

INSTRUCTION MANUAL

PRESSURE REGULATOR for fluid or semi-fluid materials

Manual: 1403 573.008.212

Date: 03/03/14 - Supersede: 10/10/13

Modif.: § 4 & 7

TRANSLATION FROM THE ORIGINAL MANUAL

IMPORTANT: Before assembly and start-up, please read and clearly understand all the documents relating to this equipment (professional use only).

PICTURES AND DRAWINGS ARE NON CONTRACTUAL. WE RESERVE THE RIGHT TO MAKE CHANGES WITHOUT PRIOR NOTICE.

KREMLIN - REXSON

150, avenue de Stalingrad 93 245 - STAINS CEDEX – France 27 : 33 (0)1 49 40 25 25 Fax : 33 (0)1 48 26 07 16

www.kremlin-rexson.com



INSTRUCTION MANUAL

PRESSURE REGULATOR for fluid or semi-fluid materials

TABLE OF CONTENTS

1.	GENERAL SAFETY INSTRUCTIONS	2
2.	DESCRIPTION	3
3.	MOUNTING	4
4.	INSTALLATION	4
5.	START UP	5
6.	MAINTENANCE	5
7.	TROUBLESHOOTING CHART	6

The specifications of the regulator - features and maintenance - are available in a documentation enclosed to the manual.

Dear Customer.

You are the owner of our new KREMLIN pressure regulator and we would like to take this opportunity to thank you.

To make sure your investment will provide full satisfaction, special care has been taken by KREMLIN during all designing and manufacturing processes.

To obtain the best result, safe and efficient operation of your equipment, we advice you to read and make yourself familiar with this instruction and service manual. Indeed, the non-compliance with instructions and precautions stated in this manual could reduce the equipment working life, result in operating trouble and create unsafe conditions.

1. GENERAL SAFETY INSTRUCTIONS



WARNING: Any misuse of the equipment or accessories can damage them, result in serious body injury, fire or explosion hazard and reduce the equipment working life. Read, understand and comply with the safety instructions hereafter.

The personnel involved in operating and servicing this equipment must be aware of all safety requirements stated in this manual. The workshop supervisor must be certain that the personnel has perfectly understood the safety instructions and complies with them.

Read all instruction manuals as well as the tags of the equipments before operating the equipment.

Refer to local safety instructions and comply with them.

■ INSTALLATION REQUIREMENTS

Ground the equipments.

Use the equipment only in a well-ventilated area to prevent from serious body injuries, fire and explosion hazards. Do not smoke in the spray area.

Never stock paints and solvents in the spray area. Always close the pots and the tins.

Always keep the spray area clean and free from debris (solvent, rags,...).

Read paint and solvent manufacturer's technical instructions.

Spraying of some materials may result in hazardous working conditions. To protect the operator, respirator mask, hand cream, glasses and hearing protective earplug are required (Refer to chapter "Safety equipment" of KREMLIN selection guide).

■ EQUIPMENT REQUIREMENTS

The operating pressure of these equipments are particularly high. Consequently, some precautions must be taken in order to prevent from accidents and from unsafe working conditions.

Never exceed the components maximum pressure of the equipment.

HOSES

Do not use hoses with a maximum burst-proof pressure less than four times the maximum service pressure of the pump (see data sheet).

Be certain the hoses are not crimped, leaking and not unrolled.

Be certain hoses are in good conditions and showing no evidence of damage.

Use only air hose with static conductor to connect the pump with the spray gun.

All fittings must be tight and in good condition.

<u>PUMP</u>

Ground the equipment (use the connection on the pump).

Do not use any product or solvent incompatible with the pump components.

Use the appropriate solvent for the material being sprayed to increase the equipment working life.

<u>GUN</u>

Never wipe the end of the tip with the fingers.

Always depressurize air and hoses before carrying out any servicing on the gun.

Never point the spray gun at anyone or at any part of the body.

PRESSURE REGULATOR

Assemble conductive hoses upstream and downstream of the regulator.

■ MAINTENANCE REQUIREMENTS

Guards (air motor cover, coupling shields, housings ...) have been designed for safe use of the equipment.

The manufacturer will not be held responsible for bodily injury or failure and / or damage to property due to removal or partial removal of the guards.

Never modify these equipments.

Check them daily, keep them in a good condition and replace the worn parts **only with KREMLIN parts**.

Before cleaning or removing components of the equipment, it is compulsory:

- to stop the pump by shutting off the compressed air supply,
- to open the pump drain valve,
- to press the gun trigger to depressurize the hoses.

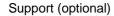
2. DESCRIPTION

The pressure regulator enables to adjust the fluid pressure into the circuits of low and medium pressure.

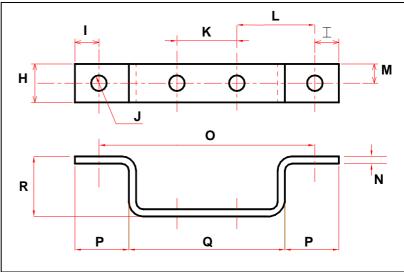
The pressure regulator is mounted on the fluid circuit between the pump fluid outlet and the gun fluid inlet. It enables to refine the pressure of the gun. It exits a spring operated model and an air operated model.

The back pressure regulator is mounted on the back fluid circuit. It enables to regulate a constant pressure and to ensure at the same time a fluid circulation into the hoses.

3. MOUNTING





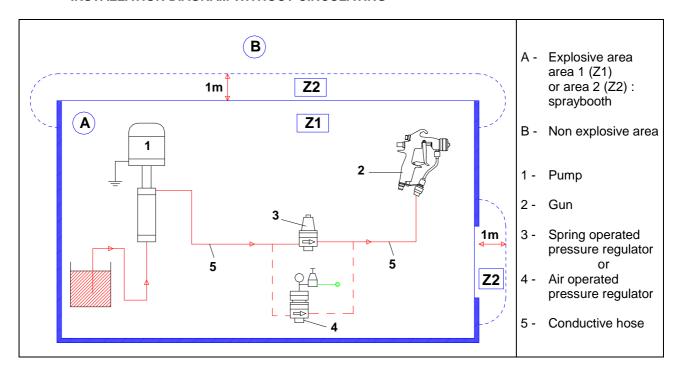


Ind.	mm	"	Ind.	mm	"	Ind.	mm	"	Ind.	mm	"
Н	16	0.63	- 1	10	0.4	J	Ø 6.5	Ø 0.25	K	25	0.98
L	20	0.79	М	8	0.31	N	3	0.12	0	90	3.54
Р	22.5	0.88	Q	65	2.56	R	25	0.98			

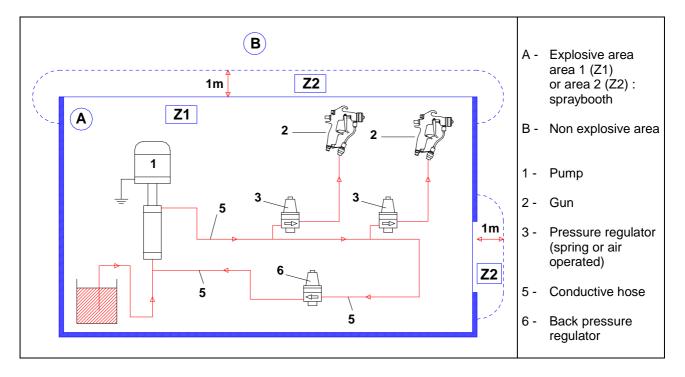
4. INSTALLATION

The pressure regulators are designed to be installed in a spraybooth.

■ INSTALLATION DIAGRAM WITHOUT CIRCULATING



■ INSTALLATION DIAGRAM WITH CIRCULATING





The 1 m / 39.37" distance indicated in these diagrams is given for information purposes only and hold harmless to KREMLIN REXSON. The user is responsible for the extraction and conditioning of the painting area where the equipment is used, for working conditions conditions (refer to EN 60079-10 standard). The 1 m / 39.37" distance may be modified if trials carried out by the user deem this necessary.

(Nota: diagrams represented with Airmix® regulators)



NOTA:

To ensure a larger lifetime of your equipment and to obtain the best flow rate possible, you must mount the regulator in vertical position.

5. START UP

Start up the pump (Refer to pump instruction manual).

Tighten the screw located on the upper part of the spring operated regulator or turn the regulator of the air operated assembly.

Start up the gun (Refer to gun instruction manual).

Adjust the fluid regulator to obtain the required pressure and fluid flow.

Nota: Refer to the regulator features to comply with the inlet and outlet pressures (refer to the enclosed document).

6. MAINTENANCE

Keep the pressure regulator clean to ensure its proper working.

When flushing the pump, make the solvent circulate in circuit to clean all the elements (pump, hoses, regulator, gun).

7. TROUBLESHOOTING CHART

■ PRESSURE REGULATOR (AIR OR SPRING OPERATED)

TROUBLE	CAUSE	SOLUTION		
Overpressure at the regulator	Adjustment screw or adjustment knob of the regulator turned clockwise (full closed)	Unscrew adjustment screw or knob.		
outlet	Air pilot pressure too high	Decrease pilot pressure.		
	Bad tightness of seat and ball	Clean or replace.		
	Adjustment screw or knob turned counter-clockwise (full open)	Screw adjustment screw or knob.		
No material coming out from the regulator	Air pilot pressure insufficient	Increase pilot air pressure.		
	Ball blocked on the seat, needle broken	Clean and reinstall or change.		
	Too much pulsation in the fluid network	Adjust inlet pressure.		
Irregular flow rate	Improper proofness of seat, ball and spring	Clean or replace.		
	Regulator in horizontal position	Mount the regulator in vertical position		
Lookage at the upper part of the	Defective fluid diaphragm	Replace it.		
Leakage at the upper part of the regulator	Screws improperly tightened on the lower body	Tighten up the screws.		

■ BACK PRESSURE REGULATOR

DEFECT	CAUSE	SOLUTION		
Overpressure upstream of the	Adjustment screw or knob turned clockwise (full closed)	Turn the adjustment screw or knob counter-clockwise.		
regulator	Pressure too high in the fluid circuit (or circulating)	Decrease pressure.		
Pressure drop upstream of the	Adjustment screw or knob turned counter-clockwise (full open)	Screw the adjustment screw or knob.		
regulator	Improper fluid proofness of seat and ball	Clean and reinstall.		
Irregular circulation	Too important pulsation in the fluid network	Check and adjust inlet pressure.		
megular circulation	Improper proofness of seat and ball	Clean or replace.		
Material leakage at the upper	Defective fluid diaphragm	Replace it.		
Material leakage at the upper body of the regulator	Loosened screws on the upper body	Tighten up the screws.		