

DOCUMENTATION

**LOW PRESSURE FLUID REGULATOR
PILOTED VERSION**

BP 40 - 0.5 / 4 PP

Manual : 582.154.110-UK - 1912

Date: 16/12/19

Supersede :

Modif.:

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.

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INSTRUCTION MANUAL

LOW PRESSURE FLUID REGULATOR

PILOTED VERSION

MODEL : BP 40 - 0,5 / 4 PP

Manual ref : 1912 573.118.112

TRANSLATION FROM THE ORIGINAL MANUAL

Date : 06/12/19 - Supersede : 21/09/10 - Modif. Update

Dear Customer,

We thank you very much for purchasing an accessory from SAMES KREMLIN range.

To get the best result, safe and efficient operation of your manual fluid regulator, we advice you to read and make yourself familiar with the instruction and service manual.

1. SAFETY INSTRUCTIONS

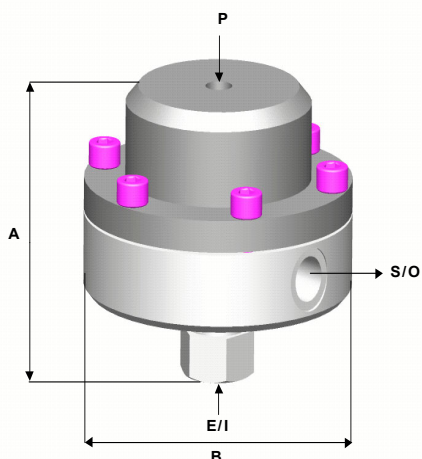
- ➔ The personnel involved in operating and servicing this equipment must be aware of all safety requirements stated in this manual. The workshop supervisor must be certain that the personnel has perfectly understood the safety instructions and complies with them.
- ➔ Use the equipment only in a properly ventilated area to maximize health care. Any misuse of the spray equipment or accessories can damage them and result in serious body injury, fire or explosion hazard.
- ➔ This equipment is installed on installations operating under low pressures. Check the maximum pressure of the fluid pressure supplied upstream of the regulator.
- ➔ All fittings must be tight and in good conditions.
- ➔ 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 drain valve,
 - to point the spray gun into an appropriate waste receptacle and press the trigger to depressurize the system.

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2. TECHNICAL FEATURES



The low pressure fluid regulator, piloted version with small passage is used on installations that handle fluid materials.

The regulator is in stainless steel and is designed for a full and easy flushing.

It is designed to be supplied under a maximum under a maximum inlet pressure of 6 bar/ 87 psi and to deliver an outlet pressure between 0,5 bar and 4 bar/ 7.25 and 58 psi.

The fluid pressure adjustment at the outlet of the regulator is carried out by adjusting the air pilot pressure that is driven by an air regulator.

Weight	1 kg / 2.204 lb
Dimension	A : 73 mm / 2.87 " B : Ø 85 mm / 3.35 "
Wetted parts	Stainless steel, PTFE, carbide

Pressure range : - Inlet pressure (max.) - Outlet pressure - Air pilot pressure (max.)	40 bar / 580 psi 0,5 to 4 bar / 7.25 to 58 psi 6 bar / 87 psi	The fluid pressure (outlet) being similar to the air pressure (pressure ratio 1) read fluid pressure on the air gauge.
Fitting : Material inlet (E/I) Material outlet 1 (S/O) Material outlet 2 Air pilot inlet (P)	F 1/4 NPSM F 1/4 BSP F 1/4 BSP F 1/8 BSP	To get a better adjustment of this fluid regulator, select an accurate air regulator

3. TROUBLESHOOTING CHART

TROUBLE	CAUSE	SOLUTION
Overpressure at the fluid regulator outlet.	Air pilot pressure too high.	Decrease air pilot pressure.
	Improper fluid proofness between seat and ball.	Clean or replace.
No material coming out from the regulator.	Insufficient air pilot pressure.	Increase air pilot pressure.
	Ball stocked on the seat.	Clean and reinstall.
Irregular flow rate	Too much pulsation in the fluid network	Check fluid network.
	Improper proofness between seat and ball.	Clean or replace.
Material leakage along the regulator hat.	Defective diaphragm.	Replace it.
	Loosen lower body.	Tighten the 6 screws.

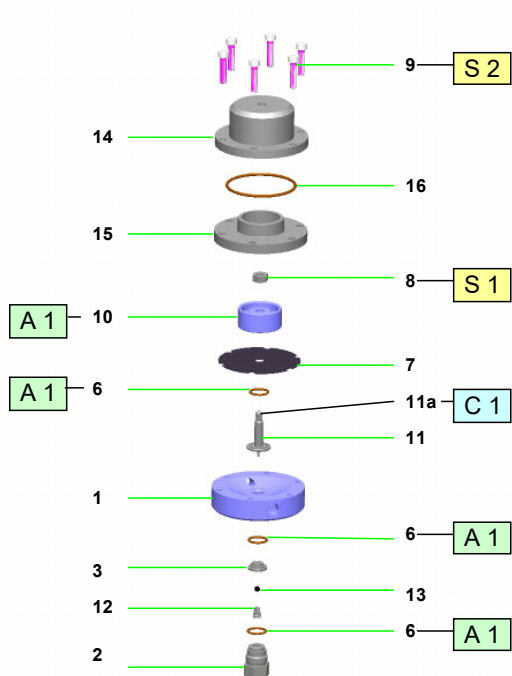
4. REMOVAL

■ CLEANING OF THE REGULATION VALVE (2 - 12 - 13)

Unscrew the valve fitting (2). Remove the spring (12) and the ball (13).
Clean the parts with white spirit or with an appropriate cleaning solvent.
Change them if necessary. When reassembling, change the seal (6).
Remount all the parts by holding the regulator vertically.

After the tightening of the valve fitting (2), check visually that the spring (12) is properly lined up with the other parts.

■ REPLACEMENT OF THE SEAT (3) OR OF THE NEEDLE ASSEMBLY (11) OR OF THE DIAPHRAGM (7)



Removal :

Unscrew the 6 screws (9) and remove the lower body (1).
Unscrew the valve fitting (2).
Remove the spring (12) and the ball (13).
To remove it from the lower body (1) and from the seal (6), push on the seat holder (3).
Remove the hat (14).
Unstick the diaphragm (7) from the bearing (15).
Pull carefully the diaphragm to remove the needle assembly (11), the piston (10) and the nut (8).
Do not pull the needle. This would damage the parts.
Unscrew the nut (8) to remove the piston (10).
Remove the diaphragm (7). Clean the parts.

Reassembly :

Change the seal (6) placed on the needle assembly.

Lubricate the piston (10) with PTFE grease.

Place the diaphragm (black side to the air room, grey side to the material room) and the piston (10) on the needle assembly.

Glue with a coating of glue the axis threading (11a). Screw the nut (8) on the needle assembly without using tools.

Grip the end of the axis (11 a) with pliers and tighten the nut slightly with a flat wrench n°13 (torque recommended : 2 Nm / 1.5 ft/lbf).

Install the assembly into the bearing (15).

Remount the regulator body (1) and fix it via the 6 screws (9). Do not forget the hat seal (16).

Remount the seat (3), the ball (13), the spring (12) and the valve fitting (2). Change the 2 seals (6).

If the seat needs to be changed (3), change as well the ball (13).

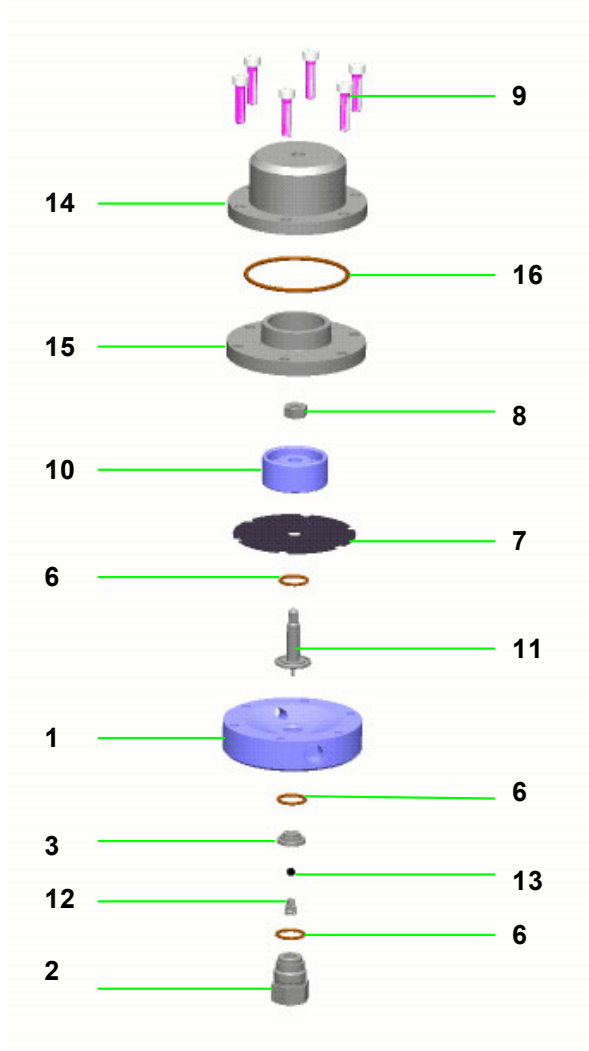
Nota bene: The seat holder is reversible. When servicing the first time, it can be installed upside down. It will have to be replaced only at second servicing.

Index	Instruction	Description	Part numbre
A 1	PTFE grease	"TECHNILUB" grease (10 ml)	560.440.101
C 1	Medium strength Aneorobic Pipe sealant	Loctite 577 (250 ml)	554.180.015
S 1	Screwing torque : 2 Nm / 1.47 ft/lbs		
S 2	Screwing torque: 10 Nm / 7.4 ft/lbs		

Doc. 573.245.052 Date/Datum/Fecha : 06/12/19 Annule/Cancel/ Ersetzt/Anula : 02/05/02	Modif. / Änderung : Mise à jour / Update / Aktualisierung / Actualización	Pièces de rechange Spare parts list Ersatzteilliste Piezas de repuesto
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LP FLUID REGULATOR (air operated)- MODEL: 40 - 0,5 / 4 PP


P.N°.155.610.230



Ind.	Part number	Description	Qty
1	055 610 001	Body, fluid regulator	1
2	055 271 203	Fitting, valve (F 1/4 NPSM)	1
3	055 271 210	Seat	1
6	050 040 314	Seal, PTFE	3
7	055 610 201	Diaphragm	1
8	953 010 019	Nut, HM 8	1
9	933 151 332	Screw, CHc M 6 x 25	6
10	055 610 210	Piston	1
11	155 271 215	Needle assembly	1
12	050 312 225	Conical spring	1
13	907 414 208	Ball Ø 5	1
14	055 610 231	Hat	1
15	055 610 211	Bearing	1
16	909 420 235	Seal, hat	1
*	155.610.110	Spare kit : piston - bearing (ind. 7, 10, 15)	1
*	155.610.113	Servicing kit (ind. 3, 6(x3), 7, 11, 12, 13, 16)	1

* Preceding the index number denotes a suggested spare part.

OPTIONS

	Part number	Description
	016.200.010	Bracket support
	933.011.198	Screw, 16 (x 2)
	953.010.019	Nut, (x 2)
	963.040.019	Washer (x 2)