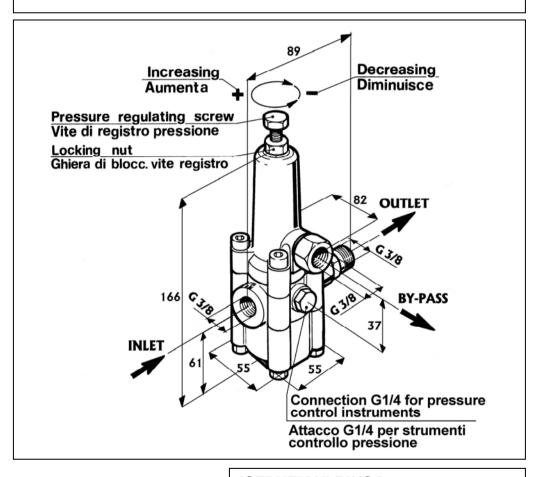


## **K7**

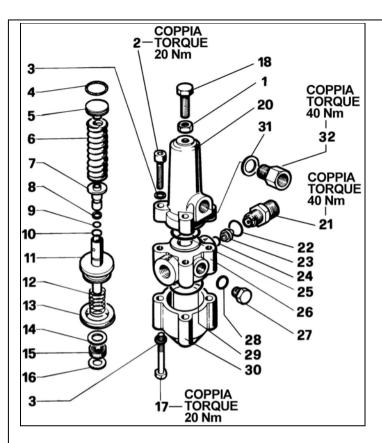


# VALVOLA DI REGOLAZIONE PRESSIONE AUTOMATICA AUTOMATIC PRESSURE REGULATOR SOUPAPE DE REGULATION DE PRESSION AUTOMATIQUE AUTOMATISCHES DRUCKREGELVENTIL





ISTRUZIONI D'USO
OPERATING INSTRUCTIONS
MODE D'EMPLOI
BEDIENUNGSANLEITUNG



KIT N.	POSIZIONI	N. PEZZI
KIT NO.	POSITION	NO. OF PCS
70	4-7-8-9-10-11-12-13-15-16-22-24-25-28-29	1

POS CODE		DESCRIPTION DESCRIZIONE			
1		DADO M 10	PCS 1		
2		VITE M 8x30 UNI 5931	4		
3		ROSETTA Ø 8.4x13x0.8	8		
4		OR Ø 20.63x2.62	1		
5		PIATTELLO MOLLA	1		
6		MOLLA Ø 17x60	1		
7		SEDE VALVOLA	1		
8		ANELLO PER OR	1		
9		OR Ø 9.13x2.62 – SPEC.	1		
10		OR Ø 9.25x1.78	1		
11		ASSIEME PISTONCINO E SFERA	1		
12		MOLLA Ø 17x17	1		
13		ANELLO TENUTA Ø 40	1		
14		ROSETTA Ø 13x20x2	1		
15		ANELLO TENUTA Ø 10	1		
16		ANELLO PER OR	1		
17	99312700	VITE M 8x45 UNI 5737	4		
18	99366300	VITE M 10x25 UNI 5740	1		
20	36309041	CORPO VALVOLA SUPERIORE	1		
21	10007870	NIPPLO G 3/8 FORO Ø 3 – <b>K7.0</b>	1		
21	10007870	NIPPLO G 3/8 FORO Ø 3 – <b>K7.1</b>	1		
21	10016070	NIPPLO G 3/8 FORO Ø 3.25 – <b>K7.2</b>	1		
21	10016170	NIPPLO G 3/8 FORO Ø 3.5 – <b>K7.3</b>	1		

	2225	DESCRIPTION	N.		
POS CODE		DESCRIPTION			
	CODICE	DESCRIZIONE	PCS		
22		OR Ø 13.95x2.62	1		
23		UGELLO Ø 2.2 – <b>K7.0</b>	1		
23	10007766	UGELLO Ø 2.5 – <b>K7.1</b>	1		
23	10016266	UGELLO Ø 2.75 – <b>K7.2</b>	1		
23	10016366	UGELLO Ø 3 – <b>K7.3</b>	1		
24	90382300	OR Ø 9.92x2.62	1		
25	90386300	OR Ø 28.25x2.62	1		
26	36309141	CORPO VALVOLA CENTRALE	1		
27	98204100	TAPPO G 1/4x9	2		
28	90358500	OR Ø 10.82x1.78	2		
29	90387100	OR Ø 34.60x2.62	1		
30	36309241	CORPO VALVOLA INFERIORE	1		
31	96738000	ROSETTA Ø 17.5x23x1.5	1		
32	36311770	NIPPLO G 3/8 – <b>K7.0</b>	1		
32	36311670	NIPPLO G 3/8 – <b>K7.1</b>	1		
32	36311870	NIPPLO G 3/8 – <b>K7.2</b>	1		
32	36311970	NIPPLO G 3/8 – <b>K7.3</b>	1		

### = ENGLISH =

TECHNICAL FEATURES										
MODEL	FLOW RATE		Max PRESSURE		Max TEMPERATURE		MASS			
MODEL	L/min	g.p.m. (USA)	MPa	bar	p.s.i.	°C	°F	kg	lbs	
	min-max	min-max								
K7.0	8-11	2.11-2.9								
K7.1	11-16	2.9-4.22	20	20	200	2000	60	140	2.07	4.56
K7.2	16-25	4.22-6.6			200	3000				
K7.3	25-41	6.6-10.83								

<sup>«</sup>Translated from original instructions»

THIS DOCUMENT PROVIDES THE INSTRUCTIONS FOR THE INSTALLATION, USE AND MAINTENANCE OF THE VALVE, THEREFORE IT IS AN INTEGRAL PART OF THE VALVE ITSELF AND MUST BE READ CAREFULLY BEFORE ANY USE AND KEPT 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 K7 automatic pressure regulator 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.

Moreover, when the outlet flow is blocked, this device totally releases the flow, thus reducing the pressure throughout the system.

- 1.2- Since the K7 valve is used in connection 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 after-sales service of Interpump Group for information.
- 1.5- In order to install the valve correctly, follow the instructions for the water inlet, outlet and by-pass connections, as stated in this instruction manual and/or on the valve itself.

#### 2- PACKAGE

- 2.1- Packages must be handled in compliance with the instructions stated on the packages themselves and/or provided by the manufacturer.
- 2.2- In case the valve is not used immediately, it must be stored in its integral package and placed in areas which are not exposed to the weather and protected from excessive humidity and from direct sunlight. Moreover, it is advisable to place wooden pallets or other types of pallets between the package and the floor, in order to prevent the direct contact with the ground.
- 2.3- The package components must be disposed of in compliance with the relevant laws in force.

#### 3- INSTRUCTIONS FOR PRESSURE SETTING:

3.1- In order to obtain a correct adjustment and consequently a proper functioning of the valve, always make sure that, when working at the maximum pressure, the valve by-pass keeps releasing a quantity of water equal to 5% of the total flow-rate. In case the flow-rate at the by-pass is close to zero or exceeds 15% of the maximum flow-rate, this could cause faults, early wear and result in situations of danger.

The positions mentioned in the following instructions refer to those shown in the exploded view (page 4).

- 3.2- Connect the valve to the water system and follow these steps:
- 3.2.1- Unloose the nut pos.1 and unscrew the adjustment screw pos. 18 in order to completely release the spring.
- 3.2.2- Open the gun or the water control device and start the system. Make sure that the air contained in it is fully ejected.
- 3.2.3- Keeping the gun or the water control device open, start adjusting the pressure by screwing down the screw pos.18. 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.
- 3.2.4- Lock the screw pos. 18 by tightening the nut pos. 1.

3.2.5- In order to obtain working pressures lower than the maximum set pressure, unloose the nut pos. 1 and turn the screw pos. 18 counter-clockwise.



In case of doubts, do not hesitate to contact the after-sales service of Interpump Group. 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.

#### 4- WARNINGS

- 4.1- The installation and the setting of the maximum pressure must be made by qualified 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.
- 4.2- 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.
- 4.3- Use soft and filtered water only. In case of salt water and/or of water containing solid particles of a size exceeding 360µm, 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.
- 4.4- Use guns or other control devices ensuring a perfect seal when closed. Leakages may compromise the correct functioning of the valve.



4.5- 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 inferior. Therefore, take care in case of contact with the hot surfaces.

- 4.6- After use and/or before performing any operation on the system or on the valve, release the pressure by using the adjustment knob/screw and opening the gun or the control device for a few seconds. The jet created by the residual pressure must be directed downwards in order to avoid damages or dangers.
- 4.7- For safety reasons, it is advisable to equip the high pressure feeding line of the system also with a relief or safety valve duly adjusted.
- 4.8- To connect the valve to the system it is preferable to use flexible hoses fitted in a way that they do not form 90° elbows, throttlings or siphons which could include harmful air bubbles. The inside diameters of the hoses and fittings must be equal to the correspondent inside diameters of the inlet, by-pass and outlet threads of the valve. Moreover, it is necessary to correctly choose the type of hose depending on the rated pressure and flow-rate; the hoses must always be used within their operation limits as stated by the manufacturer and indicated on the hoses themselves.
- 4.9- Tighten the fittings used on the G3/8" threads of the valve (torque wrench setting 45 Nm ±5%). In order to

- ensure the seal, fit a metal washer with a rubber ring between the fittings, or use a proper sealant on the thread.
- 4.10- Always connect the valve by-pass fitting to a hose, in order to avoid the excessive noise caused by the water outflow through the by-pass without hose.
- 4.11- 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.
- 4.12- **Warning:** If the valve is used at low temperature involving the risk of icing, make sure that it is not freezed inside and/or it is not blocked before using it.

#### 5- MAINTENANCE

- 5.1- Maintenance and repair must be carried out by qualified and authorized staff only. Before any operation, make sure that the valve and the system are shut down and made unusable.
- 5.2- A correct maintenance helps extend the working life and grants a better performance of the valve.
- 5.3- From time to time, it is necessary to check that the valve is clean outside, and that there is no sign of leakage and/or malfunctioning. If necessary, replace the involved parts. In case of doubts, contact the after-sales service of Interpump Group.
- 5.4- Replace the valve parts with original spare parts only.



IMPORTANT: After maintenance, make sure that the valve is re-assembled correctly and that the initial conditions are restored. Comply with the torque wrench setting values and set the pressure again as described above.

5.5- 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 centre or contact the nearest INTERPUMP GROUP Authorized Service Centre.



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 responsibility as to the valve functioning and safety.

#### 6- WARRANTY CONDITIONS

- 6.1- The period and conditions of warranty are specified in the purchase contract.
- 6.2- 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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