

# BALL PUMP EOS MODEL R

# **OPERATING AND START-UP**

# 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).

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

## **KREMLIN - REXSON**

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**KREMLIN REXSON** 

# 1. OPERATING PRINCIPLE

The pneumatic motors are designed to be coupled with the recommended KREMLIN-REXSON fluid section to get the required ratio and flow rate.

The pneumatic motors with rectilinear alternative motions operate thanks to the compressed air supply. The reversing system is carried out by means of :

- a distributor, model 4/2,
- two sensors,
- a distributor, model 5/2.



#### WARNING!

The frictions due to the displacement of fluid inside the pumps and accessories, as well as the one created by the tightness seals, generate static electricity that may cause fire or explosion. This is why the pump must be grounded.

# 2. INSTALLATION



А	Air valve (main shut off valve)	I	Gauge
В	Filter or purifier	J	Fluid regulator
С	Air regulator	K	Hose with ground
D	Depressurize valve (air)	L	Swivel fitting
E	Pump	М	Spray gun
F	Grounding	Ν	Suction rod
G	Material filter	0	Cup
Н	Fluid drain valve	Р	Drain cup

(For other installation, please contact KREMLIN REXSON).

### 3. USE

#### ADJUSTMENT

The increase of the motor supply air pressure (via the air regulator) leads to an increase of the number of pump piston returns/mn (cycles) which leads to a flow rate increase and to an outlet pressure increase of the pumped material.

AIR CONSUMPTION OF THE MOTOR			
Pressure of the motor at 6 bar / 87 psi			
Version	daN		
1500	470		
3000	920		



# 4. PNEUMATIC CABLING

Motor pneumatic diagram



# 5. START UP



BEFORE STARTING THE EQUIPMENT

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

#### **GROUNDING OF THE PUMP**





Unscrew the lock-nut (A), remove the washer (B), insert the lug (C) with its ground wire (D) (minimum section :  $1,5 \text{ mm}^2$ ) between the washer (B) and the washer (D). Tighten the lock-nut. Connect the other end of the wire to a real "ground", according to the national rules.

A qualified electrician must check the ground continuity. If the continuity is not correct, check the terminal, the electric wire, the U bolt and the ground point. Never operate pump without revolving the trouble.

#### CONNECTION OF THE COMPRESSED AIR SUPPLY

For a correct operating and a long duration life of the motor, supply air must be filtered and not lubricated.

- You must install a **pressure relief valve** after the air regulator and near to the inlet motor to follow the pressure relief instructions.
- The motor air supply hose should have an internal diameter of at least 19 mm / 0.75".
- The motors are tested prior to their sending. Nonetheless, before coupling the motor to the pump, you must operate the no load motor during a few minutes to a maximum pressure of 1 bar / 14.5 psi.

Then, comply with the instructions as follows :

- Couple the motor to the required fluid section,
- Connect the main air supply to the motor,
- Adjust the pressure by means of the air regulator.

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Before starting the equipment, (see the Installation section view).

Follow these instructions :

- The main air valve (A) is closed,
- Close the depressurize valve (D),
- Close the drain valve (H),
- Adjust the air regulator (C) on 'O',
- Adjust the fluid regulator (J) on 'O',
- Close the gun (M) (valve, gun,...),
- Open partially the drain valve (H), place a drum to get the drained material,
- Open the air valve (A),
- Open the depressurize air valve (D),
- Adjust the air regulator (C) to operate slowly the pump,
- Operate to get off air from the pump,
- Close the drain valve (H),
- Open the fluid regulator (J),
- Trigger the gun (M) (valve,...) and let it on the drum (grounded) to get off air from hoses, gun, valve,...
- Material must flow continuously (without air bubble),
- The pump must stop when the gun is closed (M) (valve, gun,...),
- Fill the T lubricant\* into the cup until it reaches the maximum level,
- Refill with the T lubricant\* until the backflow into the cup (~1.2L / 0.32 US gal).

#### \* Use only KREMLIN REXSON T lubricant

Then adjust :

- air pressure to the regulator (C),
- fluid pressure to the regulator (J).

Depending upon :

- material viscosity,
- gun nozzle diameter (M),
- material hoses' length and diameter (K),
- work.

Nota : Before starting the work, check that the working range is correct.

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The pumps are tested in our workshop with lubricant. Before starting up, you must flush the pump with the appropriate solvent.

# 6. SHUTDOWN AT THE END OF THE WORK

Unscrew the air regulator (s).

Leave the pump full of material.

When stopping the pump for a long time, after flushing it, leave it filled with solvent.

Depressurize the system.

#### SHORT SHUTDOWN

Flush the installation with the appropriate solvent to prevent from material drying inside the pump, hoses or accessories. Eliminate the pushed product by the solvent in a container and flow the solvent in a closed circuit until you get a sufficient flushing.

Remove the T lubricant\* from the cup (O) by the drain cup (Q) and refill with the T lubricant into the cup

#### \*Use only KREMLIN REXSON T lubricant

We advice you to stop the pump in 'low reversing' position to prevent from material drying on the piston rod.

- 1 Decrease air pressure regulator (C) until you get 0 bar / 0 psi on the gauge (I),
- 2 Trigger the gun to depressurize the system,
- 3 Unscrew the gun air regulator or disconnect the gun air inlet,
- 4 Remove the gun aircap and the nozzle (only when using an AIRMIX® gun) and soak them into solvent.

#### LONG SHUTDOWN

After flushing the installation, to prevent from corrosion, fill the pump with oil solvent to prevent air bubbles and neutralize the residual material.