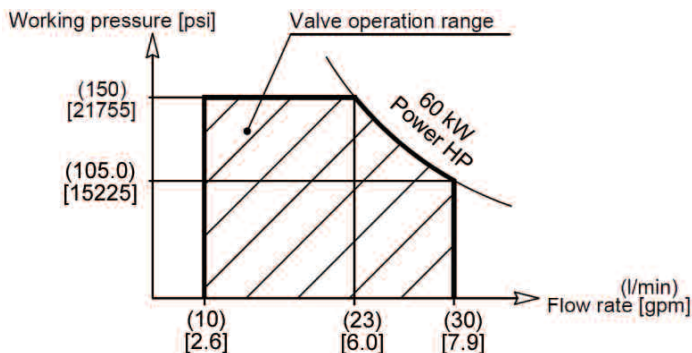
3.4 In the systems for hot water production, the temperature of the liquid that comes into contact with the valve must always be lower than the value stated in this instruction manual and indicated on the valve itself. **Avoid the formation of steam or overheated water.**

3.5 Before operating the system, it is advisable to start it for a preliminary test run in order to 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 convey the discharged water; instead, always release into the atmosphere. Failure to comply with these simple instructions will result in a reduced safety of the system.

3.7 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 81.5 HP (60 kW). As shown in the chart below, this means using pumps producing a flow rate of approximately 61 GPM (231 l/min) for maximum working pressures of 150 MPa (21755 PSI/1500 bar), and generating a pressure of approximately 105 MPa (1050 PSI/15225 bar) for maximum flow rates of 7.9 GPM (30 l/min).



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

4. MAINTENANCE

4.1 Maintenance and repair must be carried out by qualified and authorized staff only.



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

5.3 The valve is entirely made of non-toxic and safe materials; however, in case of disposal, we suggest you do not dispose of in environment but take it to an authorized disposal center or contact the General Pump Service Department.



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 disclaims all

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.

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