AUTOMATIC AIRMIX® GUN

AVX

TECHNICAL FEATURES

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).

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1. DESCRIPTION

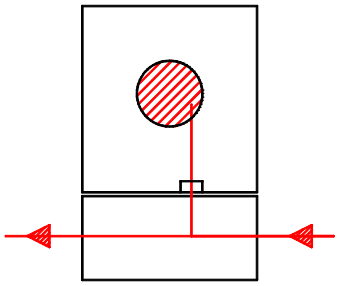
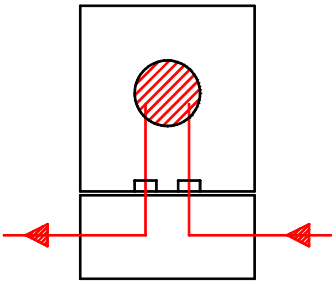
The AVX gun is designed for applying paints, primers, adhesives in automatic installations. It can be fitted on fixed supports, automatic machines or robots.

The gun assembly on base allows quick interchangeability reducing the time down. The disassembly and the assembly of the gun are carried out without removing the hoses.

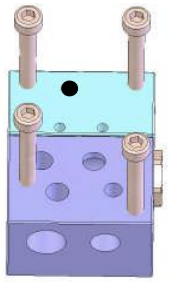
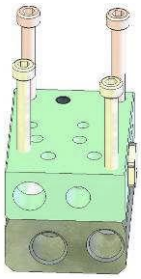
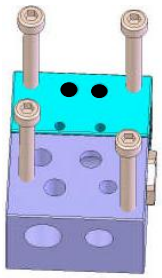
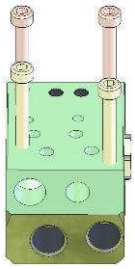
There are 2 kind of AVX gun with base : AVX (⊥) : assembly (gun + base) with fluid circulation in the base.
AVX (Ω) : assembly (gun + base) with internal fluid circulation to the gun.

Depending upon the installation, choose a base with lateral fluid connection or a base with back fluid connection.

2. TECHNICAL FEATURES

FEATURES	GUN, MODEL AVX (⊥)	GUN, MODEL AVX (Ω)
Fluid circulation	 Circulation in the base	 Internal circulation to the gun
Maximum air supply pressure	6 bar / 87 psi	
Maximum fluid supply pressure	**200 bar / 2900 psi**	
Minimum command air pressure	3 bar / 43.5 psi	
Recommended operating air pressure	from 1 to 3 bar / from 14.5 to 43.5 psi	
Flow rate	Dependent upon nozzle (refer to chart)	
Weight (gun only, without aircap) Weight (gun only, with aircap)	452 g / 1 lb 508 g / 1.1 lb	
Operating maximum temperature	50°C / 122°F	
Air consumption	From 3 to 7.5 m3/h - from 1.8 to 4.4 c.f.m	
Wetted parts	Stainless - treated stainless steel	
Seat (removal)	Stainless	
Noise level (at 1m - depending upon ISO 3746 standard)	77 dBa	

Note : For HVLP compliance, the maximum inlet air pressure at the gun base must not exceed 14.35 psi (0,99 bar) to maintain 10 psi (0,68 bar) or less at the air cap. Testing for HVLP compliance was performed using the specified HVLP test air cap, the fan control fully closed and a pressure gauge on the air inlet fitting at the gun base. It may also be a requirement of some regulatory agencies that users have the appropriate test air cap available on site to verify that the gun is being operated within the regulatory limitations

	Base (⊥)		Base (Ω)	
Model				
	lateral outlets	rear outlets	lateral outlets	rear outlets
Base weight	240 g / 0.53 lb	480 g / 1.06 lb	240 g / 0.53 lb	480 g / 1.06 lb
Base	Supplied with the gun			
Material (base)	Aluminium with stainless steel insert			

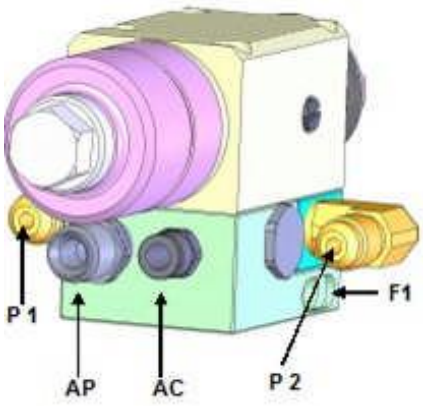
Weight (gun + base + fittings)	847 g / 1.9 lb	1070 g / 2.4 lb	847 g / 1.9 lb	1070 g / 2.4 lb

- **AIR AND FLUID FITTINGS WITH HOSES**

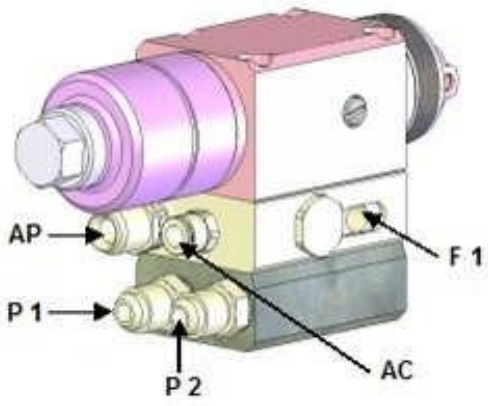
Supply	Threadings (base)	Fittings (base)	Hoses
Fluid (P1-P2)	F 1/4 NPS	M 1/2 JIC (# 5 JIC)	blue AIRMIX® hose, **conductive**, ∅ 4.8 mm (3/16") or 6.35 mm (1/4")
Atomizing air (AP)	F 1/4 NPS	M 1/4 NPS	Air hose : ∅ minimum ID 7 mm (for a 7.5 m length)
Command air (AC)	F 1/8 NPS	Quick fit	Polyamide hose : ∅ 4 x 6

On the base, you can fit : - either 2 product fittings (P1 - P2) ➔ fluid circulation
- or 1 fluid fitting and a plug

Applicate glue on the threading of the fluid fittings before assembling (similar to Loctite 577).



Fixing of the gun on the base :
4 screws M 5 x 40.

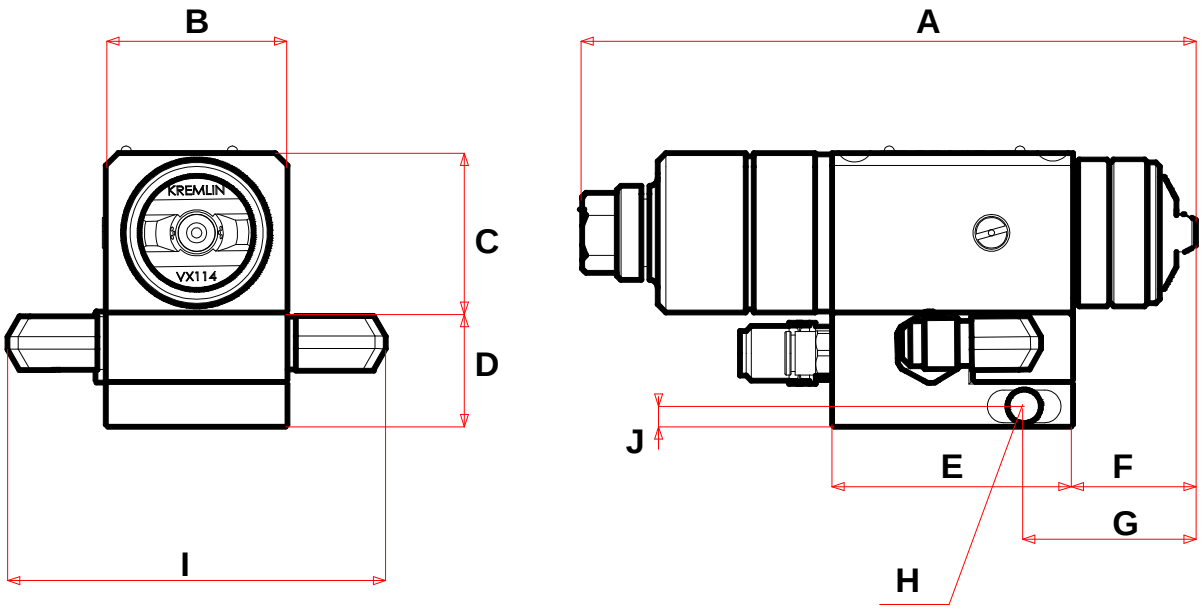


Fixing of the gun on the base :
2 screws M 5 x 60 (in the front) and 2 screws M 5x 40 (at the back)

Fixing of the whole (gun-base) in F1 : rod Ø 16, length 100 mm / 4".

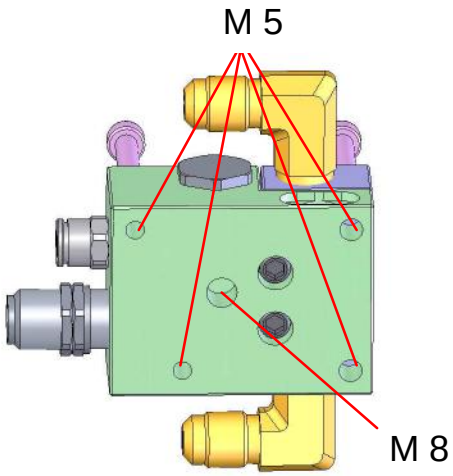
The grounding of the gun will be carried out by means of the bracket (also grounded) or by means of a conductive material hose.

- **DIMENSIONS : AVX GUN WITH LATERAL CONNECTION BASE**



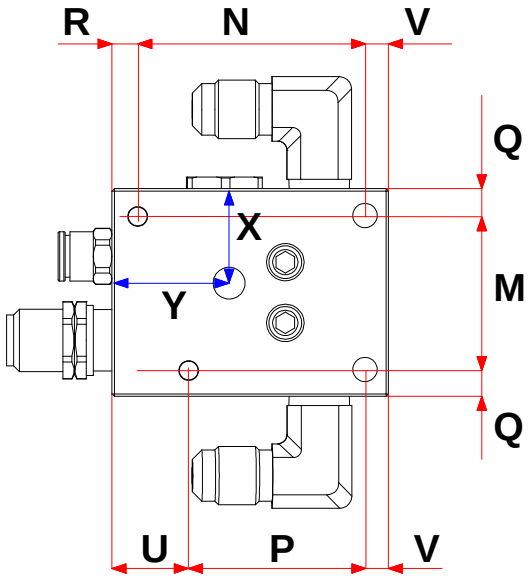
Ind.	A	B	C	D	E	F	G	H	I	J
mm	150	44.5	39	28	59	30	42	Ø 8.2	93	5
"	5.9	1.75	1.54	1.10	2.32	1.18	1.65	Ø 0.33	3.66	0.2

Base (bottom view)



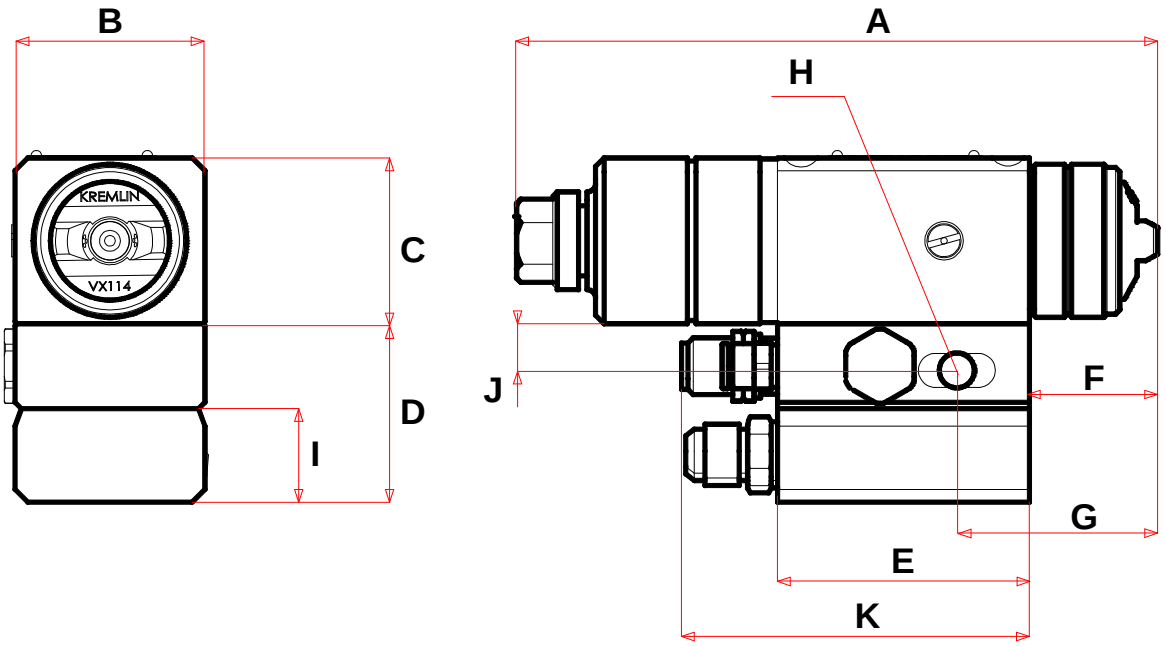
4 holes : M 5 x 10 mm

1 hole : M 8 x 7 mm



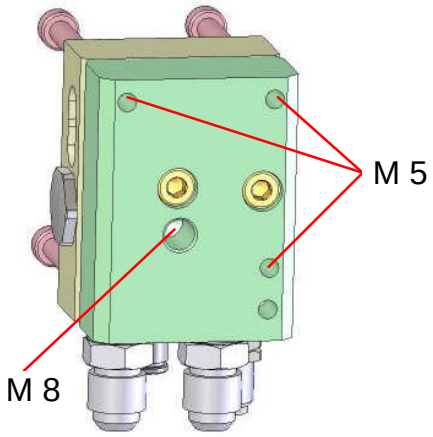
Ind.	M	N	P	Q	R	U	V	X	Y
mm	33	48.5	37.7	5.75	5.5	16.3	5	20.25	25
"	1.3	1.9	1.48	0.23	0.22	0.64	0.2	0.8	0.98

▪ DIMENSIONS : AVX GUN WITH BACK CONNECTION



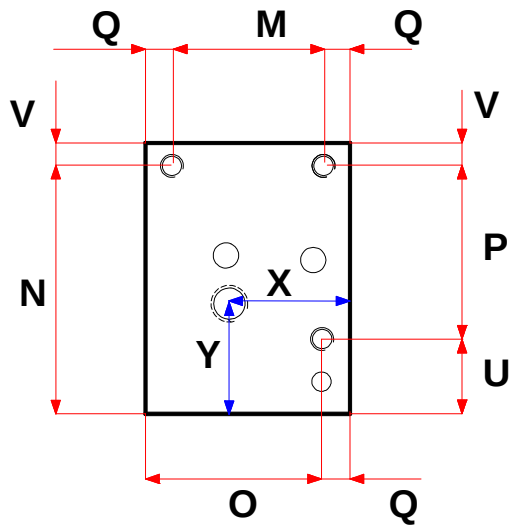
Ind.	A	B	C	D	E	F	G	H	I	J	K
mm	150	44.5	39	42	59	30	47	Ø 8	22	11	81.50
"	5.9	1.75	1.54	1.65	2.32	1.18	1.85	Ø 5/16	0.87	0.43	3.2

Base (bottom view)



3 holes : M 5 x 15 mm

1 hole : M 8 x 10 mm



Ind.	M	N	O	P	Q	U	V	X	Y
mm	33	54	38.75	37.7	5.75	16.3	5	26.25	24
"	1.3	2.13	1.52	1.48	0.23	0.64	0.2	1.03	0.94

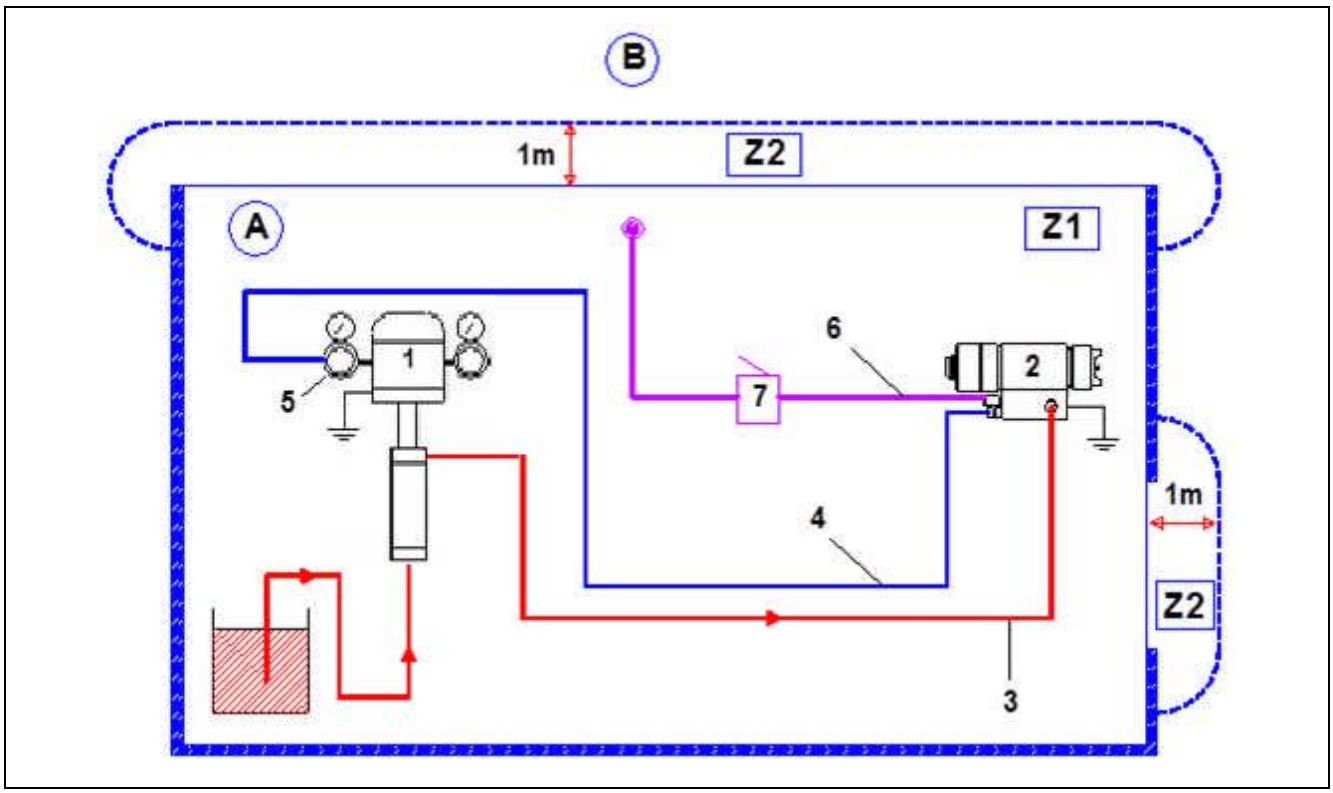
3. INSTALLATION

- **DESCRIPTION OF THE LABEL MARKING**

Marking in accordance with the ATEX Directive

KREMLIN REXSON **STAINS FRANCE**	Name and address of the manufacturer
AVX	Gun model
CE II 2 G	**II** : group II **2** : class 2 Surface equipment meant to area where explosive atmospheres due to gas, vapours, mists are liable to appear from time to time in usual operating **G** : gas
P air : 6 bar / 87 psi	Gun air supply maximum pressure
P prod : 200 bar / 2900 psi	Maximum fluid pressure at the gun inlet
-	Number given by KREMLIN REXSON. The two first numbers indicate the manufacturing year.

- **INSTALLATION DIAGRAM**



Captions :

A	Explosive area area 1 (Z1) or area 2 (Z2) : spray booth
B	Non explosive area
1	Pump
2	Airmix® automatic gun

3	Fluid hose
4	**Conductive** air hose (spraying air)
5	Air regulator
6	Air hose (control air)
7	3 way-valve or electrovalve

1 - By means of a fluid hose (3), connect the gun fluid fitting to the pump. Tighten firmly the fittings.

2 - By means of a **conductive** air hose (4), connect the gun 'Spraying air' fitting (2) to an air regulator (5) that can supply at least 3 bar / 43.5 psi (→ spraying air).

3 - By means of an air hose (6), connect the gun 'Control air' fitting to the valve or the electrovalve (7) that will control the opening and the closing of the gun.

A minimum pressure of 3 or 4 bar / 43.5 or 8 psi is necessary to control the gun (→ control air).

Nota : The gun (and its eventual base) **must be** grounded by, **at least,** one of the three next solutions :

- by means of the fixing device on the machine,
- by means of the static conductive air hose,
- by means of the conductive or static conductive fluid hose.

The ground resistance between the gun and the floor must be ≤ 1 MΩ.

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.