

## SPECIFICATIONS

# STAINLESS STEEL AIRMIX® PRESSURE REGULATOR

Models :

**250 - 10 / 70**

**250 - 10 / 120**

**120 - 5 / 40**

Manual : 1310 573.041.212

Date : 10/10/13 - Supersede : 21/09/10

Modif. : Update

## 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.

### ADDITIONAL DOCUMENTATIONS

SPARE PARTS : AIRMIX® Regulator (Doc. 573.328.050)

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**SPECIFICATIONS**

**STAINLESS STEEL AIRMIX® PRESSURE REGULATOR**

**Manual or piloted version**

**Versions : 250 - 10 / 70, 250 - 10 / 120, 120 - 5 / 40**

**1. TECHNICAL FEATURES**

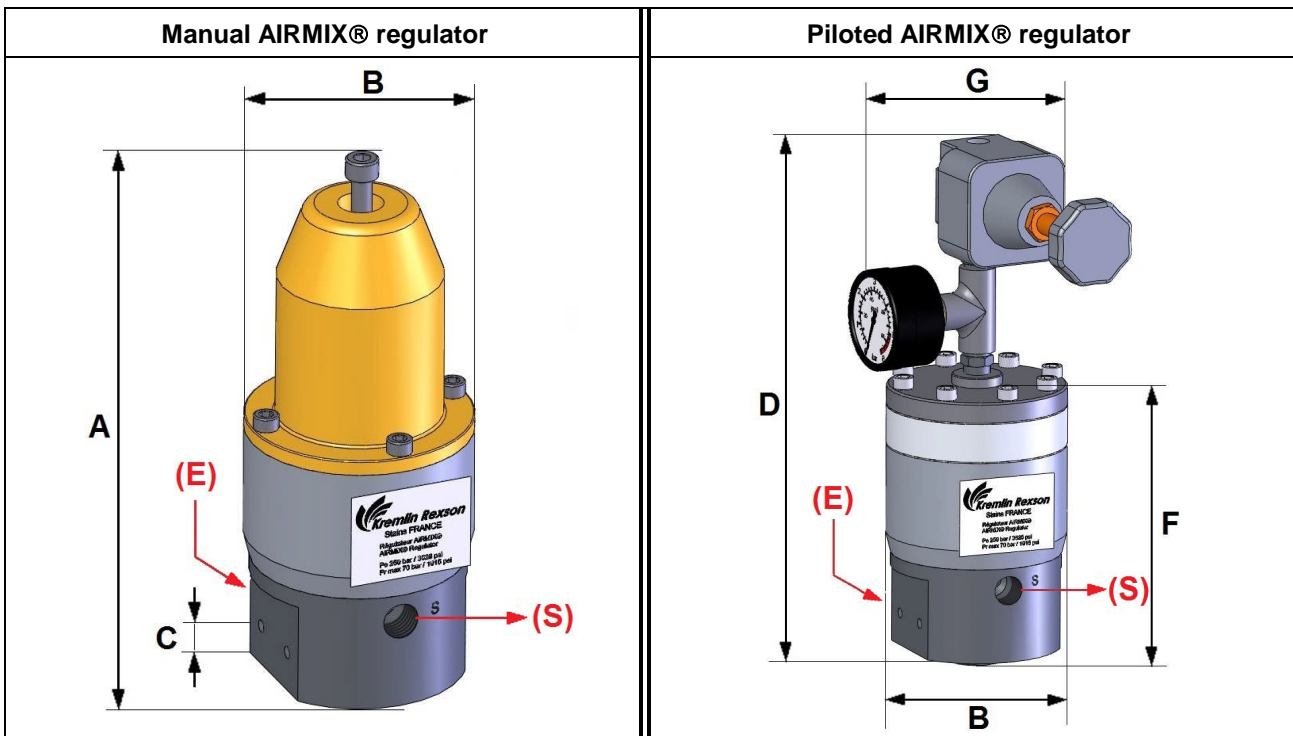
The AIRMIX® fluid regulator is used on installations that handle fluid or semi-fluid materials.

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

For the manual control regulator : the adjustment of the fluid pressure at the outlet of the regulator is carried out by screwing or unscrewing the adjustment screw (with the wrench n° 6).

For the piloted regulator : the adjustment of the fluid pressure at the outlet of the regulator is carried out by adjusting the air pilot pressure. The pilot air must be driven by a precision air regulator to obtain a better adjustment of the piloted regulator.

The fluid part is the common part of the 2 regulators. An arrow (or the letters **E** and **S**) marked on the body indicates the fluid inlet and the fluid outlet.



Ind.	mm	"	Ind.	mm	"	Ind.	mm	"	Ind.	mm	"
A	225	8.85	B	Ø 89	Ø 3.5	C	16	0.6	D	275	10.8
F	Max 160	Max 6.3	G	170	6.7						

Type	Manual regulator (by screws)		Air piloted regulator (with pilot regulator)		
Version	250 - 10 / 70	250 - 10 / 120	120 - 5 / 40	250 - 10 / 70	250 - 10 / 120
Pilot stage number	-	-	1	2	3
<b>Pressure range :</b>	250 bar / 3625 psi		120 bar / 1740 psi	250 bar / 3625 psi	250 bar / 3625 psi
- Maximum inlet pressure	250 bar / 3625 psi		120 bar / 1740 psi	250 bar / 3625 psi	250 bar / 3625 psi
- Outlet pressure	From 10 to 70 bar / from 145 to 1015 psi	From 10 to 120 psi / from 145 to 1740 psi	From 5 to 40 bar / from 72.5 to 580 psi	From 10 to 70 bar / from 145 to 1015 psi	from 10 to 120 bar / from 145 to 1740 psi
- Maximum piloting air pressure	-		6 bar / 87 psi		
<b>Fittings :</b>	F 3/8 NPS		F 3/8 NPS		
- Fluid inlet (E)	F 3/8 NPS		F 3/8 NPS		
- Fluid outlet (S)	F 3/8 NPS		F 3/8 NPS		
- Air pilot inlet	-		F 1/4 BSP		
<b>Wetted parts</b>	Stainless steel, PTFE, carbide		Stainless steel, PTFE, carbide		
<b>Weight</b>	3.6 kg / 7.9 lb		3.6 kg / 7.9 lb	3.850 kg / 8.5 lb	4.1 kg / 9 lb
<b>Maximum temperature</b>	50°C / 122°F		50°C / 122°F		

#### ■ HOSES WITH FITTINGS RECOMMENDED

You must choose the hose according to the material viscosity and to the length. Make sure the hose has a larger diameter for higher length or important viscosity.

Airmix® Regulator	Fluid material		Semi-fluid material	
	Fitting	AIRMIX® hose	Fitting	AIRMIX® hose
Inlet (E)	M 3/8 NPT - M 1/2 JIC	∅ 6,35 mm int. (1/4")	M 3/8 NPT - M 3/4 JIC	∅ 9,52 mm int. (3/8")
Outlet (S)	M 3/8 NPT - M 1/2 JIC	∅ 4,8 mm int. (3/16")	M 3/8 NPT - M 1/2 JIC	∅ 4,8 mm int. (3/16") or 6,35 mm int. (1/4")

## 2. MAINTENANCE



**WARNING :** Before any action on the installation, shut off the compressed air supply and depressurize the systems by triggering the spray gun.

#### ■ CLEANING OF THE REGULATION VALVE (22)

Unscrew the plug (27). Remove the spring (25) and the ball (24).

Clean the parts with the appropriate cleaning solvent.

Change them if necessary. During the reassembly, change the seal (26).

Reassembly all the parts by holding the regulator vertically. Tighten the plug (27).

#### ■ REPLACEMENT OF THE SEAT (23)

##### Removal :

Unscrew the 4 screws (18) and remove the lower body (10).

Unscrew the plug (27). Remove the spring (25) and the ball (24).

To remove it from the lower body (10), push on the seat (23).

Clean the parts or replace with new parts.

**Reassembly :**

Change the 2 seals (26), the seat (23) and the ball (24) (refer to regulation assembly, 22).  
Remount the seat (23), the guide bush (21), the ball (24), the spring (25) and the plug (27).  
Remount the lower body (10) and fix it via the 4 screws (18). Respect the screwing torque.

**■ REPLACEMENT OF THE NEEDLE ASSEMBLY (11) OR OF THE DIAPHRAGMS (13 & 14)****Removal :**

Unscrew the 4 screws (18) and remove the lower body (10).  
Unstick the diaphragms from the upper body (19).  
Pull carefully the diaphragms to remove the needle assembly (11), the piston (16) and the nut (17).

**Do not pull the needle. This would damage the parts.**

Unscrew the nut (17) to remove the piston (16).  
Remove the black diaphragm (13) and the white washer support (14).  
Clean the parts or replace with new parts.

**Reassembly :**

Replace the seal (15) placed on the needle assembly (11) and the seal (20).  
Place the black diaphragm (13) to the air side, the white washer support (14) to the fluid side, and the piston (16).  
Place the needle assembly (11) into a vice and tighten at the 2 flats.  
Glue with a coating of glue the axis threading (11).  
Screw the nut (17) on the needle assembly without using tools, then screw it slightly with a wrench n° 8.  
Install the assembly into the upper body (19).  
Remount the lower body (10) with the regulation valve (22) and fix it via the 4 screws (18). Respect the screwing torque.

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**➡ IMPORTANT : when reassembling, the needle of the needle assembly (11) must be inside the central port of the seat (23), until getting in touch with the ball (24).**

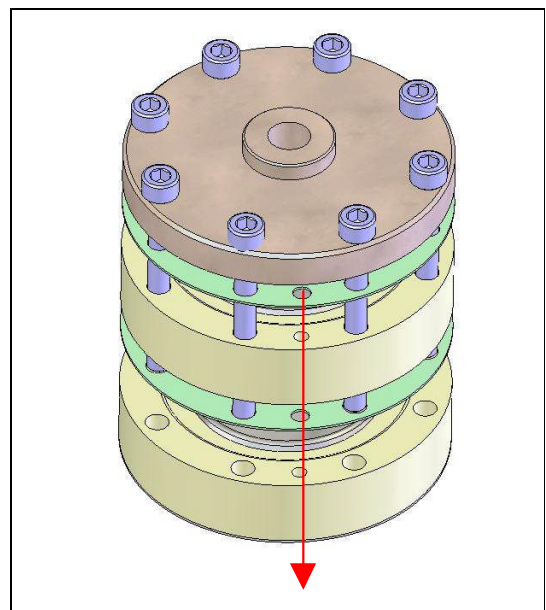
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**■ REMOVAL - REASSEMBLY OF THE PILOT ASSEMBLY****Reassembly :**

When reassembling, **you shall comply with the alignment of the holes.**

The parts have 9 holes : 8 holes (∅ 6.5 mm) for the screws and one hole (∅ 4 mm) for the pilot air.

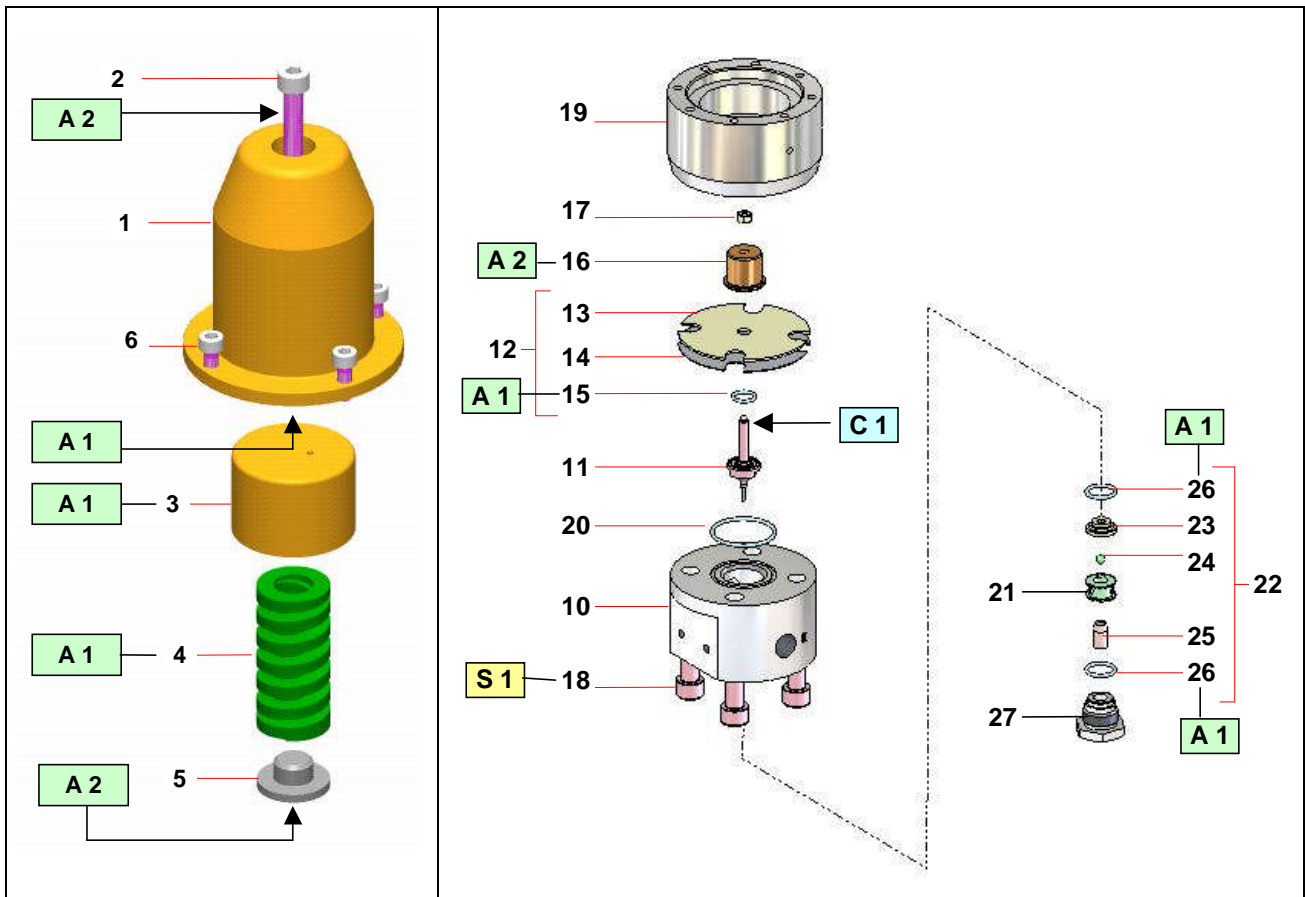
**The air passage must not be obstructed.**



**Before reassembling the different components :**

- Clean the part with the appropriate cleaning solvent.
- Install new parts if necessary after having lubricated them with PTFE grease.
- Install new parts if necessary.

■ **ASSEMBLY INSTRUCTIONS**



Index	Instructions	Description	Part number
A 1	PTFE grease	"TECHNILUB" grease (10 ml)	560.440.101
A 2	Graphite grease	Graphite grease box (1 kg / 2.204 lb)	560.420.005
C 1	Medium strength - Aneorobic Pipe Sealant - Similar as Loctite 577		
S 1	Screwing torque : 20 Nm / 14.75 ft/lbs		