sames kremlin

Airmix® spraying and equipment

CATALOGUE V6.0

Creator since 1975, bringing the perfect mix between quality and productivity

sames

BOND • PROTECT • BEAUTIFY

www.sames.com

Sames - Headquarter - *13 chemin de Malacher, 38243* **MEYLAN - FRANCE**
≈ 250 Employees / 15 000 m²

Sames - *150, avenue de Stalingrad, 93240* **STAINS - FRANCE**
≈ 220 Employees / 20 000 m²

Editor's note

To help you increase your competitiveness, **Sames** dedicates itself daily to excellence in terms of innovation, reliability and sustainability.

We are constantly improving our performances as well as quality to meet your specific needs.

We also help you define the equipment allowing your installation to comply with V.O.C. directives and industry standards.

We enable you to benefit from reliable technologies while ensuring you a swift return on investment.

In this catalogue, you will find the equipment that will enable you to reach the paint application results you are targeting and the finish quality you desire.

Our mission is to provide you with the best equipment to meet your needs and requirements.

The entire team at **Sames** is at your disposal to answer your questions.

Enjoy your reading.

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Flash this QRcode to request a private access to download every user manual.

A strong identity at your disposal

Since joining the **EXEL Industries group**, **Sames** has taken on the challenges of the 21st century. Increasing our customers' comfort and profitability, giving them a superior service: this is not enough anymore. **Sames** thrives to be one of the best contributors in **Corporate Social Responsibility** (CSR).

This challenge has many aspects. On the human side, we continue respecting our customers, employees and shareholders through our commitment to safety, our **"Human Touch"** policy and uncompromising ethics. On **the environment side**, we pledge to keep our processes sustainable, our carbon footprint minimal, and make products long lasting, easy to repair and recycle.

Our challenges do not stop there. It is our duty to help our customers achieve these goals, belonging to all of us. We must also reduce our packaging, recycle our waste, reduce our transportations costs...

Let us face reality: the industry of paints, glues, varnishes, solvents, etc. has scope to improve its environmental footprint. Our commitment to our customers and to the planet Earth, is to help reduce the waste of products, support the reduction of Volatile Organic Compounds (VOC) and fluorine compounds (PFAS), reduce the energy consumption, reduce the amount of unused and discarded chemical products.

More than a supplier, **Sames** is the partner of your performance.

We Simply apply the most efficient solutions.

Improve your business

Leader in finishing solutions to protect and embellish materials, **Sames** is your key partner to enhance your productivity, combined with an excellent finish quality.

THE MOST ADVANCED TECHNOLOGIES

R & D = 4% of revenues invested in R&D

106 families of active registered patents

Airmix®: Creator of Airmix® Technology since 1975, we provide the perfect mix between quality and productivity

Electrostatic: expertise for high finishing quality and efficiency

Airless: We provide premium Airless Products for finishers with demanding applications

Powder coating inventor

INNOVATIVE TURN-KEY OFFER

Key technical areas controlled

- Finishing,
- Robotics,
- Mechanical,
- Automation,
- Fluid,
- Electrical, Electronics...

Engineering =
200 people worldwide

ENGAGED BEYOND YOUR NEEDS

Analyze and anticipate your needs

A global network of experts, close to you

Support you

- Culture of industrial and technical cooperation
- Services during the life of your installation

Our commitments
Customer satisfaction through clear processes

Customer satisfaction

OUR DOMAINS OF EXPERTISE

On top of world-class products, Sames offers to the professionals a complete range of services, based on hundreds of years of cumulated experience:

www

> HOTLINE

Experienced technicians with direct access to the full pool of technical competences answer you in English and French languages. Available at office hours, Central European Time.

+33 (0)1 49 40 25 28

Monday to Friday: 8:30 - 12:00 am and 13:00 - 17:30 pm

> AUDIT

We are specialists in spray painting. Our application specialists visit your premises and produce a written audit of recommendations, covering:

- Safe use of our products
- Work procedures
- Quality and efficiency assessment
- Fine tuning

Customers putting those recommendations in practice usually experience huge gains in final product quality and savings in product and energy.

> PREVENTIVE AND CORRECTIVE MAINTENANCE

May be carried out on site or in our repair center of Stains (Paris), France. Includes preventative maintenance, repairs, upgrades and overhauls.

> GENUINE SPARE PARTS

Sames original parts and kits guarantee quality and reliability for long periods of time. Using genuine spare parts improve the lifetime of the equipment and are a critical condition for maintaining ATEX certification on the user's premises.

> TECHNICAL SKILLS DEVELOPMENT

Can be carried out on your workplace or in our training center of Stains (Paris), France. Basic training encompasses the usage and maintenance of our equipment. Advanced trainings help even experienced painters to improve their skills in the fine art of spray paint. Investing in workers' trainings and competences is the best method to improve product quality, reduce downtime and waste, save product and time.

The trainings offered by Sames are registered by the French government and eligible to tax rebates.

Quality assurance

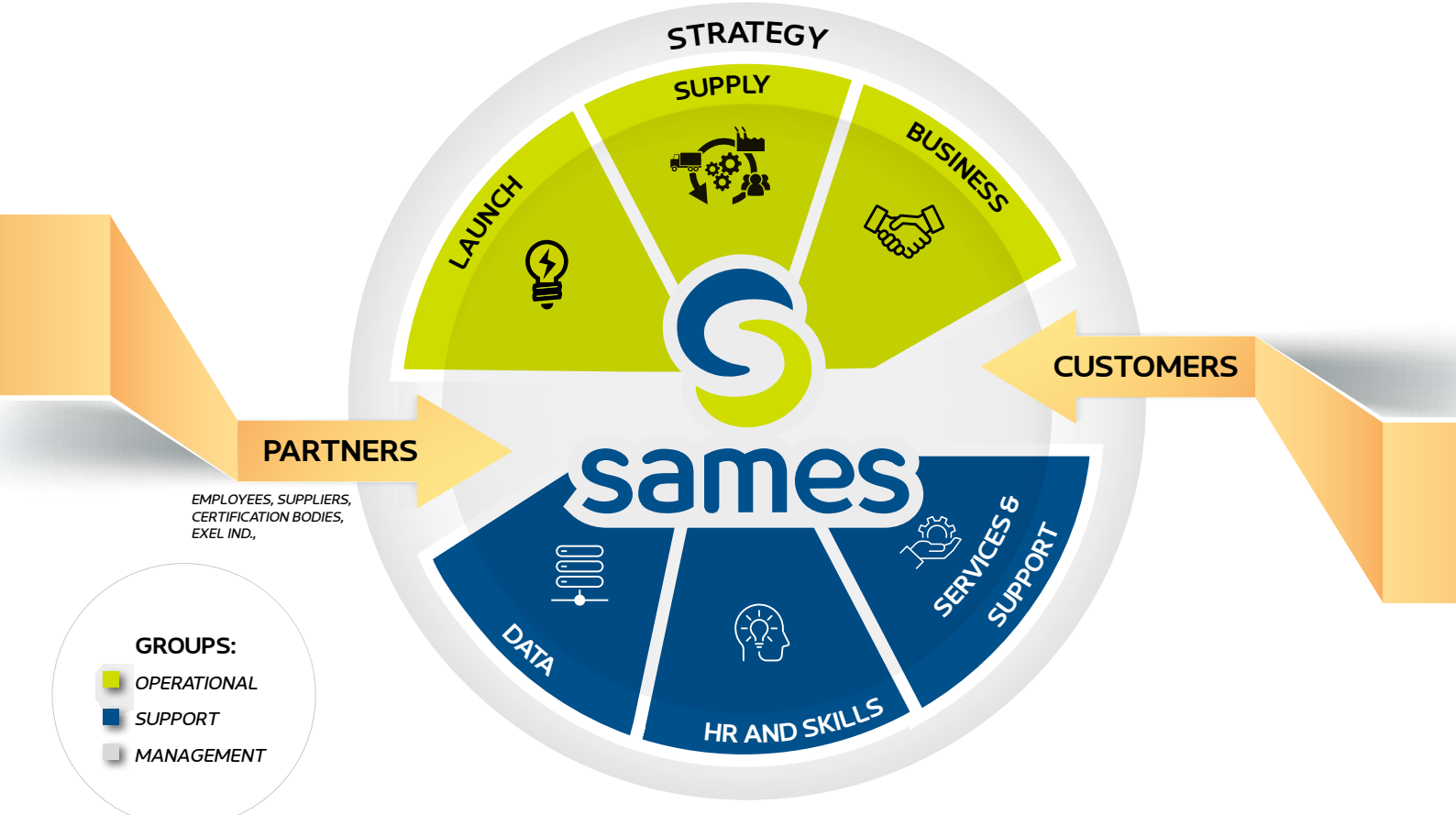
In accordance with the requirements of the ISO 9001 standard, issue 2015, procedures and records are totally controlled. Sames quality policy's commitment guarantees the utmost quality at each stage of manufacturing and component assembly.

Our products are in the scope of the following European directives:

- 2014/34/UE Explosive Atmospheres
- 2006/42/CE Machinery
- 2014/35/UE Low Voltage
- 2014/30/UE Electromagnetic Compatibility
- 2011/65/UE RoHS Restriction of Hazardous Substances in electrical and electronic equipment
- 2012/19/UE WEEE Waste of Electrical and Electronic Equipment
- 1907/2006/CE REACH Registration, Evaluation, Authorization and Restriction of Chemicals.

A process mapping allows organizing all the stages while being very attentive to the various environments (customers, competition...), to the audits (inner and outer) and to the indicators linked to the defined aims.

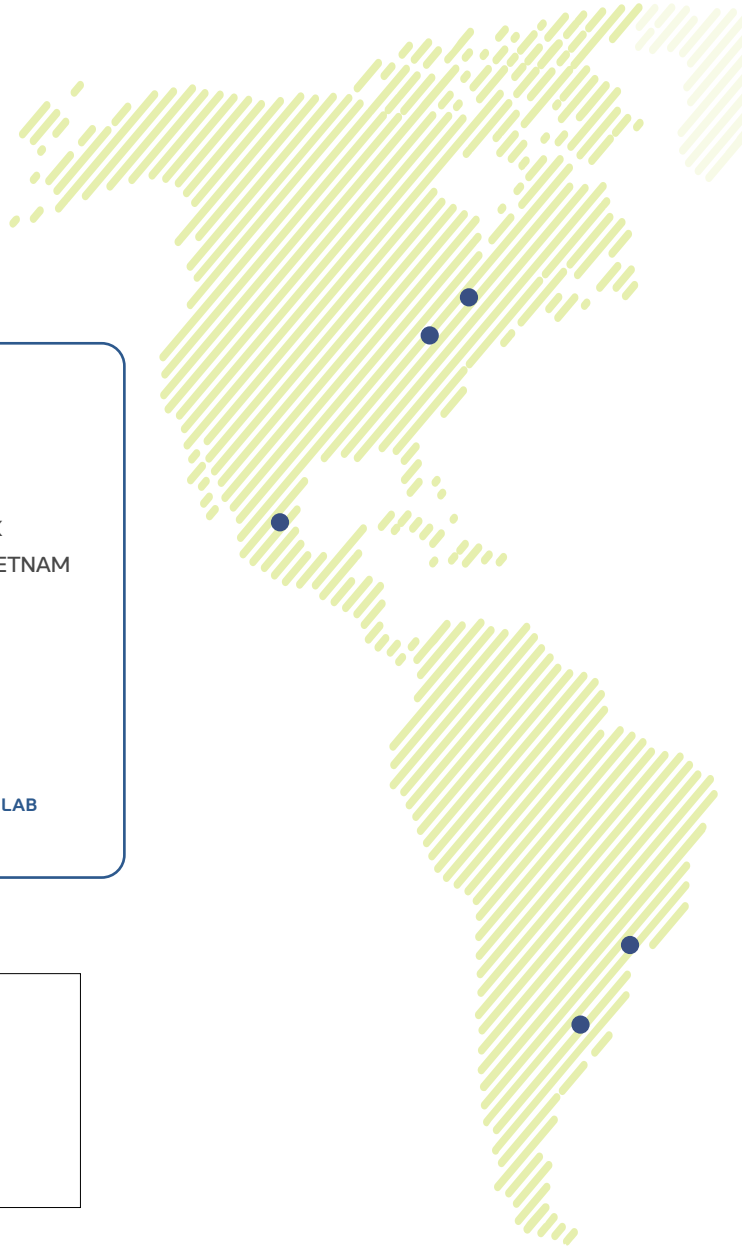
PROCESSES MAPPING



Global presence

16 Locations

Wherever you are in the world, we are committed to staying close to you. This is our "Human Touch".



◇ Headquarter and Production plants

Meylan,
FRANCE

● Production plants

Stains,
FRANCE
Erftstadt,
GERMANY

● Subsidiaries (with application lab)

● Commercial offices:

CZECH REPUBLIC
INDONESIA
LATVIA
MALAYSIA
PHILIPPINES
SINGAPORE
SWEDEN
THAILAND
TURKEY
UK
VIETNAM

A worlwide coverage, more than **1000** employees and **3000** partners!

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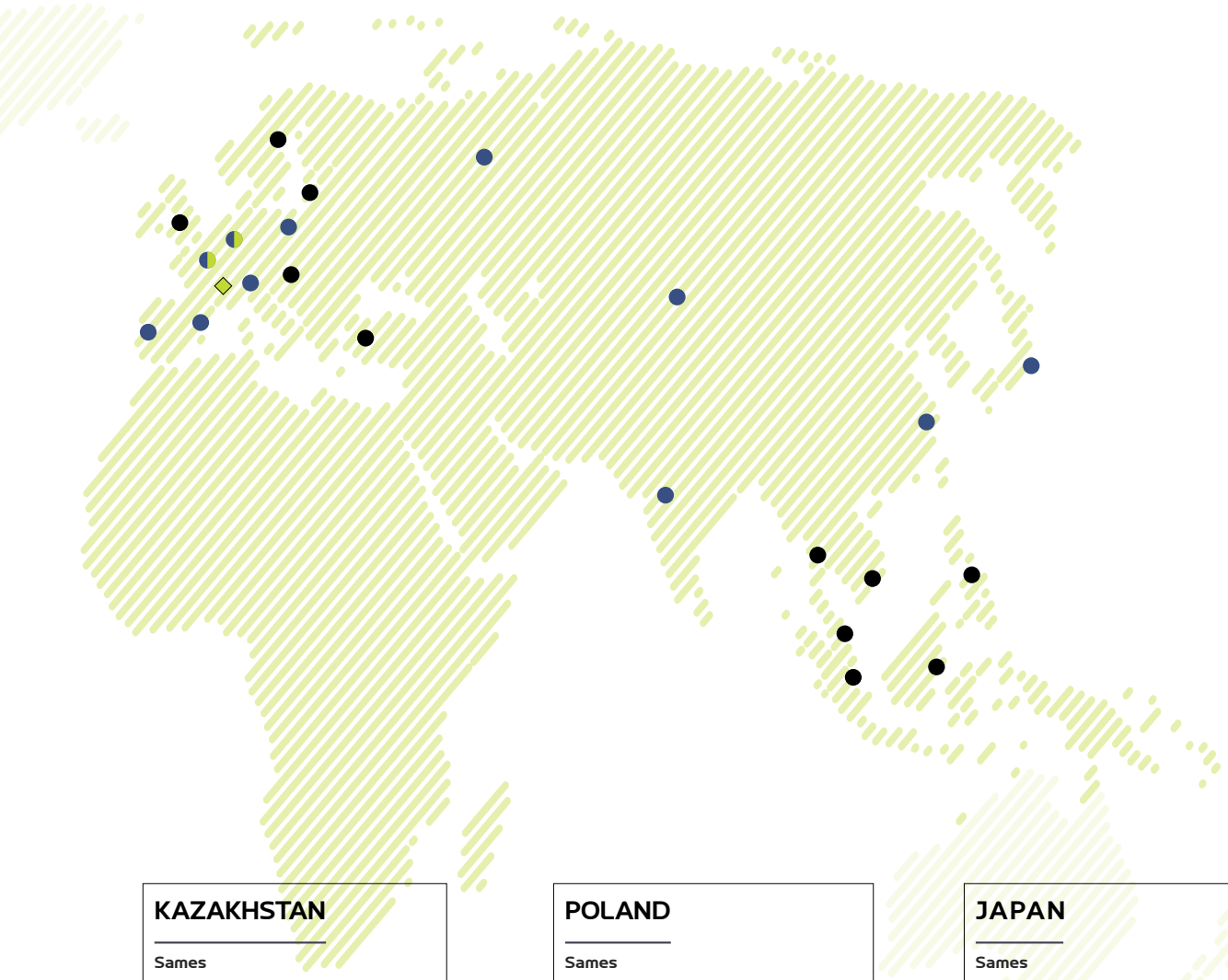
Global presence



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Airmix® spray technology

Sames Kremlin created the Airmix® Technology in 1975.

Airmix® is an intermediate spray technology that combines the advantages of both conventional and Airless technology.

Airmix® systems are the best choice where speed of application and high finish quality are both necessary. Applications include spraying on furniture, machinery, transports, shipbuilding, and many other markets.

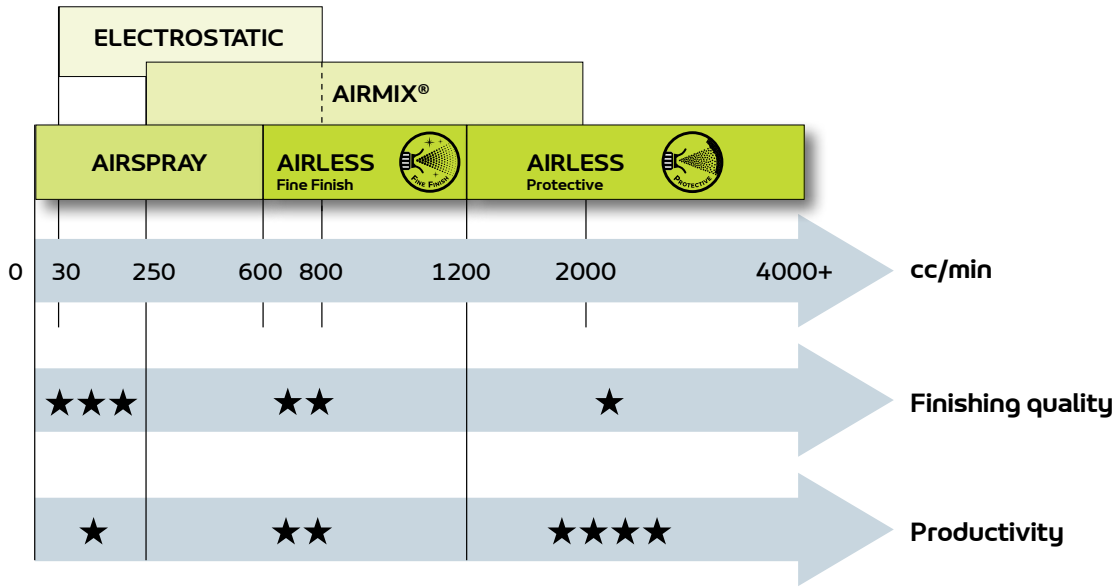
The Airmix® range is designed for manual, automatic and electrostatic spraying.

WWW

Airmix® is particularly well suited to apply the following materials:

- Water based paints
- Solvent based paints
- Epoxy primer
- PU Top coat
- Polyester
- Acrylics
- Cellulose
- 2K material with acid or moisture sensitive catalyst
- High gloss
- High Solid Content

The place of the Airmix® technoogy inside coating technologies:

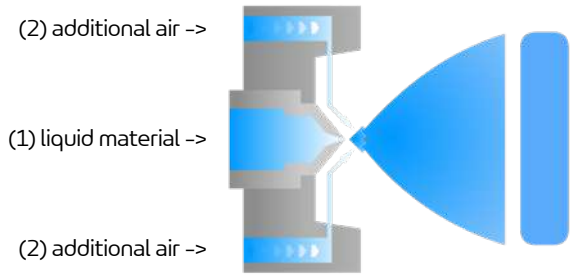


Recommended range of use

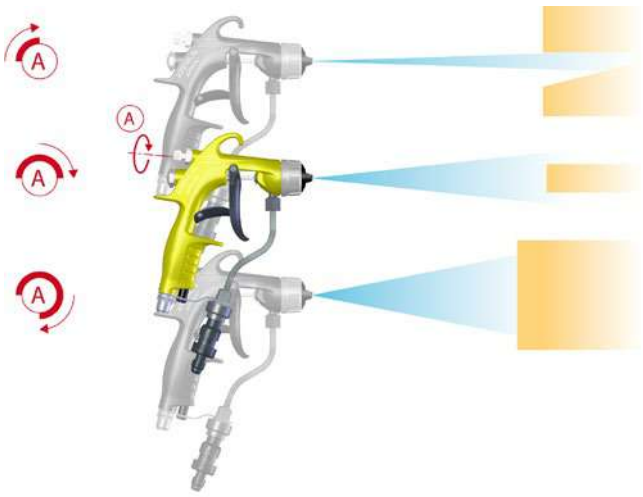
Airmix® spray technology

How does it work

As in **airless** technology, the liquid material is forced at medium pressure through a very small hole in a carbide tip. The material **(1)** vaporizes and forms small droplets. Air jets push the stream of product forward and help the atomization; therefore, paint can be vaporized at a much lower pressure than in airless systems.
This increases the transfer efficiency, improves the quality of atomization, and prevents the formation of drops on the head.



Other air jets **(2)** called «fan control» concentrate the width of the spray, according to the application requirements. The pressure of fan control air jets is controlled by the «fan control knob» at the rear of the gun **(A)**.



Without fan control air, the width angle of the spray is the maximum defined by the **tip** specifications. Increasing the air pressure will concentrate the beam by up to 1/3, this being heavily influenced by the characteristics of the product, viscosity and pressure.

Airmix® key points

Airmix® gives a high finishing quality and uniform film build for high productivity on paint flow rates up to 2000 cc/min. Conventional spray is known for high finishing quality with limited flow rate, ideally under 400cc/min ; Airless is an efficient high flow solution but lacking somehow in quality finishing.

The use of Airmix® systems is optimal in a range of pressure between 30 and 240 bar for paint; this corresponds to pumps with a pressure ratio between 5/1 and 40/1.

The **Sames** Airmix® spray gun delivers a transfer efficiency (the amount of product effectively reaching the target) up to 86%, according to the EN13966 standard. Eliminating overspray reduces coating consumption by up to 35 % against airspray application while maintaining an outstanding spraying quality.

AIRMIX®
HALF A CENTURY OF SUCCESS !

Airmix® spray technology

Equipment

Xcite®+ and Xcite®+ light are our flagship in manual spray guns. In 2022, they have replaced the legacy Xcite® and Xcite® light, offering better atomization performances and improved features.
Xcite®+ includes a stainless steel filter and swivel; Xcite®+ light is lighter in hand and its operation might require a product in-line filter.
AVX automatic gun is to be integrated in a robot, machinery or paint tunnel. Instead of a manual trigger, the gun is operated by an external air trigger.

Heads and tips

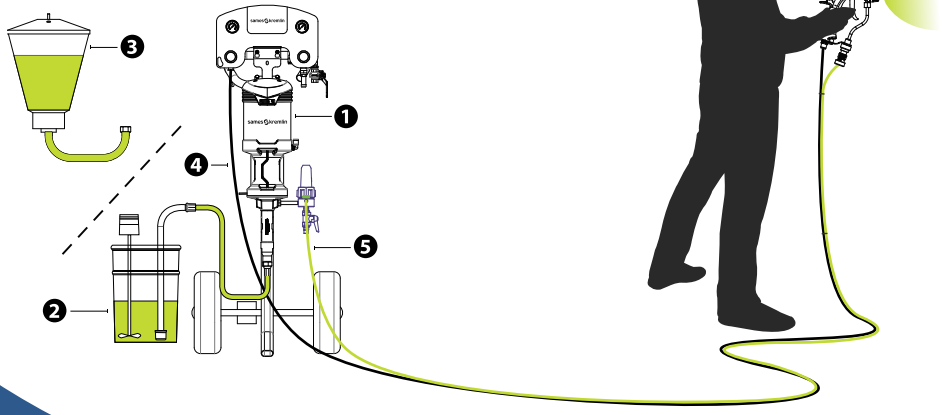
A large range of tips are available for any application on ***page 21***; Tips are common to Xcite®+, Xcite®+ light and AVX, whereas AVX special heads offer a large range of options.

Spray systems

Airmix® spray systems can be ordered as complete spray pack as described on the following page or assembled component by component.
A basic Airmix® system includes a pump, a gun, an air hose and a product hose.
The pump **(1)** can be supplied from a suction rod **(2)** or a gravity hopper **(3)**.
The gun shall be selected as 120bar, 240 bar or even 400 bar for extremely thick materials.

Air **(4)** and product **(5)** hoses must be selected according to the material sprayed and the maximum pressure that the pump can deliver.

Spray systems may also include standalone filters, in-line-filters, agitators, carts, flushing rods, two-gun management, circulations systems.
Do not hesitate to contact your nearest **Sames** representative for advice in defining the right combination for your needs.



Spray kit selection

The choice of pump and gun type depend mostly on the type and viscosity of the product to be applied.
This can be found in the material data sheet.

Our standard kits include
2 air regulators with gauges,
2 hoses 7.5m long (except on 151.665.700 and 151.665.720) with protecting sleeve, and one Xcite®+ spray gun with VX24 head.

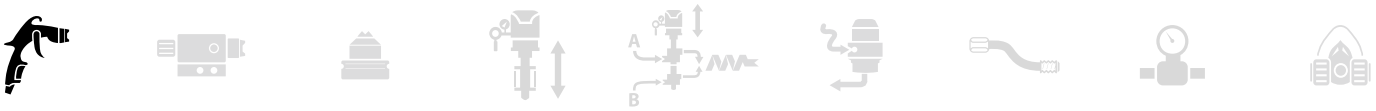
They satisfy the requirements of applications spraying up to 5 liters /day.
Kits are sent ready to assemble.

= Table of spray kit

Maximum output pressure: bar(psi)	Gun type	Two gun manifold	Tip	Hoses included	Swivel fitting	Pump type	Mounting	Packing material	Pump output filter w/ drain valve	Suction rod	Reference to order
60 (870)	Xcite®+ 120	-	-	-	-	10C18	Wall	GT	-	None inlet F 1/2 BSPP	151.665.700 (6)
		-	-	-	-	10C18	Wall	GT	-	Ø 6.35 (7)	151.665.720
		-	06.094	✓	-	10C18	Wall	GT	-	-	151.665.730
		-	06.094	✓	-	10C18	Wall	GT	-	Ø 6.35 (7)	151.665.740 (6)
		-	06.094	✓	-	10C18	Tripod	GT	-	Ø 6.35 (7)	151.665.760 (6)
		-	06.094	✓	-	10C18	Wall	GT	-	Ø 16 (8)	151.665.780
		-	06.094	✓	-	10C18	Tripod	GT		Ø 16 (8)	151.665.770
90 (1305)	Xcite®+ 120	-	-	✓	-	15C25	Wall	GT	-	Ø 16 (8)	151.261.001
		-	-	✓	✓	15C25	Wall	GT	-	-	151.260.976
		-	-	✓	✓	15C25	Wall	GT	-	Ø 16 (8)	151.260.974 (6)
		-	-	✓	✓	15C25	Wall	MB-A	-	Ø 16 (8)	151.265.005
		-	-	✓	✓	15C25	Wall	MB-A	-	-	151.265.006
		-	-	✓	-	15C25	Wall	MB-A	-	Ø 16 (8)	151.265.015
	Xcite®+ 120 Light	-	09.114	✓	-	15C25	Wall	MB-A	✓	Ø 16 (8)	151.140.600
	Xcite®+ 120	-	-	✓	✓	15C50	Wall	GT	✓	-	151.265.052
		-	-	✓	✓	15C50	Wall	GT	✓	Ø 23 (9)	151.265.053
		-	-	✓	✓	15C50	Wall	GT	-	Ø 23 (9)	151.265.050
	Xcite®+ 120 Light	-	12.114	✓	✓	15C50	Wall	GT	✓	Ø 23 (9)	151.143.600
	2 x Xcite®+ 120	✓	2 x 09.114	2	2	15C50	Wall	MB-A	✓	Ø 23 (9)	151.143.650
100 (1450)	Xcite®+ 120	-	-	✓	✓	17F60	Wall	GT	✓	Ø 23 (9)	151.260.967
120 (1740)	Xcite®+ 120	-	-	✓	✓	20C50	Wall	Chevron	✓	Ø 23 (9)	151.260.966
		-	-	✓	✓	20C50GT	Wall	GT	✓	Ø 23 (9)	151.260.973
180 (2610)	Xcite®+ 240	-	-	✓	✓	30C25	Wall	GT	-	Ø 16 (8)	151.260.975 (6)
		-	-	✓	✓	30C25	Wall	GT	-	-	151.260.977
		-	-	✓	✓	30C25	Wall	GT	✓	Ø 25 (9)	151.260.978 (6)
		-	-	✓	-	30C25	Wall	GT	-	Ø 25 (9)	151.261.002
		-	-	✓	✓	30C25	Wall	MB-A	-	-	151.265.008
		-	-	✓	✓	30C25	Wall	MB-A	-	Ø 16 (8)	151.265.007
		-	-	✓	-	30C25	Wall	MB-A	-	Ø 23 (9)	151.265.010
		-	-	✓	✓	30C25	Wall	MB-A	✓	Ø 23 (9)	151.265.009
200 (2900)	Xcite®+ 240	-	-	✓	✓	34F60	Wall	GT	✓	Ø 23 (9)	151.260.970
210 (3045)	Xcite®+ 240	-	12.114	✓	✓	35C50	Wall	MB-A	-	Ø 23 (9)	151.148.400
		-	12.114	✓	✓	35C50	Wall	MB-A	✓	Ø 23 (9)	151.148.450 (6)
	2 x Xcite®+ 240	✓	2 x 09.114	2	2	35C50	Wall	MB-A	✓	Ø 23 (9)	151.148.650
240 (3480)	Xcite®+ 240	-	-	✓	✓	40C50	Wall	Chevron	✓	Ø 23 (9)	151.260.968

All kits are delivered unassembled except some 10C18 which have the air plate installed (contact us)
(6): References carry reduced lead time

Suction rods (when included)	
(7): Ø 6.35 (M 26x125)	051.665.640
(8): Ø 16 (M 26x125)	151.140.100
(9): Ø 23 (M 26x125)	049.596.150



Manual spray guns

The Xcite®+ gun family is the result of Sames experience since 1925. The Xcite®+ gun brings an excellent comfort to the operator. Its ultra light trigger, its design, its ergonomics and its swivel fitting reduce the operator fatigue, improve the productivity and reduce risks of RSI (Repetitive strains injuries).

Xcite®+ family uses high quality components which ensure a perfect reliability maintaining a high level of performances. The last generation of Airmix® atomization aircap offers unsurpassed finish quality.

The sprayer has the ability to modify significantly the pattern without changing the tip while using minimum atomization air and pressure. This is very useful when painting complex shape parts.

FEATURES	BENEFITS	SPECIFIC TO ONE FAMILY
Improved atomization quality Increased transfer efficiency	Outstanding spraying quality with reduced overspray	All
High transfer efficiency - up to 86%	Significant paint savings and less cleaning necessary	All
High flow rates	To meet demand production needs	All
Lightweight, light trigger and flexible design	Reduced fatigue and excellent working conditions for increased productivity	Xcite®+ Light
Simple construction with fan adjustments and EZ technology on aircap	Constant finish quality and smart usage from horizontal to vertical spray pattern	All
Compact design with optional whip hose connected directly to the spray gun	Easy access into recessed areas	Xcite®+ Light
Stainless steel fluid passages, Anodized body and double seal technology	Extended lifetime even with water-based materials	All

SPECIFICATIONS

		XCITE®+ 120	XCITE®+ 240	XCITE®+ 400	XCITE®+ LIGHT 120	XCITE®+ LIGHT 240
Body of the gun		Forged aluminum				
Fuid pressure range (bar (psi))		20-120 (290-1740)	20-240 (290-3500)	200-400 (2900-5800)	20-120 (290-1740)	20-240 (290-3500)
Maximum air inlet pressure (bar (psi))		6 (87)				
Recommended atomization air pressure (bar (psi))		0.7 - 3 (10 - 43)				
Fluid output		Depends on the atomization tip (***page 21***)				
Maximum fluid Temperature (°C (°F))		50 (122)				
Air consumption (m3/h)		4.8 - 7.2				
Wetted parts		Stainless steel, PTFE, carbide				
Safety		Trigger lock				
Filter (fitted on fluid tube)		#6 - 85 MESH / 168µ			-	
Seat		Carbide (*)				
(*) Acetal seats available as option, maximum pressure 60 bar						
ATEX		CE Ex II 2 G Ex h IIB T6 Gb X and UKCA				
Fittings	Air inlet	M 1/4 NPSM				
	Fluid inlet	M 1/2" JIC (M 1/4 NPSM Swivel available)			F1/2" JIC (M1/2» JIC with supplied fitting) (M 1/4 NPT, M1/4 BSP adapters available)	
Sprayed material	Waterbased	✓	✓	✓	✓	✓
	Solvent base	✓	✓	✓	✓	✓
	Primers	✓	✓	✓	✓	✓
	Stains	✓	✓	✓	✓	✓
	Direct Gloss / Metallic	-	-	-	-	-
	Top coats / High Gloss	✓	✓	✓	✓	✓
	UV products	-	-	-	-	-
	Moisture sensitive	✓	✓	✓	✓	✓
	Two components	✓	✓	✓	✓	✓
	Anti-corrosion / abrasives	-	-	✓	-	-
	Adhesives	-	-	✓	-	-
	Sealants	-	-	✓	-	-
	Greases	-	-	✓	-	-
	Wax	-	-	✓	-	-

UNSURPASSED ATOMIZATION FOR SUPERIOR PERFORMANCE

Xcite®+

The Xcite®+ « golden gun » is the reference in the painting industry. Airmix® technology provides an excellent finish and high efficiency.

Xcite®+ comes as standard with a metallic filter and swivel or as a "light" version where the product hose connects directly to the fluid inlet of the gun. Both models feature manual fan control knobs.

Xcite®+ is available in 120 or 240 bar pressure rating. A special version spraying up to 400 bar allows the fine spray of extremely viscous liquids e.g. varnishes and glues.

The legacy Xcite® is fully replaceable by the new Xcite®+ and Xcite®+ light. Those latter models have improved atomization process due to the embedded deflector and diffuser, resulting in better finishing..

Every Xcite®+ gun comes with a VX24 HVLP head; tips are to be ordered separately from our large offering on ***page 21***.

86% TRANSFERT EFFICIENCY HVLP COMPLIANT

WWW

- **Product savings and environmental protection due to high transfer efficiency (up to 86%)**
- **Unsurpassed atomization quality of spraying**
- **Ergonomically designed for outstanding performance**

CONFIGURATION OF THE XCITE®+ SPRAY GUN

Type of Gun	Maximum pressure	Swivel included	seat	Air inlet	Fluid inlet	Weight	Reference to order
Xcite®+	120 bar (1740 psi)	✓	Carbide	M ¼ NPSM	M ½" JIC	579	135.732.100 (1)
	120 bar (1740 psi)	-	Carbide	M ¼ NPSM	M ½" JIC	511	135.732.120
	240 bar (3500 psi)	✓	Carbide	M ¼ NPSM	M ½" JIC	579	135.732.200 (1)
	240 bar (3500 psi)	-	Carbide	M ¼ NPSM	M ½" JIC	511	135.732.220
	400 bar (5800 psi)	✓	Carbide	M ¼ NPSM	M ½" JIC	587	135.732.400

(1): References carry reduced lead time
Tips are to be ordered separately from our large offering on page 21

XCITE®+ KITS WITH AIR AND FLUID HOSES

Kits Xcite®+	Maximum pressure	Length	Part number	composition of the kit
KIT Xcite®+ 120 and HOSE 7.5 m	120 bar (1740 psi)	7.5 m	151.260.960	135.732.100 ; 050.382.114 ; 050.450.853 ; 129.270.087 ; 905.210.502
KIT Xcite®+ 240 and HOSE 7.5 m	240 bar (3480 psi)	7.5 m	151.260.961	135.732.200 ; 050.382.114 ; 050.450.653 ; 129.270.087 ; 905.210.502
KIT Xcite®+ 120 and HOSE 15 m	120 bar (1740 psi)	15 m	151.260.990	135.720.100 ; 503.821.06 ; 50.450.811 ; 129270087 ; 905210502
KIT Xcite®+ 240 and HOSE 15 m	240 bar (3480 psi)	15 m	151.260.991	135.732.200 ; 503.82.106 ; 50.450.607; 129.270.087 ; 905.210.502

Four standard kits are available for the convenience of ordering and shipping: They include Swivel air and fluid hoses, Protecting sleeve. Air hose is terminated ¼ female NPS, Fluid hose is terminated with 1/2" female JIC. An adapter M1/2"JIC - 1/4M NPT is provided with each kit

Xcite®+ Light

The Xcite®+ Light Airmix® manual spray gun focuses on lightness, simplicity and maneuverability. For maximum benefits, this spray gun is available in two versions:
120 bar and 240 bar

- **Excellent Airmix® finish quality**
- **High transfer efficiency – up to 86% (HVLP compliant)**
- **Designed to access recessed areas of parts**

THE LIGHTEST AIRMIX® MANUAL SPRAY GUN ON THE MARKET!

CONFIGURATION OF THE XCITE®+ LIGHT SPRAY GUN

Type of Gun	Maximum pressure	Swivel included	seat	Air inlet	Fluid inlet	Weight	Reference to order
Xcite®+ light	120 bar (1740 psi)	-	Carbide	M ¼ NPSM	F ½" JIC (M1/2" JIC with supplied fitting)	385	135.733.120 (1)
	240 bar (3480 psi)	-	Carbide	M ¼ NPSM	F ½" JIC (M1/2" JIC with supplied fitting)	385	135.733.220

(1): References carry reduced lead time
Tips are to be ordered separately from our large offering on ***page 21***

Xcite®+ / Xcite®+ Light

ACCESSORIES

Description	Max pressure (bar)	Xcite®+ 120	Xcite®+ 240	Xcite®+ 400	Xcite®+ light 120	Xcite®+ light 240	Reference to order
Inline fluid filter Male-Male 1/2"JIC	500				✓		155.010.000
Inline fluid filter Male-Female 1/2"JIC	500				✓		155.010.100
Stainless steel screen for filter, M4 (pack of 5)	500	✓	✓	✓			129.609.907
Stainless steel screen for filter, M6 (pack of 5)	500	✓	✓	✓			129.609.908
Stainless steel screen for filter, M12 (pack of 5)	500	✓	✓	✓			129.609.909
Swivel Male-Female 1/2"JIC		✓	✓	✓	✓	✓	129.732.425
Swivel Female1/2"JIC-Male 1/4 NPSM	500	✓	✓	✓	✓	✓	129.732.435
Stainless steel fitting Male-Male 1/2"JIC (supplied with Xcite light)	500				✓	✓	905.210.709
Stainless steel fitting M1/2"JIC - M1/4 NPT	250				✓	✓	905.210.502
Stainless steel fitting M1/2"JIC - M1/4 BSPT	400				✓	✓	550.542
Carbide seats, seals and diffusers (2 of each)	400		✓	✓		✓	129.740.908
Acetal seat, no diffuser (pack of 10)	60	✓				✓	129.729.904
Diffuser (package of 10)		✓	✓	✓	✓	✓	129.740.910
Seals for diffuser (package of 10)		✓	✓	✓	✓	✓	129.740.911
Airmix® spray guns can be fitted with extensions in order to spray inaccessible areas.							
Straight extension 400 mm length	400	✓	✓	✓	✓	✓	075.810.010

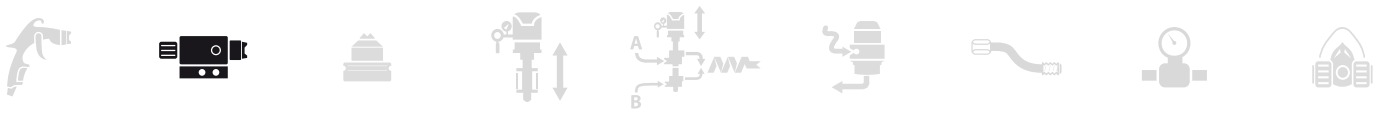
MAINTENANCE KITS

Description	Xcite®+ 120	Xcite®+ 240	Xcite®+ 400	Xcite®+ light 120	Xcite®+ light 240	Reference to order
Seal kit (Air) for Xcite®+ and Xcite®+Light	✓	✓	✓	✓	✓	129.729.908
Seal kit (Fluid) for Xcite®+ 120 and 240	✓	✓		✓	✓	129.729.901
Seal kit (Fluid) for Xcite®+ 400			✓			129.729.941
Seal kit (Fluid) for Xcite®+ Light 120 and 240				✓	✓	129.733.926

High flexibility textile braided hoses, 240bar, Female 1/2" JIC on each side with spring. Color : black. To be used with the Xcite+ Light to offer, high manoeuvrability and flexibility for a very user friendly application. Incorporate the male-male inline filter after the whip hose for tip protection.

FLUID HOSES

	Internal Diameter	
Length	3.2 mm (1/8")	4.8 mm (3/16")
0.6 m	050.220.061	050.240.061
1 m	050.220.101	050.240.101
1.5 m	050.220.151	050.240.151
2 m	050.220.201	050.240.201
3m	050.220.301	050.240.301



Automatic spray gun

Automatic Airmix® spray guns provide the same benefits as the manual ones. Instead of a manual trigger, the material flow of product is controlled by an external air trigger. Automatic guns are a quick and efficient solution widely used in robotic paint machines, particularly “flat-liners”. They are compatible with Ultra-Violet paint, glues, varnishes and multi-component products.

Fluid is circulated in the base (type T) , reducing the pressure loss, or in the gun (Type Ω) for quick flushing.

Airmix® automatic guns are mounted with several different heads according to the application. A manual and a remote fan adjustment control (through compressed air) are available as option.

FEATURES	BENEFITS
Reduced size and weight	Reduce the payload and energy consumption on the robotic heads
High transfer efficiency - up to 86%	Significant paint savings - reduce cleaning
Airmix® atomization	Excellent finish quality
Modular design	Quick service: only 4 bolts to unscrew, no need to remove hoses
Stainless steel design	Compatibility with aggressive chemicals
Large dimension fluid passages	Reduce the pressure drop and allows to work from liquid to semi-viscous materials
Choice of circulation in the base or the gun	Performance level guaranteed for most materials and easy flushing
Choice of bases with rear or side connections	To fit each customer need and line configuration
Choice of tips for water-based materials	Optimize performances and flow. Dedicated tips (xtra fine finish) optimizes application performances
Adjusting fan width	easy control of spray area, reduce overlap and overspray
Integrated filtration	Reduce tip clogging

SPECIFICATIONS

		AVX
Body material		Forged aluminum
Fuid pressure range : bar (psi)		20-200 (290-2900)
Maximum air inlet pressure : bar (psi)		6 (87)
Minimal trigger air pressure / bar (psi)		3 (43)
Recommended atomization air pressure (bar (psi))		0.7 - 3 (10 - 43)
Fluid output		Depends on the tip used
Weigth - gun only (g (lbs))		452 (16)
Maximum fluid Temperature (°C (°F))		50 (122)
Air consumption (m3/h)		3.2 - 7.5
Wetted parts		SST or acetal (option)
Cartridge		PTFE or GT
Seat		SST, carbide or acetal (option)
ATEX Marking		CE-UKCA II2G Ex h IIB T6 Gb X
Fittings	Atomizing air - base (Female)	F 1/4 NPSM (M1/2" JIC with standard fitting
	Fluid - base (Female)	F 1/4 NPSM (M1/4 NPSM with standard fitting)
	Air trigger - base (Female)	F 1/8 NPSM (Fast fitting 4x6 with standard fitting)
Sprayed material	Waterbased	✓
	Solvent base	✓
	Primers	✓
	Stains	✓
	Direct Gloss / Metallic	✓
	Top coats / High Gloss	✓
	UV products	✓
	Moisture sensitive	✓
	Two components	✓
	Adhesives	-
	Sealants	-
	Greases	✓

Automatic spray gun

*: +/- 2% according to norm (EN 13966-1)

AVX Airmix®

The AVX automatic Airmix® spray gun ensures high level performance with unsurpassed finish and excellent atomization quality.

- **High transfer efficiency**
- **Excellent atomization quality**
- **Modular design and high reliability**

LIGHWEIGHT AND POLYVALENCE FOR EFFICIENT PRODUCTION

GT seals provide excellent compatibility with UV products and are the best replacement for ATX product range.
A complete installation needs a gun, a base and a set of fittings.

86 % TRANSFERT EFFICIENCY HVLP COMPLIANT

WWW

AVX SPRAY GUN FULL KITS
(gun, base and fittings included, not assembled)

Type of gun	Base type	Version	Aircap (1)	Tip (2)	Seal type	Part number
AVX gun (T)	side outputs	circulation in the base	No	No	Chevron	129.695.000
AVX gun (Ω)	side outputs	circulation in the gun			Chevron	129.695.100
AVX gun (T)	rear outputs	circulation in the base			Chevron	129.695.050
AVX gun (Ω)	rear outputs	circulation in the gun			Chevron	129.695.150
AVX gun (T) for CEFLA machines	side outputs (CEFLA type)	circulation in the base			Chevron	129.695.200

AVX SPRAY GUN ONLY

Type of gun	Base type	Version	Aircap (1)	Tip (2)	Seal type	Part number
AVX gun (T)	-	circulation in the base	No	No	GT	129.690.003
AVX gun (Ω)	-	circulation in the gun			GT	129.691.001
AVX gun (T)	-	circulation in the base			Chevron	129.690.000 (3)
AVX gun (Ω)	-	circulation in the gun			Chevron	129.691.000

BASES FOR AVX SPRAY GUN

Description	Base type	Detail	Weight (g)	Wetted parts	Part number
Base for AVX - circulation in the base (T)	Side outlet	Standard flat	240	Stainless Steel	129.690.070 (3)
CEFLA base for AVX -circulation in the base (T)		For Cefla machine			129.690.090
Base for AVX - circulation in the gun (Ω)		Standard flat			129.691.070
Base for AVX - circulation in the base (T)	Rear outlet	Thick flat	480		129.690.080
Base for AVX - circulation in the gun (Ω)		Thick flat			129.691.080

SET OF FITTINGS

Description	Including					Part number
	M 1/4 BSPT M 1/4 NPS (atomisation air intake)	MM 1/4 NPT 1/2" JIC SST fluid connections	Plug M 1/4 NPT SST (fluid)	M 1/8 NPT Fast fitting 4x6 (air trigger)	M5 Fast fitting 4x6 (air trigger)	Part number
Fitting kit (JIC) for side outlet base	1	2 (Elbow type)	1	1		129.690.075 (3)
Fitting kit (JIC) for rear outlet base	1	2 (Straight type)	1	1		129.690.085
Fitting kit (JIC) for CEFLA base (Side outlets)	1	2 (Elbow type)	1		1	129.690.095

MAINTENANCE

Description	Part number
Seal kit (air and fluid)	129.690.901
Chevron Needle-cartridge assembly (pack of 4)	129.690.050
GT Needle-cartridge assembly (one)	129.690.060
Stainless steel seatwith seal POM-C (2 seats and 2 seals)	129 679 905
Acetal seat (60 bar maximum) (pack of 10)	129679904

(1): To be ordered separately - see table ***page 22***
(2): To be ordered separately - see table ***page 21***
(3): References carry reduced lead time

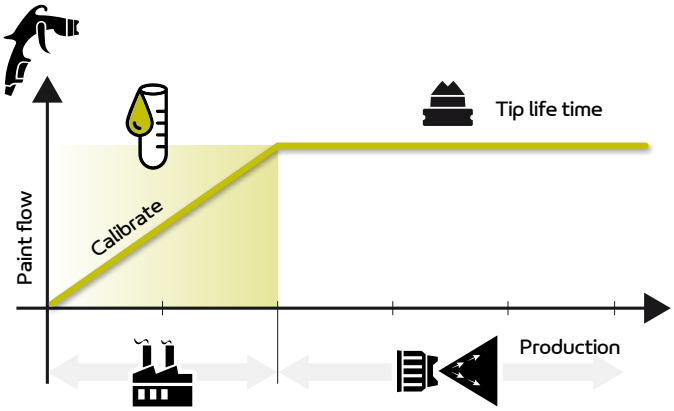
Tips and spraying accessories

Choose tips according to the type of paint, desired flowrate and optimum fan width. Airmix® tips are wearing parts and must be replaced regularly to keep transfer efficiency, paint savings and high quality finishing.

Our spraying tips are made of one of the hardest and most durable material - Carbide. Every tip is tested individually and subject to stringent quality control.

This ensure the best quality, durability and continuity of performance over the product lifetime.

Using genuine spare parts improve the lifetime of the equipment.



HOW TO CHOOSE AN AIRMIX® TIP: XX.YYZ

The first two digits **XX** show the caliber of the orifice, directly linked to the flow rate

The following digits **YY**, are related to the width of the spray pattern at the standard distance of 25cm (10in.)

The digit **Z** defines the type of paint and fan geometry: water based, solvent-based, or assymetric solvent-based

(assymetric fan: same width as a standard one but the flow of paint is higher on one side (70%) than on the other (30%))

FOR EXAMPLE:

Apply 0.6L/min at 120 bar of waterbased paint with a spray pattern of approximately 25 cm

XX -> Caliber **#09** will deliver the appropriate flowrate at 120 bar

YY -> Width **#11** for a spray pattern of 25 cm

Z -> **#2** : buse Xtra fine finish for water-based materials

The part number of the tip will be: 134.5**XX.YYZ**
134.5**09.112**

Important recommendation

After use, remove and clean the tip with water or solvent, keep it overnight in a container filled with perfectly clean material

Note : 100.17 and 100.21 tip have part numbers 134.100.174 and 134.100.214

Airmix® Kremlin spray tips

TABLE OF FINE FINISH TIP - 134.5XX.YY4

RECOMMENDED FOR **SOLVENT BASED** MATERIAL

Caliber	Orifice diameter mm (thou)	Water flow rate (l/mn)				Filter mesh		Average fan width (in cm) at a distance of 25cm									
		Pressure (bar-psi)						7.5	11	15	19	23	27	31	35	41	52
								Fan angle (degrees)									
		35 (500)	70 (1000)	120 (1740)	200 (2900)	Gun	Pump	17	25	30	37	42	47	50	55	60	65
02	0.15 (6)	0.07	0.10	0.13	0.17	4	2	02.03	02.05			02.11					
03	0.177 (7)	0.11	0.15	0.20	0.26	4	2	03.03	03.05	03.07			03.13				
04	0.228 (9)	0.16	0.22	0.29	0.38	4	2 or 4	04.03	04.05	04.07	04.09	04.11	04.13				
06	0.279 (11)	0.23	0.33	0.43	0.57	4	4 or 6	06.03	06.05	06.07	06.09	06.11	06.13	06.15			
07	0.304 (12)	0.28	0.39	0.51	0.66	6	4 or 6							07.15			
09	0.330 (13)	0.32	0.45	0.59	0.77	6	6 or 8	09.03	09.05	09.07	09.09	09.11	09.13	09.15	09.17		
12	0.381 (15)	0.42	0.60	0.79	1.03	6	8 or 12			12.07	12.09	12.11	12.13	12.15	12.17		
14	0.406 (16)	0.51	0.72	0.94	1.23	12	8 or 12		14.05	14.07	14.09	14.11	14.13	14.15	14.17	14.19	
18	0.457 (18)	0.67	0.95	1.24	1.63	12	12				18.09		18.13	18.15	18.17	18.19	
20	0.508 (20)	0.75	1.06	1.39	1.82	12	12			20.07	20.09	20.11	20.13	20.15	20.17	20.19	
25	0.553 (21)	0.94	1.33	1.74	2.28	12	15							25.13	25.17		
30	0.609 (24)	1.13	1.60	2.09	2.74	12	15					30.11	30.13	30.15	30.17	30.19	
40	0.660 (26)	1.54	2.18	2.85	3.73	12	20								40.17		
45	0.736 (29)	1.68	2.38	3.12	4.08	12	20					45.11		45.15	45.17	45.19	
100	1.04 (40)	3.96	5.68	7.33	9.47	12	20 or 30								100.17		100.21

TABLE OF XTRA™ FINE FINISH TIP - 134.5XX.YY2

RECOMMENDED FOR **WATER BASED** MATERIAL

Caliber	Orifice diameter mm (thou)	Water flow rate (l/mn)				Filter mesh		Average fan width (in cm) at a distance of 25cm							
		Pressure (bar-psi)						7.5	11	15	19	23	27	31	35
								Fan angle (degrees)							
		35 (500)	70 (1000)	120 (1740)	200 (2900)	Gun	Pump	17	25	30	37	42	47	50	55
04	0.228 (9)	0.16	0.22	0.29	0.38	4	2 or 4	04.03	04.05	04.07	04.09	04.11	04.13		
06	0.279 (11)	0.23	0.33	0.43	0.57	4	4 or 6	06.03	06.05	06.07	06.09	06.11	06.13	06.15	
07	0.304 (12)	0.28	0.39	0.51	0.66	6	4 or 6							07.15	
09	0.330 (13)	0.32	0.45	0.59	0.77	6	6 or 8	09.03	09.05	09.07	09.09	09.11	09.13	09.15	09.17
12	0.381 (15)	0.42	0.60	0.79	1.03	6	8 or 12			12.07	12.09	12.11	12.13	12.15	12.17
14	0.406 (16)	0.51	0.72	0.94	1.23	12	8 or 12		14.05	14.07	14.09	14.11	14.13	14.15	14.17

TABLE OF FINE FINISH TIP WITH ASYMMETRICAL FAN PATTERN - 134.5XX.YY7

RECOMMENDED FOR **SOLVENT BASED** MATERIAL TO OBTAIN AN ASYMMETRICAL FAN PATTERN

Caliber	Orifice diameter mm (thou)	Water flow rate (l/mn)				Filter mesh		Average fan width (in cm) at a distance of 25cm							
		Pressure (bar-psi)						7.5	11	15	19	23	27	31	35
								Fan angle (degrees)							
		35 (500)	70 (1000)	120 (1740)	200 (2900)	Gun	Pump	17	25	30	37	42	47	50	55
06	0.279 (11)	0.23	0.33	0.43	0.57	4	4 or 6				06.09	06.11			
09	0.330 (13)	0.32	0.45	0.59	0.77	6	6 or 8				09.09	09.11		09.15	
12	0.381 (15)	0.42	0.60	0.79	1.03	6	8 or 12				12.09	12.11			
14	0.406 (16)	0.51	0.72	0.94	1.23	12	8 or 12				14.09	14.11	14.13		

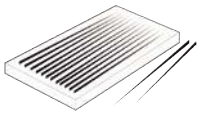
Aircaps for Airmix® spray guns

DESCRIPTION		VX124 KHVLP XCITE® TYPE RING	VX124 KHVLP MVX TYPE RING	VX24 KHVLP XCITE® TYPE RING	VX114 KHVLP	VX14 KHVLP	VX54
SURFACING		ANODIZED	ANODIZED	ANODIZED	ALUMINUM	ALUMINUM	NON STICK
COMPATIBLE WITH	XCITE®+	✓	✓	✓	–	–	–
	XCITE®+ LIGHT	✓	✓	✓	–	–	–
	AVX	✓	✓	✓	✓	✓	✓
ADJUSTABLE FAN		–	–	FULL JET	–	REDUCED JET	–
ATOMIZATION AIR		PERIPHERAL	PERIPHERAL	PERIPHERAL	PERIPHERAL	PERIPHERAL	CENTRAL
TYPE OF MATERIAL	WATER-BASED	✓	✓	✓	–	–	–
	SOLVENT-BASED	✓	✓	✓	✓	✓	✓
SPRAYING QUALITY		EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	GOOD
TRANSFER EFFICIENCY		EXCELLENT	EXCELLENT	EXCELLENT	VERY GOOD	VERY GOOD	VERY GOOD
NON-CORROSION COATING		✓	✓	✓	–	–	–
NON-STICK COATING		–	–	–	–	–	✓
PART NUMBER		132.720.055	132.720.065	132.720.020(1)	132.670.940	132.670.920(1)	132.670.030

(1) can be used with the remote fan width adjustment on automatic gun

PACK OF 3 AIRCAP PROTECTION : PN = 132.720.003

Accessories for Airmix® spray guns



TIP CLEANING NEEDLES

Description	tips size (mm)	Quantity	Part number
Unclogging needles	≤ 9	12	000.094.000
Unplugging needles	≥ 12	12	000.094.002

SEALS AND MICROSCREENS

Description	Quantity	Part number
100µ microscreen for tips size ≤ 9	10	129.609.901
PTFE Seal for tips size ≥ 9	10	129.529.903

SUPPORT

Description	Mark	Part number
Mounting support ø12 mm	A	049.351.700
Mounting support swiveling	B	049.351.705
Mounting rod ø16 mm + nut ø16 mm; length : 100 mm	C	049.351.000

A

B

C

ACCESSORIES

Description	Mark	Part number
Remote adjusting fan width kit (F 1/4 BSPP - M14*100)	D	029.253.002
Manual air adjuster (M14*100)	E	129.253.100

D

E

Manual electrostatic spray gun

Nanogun+ Airmix®

Nanogun+ Airmix® manual electrostatic gun is designed for applying solvent-based materials.
Available in 2 pressure calibrations, 120 and 200 bars (1740 and 2900 psi), it meets a wide range of application requirements.

- Airmix® technology for productivity and outstanding transfer efficiency of 93%
- Electrostatic charge delivers more paint savings
- Lightweight and ergonomically designed

THE BEST COMBINATION FOR PRODUCTIVITY

Our electrostatic Nanogun+ Airmix® sprayer takes advantage of the method of applying coatings to a metal surface which involves the attraction law between positively and negatively charged particles. Just before the atomized paint leaves the tip (also called nozzle), it is given a negative charge. The charged paint droplets are sprayed through a strong electric field. The positively charged, grounded metal item attracts the negatively charged liquid to its surface.
The power of the electric field also influences the force of attraction. After the electric field has been created, the ions follow the field lines towards the negative charge. As the attraction of the electrically charged particles to the grounded surface is so strong, paint drift is reduced. This means a high transfer efficiency with this electrostatic method. Furthermore, the paint droplets are pulled towards surfaces in all directions, so that all sides of target areas are coated. Some particles actually change direction as they are pulled up, down and sideways towards all angles of the objects to be painted. The underside of objects substrates are coated and paint is renowned for reaching around the back of surfaces if an electrostatic painting system is used. The new coatings will even get into small crevasses and this 'electrostatic wraparound' makes it an ideal technique to apply paint on hard to reach areas with an improved coverage .
Sames electrostatic spray painting Nanogun+ equipment together with the Airmix® atomization quality ensured that paint deposition is optimum and that less paint is released into the air because it is so strongly attracted to grounded surfaces, so overspray is reduced and the environment is safer for the operator.

SPECIFICATIONS

GUN	Nanogun+ Airmix®
Gun weight without hoses or cables	640 g
Gun length	310 mm
Hose lengths available	7.5 m, 15 m and 30 m (option)
Type of spray	**Adjustable flat spray**
Spray width, 250 mm away	120 to 370 mm
Pneumatic supply	**Nanogun+ Airmix®**
Max air supply pressure	7 bar (101psi)
Product supply	**Nanogun+ Airmix®**
Paint flow rate - water	from 250 to 1230(1) cc/min.
Max paint supply pressure	200 bar (2900psi)
Recommended product viscosity	20 to 120 seconds CA4 Cup
Max fluid temperature	40 (°C)

(1): depending on viscosity and gun version

High Voltage	GNM6080
Voltage maxi.	60 kV
Current maxi.	80 µA

ATEX marking:

Nanogun+ Airmix®

CE 0080 UKCA 2503 cPSus
Ex II 2 G
0.24 mJ
INERIS14ATEX0014
CML 21UKEX9793

GNM6080

CE 0080 UKCA 2503 cPSus
Ex II (2) G
[0.24 mJ]
INERIS14ATEX0014
CML 21UKEX9793

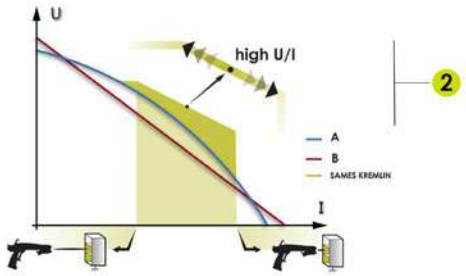
Control module should not be installed in an ATEX zone (hazardous area)..

Manual electrostatic spray gun

Nanogun+ Airmix®

BENEFITS

Performance
1 – Automatic control of high voltage to maintain constant paint charge for unmatched Transfer Efficiency of 93%
1 – Independent settings for perfect process control
2 – Optimal wrap-around and penetration effects for unrivaled paint savings with BOTH high current and high voltage
High-quality coverage and regular thickness for outstanding finishing application
Wide range of viscosities and type of solvent based materials to cover all product specifications at reduced costs
Productivity
3 – Air and paint flows easily adjustable with intuitive knobs
4 – Spray change from flat to round type is fast and simple
4 – High quality tungsten carbide tips, individually tested, with repeatable spraying application
5 – High Voltage triggered when needle moves: no pressure sensor for higher safety
6 – GNM 6080 control module provides smart diagnostics for improved maintenance
Lightweight and enhanced ergonomics for increased operators' comfort
Sustainability
7 – Quick Disconnect for enhanced maintenance
8 – External Paint Circuit with simplified access for replacement
Reduced Total Cost of Ownership with around 30% less wearable parts than market standards
Reliable quality of raw materials and components for tough use and long lifetime

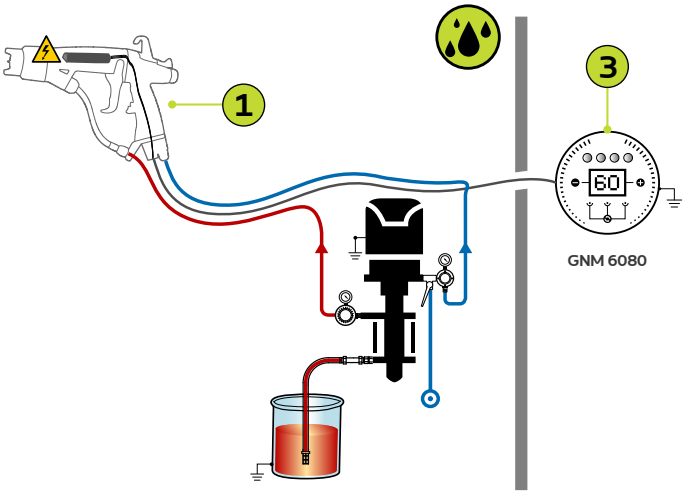


6 VERSIONS TO MEET ALL YOUR NEEDS:

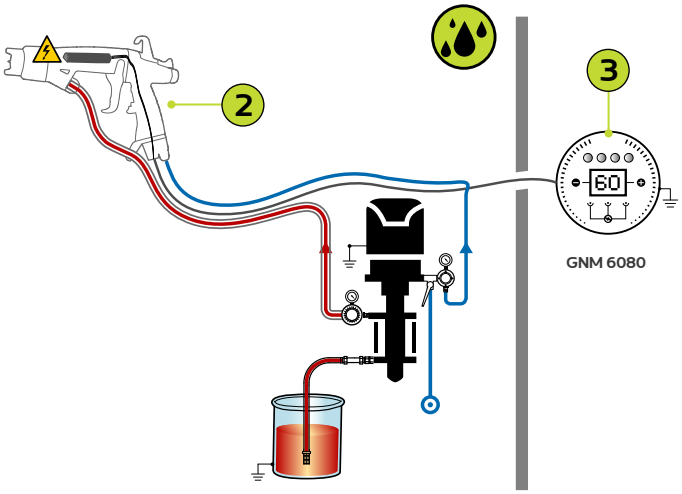
NANOGUN+ VERSION:	Compatible with			Working with paint resistivity (MΩ.cm)	Recommended working pressure (bar)
	solvent based paint		Non-ignitable water based paint		
	HR	LR	H2o		
Airmix® 120	√			10 to 500	60 - 120
		√		0.5 to 200	
			√	few kΩ.cm	
Airmix® 200	√			10 to 500	90 - 200
		√		0.5 to 200	
			√	few kΩ.cm	
			use with ISOCUBE insulating box		

Nanogun+ Airmix®

CONFIGURATION OF THE NANOGUN+ AIRMIX® SPRAY GUN – HR AND LR VERSIONS



HR Version



LR Version

: Hazardous area

Mark	Nanogun+ Airmix® (Handgun + hoses + Control module + tools + 09-091 tip)			
	Airmix® 120 with 09-091 Tip		Airmix® 200 with 09-091 Tip	
1 HR VERSION	EU	US	EU	US
Paint hose = 7.5 m	910021113-07	910021113-072	910021115-07	910021115-072
Paint hose = 15 m	910021113-15	910021113-152	910021115-15	910021115-152
Paint hose = 30 m	910021113-30	910021113-302	910021115-30	910021115-302
2 LR VERSION				
Paint hose = 7.5 m	910021114-07	910021114-072	910021116-07	910021116-072
Paint hose = 15 m	910021114-15	910021114-152	910021116-15	910021116-152
Paint hose = 30 m	910021114-30	910021114-302	910021116-30	910021116-302

HR = High Resistivity and Quick Disconnect
LR = Low Resistivity

3 Mark 3	CONTROL MODULE
GNM6080 EU	910017193
GNM6080 US	910017192

Nanogun+ Airmix®

NOZZLES

Tips	Water flow rate (cc/min) at 120 bar	Water flow rate (cc/min) at 200 bar	Fan width (cm) at dist. = 25 cm	Part number
04.111	290	380	25	130001414
06.151	430	570	33	130001419
09.091	590	770	21	130001420
12.111	790	1030	25	130001425
14.131	940	1230	29	130001430

More tips available, contact us

SPARE PARTS

Designation	Part number
New base for HR version	900021346
Fluid hose connection nut	900021299
New air valve kit with washer	910018203
Maintenance Seal Kit for Nanogun Airmix	910022694
Equipped LR hose holder	910031353
Air settings button enlarger	900020056

Everclean Hand
900011711#

Set of 10

Isocube

Insulating cabinet for electrostatic non-ignitable water borne coating application with **Nanogun+ Airmix® H2O** - manual applications - up to 30 liters paint containers.

- **100% safe operation for manual electrostatic waterborne and non-flammable product applications**
- **Plug and Spray: Easy to install, to move around, to maintain**
- **User friendly for outstanding finish quality**

WWW

YOUR SAFETY COMES FIRST!

When spraying waterborne coatings, spray equipment must be isolated in a closed cabinet. The Isocube by SAMES KREMLIN fully complies to this requirement. This compact insulating cabinet can be installed close to the paint location. A large door provides easy access to load the paint tank.
A built-in safety system ensures the grounding of the paint circuit when the gun is not spraying or when the door is opened.

SPECIFICATIONS

GUN	Nanogun+ Airmix® H2O
Gun weight without hoses or cables	640 g
Gun length	310 mm
Hose lengths available	7.5 m / 15 m
Type of spray	**Adjustable flat spray**
Spray width, 250 mm away	120 to 370 mm
Pneumatic supply	**Nanogun+ Airmix®**
Max air supply pressure	7 bar (101psi)
Product supply	**Nanogun+ Airmix®**
Paint flow rate - water	from 250 to 1230(1) cc/min.
Max paint supply pressure	7 - 195 bar (102 - 2827psi)
Recommended product viscosity	20 to 150 seconds CA4 Cup
Max fluid temperature	40°C (104°F)

(1): depending on viscosity, gun and pump version

Designation	Isocube
Weight	180 kg (400 lbs)
Tank Capacity	30 L. (8 gal)
Discharge Time (on door opening)	< 0.8 sec.
Dimension (L x W x P)	110 x 164 x 65 cm (49 x 73 x 30 in.)

High Voltage	GNM6080
Voltage maxi.	60 kV
Current maxi.	80 µA

Product marking:

Nanogun+ Airmix® H2O

CE
EN 50059
non ignitable liquid only

Isocube

CE cPSus
EN 50059
non ignitable liquid only

GNM6080

CE 0080 UKCA 2503 cPSus
Ex II (2) G
[0.24 mJ]
INERIS14ATEX0014
EN 50050-1: 2013

Isocube

BENEFITS

Performance
1 - Electrical safety of operators: automatic discharge to earth in case of a power shutdown or when the operator opens the door (<0.8s)
1 - Perfect quality of electrostatic insulation for efficient wrap-around effect
1 - Immediate productivity internal charge (60 kV): generator built in the gun
2 - Discharge resistor
Productivity
1 - Plug and spray: set-up and running within 10 minutes
1 - All unit control remote to front side
3 - Easy integration thanks to clean side and back faces
4 - Easy access to the pump and paint container
6 - Retains product leaks and rinsing fluids
Sustainability
5 - Robust design for durability
6 - Easy to clean working cell. Polypropylene welded body
7 - Easy hose assembly and connection to smart manifold panel
8 - Removable rack for easily cleaning the paint containers

YOUR SAFETY COMES FIRST!

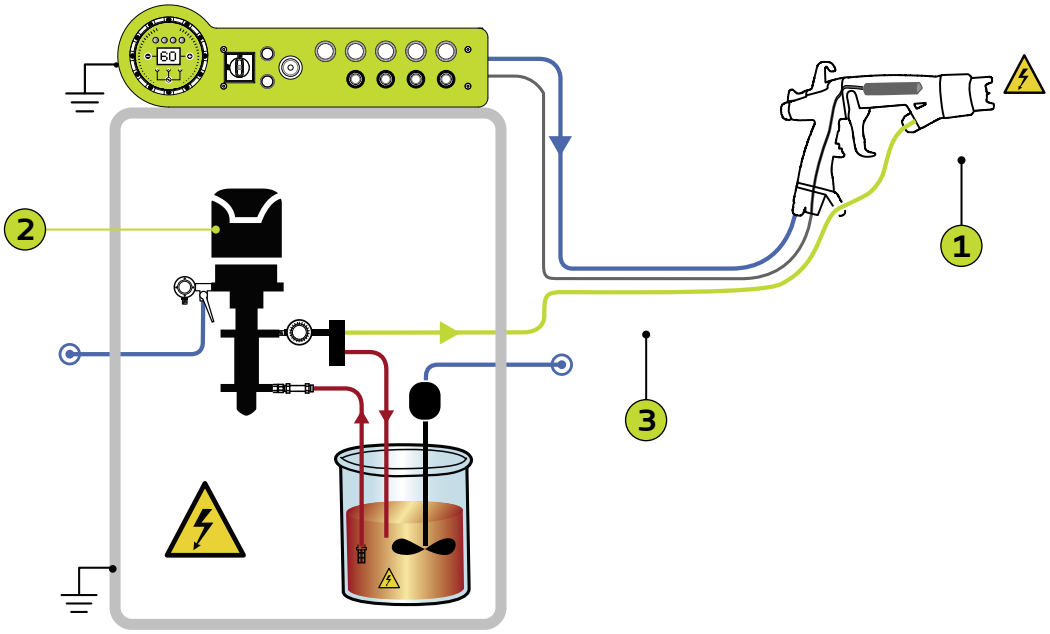
To provide the safest equipment for the painters, the Isocube insulating cabinet is designed and manufactured with full welded polypropylene panels to be electrostatic proof, integrates the most advanced technologies to keep your productivity at its best

– among of them a single and complete control panel

and is beyond the environmental and safety regulations:

- retention tray to collect spillage of product out of the paint bin
- a ground resistor to drain electrostatic charges in less than 10 sec. when not spraying
- quick and full charge drain on door opening or power shutdown or emergency stop (<0.8 s) with its fast response grounding air piston.

Isocube



EQUIPMENTS (insulating box + Spray gun)

Designation	1 Spray gun	2 Pump	Product pressure - bars (PSI)	3 Hose length -m (ft)	Nozzle size	Part number
Isocube CE	Nanogun+ Airmix® H2O	15C25	120 (1740)	7.5 (24)	09-091	910.023.637
		30C25	200 (2900)	7.5 (24)	09-091	910.023.638
		17F60	120 (1740)	7.5 (24)	09-091	910.025.758
		34F60	200 (2900)	7.5 (24)	09-091	910.025.759
		15C50	120 (1740)	7.5 (24)	09-091	910.023.786
		15C25	120 (1740)	15 (48)	09-091	910.026.036
		30C25	200 (2900)	15 (48)	09-091	910.026.039
		17F60	120 (1740)	15 (48)	09-091	910.026.047
		34F60	200 (2900)	15 (48)	09-091	910.026.050
		15C50	120 (1740)	15 (48)	09-091	910.026.048
Isocube US	Nanogun+ Airmix® H2O	15C25	120 (1740)	7.5 (24)	09-111	910.023.785
		15C25	120 (1740)	15 (48)	09-111	910.026.046
		17F60	120 (1740)	7.5 (24)	09-111	910.025.758
		30C25	200 (2900)	7.5 (24)	09-111	910.023.787
		30C25	200 (2900)	15 (48)	09-111	910.026.049
		17F60	120 (1740)	15 (48)	09-111	910.026.047
		34F60	200 (2900)	7.5 (24)	09-111	910.025.759
		34F60	200 (2900)	15 (48)	09-111	910.026.050

F = Technology FLOWMAX®

Notes

Airmix® pumps

Sames reciprocating positive displacement piston pumps .
Sames is a world leader in design and manufacturing of pneumatic piston pumps. They are the essential tool for any painting specialist

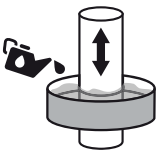
- High-pressure output ensures atomization of the most viscous products
- Double-action piston
- Turbo option with special air distributor which prevents icing and allows long duty cycle – particularly suited for circulation and paint kitchens

Pneumatic compressed air power drives these pumps. These pumps are double acting pumps with displacement occurring on the up and down stroke of the pump. This provides low-shear pumping action that is very friendly to a wide range of materials resulting in little or no degradation. It also guarantees a continuous supply of fluid, thus ensuring the smoothness and regularity of the sprayed film.

Pneumatic drive pumps are inherently explosion proof. With proper installation pneumatic, pumps are safe for use with solvents and other flammable materials. Pneumatic pumps can be safely used in hazardous areas and wet environments.

Sames pneumatic drive pumps automatically start and stop with the opening and closing of the system dispense/spray outlet valve. These pumps build to a static pressure and then automatically stop until the outlet valve is opened.

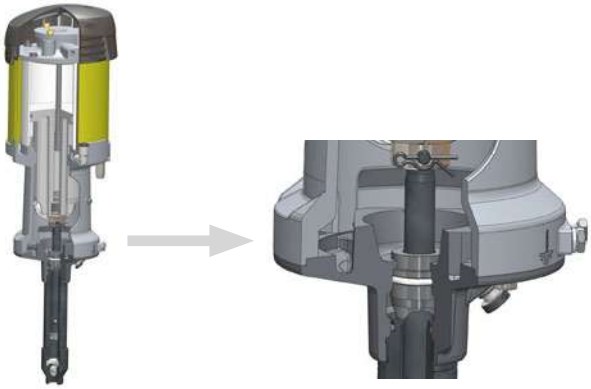
Cup pumps and Flowmax® bellow pumps



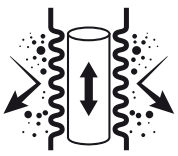
Cup lub technology

Cup pumps include an oil-filled cup at the top of the hydraulic section.

- **The lubricant ensures the correct movement of the piston and the long lifetime of the pump seal.**
- **Prevents the pumped product from drying on the piston**
- **Prevents piston overheat.**
- **Provides a visual indication of the state of the seal**



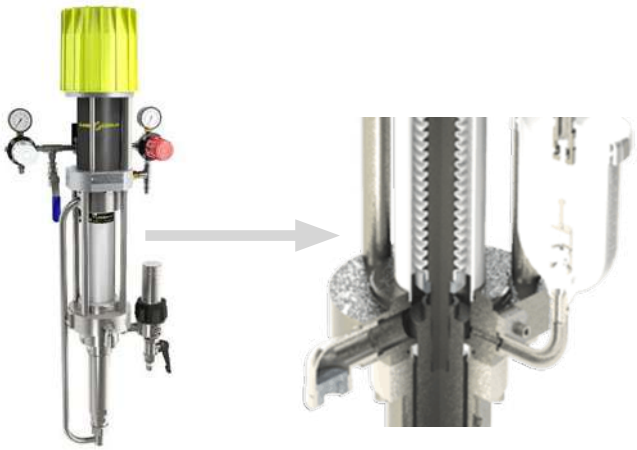
Cup pumps are particularly adapted to fast color change, water or solvent-based materials. Seals are available of several types. "Chevron" seals require regular seal verification and tightening.



Flowmax® technology

Flowmax® bellow pumps include a polyethylen bellow seal, which protects the piston shaft from air and light.

- Offer very quiet piston transitions
- Reduce the risks of leaks
- Substantially outlast cup seals



Flowmax pumps are particularly adapted to High-viscosity materials. As there is no contact between the shaft and outside air, they are the best for moisture sensitive materials like hardeners or shear-sensitive materials. They require less maintenance than cup seals.

Airmix® pumps

What do you need to choose a pump ?

EACH PUMP REFERENCE IS MADE OF TWO NUMBERS AND ONE LETTER :

- **The first number defines the ration between the supplied air pressure and the high-pressure fluid.**
- **The letter is 'C for Cup pumps and 'F' for Flowmax Flowmax® bellow pumps**
- **The second number is the capacity of the hydraulic section in milliliters or cubic centimeters.**

THE FOLLOWING INFORMATION WILL HELP YOU CHOOSE THE RIGHT PUMP FOR YOUR APPLICATION :

- Maximum applying pressure
- Chemical composition and compatibility of the spray material.
- Length and diameter of hoses
- Desired flow rate
- Frequency of material or color change
- Opportunity to use Airless spraying (need for high-pressure)
- Useful information can usually be found from the Material Technical sheet and the Material Safety Data sheet

Choosing the right characteristics may sometimes become a challenge. Please do not hesitate to contact your closest Sames representative for help. We are paint spray specialists.

STEP 1 - defining the right pressure

Most industrial installations deliver 6-7 bar continuous air flow. **Divide the desired fluid pressure by 6 and choose the pump whose pressure ratio (the first 2 digits) is superior.**
If you are using very viscous products, long or narrow hoses, take some safety margin in your calculation. Increasing the safety margin between the operating pressure and maximum design pressure improves the lifetime of the pump.

Example:
spraying @150 bar gives a ratio of 25
use a pump 30xxxx or above

STEP 2 - defining the pump capacity

Divide the flow rate in CC/minute (or cm3/minute) by 10 and oversize to the next pump capacity (the end 2/3 digits).
Do not forget to increase the capacity if you are using circulation and/or multiple spray guns.
A large pump will run at lower speed and require less maintenance than a smaller one - but the color change will require more time and cleaning fluid.

Example:
0.8 liter/minute or 800 cc/min
> gives an inner size of 80 cc
> use a pump xxx**100** or above

STEP3 – Cup or Bellow seal

Choose according to your application and the information above.
Cup seal pumps are noted " **xxCxx** "
and
Flowmax® bellow pumps are noted " **xxFxx** "

STEP 4 – Material

All the **Sames** pumps offer stainless steel material for all metallic parts in contact with the fluid. MB-A seals and cartridges (a patented Sames design) cover a very large range of applications (including water-based and moisture-sensitive materials) and provide reduced dead zones, allowing for quick color changes. Materials for specific needs are available for particular cases.

STEP 5 – Mounting

Pumps are available bare, wall-mounted or pre-installed on carts. If the pre-mounted cart option is not offered in the pump page, please choose the adequate cart from the table in the "Carts " pages.

Airmix® pumps

Particular cases

Material selection is based upon the material being pumped and its characteristics and chemical composition.
Users should always follow the material compatibility recommendations of the material supplier combined with previous successful experience. Determining the material compatibility usually requires the reference to the material safety data sheet of the product.

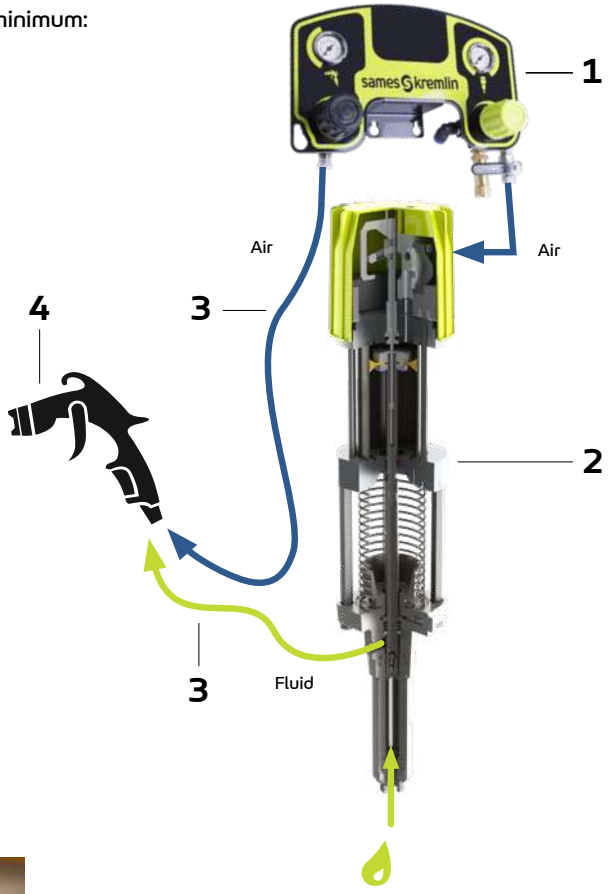
- GT seals are particularly suited to UV-cured paints and coatings
- PH pumps and accessories are have a choice of acid-resistant materials, for high acidity (ph) products like 2K hardeners.
- WB pumps have increased resistance to Water-based materials
- Turbo pumps with a particular anti-icing air distributor are used in case of continuous, high flow rate.

Airmix Spraying packs

A spraying pack includes the following equipment, at the minimum:

1. **AIR PRESSURE REGULATORS**
2. **PUMP**
3. **AIR AND FLUID HOSES**
4. **AIRMIX SPRAY GUN**

= **spray pack**, *see table page 13*



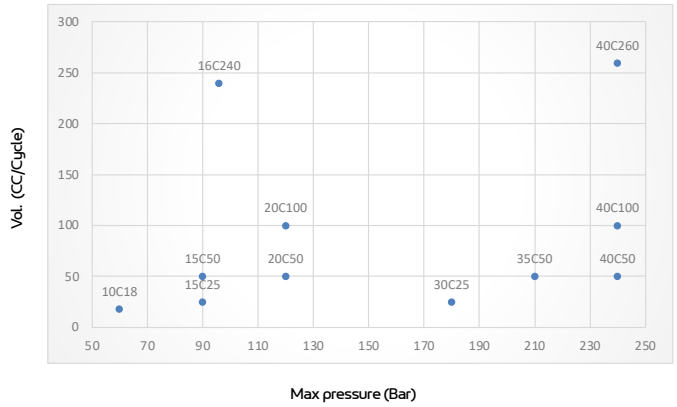
Optional equipment:

- Suction tube with stainless steel strainer
- Gravity Hopper
- High pressure filter at the pump outlet
- Wall mount brackets for fixed installation
- Heavy-duty carts for cart work

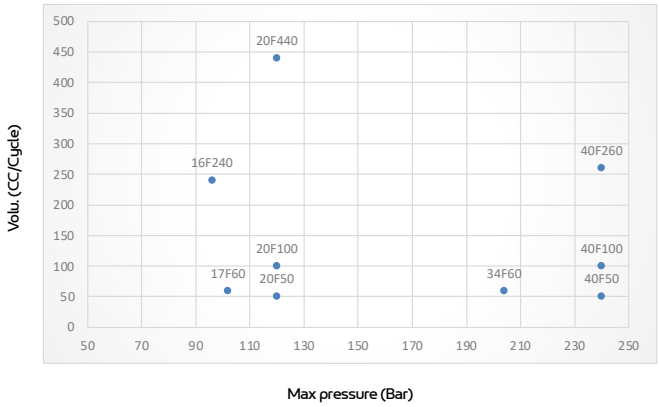
Airmix® pumps

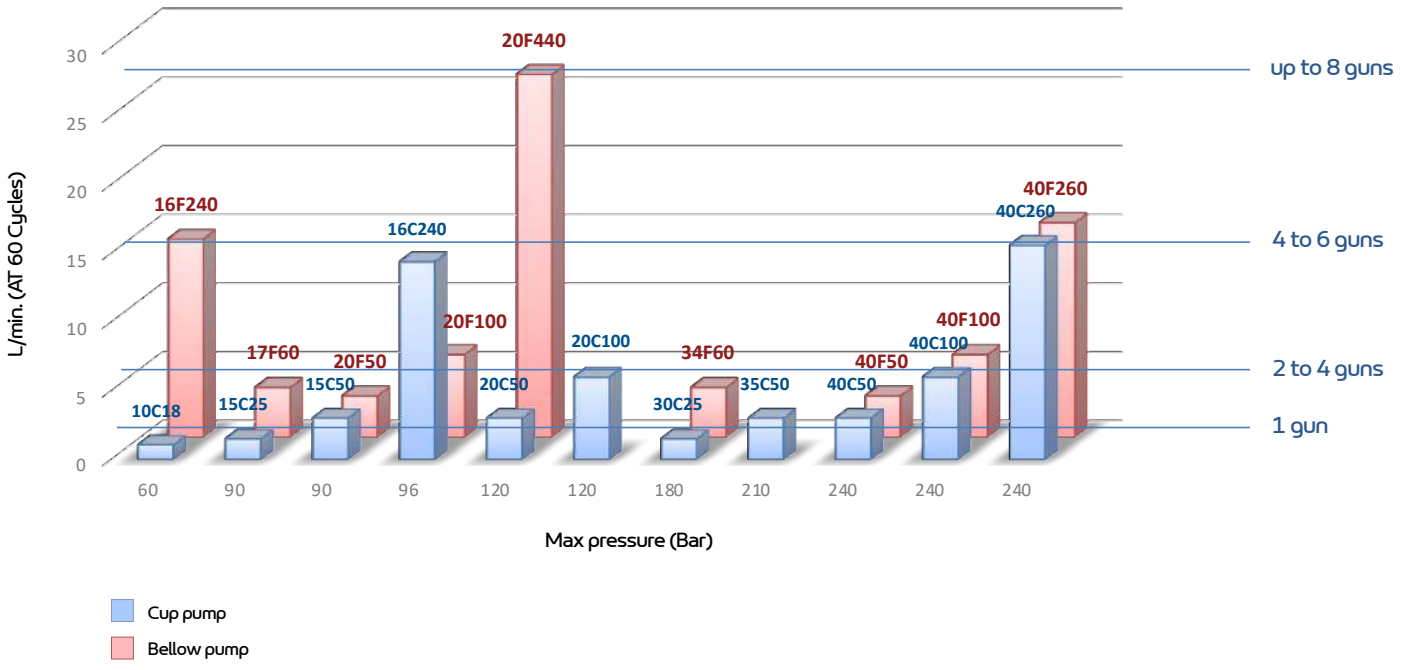
Select your pump according to the needs of the application:
maximum product pressure and flow capacity

Cup pumps



Flowmax® bellow pumps





Cup pumps

Selection table of cup pumps

PUMP NAME		10C18	15C25	15C50	16C240	20C50	20C100	30C25	35C50	40C50	40C100	40C260
Construction		Stainless Steel										
Upper sealing	MB-A cartridge	-	✓	✓*	-	-	-	✓	✓	-	-	-
	GT (cartridge)	✓	✓	✓	-	✓	✓*	✓	✓*	✓*	✓*	✓
	Chevron seal mix Polyfluid/PTFEG	-	-	-	✓	✓	✓	-	-	✓	✓	-
	Chevron seal mix UHMWPE/PTFEG	-	-	-	-	-	-	-	-	-	-	✓
	Chevron Leather	-	-	-	✓*	-	-	-	-	-	-	-
	Chevron UHMWPE	-	-	-	✓*	✓*		-	-	✓*	✓*	✓*
	PU	-	-	-	✓*	-	✓*	-	-	-	✓*	✓
Lower sealing	GT	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓
	PFA	✓	-	-	-	-	-	-	-	-	-	-
	Polyacetal	✓*	-	-	-	-	-	-	-	-	-	-
	PU	✓*	-	-	✓*	-	✓*	-	-	-	-	✓
	Chevron UHMWPE	-	-	-	-	✓*	✓*	-	-	✓*	✓*	-
	Chevron PTFEG	-	-	-	-	✓*	✓*	-	-	✓*	✓*	
	Cup seal (UHMWPE)	-	-	-	✓*	-	-	-	-	-	-	-
Turbo anti-icing version		-	-	-	✓	-	✓	-	-	-	-	-
Ball	Stainless steel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Carbide	✓*	-	-	-	-	-	-	-			
	304L	-	-	-	-	-	✓*	-	-	-	✓*	-
	316L	-	-	-	-	✓*	✓*	-	-	✓*	✓*	✓*
ATEX		CE-UKCA II2G Ex h IIB T4 Gb X	CE-UKCA II2G Ex h IIB T3-T4 Gb X	CE-UKCA II2G Ex h IIB T3 Gb X	CE II 2G h T2	CE II 2G h T2	CE II 2G T1	CE-UKCA II2G Ex h IIB T3-T4 Gb X	CE-UKCA II2G Ex h IIB T3 Gb X	II 2G Ex h IIB T2 Gb X	II 2G Ex h IIB T1 Gb X	II 2G Ex h IIB T3 Gb X
ASSEMBLING												
Bare		-	-	-	✓	✓	✓	-	-	✓	✓	-
Wall mounted		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cart mounted		✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓*
DIMENSION (wall mounted pump without filter or suction rod)												
Height (mm)		390	585	585	864	838	864	585	600	800	800	1080
Width (mm)		270	158	159	356	356	356	158	230	400	400	640
Depth (mm)		150	170	160	254	178	280	170	230	280	280	325
Weight (kg)		5.3	7.6	8	27	17	22	7.6	12	22	22	110
CHARACTERISTICS												
Pressure ratio		10/1	15/1	15/1	16/1	20/1	20/1	30/1	35/1	40/1	40/1	40/1
Output per cycle (cc)		18	25	50	240	50	100	25	50	50	100	240
Number of cycle (per liter)		55	40	20	4	20	10	40	20	20	10	4
Output at 60 cycles/min (L)		1.1	1.5	3	14.4	3	6	1.5	3	3	6	15.6
Free flowrate (L/min)		1.1	1.5	1.5	14.4	3	6	1.5	1.5	3	6	14.4
Max fluid pressure (bar)		60	90	90	96	120	120	180	210	240	240	240
Max Paint temperature (°C)		60	60	60	60	60	60	60	60	60	60	60
Operating air pressure (bar)		1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6
Air consumption at 30 cyc/min and 4 bar (m(3)/h)		1.9	2.8	2.8	41.5	10.8	21.6	7.1	18.9	21.6	43.2	96.8
FITTINGS												
Air inlet		F 3/8 BSPP	F 3/8 BSP	F 3/8 BSP	F 3/4 BSP	F 3/8 BSP	F 3/8 BSP	F 3/8 BSP	F 3/8 BSP	F 3/8 BSP	F 3/4 BSP	F 3/4 BSP
Fluid Inlet		M 26x125	F 1/2 BSPP or M 26x125	F 1/2 BSPP or M 26x125	F 1 BSPP or M 26x125	F 1/2 BSPP or M 26x125	F 1/2 BSPP or M 26x125	M26x125	F 1/2 BSPP or M 26x125	F 1/2 BSPP or M 26x125	F 1/2 BSPP or M 26x125	F 1/2 BSPP or M 26x125
Fluid Outlet (after filter)		M 1/2" JIC										M 3/4" JIC

** = optional*

Selection table of cup pumps

FEATURES	BENEFITS	10C18	15C25	15C50	16C240	20C50	20C100	30C25	35C50	40C50	40C100	40C260
Stainless steel design	Compatible with water-based materials	All										
Small fluid section and suction rod	Less product loss during color-changing and pump flushing	✓	-	-	-	-	-	-	-	-	-	-
The gun/pump packs work with a compressor of 0,5 HP	Reduction of operational costs		-	-	-	-	-	-	-	-	-	-
Simple design, reduced number of spare parts	Easy maintenance	All										
Compact design	Fits in small working areas	✓	✓	✓	-	✓	-	✓	✓	✓	-	-
Large diameter suction rod and high compression ratio	Can be used with a wide range of materials	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fluid section with cart lower packing construction	Improved material refilling and emptying for constant output improved sealing - easier maintenance	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Simple and accessible air motor/fluid section coupling without tie rod	Possibility to rotate the fluid section to adjust the filter orientation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Closed design with protective carter between air motor and fluid section	Lubricant protection against external pollution Full operator safety	-	✓	✓	-	-	-	✓	✓	-	-	-
Progressive start up with very low air pressure	Easy priming at very low fluid discharge pressure. No pulsation even with 0.5 bar of air	-	✓	✓	-	-	-	✓	✓	-	-	-
Large volume per cycle	Can feed a circulating system	-	-	-	✓	-	✓	-	-	-	✓	✓
Sprayed material	Water base	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Solvent base	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Primers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Stains	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	-
	Direct Gloss / Metallic	-	-	-	✓	-	-	✓	✓	-	-	✓
	Top coats / High Gloss	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	UV products	-	-	-	-	-	-	-	-	-	-	-
	Moisture sensitive	-	-	-	-	-	-	-	-	-	-	-
	Two components	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Anti-corrosion / abrasives	-	-	-	-	-	-	-	•	-	-	-
	Adhesives	-	-	-	-	-	-	-	-	-	-	-
	Sealants	-	-	-	-	-	-	-	-	-	-	-
	Greases	-	-	-	-	-	-	-	-	-	-	-
	Wax	-	-	-	-	-	-	-	-	-	-	-

** = optional*

10C18 Airmix® pump

The 10C18 Airmix® pump is perfect for painting small quantities of fluid products, water or solvent based.
The simple design reduces maintenance and cleaning time.

- **Fast color change, minimum solvent consumption**
- **Good chemical compatibility with several choices of seals**
- **Large range of "ready to spray" kits**

PISTON PUMP WITH CUP SEAL FOR FINE FINISHING APPLICATIONS

= *available in* **spray pack** *version, see table page 13*

CONFIGURATION OF THE 10C18 AIRMIX® PUMP

The 10C18 is only available as a spray pack, please refer to **page 13** for selection.

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Servicing kit for 340/2 air motor	-	-	144.850.150
Servicing kit C18 fluid section (without seat)	GT	PFA (std)	144.855.799
Servicing kit C18 fluid section (with F1/2 seat)	GT	PFA (std)	144.855.797
Servicing kit C18 fluid section (with M26x125 seat)	GT	PFA (std)	144.855.796
SST throat cartridge with GT seal	GT	-	144.030.157
Exhaust valve seal	-	PFA (std)	044.765.503
Exhaust valve seal	-	Polyacetal	144.850.157
Exhaust valve seal	-	PU (Red)	144.855.704
Ball Ø 5, Stainless steel (std)	-	-	907.414.108
Ball Ø 16, 440C Stainless steel (std)	-	-	907.414.242
Ball Ø 16, 316L Stainless steel	-	-	907.414.142
Ball Ø 16 carbide	-	-	907.414.342

ACCESSORIES

Description	Thread	Part number
Tripod		151.665.705
Single Post Cart		151.730.140
Handle		051.665.651
Suction rod Ø6.5 plunging tube length 230mm straight	F 26x125	151.665.640
Suction rod Ø16 plunging tube length 570 mm elbowed	F 26x125	149.596.050
Suction rod Ø16 M26 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.060

Please refer to accessories section for detailed information and pictures

15C25 Airmix® pump

The 15C25 Airmix® pump is perfect for painting small quantities of fluid products, water or solvent based. Up to 90 bar of fluid pressure to compensate pressure drops.

- **Good chemical compatibility with GT or MB-A cartridges**
- **Large range of "ready to spray" kits**
- **Suction rod or gravity hopper**

PISTON PUMP WITH CUP SEAL FOR FINE FINISHING APPLICATIONS

EQUIPMENT

Assembly	Piston seal	Lower sealing	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Wall mounted	GT	GT	M26x125	-	-	✓	✓	-	151.140.000
	GT	GT	F 1/2 BSPP	-	-	✓	✓	-	151.140.320
	MB-A	GT	M26x125	-	-	✓	✓	-	151.140.400
	MB-A	GT	F 1/2 BSPP	-	-	✓	✓	-	151.140.450
	GT	GT	M26x125	(Ø 16)	-	✓	✓	-	151.140.100
	GT	GT	M26x125	(Ø 16)	-	✓	✓	✓	151.140.150
	MB-A	GT	M26x125	(Ø 16)	-	✓	✓	-	151.140.500
	GT	GT	M26x125	(Ø 16)	-	-	✓	-	151.140.300
	MB-A	GT	M26x125	(Ø 16)	-	✓	✓	✓	151.140.550
	MB-A	GT	M26x125	(Ø 16)	-	-	✓	-	151.140.650

SPARE PARTS

Description	Part number
Servicing kit for 245-4 air motor	144.140.190
Air motor reversing kit	144.130.191
MB-A Cartridge kit	144.130.365
GT Cartridge kit	144.130.205
Servicing kit C25 fluid section	144 130 291
Ball Ø 16, 440C Stainless steel (std)	907.414.242
Ball Ø 16, 316L Stainless steel	907.414.142
Ball Ø 9,52, 440 stainless steel (std)	907.414.223
Ball Ø 9.52, 304L stainless steel	907.414.123
Ball Ø 9,52, 316L stainless steel	907.414.623

ACCESSORIES

Description	Thread	Part number
Wall-mounted totem		151.140.240
Tripod		151.140.210
Tripod essential		151.730.130
Single Post Cart		151.730.140
Double Post Cart		151.241.000
Gravity Hopper 6 liters - U shape	F 26x125	151.140.230
Stainless steel Suction rod Ø16 plunging tube length 570 mm elbowed	F 26x125	149.596.050
Stainless steel Suction rod Ø16 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.060
Stainless steel Suction rod Ø23 plunging tube length 570 mm elbowed	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter Mesh 6 3/8 (Inlet F1/2"JIC - Outlet M1/2"JIC)		155.580.600
Air plate with 2 air regulator		151.140.070
Air plate with 1 air regulator		151.140.060

Cup pumps

15C50 Airmix® pump

The 15C50 Airmix® pump is perfect for painting medium quantities of fluid products, water or solvent based.
Up to 90 bar of fluid pressure to compensate pressure drops.

- **Good chemical compatibility with GT or MB-A cartridges**
- **Two gun management available**
- **Suction rod or gravity hopper**

PISTON PUMP WITH CUP SEAL FOR MEDIUM APPLICATIONS

EQUIPMENT

Assembly	Piston seal	Lower sealing	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Wall mounted	GT	GT	F 1/2 BSPP	-	-	✓	✓	-	151.143.000
	GT	GT	M26x125	-	-	✓	✓	-	151.143.050
	GT	GT	M26x125	(Ø 23)	(Ø 16)	✓	✓	✓	151.143.250
	GT	GT	M26x125	-	(Ø 16)	✓	✓	✓	151.143.450

SPARE PARTS

Description	Part number
Servicing kit for 245-4 air motor	144.140.190
Air motor reversing kit	144.130.191
GT Cartridge kit	144.135.205
MB-A Cartridge kit	144.135.365
Servicing kit C50 fluid section	144.135.237
Ball Ø 14, 420C Stainless steel (std)	87.014
Ball Ø 20, 440C Stainless steel (std)	907.414.291

ACCESSORIES

Description	Thread	Part number
Wall-mounted totem		151.140.240
Essential Tripod		151.730.130
Single Post Cart		151.730.140
Dismountable cart		151.241.000
Dismountable cart with drum table		151.242.000
Gravity Hopper 6 liters - U shape	F 26x125	151.140.230
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter 3/8 (Inlet F1/2"JIC - Outlet M1/2"JIC) mesh 6		155.580.600
Air plate with 2 air regulator		151.140.070
Air plate with 1 air regulator		151.140.060
Air plate with 2 regulator + 2 gun management system without product valves		151.140.095

Please refer to accessories section for detailed information and pictures

Cup pumps

16C240 Airmix® pump

The 16C240 Airmix® pump is designed to pump large quantities of fluid product. Turbo version prevents ice build-up on continuous operations.

- **Heavy duty air changeover valves**
- **Used for circulation and/or multiple guns.**
- **Very large choice of seals and packing materials (Leather, PU, UHMW...)**

PISTON PUMP WITH CUP SEAL FOR HIGH FLOW RATE

WWW

EQUIPMENT

Assembly	Piston seal	Lower Seal	Air motor	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Bare	Chevron seal mix Polyfluid/ PTFEG	Cup seal (UHMWPE)	Std	F 1 BSPP	-	-	-	-	-	151.790.000
Wall mounted			Std	M26x125	-	-	✓	✓	-	151.790.100
Wall mounted			Std	M26x125	(Ø 23)	(Ø 16)	✓	✓	✓	151.790.200
Cart			Std	M26x125	(Ø 23)	-	✓	✓	-	151.790.400
Wall-mounted, Turbo			Enhanced Turbo	M26x125	-	-	✓	✓	-	151.797.100
Wall-mounted, Turbo			Enhanced Turbo	M26x125	(Ø 23)	(Ø 16)	✓	✓	✓	151.797.200

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 2000-4 air motor including reversing-block seals	-	-	146.270.990
Full maintenance kit for 2000-4 air motor including reversing-block seals	-	-	146.270.996
GT Cartridge kit	GT	-	144.710.100
Seal kit for C240 hydraulic section	Chevron seal mix Polyfluid/PTFEG	Cup seal (UHMWPE)	144.970.090
Full maintenance kit C240 hydraulic section	Chevron seal mix Polyfluid/PTFEG	Cup seal (UHMWPE)	144.970.095
Cup seal	-	Cup seal (UHMWPE)	044.970.008
Chevron seal, UHMWPE	UHMWPE	-	909.051.102
Leather seal (pack of 10)	LEATHER	-	109.050.603
Adaptation assembly for Polyurethane (PU) seals	PU Cartridge	PU	144.970.260
Seal kit for C240 hydraulic section (PU/PU)	PU Cartridge	PU	144.970.265
Ball Ø 16, 440C Stainless steel (std)			907.414.242
Ball Ø 16, 316L Stainless steel			907.414.142
Ball Ø 9,52, 440 stainless steel (std)			907.414.223
Ball Ø 9.52, 304L stainless steel			907.414.123
Ball Ø 9,52, 316L stainless steel			907.414.623

ACCESSORIES

Description	Thread	Part number
Two Post Cart w/o plate		051.221.000
Pump Mounting Plate with straps		056.100.199
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter 3/8 Mesh 6		155.580.300
Stainless steel adapter Length 70 (for connecting the fluid filter) MM3/8 NPT		055.580.301
Stainless steel adapter (for connecting the fluid filter) M1/2-F3/8		905.210.203

20C50 Airmix® pump

The 20C50 Airmix® pump is a medium-range, all purpose pump for medium viscosity products. Includes a special model for water based and high solid content.

- **Suction rod or gravity hopper**
- **Heavy duty air changeover valves**
- **Good chemical compatibility with GT, Chevron, PE seals**

RECOMMENDED FOR ONE TO 8 AIRMIX® GUNS OPERATIONS WITH ICE FREE PERFORMANCES

EQUIPMENT

Assembly	Piston seal	Lower Seal	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Bare pump	Chevron seal mix Polyfluid/ PTFEG	GT	F 1/2 BSPP	-	-	-	-	-	151.770.000
Wall Mounted		GT	M26x125	(Ø 23)	(Ø 16)	✓	✓	✓	151.770.100
Wall Mounted		GT	M26x125	(Ø 23)	-	✓	✓	-	151.770.200
Wall Mounted, GT	GT	GT	M26x125	(Ø 23)	(Ø 16)	✓	✓	✓	151.773.100

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 500-4 air motor			146.260.990
Full maintenance kit for 500-4 air motor			146.260.995
Seal kit for C50 hydraulic section (std)	Chevron seal mix Polyfluid/PTFEG	GT	144.950.091
Full maintenance kit C50 hydraulic section (std)	Chevron seal mix Polyfluid/PTFEG	GT	144.950.096
Seal kit for C50 hydraulic section (Chevron/Chevron)	Chevron seal mix Polyfluid/PTFEG	Chevron seal mix PTFEG / PE	144.950.090
Full maintenance kit C50 hydraulic section (Chevron/Chevron)	Chevron seal mix Polyfluid/PTFEG	Chevron seal mix PTFEG / PE	144.950.095
Chevron seal, Polyfluid (std)	Chevron Polyfluid	-	909.050.915
Chevron seal, PTFEG (std)	Chevron PTFEG	-	044.790.013
Chevron seal, PE	Chevron UHMWPE	-	909.051.103
Chevron seal, PTFEG	-	Chevron PTFEG	044.790.008
Chevron seal, PE	-	Chevron UHMWPE	909.051.104
Seal kit for C50 hydraulic section (GT/GT)	GT	GT	144.950.097
Full maintenance kit C50 hydraulic section (GT/GT)	GT	GT	144.950.098
Ball Ø 16, 440C Stainless steel (std)			907.414.242
Ball Ø 16, 316L Stainless steel			907.414.142
Ball Ø 9,52, 440 stainless steel (std)			907.414.223
Ball Ø 9.52, 304L stainless steel			907.414.123
Ball Ø 9,52, 316L stainless steel			907.414.623

ACCESSORIES

Description	Thread	Part number
Wall mounted support		044.910.121
One post cart		151.730.140
Two Post Cart w/o plate		051.221.000
Two Post Pump Mounting Plate		056.100.199
Gravity Hopper 6 liters - U shape	F 26x125	151.140.230
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter Mesh 6		155.580.300
Stainless steel adapter 3/8" (for connecting the fluid filter)		055.580.301

Please refer to accessories section for detailed information and pictures

Cup pumps

20C100 Airmix® pump

The 20C100 Airmix® pump is designed to pump large quantities of medium viscosity products. Turbo version prevents ice build-up on continuous operations.

- **Used for circulation and/or multiple guns.**
- **Heavy duty air changeover valves**
- **Large chemical compatibility with multiple seals material choices (Chevron, GT, PU)**

WWW

IDEAL FOR WATER-BASED AND HIGH SOLIDS MATERIALS WITH ICE FREE PERFORMANCES

EQUIPMENT

Assembly	Piston seal	Lower Seal	Air motor	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Bare	Chevron seal mix Polyfluid/ PTFEG	GT	Std	F 1/2 BSP	-	-	-	-	-	151.780.000
Wall mounted		GT	Std	M26x125	(Ø 23)	-	✓	✓	-	151.780.100
Wall mounted		GT	Std	M26x125	(Ø 23)	(Ø 16)	✓	✓	✓	151.780.200
Wall-mounted, Turbo		GT	Enhanced Turbo	M26x125	-	-	✓	✓	-	151.782.100
Wall-mounted, Turbo		GT	Enhanced Turbo	M26x125	(Ø 23)	(Ø 16)	✓	✓	✓	151.782.200

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 1000-4 air motor			146.270.991
Full maintenance kit for 1000-4 air motor		GT	146.270.995
Seal kit for C100 hydraulic section	Chevron seal mix Polyfluid/PTFEG	GT	144.960.091
Full maintenance kit C100 hydraulic section (Chevron/GT)	Chevron seal mix Polyfluid/PTFEG	Chevron seal mix PTFEG / PE	144.960.096
Seal kit for C100 hydraulic section (Chevron/Chevron)	Chevron seal mix Polyfluid/PTFEG	Chevron seal mix PTFEG / PE	144.960.090
Full maintenance kit C100 hydraulic section (Chevron/Chevron)	Chevron seal mix Polyfluid/PTFEG	-	144.960.095
Chevron seal polyfluid	Chevron Polyfluid	-	909.050.913
Chevron seal PTFEG	Chevron PTFEG	GT	109.050.818
GT cartridge	GT	-	144.960.100
Chevron seal, PE	Chevron UHMWPE	Chevron PTFEG	909.051.105
Chevron seal PTFEG	-	Chevron UHMWPE	909.050.819
Chevron seal UHMWPE	-	PU	909.051.106
Servicing kit PU	PU		144.960.159
Ball Ø 16, 440C Stainless steel (std)			907.414.242
Ball Ø 16, 316L Stainless steel			907.414.142
Ball Ø 9.52, 440C stainless steel (std)			907.414.223
Ball Ø 9.52, 304L stainless steel			907.414.123
Ball Ø 9,52, 316L stainless steel			907.414.623

ACCESSORIES

Description	Thread	Part number
Two Post Cart w/o plate		051.221.000
Two Post Pump Mounting Plate		056.100.199
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter mesh 6		155.580.300
Stainless steel adapter 3/8" (for connecting the fluid filter)		055.580.301

Please refer to accessories section for detailed information and pictures

ACCELERATOR OF PERFORMANCE

30C25 Airmix® pump

The 30C25 Airmix® pump is for painting small quantities of medium viscosity products, water or solvent based. Up to 180 bar of fluid pressure to compensate pressure drops.

- **Good chemical compatibility with GT or MB-A cartridges**
- **Suction rod or gravity hopper**
- **Large range of "ready to spray" kits**

EQUIPMENT

Assembly	Piston seal	Lower Seal	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Wall Mounted	GT	GT	M26x125	-	-	✓	✓	-	151.145.000
Wall Mounted	GT	GT	M26x125	-	-	-	✓	-	151145050
Wall Mounted	GT	GT	M26x125	(Ø 16)	-	✓	✓	-	151.145.100
Wall Mounted	GT	GT	M26x125	(Ø 23)	-	✓	✓	-	151.145.150
Wall Mounted	GT	GT	M26x125	(Ø 16)	-	✓	✓	✓	151.145.200
Wall Mounted	GT	GT	M26x125	(Ø 23)	-	✓	✓	✓	151.145.250
Wall Mounted	GT	GT	M26x125	(Ø 23)	-	✓	✓	✓	151.145.300
Wall Mounted	GT	GT	F1/2 BSPP	-	-	✓	✓	-	151.145.320
Wall Mounted	MB-A	GT	M26x125	-	-	✓	✓	-	151.145.400
Wall Mounted	MB-A	GT	F1/2 BSPP	-	-	-	-	-	151.145.450
Wall Mounted	MB-A	GT	M26x125	-	-	-	✓	-	151.145.500
Wall Mounted	MB-A	GT	M26x125	(Ø 16)	-	✓	✓	-	151.145.550
Wall Mounted	MB-A	GT	M26x125	(Ø 23)	-	✓	✓	✓	151.145.600
Wall Mounted	MB-A	GT	M26x125	(Ø 23)	-	✓	✓	-	151.145.650
Wall Mounted	MB-A	GT	M26x125	(Ø 16)	-	✓	✓	✓	151.145.700
Wall Mounted	MB-A	GT	M26x125	(Ø 23)	-	-	✓	✓	151.145.750

SPARE PARTS

Description	Part number
Servicing kit for 420-4 air motor	144.130.190
Air motor reversing kit	144.130.191
GT Cartridge kit	144.130.205
MB-A Cartridge kit	144.130.365
Servicing kit C25 fluid section	144.130.291
Ball Ø 16, 440C Stainless steel (std)	907.414.242
Ball Ø 16, 316L Stainless steel	907.414.142
Ball Ø 9,52, 440 stainless steel (std)	907.414.223
Ball Ø 9.52, 304L stainless steel	907.414.123
Ball Ø 9,52, 316L stainless steel	907.414.623

Cup pumps

30C25 Airmix® pump

ACCESSORIES

Description	Thread	Part number
Wall-mounted totem		151.140.240
Tripod		151.140.210
Tripod essential		151.730.130
Single Post Cart		151.730.140
Handle		051.665.651
Double Post Cart		151.241.000
Gravity Hopper 6 liters - U shape	F 26x125	151.140.230
Stainless steel Suction rod Ø16 plunging tube length 570 mm elbowed	F 26x125	149.596.050
Stainless steel Suction rod Ø16 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.060
Stainless steel Suction rod Ø23 plunging tube length 570 mm elbowed	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter Mesh 6 3/8 (Inlet F1/2"JIC - Outlet M1/2"JIC)		155.580.600
Air plate with 2 air regulator		151.140.070
Air plate with 1 air regulator		151.140.060

Please refer to accessories section for detailed information and pictures

35C50 Airmix®/Airless pump

The 35C50 Airmix® pump is a medium-range, all purpose pump for medium to high viscosity products. Up to 210 bar of fluid pressure allows Airmix® or Airless applications.

- **Suction rod or gravity hopper**
- **Available in kits with one or two air regulators**
- **Good chemical compatibility with GT or MB-A cartridges**

PISTON PUMP WITH CUP SEAL FOR MEDIUM VISCOSITY

EQUIPMENT

Assembly	Piston seal	Lower Seal	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Wall Mounted	MB-A	GT	F 1/2"	-	-	✓	✓	-	151.148.000
Wall Mounted	MB-A	GT	M26x125	-	-	✓	✓	-	151.148.050
Wall Mounted	MB-A	GT	M26x125	(Ø 23)	(Ø 16)	✓	✓	✓	151.148.100
Wall Mounted	MB-A	GT	F 1/2"	-	-	-	✓	-	151.148.150
Wall Mounted	MB-A	GT	M26x125	-	-	-	✓	-	151.148.200
Wall Mounted	MB-A	GT	M26x125	(Ø 23)	-	✓	✓	-	151.148.250
Wall Mounted	MB-A	GT	M26x125	(Ø 23)	-	-	✓	-	151.148.300
Wall Mounted	MB-A	GT	M26x125	(Ø 23)	(Ø 16)	-	✓	✓	151.148.350

SPARE PARTS

Description	Part number
Servicing kit for 970-4 motor	144.160.191
Air motor reversing kit	144.130.191
GT Cartridge kit	144.135.205
MB-A Cartridge kit	144.135.365
Servicing kit C50 Fluid Section	144.135.237
Ball Ø 14, 420C Stainless steel (std)	87.014
Ball Ø 20, 440C Stainless steel (std)	907.414.291

ACCESSORIES

Description	Thread	Part number
Wall-mounted totem		151.140.240
Essential Tripod		151.730.130
Single Post Cart		151.730.140
Dismountable cart		151.241.000
Dismountable cart with drum table		151.242.000
Gravity Hopper 6 liters - U shape	F 26x125	151.140.230
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter 3/8 (Inlet F1/2"JIC - Outlet M1/2"JIC) mesh 6		155.580.600
Air plate with 2 air regulator		151.140.070
Air plate with 1 air regulator		151.140.060
Air plate with 2 regulator + 2 gun management system without product valves		151.140.095

Please refer to accessories section for detailed information and pictures

Cup pumps

PISTON PUMP WITH CUP SEAL FOR HIGH VISCOSITY

40C50 Airmix®/Airless pump

The 40C50 Airmix® pump is a medium-range, all purpose pump for high viscosity products. Up to 240 bar of fluid pressure allows Airmix® or Airless applications.

- **Suction rod or gravity hopper**
- **Two gun management available**
- **Good chemical compatibility with GT, Chevron, PE seals**

WWW

EQUIPMENT

Assembly	Piston seal	Lower Seal	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Bare	Chevron seal mix Polyfluid/ PTFEG	GT	F1/2 BSPP	-	-	-	-	-	151.775.000
Wall mounted		GT	M26x125	-	-	-	✓	-	151.775.050
Wall mounted		GT	M26x125	(Ø 23)	-	-	✓	-	151.775.100
Wall mounted		GT	M26x125	-	(Ø 16)	-	✓	✓	151.775.150
Wall mounted		GT	M26x125	(Ø 23)	(Ø 16)	-	✓	✓	151.775.200
Wall mounted		GT	M26x125	(Ø 23)	(Ø 16)	-	✓	✓	151.775.200
Cart		GT	M26x125	(Ø 23)	(Ø 16)	-	✓	✓	151.775.400
Cart WB		GT	M 1"	(1")	(Ø 16)	-	✓	✓	151.775.500
Wall mounted WB		GT	M 1"	(1")	(Ø 16)	-	✓	✓	151.775.550

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 1000-4 air motor including reversing-block seals			146.270.991
Full maintenance kit for 1000-4 air motor including reversing-block seals			146.270.995
Seal kit for C50 hydraulic section (std)	Chevron seal mix Polyfluid/PTFEG	GT	144.950.091
Full maintenance kit C50 hydraulic section (std)	Chevron seal mix Polyfluid/PTFEG	GT	144.950.096
Seal kit for C50 hydraulic section (Chevron/Chevron)	Chevron seal mix Polyfluid/PTFEG	Chevron seal mix PTFEG / PE	144.950.090
Full maintenance kit C50 hydraulic section (Chevron/Chevron)	Chevron seal mix Polyfluid/PTFEG	Chevron seal mix PTFEG / PE	144.950.095
Chevron seal, Polyfluid (std)	Chevron Polyfluid	-	909.050.915
Chevron seal, PTFEG (std)	Chevron PTFEG	-	044.790.013
Chevron seal, PE	Chevron UHMWPE	-	909.051.103
Chevron seal, PTFEG	-	Chevron PTFEG	044.790.008
Chevron seal, PE	-	Chevron UHMWPE	909.051.104
Seal kit for C50 hydraulic section (GT/GT)	GT	GT	144.950.097
Full maintenance kit C50 hydraulic section (GT/GT)	GT	GT	144.950.098
Ball Ø 16, 440C Stainless steel (std)			907.414.242
Ball Ø 16, 316L Stainless steel			907.414.142
Ball Ø 9,52, 440 stainless steel (std)			907.414.223
Ball Ø 9.52, 304L stainless steel			907.414.123
Ball Ø 9,52, 316L stainless steel			907.414.623

ACCESSORIES

Description	Thread	Part number
Two Post Cart w/o plate		051.221.000
Two Post Pump Mounting Plate		056.100.199
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm M26x125	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums) M26x125	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed F18 x 125	F 18x125	049.596.000
Fluid filter 3/8 Mesh 12		155.580.400
Gravity Hopper 6 liters - U shape	F 26x125	151.140.230

Cup pumps

PISTON PUMP WITH CUP SEAL FOR HIGH VISCOSITY

40C100 Airmix®/Airless pump

The 40C100 Airmix® pump is designed for high flow, high viscosity products. Up to 240 bar of fluid pressure allows Airmix® or Airless applications.

- **Used for circulation and/or multiple guns.**
- **Heavy duty air changeover valves**
- **Large chemical compatibility with multiple seals material choices (Chevron, GT, PU)**

EQUIPMENT

Assembly	Piston seal	Lower Seal	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Bare	Chevron seal mix Polyfluid/ PTFEG	GT	F 1/2 BSPP	-	-	-	✓	-	151.785.000
Wall Mounted		GT	M26x125	-	-	-	✓	-	151.785.050
Wall Mounted		GT	M26x125	(Ø 23)	-	-	✓	-	151.785.100
Wall Mounted		GT	M26x125	-	(Ø 16)	-	✓	✓	151.785.150
Wall Mounted		GT	M26x125	(Ø 23)	(Ø 16)	-	✓	✓	151.785.200
Wall Mounted		GT	M26x125	(Ø 23)	(Ø 16)	-	✓	✓	151.785.250
Cart		GT	M26x125	(Ø 23)	(Ø 16)	-	✓	✓	151.785.400
Cart WB		GT	M 1"	(1")	(Ø 16)	-	✓	✓	151.785.500
Wall Mounted WB		GT	M 1"	-	-	-	✓	-	151.785.510
Wall Mounted WB		GT	M 1"	-	(Ø 16)	-	✓	✓	151.785.520
Wall Mounted WB		GT	M 1"	(1")	(Ø 16)	-	✓	✓	151.785.550

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 2000-4 air motor including reversing-block seals			146.270.990
Full maintenance kit for 2000-4 air motor including reversing-block seals			146.270.996
Seal kit for C100 hydraulic section	Chevron seal mix Polyfluid/PTFEG	GT	144.960.091
Full maintenance kit C100 hydraulic section (Chevron/GT)	Chevron seal mix Polyfluid/PTFEG	GT	144.960.096
Seal kit for C100 hydraulic section (Chevron/Chevron)	Chevron seal mix Polyfluid/PTFEG	Chevron seal mix PTFEG / PE	144.960.090
Full maintenance kit C100 hydraulic section (Chevron/Chevron)	Chevron seal mix Polyfluid/PTFEG	Chevron seal mix PTFEG / PE	144.960.095
Chevron seal polyfluid	Chevron Polyfluid	-	909.050.913
Chevron seal PTFEG	Chevron PTFEG	-	109.050.818
GT cartridge	GT	GT	144.960.100
Chevron seal, PE	Chevron UHMWPE	-	909.051.105
Chevron seal PTFEG	-	Chevron PTFEG	909.050.819
Chevron seal UHMWPE	-	Chevron UHMWPE	909.051.106
Servicing kit PU	PU	PU	144.960.159
Ball Ø 16, 440C Stainless steel (std)			907.414.242
Ball Ø 16, 316L Stainless steel			907.414.142
Ball Ø 9.52, 440C stainless steel (std)			907.414.223
Ball Ø 9.52, 304L stainless steel			907.414.123
Ball Ø 9,52, 316L stainless steel			907.414.623

ACCESSORIES

Description	Thread	Part number
Two Post Cart w/o plate		051.221.000
Two Post Pump Mounting Plate		056.100.199
Atomizing air kit	M 1/2 BSPT	151.740.300
Atomizing air kit with 'T' connexion	F 1/2 BSPP - M 1/2 BSPT	151.740.200
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter Mesh 6		155.580.300

Cup pumps

PISTON PUMP WITH CUP SEAL FOR HEAVY DUTY APPLICATIONS

40C260 Airmix®/Airless pump

The 40C260 Airmix® pump is designed to pump extra large quantities of high viscosity products. Up to 240 bar of fluid pressure allows Airmix® or Airless applications.

- **Used for circulation and/or multiple guns.**
- **Very large choice of seals and packing materials (Leather, PU, UHMW)**
- **Fluid output fitting 3/4"JIC for high flow-rate installations**

EQUIPMENT

Assembly	Piston seal	Lower Seal	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Wall-mounted	Chevron seal mix PE/ PTFEG	GT	M38x150	-	-	-	✓	-	151.870.500
Wall-mounted		GT	M38x150	(Ø 23)	-	-	✓	✓	151.870.600
Wall-mounted	PU	PU	M38x150	-	-	-	✓	✓	151.870.660
Wall-mounted	GT	GT	M38x150	-	-	-	✓	✓	151.870.670
Cart	Chevron seal mix PE/ PTFEG	GT	M38x150	(Ø 23)	-	-	✓	✓	151.870.700
Wall-mounted		GT	M38x150	-	-	-	✓	✓	151.870.800

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 5000-4 air motor including reversing-block seals			146.280.991
Full maintenance kit for 5000-4 air motor including reversing-block seals			146.280.996
GT Cartridge kit	GT	-	144.710.100
PU Cartridge kit	PU	-	144.710.200
Piston seal (lower seal) PU	-	PU	909.060.303
Seal kit for C260 hydraulic section (Chevron/GT)	Chevron seal mix PE/PTFEG	GT	144.025.090
Full maintenance kit C260 hydraulic section (Chevron/GT)		GT	144.025.695
Seal kit for C260 hydraulic section (GT/GT)	GT	GT	144.025.693
Full maintenance kit C260 hydraulic section (GT/GT)	GT	GT	144.025.694
Seal kit for C260 hydraulic section (PU/PU)	PU	PU	144.025.691
Full maintenance kit C260 hydraulic section (PU/PU)	PU	PU	144.025.692
Ball Ø 16, 440C Stainless steel (std)			907.414.242
Ball Ø 16, 316L Stainless steel			907.414.142
Ball Ø 27.7 440C stainless steel (std)			907.414.269

ACCESSORIES

Description	Thread	Part number
Two Reinforced Arms w/o mounting plate		051.231.000
Pump bracket		051.341.206
Atomizing air kit	M 1/2 BSPT	151.740.300
Atomising air kit with 'T' connexion	F 1/2 BSPP - M 1/2 BSPT	151.740.200
Suction rod Ø23 plunging tube length 570 mm	F 38x150	049.597.100
Stainless steel flushing rod	F 18x125	049.596.000
Fluid filter 3/4 mesh 12		155.581.400
Stainless steel adapter 3/4" NPS (for connecting the fluid filter)		055.581.401

Flowmax® bellow pumps

Selection table of flowmax® bellow pumps

Type of pump		Flowmax® bellow pumps									
PUMP NAME		**16F240**	**17F60**	**20F50**	**20F50PH**	**20F100**	**20F440**	**34F60**	**40F50**	**40F100**	**40F260**
Construction		Stainless Steel									
Upper sealing	GT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	PU	✓	-	-	-	-	✓	-	-	-	✓
Lower sealing	GT	-	✓	✓	✓	✓	-	✓	✓	✓	✓
	PU	✓	-	-	-	-	✓	-	-	-	✓
	Cup seal (UHMWPE)	✓	-	-	-	-	✓	-	-	-	-
Turbo anti-icing version		✓	-	-	-	✓	-	-	-	-	-
Stainless steel	Stainless steel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	304L	✓*	✓*	✓*	-	✓*	-	✓*	✓*	✓*	-
	316L	✓*	✓*	✓*	-	✓*	-	✓*	✓*	✓*	✓*
	Ceramic	-	-	-	✓	-	-	-	-	-	-
ATEX		CE II 2 G T3	CE II 2G h T6	CE II 2 G	CE II 2G T3	CE II 2G h T5	CE II 2 G T3	CE II 2G T5	CE II 2G T5	CE II 2G T5	CE II 2G T5
ASSEMBLING											
Bare		✓	-	✓	-	✓	✓	-	✓	✓	-
Wall mounted		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cart mounted		✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓
DIMENSION (wall mounted pump without filter or suction rod)											
Height (mm)		105	622	991	991	975	111.5	610	975	975	1120
Width (mm)		400	330	483	483	470	640	410	400	400	300
Depth (mm)		270	210	280	280	270	325	250	280	280	510
Weight (kg)		32	20	22	22	27	66	26.5	37	42	110
CHARACTERISTICS											
Pressure ratio		16/1	17/1	20/1	20/1	20/1	20/1	34/1	40/1	40/1	40/1
Output per cycle (cc)		240	60	50	50	100	440	60	50	100	260
Number of cycle (per liter)		4	16	20	20	10	2.3	17	20	10	3.8
Output at 60 cycles/min (L)		14.4	3.6	3	3	6	26.4	3.6	3	6	15.6
Free flowrate (L/min)		14.4	3.6	3	3	6	26.4	3.6	3	6	15.6
Max fluid pressure (bar)		96	100	120	120	120	120	204	240	240	240
Max Paint temperature (°C)		60	60	60	60	60	60	50	50	50	60
Operating air pressure (bar)		1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6
Air consumption at 30 cyc/min and 4 bar (m(3)/h)		41.5	11	10.8	10.8	21.6	63.4	22.03	21.60	43.2	112.32
FITTINGS											
Air inlet		F 3/4 BSP	F 3/8 BSP	F 3/8 BSP	F 3/8 BSP	F 3/8 BSP	F 3/4 BSP	F 3/4 BSP	F 3/4 BSP	F 3/4 BSP	F 3/4 BSP
Fluid Inlet		M 26x125	M26x125	M1/2 BSPP or M26x125	F 1/2 BSPP	M26x125	M 38 x 150	M 26x125	M 26x125	M 26x125	M 38 x 150
Fluid Outlet (after filter)		M 1/2" JIC					M" 3/4 JIC	M 1/2" JIC			M" 3/4 JIC

** = optional*

Selection table of flowmax® bellow pumps

FEATURES	BENEFITS	16F240	17F60	20F50	20F50PH	20F100	20F440	34F60	40F50	40F100	40F260
Sealing ensured by a proprietary bellow seal	High reliability	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Leak free	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Total sealing between pump and its environment,	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Ideal to work with moisture sensitive materials	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Moisture sensitive, catalysts	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Acid catalyzed materials	-	-	-	✓	-	-	-	-	-	-
	Fluid discharge without retention of a wide range of coating materials	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Large and smooth fluid passages	Compatible with water-based materials	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Stainless steel design	Constant fluid output pressure	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Balanced fluid section	Excellent suction capacity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cart piston seal	Easy maintenance	-	✓	-	-	-	-	✓	✓	✓	✓
External valves assembly	Fast inversions and very high efficiency	-	✓	-	-	-	-	✓	✓	✓	✓
Floating piston	Water base	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sprayed material	Solvent base	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Primers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Stains	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Direct Gloss / Metallic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Top coats / High Gloss	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Moisture sensitive	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Pre-mixed two components materials	-	-	-	-	-	-	-	-	-	-
	Anti-corrosion / abrasives	-	-	-	-	-	-	-	-	-	-
	Adhesives	-	-	-	-	-	-	-	-	-	-
	Sealants	-	-	-	-	-	-	-	-	-	-
	Greases	-	-	-	-	-	-	-	-	-	-
	Wax	-	-	-	-	-	-	-	-	-	-

• = available

** = optional*

PISTON PUMP WITH BELLOW FLOWMAX® SEAL FOR HIGH FLOW RATE

16F240 Airmix® pump

The 16F240 Airmix® pump is designed to pump large quantities of fluid product.
Turbo version prevents ice build-up on continuous operations.

- **Heavy duty air changeover valves**
- **Used for circulation and/or multiple guns.**
- **Very large choice of seals and packing materials (GT, PU, UHMW...)**

WWW

EQUIPMENT

Assembly	Piston seal	Lower Seal	Air motor	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Bare	GT	Cup seal (UHMWPE)	Std	M26x125	-	-	-	-	-	151.793.000
Wall-mounted	GT		Std	M26x125	-	-	-	✓	-	151.793.100
Wall-mounted	GT		Std	M26x125	(Ø 23)	(Ø 16)	-	✓	✓	151.793.200
Wall-mounted	PU	PU	Std	M26x125	(Ø 23)	(Ø 16)	-	✓	✓	151.793.260
Cart	GT	Cup seal (UHMWPE)	Std	M26x125	(Ø 23)	(Ø 16)	-	✓	✓	151.793.400
Wall-mounted turbo	GT		Enhanced Turbo	M26x125	-	-	-	✓	-	151.796.100
Wall-mounted turbo	GT		Enhanced Turbo	M26x125	(Ø 23)	(Ø 16)	-	✓	✓	151.796.200
Wall-mounted turbo	PU	PU	Enhanced Turbo	M26x125	(Ø 23)	(Ø 16)	-	✓	✓	151.796.260

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 2000-4 air motor including reversing-block seals			146.270.990
Full maintenance kit for 2000-4 air motor including reversing-block seals			146.270.996
Seal kit for F240 hydraulic section	GT	Cup seal (PEHD)	144.970.490
Full maintenance kit F240 hydraulic section	GT	Cup seal (PEHD)	144.970.495
Cup seal	-	Cup seal (UHMWPE)	044.970.008
Adaptation assembly for Polyurethane (PU) seals	PU	PU	144.970.260
Seal kit for F240 hydraulic section (PU/PU)	PU	PU	144.970.270
Ball Ø 16, 440C Stainless steel (std)			907.414.242
Ball Ø 16, 316L Stainless steel			907.414.142
Ball Ø 16 carbide			907.414.342
Ball Ø 9.52, 440C stainless steel (std)			907.414.223
Ball Ø 9.52, 304L stainless steel			907.414.123
Ball Ø 9,52, 316L stainless steel			907.414.623

ACCESSORIES

Description	Thread	Part number
Two Post Cart w/o plate		056.100.199
Two Post Pump Mounting Plate		149.596.150
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm M26x125	F 26x125	149.596.160
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums) M26x125	F 26x125	049.596.000
Stainless steel drain rod Ø16 elbowed F18 x 125	F 18x125	155.580.300

Please refer to accessories section for detailed information and pictures

17F60 Airmix® pump

The 15C50 Airmix® pump is perfect for painting medium quantities of fluid products like moisture-sensitive hardeners. Up to 100 bar of fluid pressure provides excellent suction capacity.

- **Good chemical compatibility with GT cartridges**
- **Regular output, low pulsation at changeover**
- **Suction rod or gravity hopper**

PISTON PUMP WITH BELLOW FLOWMAX® SEAL FOR MEDIUM APPLICATIONS

WWW

EQUIPMENT

Assembly	Piston seal	Lower sealing	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Wall-mounted	GT	GT	M26x125	-	-	✓	✓	✓	151.730.700
Wall-mounted	GT	GT	M26x125	-	-	-	-	-	144.147.360

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 1000-2 air motor including reversing-block seals	-	-	144.919.904
Full maintenance kit for 1000-2 air motor including reversing-block seals	-	-	144.919.914
Seal kit for F60 hydraulic section	GT	GT	144.910.799
Full maintenance kit F60 hydraulic section	GT	GT	144.910.797
Seal kit for valves	-	-	144.910.798
Ball Ø 9.52, 440C stainless steel (std)			907.414.223
Ball Ø 9.52, 304L stainless steel			907.414.123
Ball Ø 9,52, 316L stainless steel			907.414.623

ACCESSORIES

Description	Thread	Part number
Two Post Cart w/o plate		051.221.000
Two Post Pump Mounting Plate		056.100.199
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter mesh 6		155.580.300
Stainless steel adapter 3/8 NPT (for connecting the fluid filter)		055.580.301
Gravity Hopper 6 liters - L shape	F 26x125	151.140.250

PISTON PUMP WITH BELLOW FLOWMAX® SEAL FOR MEDIUM APPLICATIONS

20F50 and 20F50PH Airmix® pump

The 20F50 Airmix® pump is a medium-range, all purpose pump for medium viscosity products.
20F50PH model is specially suited to water based products and corrosive catalysts.

- **Heavy duty air changeover valves**
- **Excellent fit with 2k-3k dosing machines**
- **Good chemical compatibility with GT seals.**

WWW

EQUIPMENT

Assembly	Piston seal	Lower sealing	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Bare	GT	GT	M1/2 BSPP	-	-	-	-	-	151.771.000
Wall mounted	GT	GT	M26x125	(Ø 23)	-	✓	✓	-	151.771.100
Wall mounted	GT	GT	M26x125	(Ø 23)	(Ø 16)	✓	✓	✓	151.771.200
Cart	GT	GT	M26x125	(Ø 23)	(Ø 16)	✓	✓	✓	151.771.400
Wall mounted - PH version	GT	GT	F 1/2 BSPP	-	-	✓	✓	✓	151.772.200

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 500-4 air motor			146.260.990
Full maintenance kit for 500-4 air motor			146.260.995
Seal kit for F50 hydraulic section	GT	GT	144.950.291
Full maintenance kit F50 hydraulic section	GT	GT	144.950.292
Seal kit for F50PH hydraulic section	GT	GT	144.951.090
Full maintenance kit F50PH hydraulic section	GT	GT	144.951.095
GT seal	GT	-	909.150.212
GT seal	-	GT	909.150.214
GT seal (PH version)	GT	-	909.150.245
GT seal (PH version)	-	GT	909.150.244
Ball Ø 16, 440C Stainless steel (std)			907.414.242
Ball Ø 16, 316L Stainless steel			907.414.142
Ball Ø 16, ceramic (PH)			907.414.703
Ball Ø 16 carbide			907.414.342
Ball Ø 9.52, 440C stainless steel (std)			907.414.223
Ball Ø 9.52, 304L stainless steel			907.414.123
Ball Ø 9,52, 316L stainless steel			907.414.623

ACCESSORIES

Description	Thread	Part number
Two Post Cart w/o plate		051.221.000
Two Post Pump Mounting Plate		056.100.199
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter mesh 6		155.580.300
Stainless steel adapter 3/8 (for connecting the fluid filter)		055.580.301
Gravity Hopper 6 liters - L shape	F 26x125	151.140.250

Please refer to accessories section for detailed information and pictures

PISTON PUMP WITH BELLOW FLOWMAX® SEAL FOR MEDIUM APPLICATIONS

20F100 Airmix® pump

The 20F100 Airmix® pump is designed to pump large quantities of medium viscosity products.Turbo version prevents ice build-up on continuous operations.

- **Used for circulation and/or multiple guns.**
- **Heavy duty air changeover valves**
- **Good chemical compatibility with GT seals.**

WWW

EQUIPMENT

Assembly	Piston seal	Lower Seal	Air motor	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Bare	GT	GT	Std	M26x125	-	-	-	-	-	151.781.000
Wall mounted	GT	GT	Std	M26x125	(Ø 23)	-	✓	✓	-	151.781.100
Wall mounted	GT	GT	Std	M26x125	(Ø 23)	(Ø 16)	✓	✓	✓	151.781.200
Wall mounted	GT	GT	Std	M26x125	(Ø 23)	(Ø 16)	✓	✓	✓	151.781.400
Turbo wall-mounted	GT	GT	Enhanced Turbo	M26x125	(Ø 23)	-	✓	✓	-	151.783.100
Turbo wall-mounted	GT	GT	Enhanced Turbo	M26x125	(Ø 23)	(Ø 16)	✓	✓	✓	151.783.200

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 1000-4 air motor			146.270.991
Full maintenance kit for 1000-4 air motor			146.270.995
Seal kit for F100 hydraulic section			144.960.291
Full maintenance kit F100 hydraulic section			144.960.292
GT seal	GT	-	909.150.213
GT seal	-	GT	909.150.215
Ball Ø 16, 440C Stainless steel (std)			907.414.242
Ball Ø 16, 316L Stainless steel			907.414.142
Ball Ø 16 carbide			907.414.342
Ball Ø 9.52, 440C stainless steel (std)			907.414.223
Ball Ø 9.52, 304L stainless steel			907.414.123
Ball Ø 9,52, 316L stainless steel			907.414.623

ACCESSORIES

Description	Thread	Part number
Two Post Cart w/o plate		051.221.000
Two Post Pump Mounting Plate		056.100.199
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter mesh 6		155.580.300
Stainless steel adapter 3/8 NPT (for connecting the fluid filter)		055.580.301
Gravity Hopper 6 liters - L shape	F 26x125	151.140.250

Please refer to accessories section for detailed information and pictures

PISTON PUMP WITH BELLOW FLOWMAX® SEAL FOR HIGH FLOW RATE

20F440 Airmix® pump

The 20F440 Airmix® pump is designed to pump large quantities of low to medium viscosity products.

- **Heavy duty air changeover valves**
- **Used for circulation and/or multiple guns.**
- **Very large choice of seals and packing materials (GT, PU, UHMW)**

WWW

EQUIPMENT

Assembly	Piston seal	Lower sealing	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Wall mounted	GT	Cup seal (UHMWPE)	M38x150	-	-	-	✓	-	151.860.200
Wall mounted	GT		M38x150	-	-	-	✓	✓	151.860.300
Wall mounted	PU	PU	M38x150	-	-	-	-	-	151.860.500
Wall mounted	PU	PU	M38x150	-	-	-	✓	-	151.860.600
Wall mounted	PU	PU	M38x150	-	-	-	✓	✓	151.860.700

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 5000-4 air motor including reversing-block seals			146.280.991
Full maintenance kit for 5000-4 air motor including reversing-block seals			146.280.996
Seal kit for F440 hydraulic section (GT/UHMWPE)	GT	Cup seal (UHMWPE)	144.990.090
Full maintenance kit F440 hydraulic section (GT/UHMWPE)	GT		144.990.095
Adaptation assembly for Polyurethane (PU) seals	PU	PU	144 990 120
Seal kit for F440 hydraulic section (PU/PU)	PU	PU	144.990.130
Full maintenance kit F440 hydraulic section (PU/PU)	PU	PU	144.990.131
Ball Ø 27, 440C Stainless steel (std)			907.414.269
Ball Ø 40, 440C Stainless steel (std)			907.414.297

ACCESSORIES

Description	Thread	Part number
Two Reinforced Arms cart w/o mounting plate		051.231.000
Pump bracket		051.341.206
Atomizing air kit		151.740.200
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 38x150	049.597.100
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter 3/4 mesh 12		155.581.400
Stainless steel adapter 3/4 NPS (for connecting the fluid filter)		055.581.401

Please refer to accessories section for detailed information and pictures

PISTON PUMP WITH BELLOW FLOWMAX® SEAL FOR MEDIUM RANGE APPLICATIONS

34F60 Airmix®/Airless pump

The 34F60 pump is designed to pump small quantities of medium viscosity products. Up to 200 bar of fluid pressure allows Airmix® or Airless Fine Finish applications.

- **Good chemical compatibility with GT seals.**
- **Best for moisture sensitive products**
- **Suction rod or gravity hopper**

WWW

EQUIPMENT

Assembly	Piston seal	Lower sealing	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Wall mounted	GT	GT	M26x125	(Ø 25)	(Ø 16)	-	✓	✓	151.740.700

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 2000-2 air motor including reversing-block seals			144.929.902
Full maintenance kit for 2000-2 air motor including reversing-block seals			144.929.912
Seal kit for F60 hydraulic section	GT	GT	144.910.799
Full maintenance kit F60 hydraulic section	GT	GT	144.910.797
Seal kit for valves	-	-	144.910.798
Ball Ø 9.52, 440C stainless steel (std)			907.414.223
Ball Ø 9.52, 304L stainless steel			907.414.123
Ball Ø 9,52, 316L stainless steel			907.414.623

ACCESSORIES

Description	Thread	Part number
Two Post Cart w/o plate		051.221.000
Two Post Pump Mounting Plate		056.100.199
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter Mesh 6		155.580.300
Stainless steel adapter 3/8" (for connecting the fluid filter)		055.580.301
Gravity Hopper 6 liters - L shape	F 26x125	151.140.250

Please refer to accessories section for detailed information and pictures

40F50 Airmix®/Airless pump

The 40F50 pump is designed to pump small quantities of medium viscosity products. Up to 240 bar of fluid pressure allows Airmix® or Airless Fine Finish applications.
This pump is recommended for feeding up to 2 guns.

- **Suction rod or gravity hopper**
- **Heavy duty air changeover valves**
- **Good chemical compatibility with GT seals.**

PISTON PUMP WITH BELLOW FLOWMAX® SEAL, BEST FOR MOISTURE SENSITIVE PRODUCTS

WWW

EQUIPMENT

Assembly	Piston seal	Lower sealing	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Bare	GT	GT	M26x125	-	-	-	-	-	151.776.000
Wall mounted	GT	GT	M26x125	(Ø 25)	(Ø 16)	-	✓	✓	151.776.200
Cart	GT	GT	M26x125	(Ø 25)	(Ø 16)	-	✓	✓	151.776.400

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 1000-4 air motor including reversing-block seals			146.270.991
Full maintenance kit for 1000-4 air motor including reversing-block seals			146.270.995
Seal kit for F50 hydraulic section	GT	GT	144.950.291
Full maintenance kit F50 hydraulic section	GT	GT	144.950.292
Seal kit for F50PH hydraulic section	GT	GT	144.951.090
Full maintenance kit F50PH hydraulic section	GT	GT	144.951.095
GT seal	GT	-	909.150.212
GT seal	-	GT	909.150.214
GT seal (PH version)	GT	-	909.150.245
GT seal (PH version)	-	GT	909.150.244
Ball Ø 16, 440C Stainless steel (std)			907.414.242
Ball Ø 16, 316L Stainless steel			907.414.142
Ball Ø 16 carbide			907.414.342
Ball Ø 16, ceramic (PH)			907.414.703
Ball Ø 9.52, 440C stainless steel (std)			907.414.223
Ball Ø 9.52, 304L stainless steel			907.414.123
Ball Ø 9,52, 316L stainless steel			907.414.623

ACCESSORIES

Description	Thread	Part number
Two Post Cart w/o plate		051.221.000
Two Post Pump Mounting Plate		056.100.199
Atomizing air kit		151.740.200
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter Mesh 12		155.580.400
Gravity Hopper 6 liters - L shape	F 26x125	151.140.250

Please refer to accessories section for detailed information and pictures

40F100 Airmix®/Airless pump

The 40F100 pump is designed to pump large quantities of medium viscosity products. Up to 240 bar of fluid pressure allows Airmix® or Airless Fine Finish applications.
This pump is recommended for feeding up to 4 guns.

- **Used for circulation and/or multiple guns.**
- **Heavy duty air changeover valves**
- **Good chemical compatibility with GT seals.**

PISTON PUMP WITH BELLOW FLOWMAX® SEAL, BEST FOR MOISTURE SENSITIVE PRODUCTS

WWW

EQUIPMENT

Assembly	Piston seal	Lower sealing	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Bare	GT	GT	M26x125	-	-	-	-	-	151.786.000
Wall mounted	GT	GT	M26x125	(Ø 25)	-	-	✓	-	151.786.100
Wall mounted	GT	GT	M26x125	(Ø 25)	✓	-	✓	✓	151.786.200
Wall mounted	GT	GT	M26x125	(Ø 25)	✓	-	✓	✓	151.786.400

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 2000-4 air motor including reversing-block seals			146.270.990
Full maintenance kit for 2000-4 air motor including reversing-block seals			146.270.996
Seal kit for F100 hydraulic section	GT	GT	144.960.291
Full maintenance kit F100 hydraulic section	GT	GT	144.960.292
GT seal	GT	-	909.150.213
GT seal	-	GT	909.150.215
Ball Ø 16, 440C Stainless steel (std)			907.414.242
Ball Ø 16, 316L Stainless steel			907.414.142
Ball Ø 16 carbide			907.414.342
Ball Ø 9.52, 440C stainless steel (std)			907.414.223
Ball Ø 9.52, 304L stainless steel			907.414.123
Ball Ø 9,52, 316L stainless steel			907.414.623

ACCESSORIES

Description	Thread	Part number
Two Post Cart w/o plate		051.221.000
Two Post Pump Mounting Plate		056.100.199
Atomizing air kit		151.740.200
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 26x125	149.596.150
Stainless steel Suction rod Ø23 plunging tube length 1000mm elbowed (for 200 liters drums)	F 26x125	149.596.160
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter Mesh 6		155.580.300
Stainless steel adapter 3/8" (for connecting the fluid filter)		055.580.301
Gravity Hopper 6 liters - L shape	F 26x125	151.140.250

40F260 Airmix® Flowmax® pump

The 40F260 pump is designed to pump large quantities of medium viscosity products. Up to 240 bar of fluid pressure allows Airmix® or Airless Fine Finish applications.

- **Used for circulation and/or multiple guns.**
- **Large choice of packing materials (GT, PU)**
- **Fluid output fitting 3/4"JIC for high flow-rate installations**

BELLOW FLOWMAX® SEAL PUMP FOR HEAVY DUTY WORKS

WWW

EQUIPMENT

Assembly	Piston seal	Lower sealing	Fluid inlet fitting	Suction rod	Drain rod	Atomization air regulator	Air regulator Fluid pressure	Filter pump outlet	Part number
Wall-mounted	GT	GT	M38x150	-	-	-	✓	-	151.871.500
Wall-mounted	GT	GT	M38x150	(Ø 25)	-	-	✓	✓	151.871.600
Wall-mounted	PU	PU	M38x150	-	-	-	✓	✓	151.871.660
Cart	GT	GT	M38x150	(Ø 25)	-	-	✓	✓	151.871.700
Wall-mounted	GT	GT	M38x150	-	-	-	✓	✓	151.871.800

SPARE PARTS

Description	Piston seal	Type of exhaust seals	Part number
Seal kit for 5000-4 air motor			146.280.991
Full maintenance kit for 5000-4 air motor including reversing-block seals			146.280.996
Seal kit for F260 hydraulic section (GT/GT)	GT	GT	144.020.690
Full maintenance kit F260 hydraulic section (GT/GT)	GT	GT	144.020.695
Seal kit for F260 hydraulic section (PU/PU)	PU	PU	144.020.691
Full maintenance kit F260 hydraulic section (PU/PU)	PU	PU	144.020.692
GT seal	GT	-	909.150.228
GT seal	-	GT	909.150.226
PU seal	PU	-	909.060.304
PU seal	-	PU	909.060.303
Ball Ø 16, 440C Stainless steel (std)			907.414.242
Ball Ø 16, 316L Stainless steel			907.414.142
Ball Ø 16 carbide			907.414.342
Ball Ø 27.7 440C stainless steel (std)			907.414.269

ACCESSORIES

Description	Thread	Part number
Two Reinforced Arms w/o mounting plate		051.231.000
Pump bracket		051.341.206
Stainless steel Suction rod Ø23 plunging tube length elbowed 570 mm	F 38x150	049.597.100
Stainless steel drain rod Ø16 elbowed	F 18x125	049.596.000
Fluid filter 3/4 mesh 12		155.581.400
Stainless steel adapter 3/4" NPS (for connecting the fluid filter)		055.581.401

Please refer to accessories section for detailed information and pictures

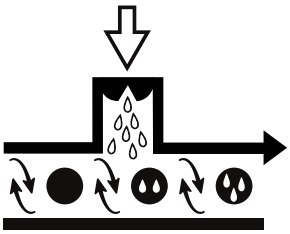
Notes

Electronic mixing and dosing systems

Two-components (**2K**) and Three-component paints (**3K**) offer excellent mechanical resistance beautiful finish and greatly reduce the emission of Volatile organic compounds (**VOC**).
They need precise, homogenous dosing and must be applied within a certain time after mixing, called '**pot-life**'.

Sames is the pioneer in 2K -3K dosing machines with dedicated technologies:

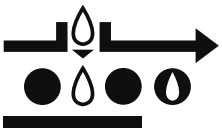
Spraymix technology



With Spraymix technology, a specific catalyst volume is sprayed directly into a vortex of base material. This generates a premix at the injection block and then the mix flows through a high performance static mixer and is applied immediately

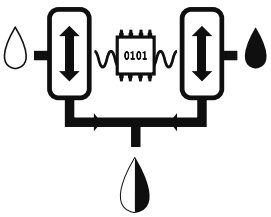
Patented dosing system: spraying the catalyst into the base stream

Injectmix technology



With Injectmix technology, a specific catalyst volume is injected into a continuous flow of base material. Then the mix flows through a high performance static mixer and is applied immediately.

PFE technology



Pulse-Free Electronic Control (PFE) acts on unique pump changeover to ensure consistent metering, and homogeneity of the mix at all times. The combination of those technologies allows a very high accuracy dosing of +/- 1%.

Airmix® **PU3000** is a simple, cost-effective dosing unit available in 2 liters and 4 liters versions.

Cyclomix Evo is a high end modular system, compatible with airspray, airmix® , airless and electrostatic spraying technologies. Its controller allows the transmission and recording of machine data through the company network.

SPECIFICATIONS

MACHINE NAME		PU3000	CYCLOMIX® Evo
Dosing type		Mechatronic	Electronical
Ratio		Adjustable	
Injection technology		**Injectmix**	Spraymix
FPE technology		✓	-
DIMENSIONS			
Height (cm)		28.6 (control cabinet) - 130-150 (dosing unit)	30 (control cabinet) - 46 (Fluid panel)*
Width (cm)		36.7 (control cabinet) - 86 (dosing unit)	40 (control cabinet) - 35 (Fluid panel)*
Depth (cm)		14.3 (control cabinet) - 70 (dosing unit)	20 (control cabinet) - 25 (Fluid panel)*
Weight (kg)		-	25*
CHARACTERISTICS			
Electrical Power		115 / 230V - 75W	
Trigger air pressure (bar)		Min : 6	Min: 4.5 - Max: 6.5
Product pressure (bar)		2 - 320	2 - 240
Wetted parts		Stainless steel and PeHD	Stainless steel, PeHD and FFKM (option 316L)
Mixing ratio		1/1 to 20/1	1 component, 0.5/1 to 33/1 (200% to 3%)
Mixing accuracy		+/- 1 %	
Number of components		2K	2K and 3K
Number of Products		1 base + 1 hardener	Up to 90 materials (base, hardener and thinner)
Type of components		2K	2K and 3K
Number of circuit		1	2 (optional independant flushing)
Connectivity		-	Smartphone app Robot communication 4.0 OPCua
Mixed fluid output (cc/min)		PU 3000 2l: up to 2000 PU 3000 4l: up to 4000	30 - 7000
Fluid viscosity		30 - 8000 cps	30 - 5000 cps
Fittings	Air inlet	F 3/4 BSP	F 10 mm
	Air outlet	F 1/4 BSP	M 1/4 NPS
	Fluid Inlet	-	M1/2" JIC or M3/8 NPSM
	Fluid Outlet	M 1/2" JIC	M1/2" JIC or M3/8 NPSM

** = configuration 3 bases and 1 hardener*

PU 3000 Airmix®

The PU3000 Airmix® combines electronic control and mechanical dosing and mixing and includes pumping, metering and electronic functions. The user-friendly control box allows the operator to intuitively learn how to operate the machine. It is available in 2 versions : 2 liters and 4 liters

- **User friendly**
- **Material mixing quality**
- **Security of application**

PLUG AND SPRAY SOLUTION PUMPING AND MIXING 2 COMPONENTS WITH ADJUSTABLE RATIO

WWW

FEATURES	BENEFITS
Plug and Spray	Quick start-up
Sames patent: Free Pulse Electronic Control (FPE) Innovative control system of pump change-over	Constant fluid flowrate Unsurpassed +/- 1 % mixing accuracy and +/- 1 % repeatability
Direct injection in the high performance static mixer	Perfect mixing
Recording of fluid consumptions and VOC Possibility to print records	Fluid and solvent consumptions stored in memory
Automatic component management : base, catalyst and solvent Automatic flushing and material generation User-friendly control panel	User-friendly and easy programming for the operator
Preventive maintenance alarm Continuous ratio checking and alarm Low level drum alarm	Safe operation
Ratio check kit in standard with 2 liters test tube Filter and drain assembly in standard	Visual control of mixing accuracy No product loss
Sealing done by a Flowmax® bellow on the catalyst side	High reliability Ideal to work with moisture-sensitive catalysts
Variable ratio from 5 to 160 % Suitable for Airmix® spraying technologies Very low flow rate from 10cc	Suitable for use on a wide range of markets

CONFIGURATION OF THE PU 3000 AIRMIX® DOSING AND MIXING UNIT

Description	Fluid volume per cycle (cm3)	Pressure Ratio	Hardener section	Part number
PU3000 2L	100	30/1	Flowmax®	155.680.110
PU3000 4L	225	30/1	C-Cup	155.680.155

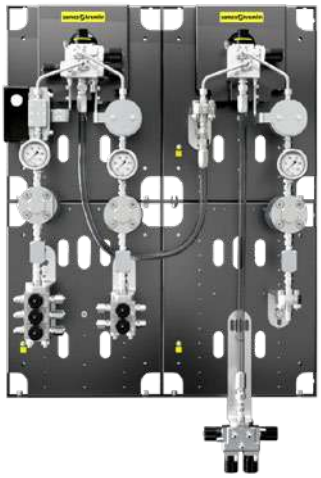
FLUSHING PUMP

Description	Suction rod	Purge rod	Air regulator fluid pressure	Part number
30-C25 flushing pump - PU 3000	• (Ø 16)	-	-	151.145.090

OPTION

Description	Part number
Spray booth glass mounting kit	155.660.340

The installation of control boxes is in a non-explosive area.



Supplied without pumps or guns to be ordered separately
Designed to supply one gun only

Cyclomix® Evo

Electronic dosing and mixing system for 2 and 3 component materials. Modular, configurable and upgradable system that allows to perfectly meet all needs.

- **Always fresh material on demand**
- **Elimination of errors caused by a manual mixing**
- **Reduced and optimized volume of waste**
- **Complete traceability of all production and maintenance data**
- **Connectivity (Smartphone App, OPCua, robot communication...)**
- **Compatible with the majority of existing products on the market and in particular acid catalysts**
- **Flexible modular design - up to 99 components**

WWW

WWW

FEATURES	BENEFITS
Unique and patented injection principle	Dosing +/- 1% and repeatability +/-0.5%
Automatic and optimised color change management (flushing, priming)	Quick start-up. Minimal loss of paint and solvent
Optimised management of paints and solvents (paint optimisation functions, customisable flushing by step, autonomous priming, etc.)	Solvent saving and environmental friendly
Multilingual and fast touch screen	User-friendly and easy interface for a quick start by a new user
Continuous control of the ratio and production parameters	The paint applied to the parts is always as expected
Stainless steel design	Compatible with a wide variety of products (waterbased paint, acid catalyst, polyurethane, epoxy, polyaspartic...)
Recording of all events (production, maintenance, etc.)	Improve the reliability of production (traceability of its production, history of modifications)
Possibility of controlling the Cyclomix® Evo from inside the booth thanks to the remote control box and the optional window kit	Better ergonomy and improved productivity
Preventive maintenance on the HMI and via the smartphone application	Optimization of maintenance activities and productivity gains
Independent management of 2 guns	Flexibility of work. Solvent saving
No pre-mixing chamber: optimized fluid passages w/o retention zones	Perfect flushing, prevent product waste
One level of access for each user	Safe use
Different flushing sequences (air-solvent as standard)	Solvent consumption optimlization upon recipe
Volume or time flushing. Multiples solvent choice for each recipe	Optimized flushing
Various Product mesurement technology: mass or gear flowmeter	Handles a large range of materials
Available with different communication protocols	Control of the Cyclomix® Evo by robot or PLC

CONFIGURATION OF THE CYCLOMIX® EVO

Description	Part number
Cyclomix Evo dosing and mixing unit - designed to your needs, please contact us to build your own confuguration	Contact us

ACCESSORIES

Description	Part number
Remote control box	155661880
Window kit for remote control box	155661887
Flushbox Fpro, Fstart, Xcite, Sflow	155710000
Flushbox Nanogun	155710050
Frame support for control panel	155661872
Air supply kit (regulator + filter + purifier)	155661391

Fluid regulators

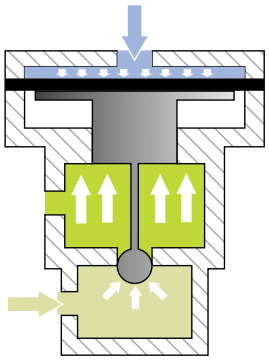
Fluid pressure regulators are used to reduce and balance the fluid pressure delivered from a pump to the applicator.
Fluid regulators should be placed as close as possible to the point of application.

The input fluid pressure should be higher than the regulated pressure.
For good control in a pneumatic regulated system, a stable air supply is required. Fluid supply pulsation should be minimized to help ensure ideal regulator function.

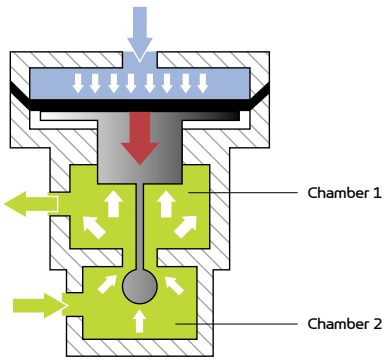
SPECIFICATIONS

		PRESSURE REGULATOR		
		MANUAL CONTROL	PILOTED	BACK PRESSURE
Pressure range (bar)	Inlet	250 max	120 max (version 5-40) 250 max (versions 10-70 and 10-120)	120 max
	Outlet (upon version)	10 - 70 10 - 120	05 - 40; 10 - 70; 10 - 120	10 -120
Weight (kg)		3.6	4.1 (version 10-120)	3.6
Width (cm)		8.9	8.9	8.9
Height (cm)		20	27.5	20
Wetted parts		Stainless steel, PTFE, carbide		

FLUID FLOW
Force equilibrium unbalanced: the air piston doesn't move; the piston ball check "Inlet Material" is closed by the fluid pressure.



PRESSURE DROP
As soon as a pressure drop occurs in the system the regulator piston moves with air pressure by opening the ball check and allowing material to flow in chamber 2.



Pressure regulator manual control

Airmix® fluid regulator is designed for low to medium viscosity materials.

- **Stainless steel design to handle water-based and solvent-based materials**
- **High precision regulation**
- **Constant fluid outlet**

PRESSURE REGULATOR – MANUAL CONTROL – AIRMIX®

Description	Type	Fluid fittings	Part number
Manual regulator 250 bar in – 10 / 70 bar out	Standard	2 x F3/8 NPSM	155.271.730
Manual regulator 250 bar in – 10 / 120 bar out	Standard		155.271.735
Manual regulator PH 250 bar in – 10 / 120 bar out	PH	2x F3/8 NPTF dry seal	155.271.770

Pressure regulator piloted control

Airmix® fluid regulator is designed for low to medium viscosity materials.

- **Stainless steel design to handle water-based and solvent-based materials**
- **High precision regulation with possibility to plug to proportional valve**
- **Constant fluid outlet**
- **Ph version for acid catalysts**

PRESSURE REGULATOR – PILOTED – AIRMIX®

Description	Type	Fittings	Air inlet	Cartridge	Integrated pilot	Part number
Piloted regulator 120 bar in – 5/40 bar out	Standard	2x F3/8 NPSM	F 1/4 BSPP	no	yes	155.271.765
Piloted regulator 250 bar in – 10 / 70 bar out	Standard			no	yes	155.271.750
Piloted regulator 250 bar in – 10 / 120 bar out	Standard			no	yes	155.271.755
Piloted regulator 120 bar in – 5 / 40 bar out	Standard	2x F3/8 NPSM		no	no	155.271.760
Piloted regulator 250 bar in – 10 / 70 bar out	Standard			no	no	155.271.740
Piloted regulator 250 bar in – 10 / 120 bar out	Standard			no	no	155.271.745
Piloted regulator 250 bar in – 10 / 160 bar out	PH	MF 1/2"JIC	T2.7x 4	no	no	155.661.575
Piloted regulator 250 bar in – 10 / 160 bar out	PH	2x F3/8 NPSM	F 1/4 BSPP	no	no	155.271.160
Piloted regulator 250 bar in – 10 / 120 bar out	PH	2x F3/8 NPSM	F 1/4 BSPP	no	yes	155.271.150
Piloted regulator 120 bar in – 5/40 bar out	Standard	MF 1/2"JIC	T2.7x 4	yes	no	155.661.571
Piloted regulator 250 bar in – 10 / 70 bar out	Standard	MF 1/2"JIC	T2.7x 4	yes	no	155.661.572
Piloted regulator 250 bar in – 10 / 160 bar out	Standard	MF 1/2"JIC	T2.7x 4	yes	no	155.661.573
Piloted regulator 300 bar in – 10 / 200 bar out	Standard	MF 1/2"JIC	T2.7x 4	yes	no	155.661.574
Piloted regulator 120 bar in – 5/40 bar out	Standard	2x F3/8 NPSM	F 1/4 BSPP	yes	no	155.271.719
Piloted regulator 250 bar in – 10 / 70 bar out	Standard	2x F3/8 NPSM	F 1/4 BSPP	yes	no	155.271.715
Piloted regulator 250 bar in – 10 / 160 bar out	Standard	2x F3/8 NPSM	F 1/4 BSPP	yes	no	155.271.716
Piloted regulator 300 bar in – 10 / 200 bar out	Standard	2x F3/8 NPSM	F 1/4 BSPP	yes	no	155.271.728

Fluid regulators

BACK PRESSURE REGULATOR - AIRMIX®

Configuration

Description	Fluid fittings	Part number
Manual regulator 120 / 0-20 ba	2x F3/8 NPSM	155.271.835
Flushing assembly : Manual regulator 120 / 0-20 bar with valve, flushing rod dia. 16 (049.596.000), 2m fluid hose and fitting for pump suction	M1/2" JIC - M1/2 BSPT/ M26x1.215	051.314.030

ACCESSORIES

Description	Part number
Wall bracket	155.484.010

HIGH PRESSURE GAUGES

Metal pressure gauge with glass and glycerin lens ; totally impact and solvent resistant.

Description	Diameter (mm)	Fittings	Pressure range (bar)	Part number
Diaphragm high pressure gauge (Y mounted)	50	F 1/2 BSPP, M1/2BSPT	0-250	155.271.790
Pressure gauge rear inlet	63	M 1/4 BSPT	0-120	910.010.802
			0-400	910.010.801

FLOWMETERS

Description	Type	Fittings	One puls for	Part number
Flowmeter without sensor	Standard	MM 1/2"JIC	0.24 cc	155660041
	Standard	FM 1/2"JIC	0.24 cc	155661192
	Standard	MM 1/2"JIC	0.07 cc	155660076
	Standard	FM 1/2"JIC	0.07 cc	155661190
	PH (316)	MM 1/2"JIC	0.24 cc	155660042
	PH (316)	FM 1/2"JIC	0.24 cc	155661195
Sensor assembly for flowmeter	-	-	0.07 cc	155.660.087
	-	-	0.12 cc and 0.24 cc	155.660.086

WARM UP PRODUCTIVITY

WWW

Fluid line

Heater – Magma 500

Material fluid heater is an auxiliary device used for material preparation and air heating. Higher layer thicknesses can be achieved by heating the material, as well as shorter drying times and higher finishing quality.

- **High pressure for heavy duty applications**
- **Excellent performances even without Fluid recirculation**
- **Stainless steel design and Explosion proof, compatible with most coatings**

FEATURES	BENEFITS
Standard Stainless steel design	Compatible with water-based materials
Thermometer integrated into the command box	Direct information on the desire temperature
Flexible positioning of the heat exchanger connections	Easy implementation
The highest fluid passage volume of the market	Insure outstanding performances even when using as one pass (without recirculation)
Possibility of heating atomizing air	Increase finishing quality and regrease drying times
ATEX Compliant	Can be used in hazardous atmosphere
Weather resistant	Always efficient even in high humidity environments

SPECIFICATIONS

HEATER NAME	MAGMA 500 ID9			MAGMA 500 ID14			
Maximum fluid pressure	500 bar (7 250 psi)						
Fluid passage volume	0.225 L (0.0594 gal)			0.390 L (0.130 gal)			
Internal diameter	9 mm (0.35")			14 mm (0.55")			
Fluid passage length	354 cm (140")			253 cm (100")			
Voltage range (V)	115	230	400	115	230	400	480
Maximum fluid temperature	85 °C (185 °F)						
Temperature classification	T4						
Wetted parts	Stainless Steel						
Weight	17,6 kg (38.8 lbs)						
Explosion Proof	II 2G Ex db IIB T4 Gb						
Dimensions (H x L x l)	405 x 220 x 180 mm (16 x 8.7 x 7.1 in)						

CONFIGURATION OF THE MAGMA 500 MATERIAL FLUID HEATER

Description	Fitting IN/ OUT	Internal Fluid diameter (mm)	Phases	Volt max (V)	Power (W)	Material	Pmax pressure (bar)	Delta T°C	Part number
ID14 HV 230V 3500W M3/4 JIC	M 3/4 JIC	14	1	230	3500	SST	500	15-90	156.160.010
ID14 HV 115V 1800W M3/4 JIC	M 3/4 JIC	14	1	115	1800	SST	500	15-90	156.160.020
ID 14 HV 400V 3800W M3/4 JIC	M 3/4 JIC	14	3	400	3800	SST	500	15-90	156.160.030
ID9 230V 3500W M1/2 JIC	M 1/2 JIC	9	1	230	3500	SST	500	15-90	156.160.040
ID9 115V 1800W M1/2 JIC	M 1/2 JIC	9	1	115	1800	SST	500	15-90	156.160.050
ID9 400V 3800W M1/2 JIC	M 1/2 JIC	9	3	400	3800	SST	500	15-90	156.160.060
ID14 HV 440V 3500W M3/4 JIC	M 3/4 JIC	14	1	440	3500	SST	500	15-90	156.160.070

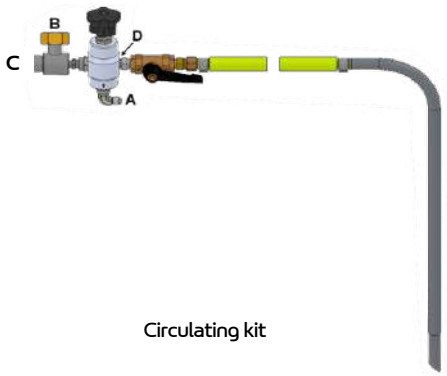
ACCESSORIES

Description	Fits to ID	Part number
TEMPERATURE INDICATOR FOR MAGMA 500 ID9	9 mm (0.35")	156.160.110
TEMPERATURE INDICATOR FOR MAGMA 500 ID14 HV	14 mm (0.55")	156.160.111
KIT FOR HEATING ATOMIZING AIR MAGMA 500	9 mm (0.35") and 14 mm (0.55")	156.160.114

Circulation valve

A circulation valve allows paint recirculation at the pump bottom (piston pump) and permits to set the perfect output for material circulation.
Max. fluid pressure = 240 bar

Bare valve



Circulating kit

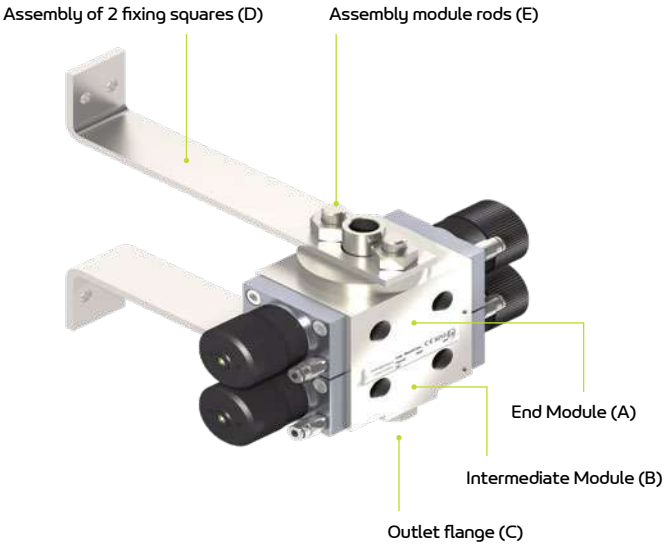
CONFIGURATION OF CIRCULATION VALVE

Version	Material	A. Inlet fitting	Outlet fitting		D. Purge	Flushing valve	Flushing rod F18x125 (049.596.000)	Max. Fluid pressure (bar)	Part Number
			B. Pump intake	C. Suction rod					
Bare	SST	F 1/4 NPSM	F 1/4 BSP	-	F 1/8 BSP	-	-	400	149.220.420
Circulation kits	Carbon steel	M 1/2" JIC	F 26x125	M 26x125	-	✓	✓	240	051.314.010
		M 3/4" JIC	M 1 BSP	M 38x150	-	✓	✓	240	051.341.100
	SST	M 1/2" JIC	F 26x125	M 26x125	-	✓	✓	240	051.314.050
		M 3/4" JIC	M 1 BSP	M 38x150	-	✓	✓	240	051.341.150

MAINTENANCE

Description	Part number
Maintenance kit for recirculation valve	049.220.450

CTM Color Change Valves



CTM are designed for a rapid color change:

- No dead zone inside CTM reducing flushing time and solvent consumption
- PTFE seals
- Design allows modular expansion
- Monostable valve normally closed
- Visual Opening detector
- Two valves per module (the solvent valve should be facing the fluid outlet)

CTM VALVE SPECIFICATIONS

Description	CTM AIRMIX®
Max pressure (bar)	120-240
Ø of passage (mm)	6
Trigger air	for hose 2.7 x 4
Fluid inlet	F 1/4 NPS
Fluid outlet	F 1/4 NPS

HOW TO BUILD YOUR COMPLETE ASSEMBLY UPON THE NUMBER OF COLORS

Nb of colors up to	NUMBER OF ELEMENT TO ORDER								
	End module (Inlet)	Intermediate modules	Outlet flange	Fixing square kit	Rod assembly for				
					1 module	2 modules	3 modules	4 modules	5 modules
2	1	-	1	1	1	-	-	-	-
4	1	1	1	1	-	1	-	-	-
6	1	2	1	1	-	-	1	-	-
8	1	3	1	1	-	-	-	1	-
10	1	4	1	1	-	-	-	-	1

CONFIGURATION OF CTM VALVES

Description		Max. pressure (bar)	Part number
Modules Airmix®	End module (inlet)	120	155.535.300
		240	155.535.350
	End module (inlet) - stainless steel (316 L)	240	155.662.050
	Intermediate module	120	155.535.400
		240	155.535.450
	Intermediate module - stainless steel (316 L)	240	155.662.060
	Outlet flange	240	155.535.500
	Outlet flange - stainless steel (316 L)	240	155.536.410
	Fixing square kit	240	155.535.700
	CTM support bracket	240	155.661.101
Description		**Nb. of materials**	**Part number**
CTM assembly (with fixing kit: 155.535.700)	For 1 module (1 end + 1 flange)	2	155.535.610
	For 2 modules (1 end + 1 intermediate + 1 flange)	4	155.535.620
	For 3 modules (1 end + 2 iintermediate + 1 flange)	6	155.535.630
	For 4 modules (1 end + 3 intermediate + 1 flange)	8	155.535.640
	For 5 modules (1 end + 4 intermediate + 1 flange)	10	155.535.650

Filters

A fluid filter is assembled on the outlet of the pump.
Ph versions are particularly suited to low ph (acid) products like catalysts.
Most filters have dual output for connecting two guns.

BARE FLUID FILTERS (SCREEN NOT INCLUDED)

Designation	Max fluid pressure (bar)	Average flow (l/min)	Fittings			Includes		Part number
			Inlet	Outlet	Drain			
3/8 stainless steel filter	360	4	1x F 3/8 NPT	2x F 3/8 NPT	1x F 1/4 NPT (on the base)	1 x 3/8 NPT SS plug (905.210.304)	2 x SS reducer : M 3/8 BSPT F1/4 BSPP (905.210.201)	155.580.200
3/8 stainless steel 316 filter (Ph)	360	4	1 x 3/8 NPTF dry seal	2 x 3/8 NPTF dry seal	1x F 1/4 NPT (on the base)	1 x 3/8 NPT SS plug (905.210.304)	2 x SS reducer : M 3/8 BSPT F1/4 BSPP (905.210.201)	155.580.810
3/4 stainless steel filter	360	6	1x F 3/4 NPS	1x F 3/4 NPS	1x F 3/8 NPS	1 x 3/8 NPT SS plug (905.210.304)		155.581.450

ACCESSORIES FOR FILTERS

Description	Part number
Stainless steel filter fitting lenght 70 mm (MM 3/8 NPT)	055.580.301
Wall-mounted bracket and screws for 3/8", 3/4" and 1" filter	155.190.105
PTFE O-ring Seal for filter (pack of 5)	150.040.327

EQUIPPED FILTERS (WITH SCREEN, FITTINGS AND DRAIN VALVE)

Designation	Max fluid pressure (bar)	Average flow (l/ min)	Fittings			Includes			Part number
			Inlet	Outlet	Drain				
3/8 Stainless steel filter with valve	360	6	1x F 3/8 NPT	M 1/2" JIC and F 3/8 NPT	M 18x125	1 x 3/8 NPT SS plug (905.210.304)	M 1/2" JIC straight adapter (905.210.503)		155.580.300
3/8 Stainless steel filter with valve	360	12	1x F 3/8 NPT	M 1/2" JIC and F 3/8 NPT	M 18x125	1 x 3/8 NPT SS plug (905.210.304)	M 1/2" JIC straight adapter (905.210.503)		155.580.400
3/8 Stainless steel filter with valve	360	6	1x F 1/2"JIC	M 1/2" JIC and F 3/8 NPT	M 18x125	1 x 3/8 NPT SS plug (905.210.304)	M 1/2" JIC straight adapter (905.210.503)	F1/2» JIC adapter (905.160.218)	155.580.600
Low pressure Stainless steel 3/8 filter with valve on tank	60	6	M 3/8 NPT	M 1/2" JIC elbowed and F 3/8 NPT	M 18x125	1 x M 3/8 NPT plug (905.210.304)	M 1/2" JIC elbowed adapter (905.210.603)	MM 3/8 BSPT straight adapter (906.314.202)	155.580.510
Stainless steel 316 3/8 filter (Ph) with valve	360	12	M 3/8 NPT	M 1/2" JIC and F 3/8 NPT	M 18x125	1 x M 3/8 NPT plug (905.210.304)	M 1/2" JIC elbowed adapter (905.210.603)	MM 3/8 BSPT 316L straight adapter	155.580.800
3/4 Stainless steel filter with valve	360	12	M 3/4 BSPT	M 3/4" JIC	M 18x125	1 x 3/4 BSPT SS plug (055.581.401)	M 3/4" JIC straight adapter (905.210.515)	MM 3/4 BSPT straight adapter (055.581.401)	155.581.400

SCREENS FOR PRODUCT FILTER

Filter number	Filtration size		Nozzle size	Quantity	Part number
	Micron	Mesh			
1	40	325	3	1	000.161.101
2	74	200	4		000.161.102
3	90	170			000.161.103
4	100	140			000.161.104
				25	100.161.104
6	168	85	6	1	000.161.106
				25	100.161.106
8	210	70	09 to 14	1	000.161.108
				25	100.161.108
12	280	55	20	1	000.161.112
				25	100.161.112
15	360	45	30 to 45	1	000.161.115
20	510	30	≤ 68		000.161.020
30	750	20			000.161.030

In-line fluid filter

IN-LINE FILTER LARGE SIZE

Description	Maximum fluid pressure (bar)	Screen	Average flow (l/min)	Fittings		Part number
				Inlet	Outlet	
In-line filter, axial, large size	320	6	4	F 1/4 NPSM	F 1/4 NPSM	055.600.000

IN-LINE STAINLESS STEEL T SHAPE FILTER SIZE

Description	Maximum fluid pressure (bar)	Screen	Average flow (l/min)	Fittings		Part number
				Inlet	Outlet	
In-line filter, axial	500	6	2	M1/2"JIC	M1/2"JIC	155.010.000
In-line filter, axial	500	6	2	M1/2"JIC	F1/2"JIC	155.010.100
In-line filter, 'T' shape (*)	320	6	2	F1/2"JIC	M1/2"JIC	155.661.590
Xcite®+ filter housing	400	6	2	M1/2"JIC	Xcite®+ input	129.520.370

** = T-shape filter allows the removing and cleaning of the mesh without disconnecting the fluid hoses.*

SCREENS FOR T SHAPE FILTER SIZE

Description	Quantity	Part number
N° 4 (100µ)	5	129.609.907
N°6 (168µ) - standard	5	129.609.908
N°8 (280µ)	5	129.609.909

Bare fluid filter

Equipped filter

In-line filter large size

T shape filter

Screen

Rods

A suction rod will transfer the paint from the drum to the pump inlet.
Please refer to your pump information to know which suction rod will fit.
NOTE: Some rods do not include a strainer

SUCTION AND FLUSHING ROD

Hose				Tube				Strainer	Shape	Suction rod	Flushing rod	Part number
Internal diameter (mm/")	Length (mm/")	Material	Thread	External diameter (mm/")	Internal diameter (mm/")	Height (mm/")	Material	Material				
6,35(1/4)	820 (32)	PEBD (black)	F 18 x 125	8 (0.31)	6 (0.24)	230 (9)	SST	SST (051.665.645)	Straight tube	✓	-	051.665.620
6,35(1/4)	820 (32)	PEBD (black)	F 26x125	8 (0.31)	6 (0.24)	230 (9)	SST	SST (051.665.645)	Straight tube	✓	-	151.665.640
10 (3/8)	1000 (39)	PEBD (phospho)	F 18 x 125	18 (0.7)	16(0.6)	570 (22)	SST	-	Elbow tube	-	✓	049.596.000
10 (3/8)	1000 (39)	PEBD (black)	F 26x125	18 (0.7)	16(0.6)	570 (22)	SST	SST (049.596.052)	Elbow tube	✓	-	149.596.050
10 (3/8)	1500 (59)	PEBD (black)	F 26x125	18 (0.7)	16(0.6)	1000 (39)	SST	SST (049.596.052)	Elbow tube	✓	-	149.596.060
19 (3/4)	1500 (59)	PEBD (black)	F 18 x 125	-	-	-	-	-	Straight hose without tube	-	✓	149.596.250
19 (3/4)	1000 (39)	PEBD (black)	F 26x125	25 (1)	23 (0.9)	570 (22)	SST	SST (049.596.152)	Elbow tube	✓	-	149.596.150
19 (3/4)	1500 (59)	PEBD (black)	F 26x125	25 (1)	23 (0.9)	1000 (39)	SST	SST (049.596.152)	Elbow tube	✓	-	149.596.160
19 (3/4)	1500 (59)	PEBD (black)	F 38 x 150	25 (1)	23 (0.9)	570 (22)	SST	SST (049.596.152)	Elbow tube	✓	-	049.597.100

STRAINER FOR SUCTION RODS

Pump	Nb of strainer	Height (mm)	External diameter (mm)	Material	filtration size		Connection	Part number
					Micron	MESH		
10C18	1	60	40	Polyamide	300	50	hole dia. 17,3 mm	051.531.600
10C18	1	32,5	28	Stainless steel	1000	18	F8*100	151.665.645
15C25 and 30C25 (ø16)	1	32,5	28	Stainless steel	1000	18	F18*100	149.596.052
30C25, 15C50, 17F60, 20C50, 20F50, 34F60, 40C50, 40F50, 08C240, 08F240, 16C240, 16F240 (ø25)	1	40	48	Stainless steel	1000	18	F25*100	149.596.152
40C50, 40C50WB (ø25)	1	40	48	Stainless steel	1000	18	F 1 BSPP	921.270.102
40C260, 40F260, 65C260, 65F260, 20.25 (OLD GENERATION)	1	112	66	Polyamide	1000	18	hole dia 25,5	149.591.400
For agitator cyclix	2	97	55	Stainless steel - polypropylene	595	30	F 3/4 BSPP	154.261.940

PRODUCT HOSES FOR SUCTION RODS

Polyethylene hose sleeve	Part number		
	ø9.5 mm	ø19 mm	ø25 mm
5 m cut	-	050.366.051	050.367.001
15 m cut	-	050.366.052	-
25 m cut	050.361.001	050.366.053	050.367.003
Grooved conical fittings	**050.140.517**	**050.140.545**	**050.140.543**
Nickel plated nut fitting	050.271.303 (F 18x125)	050.271.502 (F 26x125)	049.595.306 (F 38x150)
1 wing collar	906.311.234	906.311.207	906.311.204

GRAVITY HOPPER

Model	Compatible with	Capacity	Thread	Par number
#1 - U SHAPE	10C18, 15C25, 15C50, 20C50, 20C100 30C25, 35C50, 40C50, 40C100	6 L.	F 26*125	151.140.230
#2 - L SHAPE	17F60, 20F50, 20F100, 34F60, 40F50, 40F100	6 L.	F 26*125	151.140.250
GRAVITY HOPPER WITHOUT TUBE			-	051.890.301

#1

#2

Agitators

Cyclix™ drum cover agitators

This elevator-agitator for 20-40 to 200 L drums features a double-effect jack for a fast lift of a stainless steel cover fitted for a quick material drum change. The cover is equipped with a motorized agitator fitted with blades for low viscosity materials and a full stainless steel rod.

The elevator is supplied on a large fixing plate which makes it very stable and easy to install in paint kitchens, existing installations or an essential component of new installations.

- **Constant quality of mixed materials**
- **Stainless steel wetted parts**
- **High ROI – no product loss**

WWW

FEATURES	BENEFITS
Stainless steel (agitator cover, suction and drain rods)	Compatibility with all materials
Adjustable suction rod height	No product loss
Suction and return tubes	Suitable for recirculating
Double effect jack with 3 positions command lever: up, stop, down	Important flexibility
The agitator cannot work during elevator movements	Security

SPECIFICATIONS

AGITATOR NAME	CYCLIX™ 20-40	CYCLIX™ 200
Capacity (L)	20 - 40	200
Motor type	Pneumatic	Pneumatic
Reductor type	-	Gear train
Rotation speed (rpm)	300-2000	60 - 300
Motor torque (Nm)	2.2 at 100 rpm	7.9 at 100 rpm

Agitators

CONFIGURATION OF CYCLIX™ FOR 20 – 40 L DRUMS

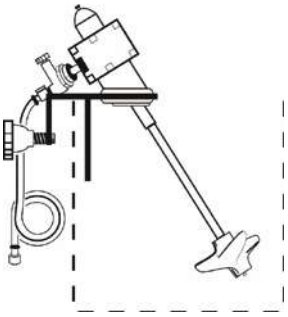
Description	Elevator height (mm)	Agitator rod length (mm)	Paddle diameter (mm)	Cover diameter (mm)	Part number
Elevator for 20 -40 l drums	995 (min) - 1470 (max)	-	-	-	151.081.000
Agitator for 20 -40 l drums	-	396	134		154.261.700
Cover for 20 -40 l drums	-	-	-	395	154.261.600
Suction/exhaust kit	-	-	-	-	154.261.800
Maintenance kit	-	-	-	-	146.020.400

CONFIGURATION OF CYCLIX™ FOR 200 L DRUMS

Description	Elevator height (mm)	Agitator rod length (mm)	Paddle diameter (mm)	Cover diameter (mm)	Part number
Elevator for 200 l drums	1504 (mini) - 2454 (maxi)	-	-	-	151.091.000
Agitator for 200 l drums	-	830	363		154.260.000
Cover for 200 l drums	-	-	-	641	154.261.200
Suction/exhaust kit	-	-	-	-	154.261.400

RECOMMENDED ACCESSORIES

Description	Part number
1/4" air lubrificator + support	154.261.997
Exhaust assembly with oil recovery (length 1 m)	154.261.996
Air feeding kit	154.261.930
Drum roller unit for 200 litres drum	151.098.100
Slotted paddle for thick materials	154.261.952
HP 150 2 liters lubricant can	149.990.017



AGITATORS FOR EDGE PAIL MOUNTING

Agitator for barrel edge mounting.
Minimum barrell height of 300 mm.

Description	Part number
Bare agitator	051.332.610
Agitator with 25 cm hose	051.332.600
Agitator with 5 m hose	049.220.710
System for barrel mounting	049.220.720

AGITATORS ON STAINLESS STEEL COVER

Agitator:
For drums diameter between 295 and 325 mm.
Minimum drum height of 390 mm.

Description	Part number
Agitator for Ø325 cover	903.290.101

STRAINER FOR CYCLIX™ SUCTION RODS

Description	Part number
Strainer for cyclix™ suction rods (pack of 2) - mesh 30	154.261.940

Fluid Hoses

Roll hoses are non-conductive, grey color and can be used up 120 bar and 100°C. They are sold without connections as 25 or 100 meters reels. Female fittings ½"JIC are available as screw or crimped type.

Non-conductive hoses reels without connections – Grey color

Designation	Part number	
Internal diameter mm (in.)	**4.8 (3/16")**	**6.35 (1/4")**
Reel 25m	050.450.060	050.450.070
Reel 100m	050.450.061	050.450.071

Connection fittings for hoses in rolls

Fitting alone to crimp	905.063.304	-
Fitting alone to screw in	905.063.308	905.063.309
Fitting alone to crimp (stainless steel)	-	905.063.355
Fitting alone to screw in (stainless steel)	905.063.358	905.063.357
Spring for fitting to crimp	905.063.361	-

Pre-assembled hoses can be used up 120 bar (grey color), 240 bar (phosphor color), 400 bar (black color) and up to 100°C.
They are sold as fully assembled hoses with one female ½"JIC connection at each end.
Connections are made of treated steel or stainless steel.

Designation	Part number						
Type	Non-Conductive			Conductive			
Color	GREY			Phosphor (light green)			BLACK
Internal diameter mm (in.)	**3.2 (1/8")**	**4.8 (3/16")**	**6.35 (1/4")**	**3.2 (1/8")**	**4.8 (3/16")**	**6.35 (1/4")**	**6.35 (1/4")**
Max.operating pressure (bar)	**120**			**240**			**400**

Pre-assembled hoses with treated steel connections

Length meters		With spring	Without spring	Without spring	With spring	Without spring	
0.4 m	-	-	-	-	-	050.450.101	-
0.6 m	-	050.450.805	050.450.701	-	-	050.450.106	-
0.8 m	-	-	050.450.702	-	-	050.450.107	-
1 m	-	050.450.809	050.450.703	-	050.450.601	050.450.102	050.451.001
2 m	-	050.450.806	050.450.704	-	050.450.602	050.450.109	-
3 m	-	050.450.810	050.450.705	-	050.450.603	050.450.110	-
5 m	-	050.450.801	050.450.706	-	050.450.604	050.450.108	050.451.002
7.5 m	-	**050.450.808**	-	-	**050.450.605**	050.450.111	-
10 m	-	050.450.802	050.450.707	-	**050.450.606**	050.450.104	050.451.003
15 m	-	050.450.811	050.450.709	-	**050.450.607**	050.450.112	-
20 m	-	050.450.812	050.450.708	-	050.450.608	050.450.105	-
25 m	-	-	-	-	-	050.450.113	-
30 m	-	-	050.450.710	-	050.450.609	-	-

Pre-assembled hoses with stainless steel connections

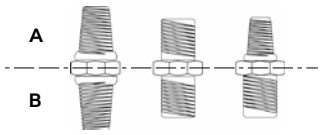
0.6 m	-	050.450.851	-	-	050.450.651	-	-
1 m	-	-	-	050.451.151	-	-	-
1.6 m	050.451.051	050.450.854	-	050.451.155	050.450.654	050.450.155	050.450.951
5 m	-	050.450.852	-	050.451.152	050.450.652	050.450.152	-
7.5 m	-	**050.450.853**	-	050.451.153	**050.450.653**	050.450.153	-
10 m	-	-	-	050.451.154	-	050.450.154	-

References in Bold carry reduced lead time

Fittings

MALE TO MALE CONNECTION PMAX.= 20 BAR

FITTINGS AND ADAPTATOR METRIC / NPT / BSP (GAS)

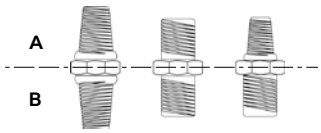


	Male (B)						
Male (A)	**M 14 x 125**	**M 18 × 125**	**M 26 × 125**	**1/4 BSPP (8x13)**	**3/8 BSPP (12x17)**	**1/2 BSPP (15x21)**	**3/4 BSPP (20x27)**
M14 x 125		050.102.133					
		050.102.142 (1)					
M18 × 125	050.102.133	050.102.102					
	050.102.142 (1)						
1/8 BSPP (5x10)	050.102.412						
1/4 BSPP (8x13)	050.102.405	050.102.408			904.523.003		
	050.102.441 (1)	050.102.444 (1)					
3/8 BSPP (12x17)	050.102.410	050.102.411		904.523.003		904.523.006	
		050.102.436(1)					
1/2 BSPP (15x21)	050.102.513	050.102.406	050.102.402		904.523.006		904.523.012
		050.102.418 (1)	050.102.437 (1)				
		050.102.429	050.102.407			904.523.012	211017 (1)(2)
1/2 NPT			050.102.507				

(1): Stainless steel; (2): Length 850 mm

MALE TO MALE CONNECTION PMAX.= 60 BAR

FITTINGS AND ADAPTATOR BSP (GAS) / NPS / NPT

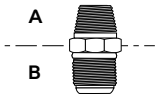


	Male (B)								
Male (A)	**1/8 BSPP (5x10)**	**1/4 BSPP (8x13)**	**3/8 BSPP (12x17)**	**1/2 BSPP (15x21)**	**3/4 BSPP (20x27)**	**1/4 NPT**	**3/8 NPT**	**1/4 NPS**	**3/8 NPS**
1/8 BSPP (5x10)		906.314.207 (1)							
1/4 BSPP (8x13)	906.314.207 (1)	050.102.213	906.314.204 (1)	050.102.211				050.102.624	050.102.646 (1)
		906.314.203 (1)		050.102.647 (1)				050.102.644 (1)	
3/8 BSPP (12x17)		906.314.204 (1)	050.102.214	906.314.205 (1)				050.102.627	050.102.628
			906.314.202 (1)						050.102.648 (1)
1/2 BSPP (15x21)		050.102.211	906.314.205 (1)	050.102.212				050.102.633	050.102.629
									050.102.649 (1)
3/4 BSPP (20x27)					050.102.215				050.102.654 (1)
1/4 NPT							905.083.201		
3/8 NPT						905.083.201			
1/4 NPS		050.102.624 050.102.644 (1)	050.102.627 050.102.647 (1)	050.102.633				050.102.630	050.102.632
3/8 NPS		050.102.646 (1)	050.102.628	050.102.629	050.102.654 (1)			050.102.632	050.102.631
			050.102.648 (1)	050.102.649 (1)					

(1): Stainless steel

MALE TO MALE FITTINGS AND ADAPTORS (STAINLESS STEEL) PMAX = 250 BAR

	Male (B)	
Male (A)	**1/2" JIC**	**3/4" JIC**
1/2" JIC	905.210.709 (3)	906.314.217
3/4" JIC	906.314.217	
1/8 NPT	905.210.501	
1/4 NPT	905.210.502	905.210.512
3/8 NPT	905.210.503	905.210.513
1/2 NPT	905.210.504	905.210.514
3/4 NPT		905.210.515

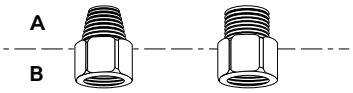


(3): up to 500 Bar
(4): up to 400 Bar
 # = Nickel Coated

MALE TO MALE FITTINGS AND ADAPTATORS (PROTECTIVE COATED STEEL) PMAX.= 360 BAR

	Male (B)					
Male (A)	**7/16" JIC**	**1/2" JIC**	**3/4" JIC**	**7/8" JIC**	**1 1/16" JIC**	**1 5*16" JIC**
1/2" JIC		050.102.301	905.160.201	550.914 (4)		
3/4" JIC		905.160.201	905.160.202 550.545 (4)	550.915 (4)		
7/8" JIC		550.914 (4)	550.915 (4)			
1/4 NPT		000.972.025	905.160.212			
3/8 NPT		000.972.028	905.160.206			
		050.470.202#	905.160.103#			
1/2 NPT			905.160.204			
3/4 NPT			905.160.203			
1/8 BSPT	550.920 (4)	550.548 (4)				
1/4 BSPT		550.542 (4)				
3/8 BSPT		550.549 (4)	550.679 (4)	550.609 (4)		
1/2 BSPT			550.544 (4)	550.540 (4)	550.903 (4)	
3/4 BSPT		550.905 (4)		550.823 (4)	550.864 (4)	550.932 (4)
1 BSPT					550.900 (4)	550.901 (4)

MALE TO FEMALE CONNECTION PMAX.= 20 BAR
FITTINGS AND ADAPTATOR METRIC / NPS / JIC / BSP (GAS)



Fittings

	Male (B)								
Male (A)	**1/2" JIC**	**1/4 NPS**	**3/8 NPS**	**M 14 x 125**	**M 18 x 125**	**M 26 x 125**	**1/4 BSPP (8x13)**	**3/8 BSPP (12x17)**	**3/4 BSPP (20x27)**
1/2" JIC		050.123.305 (1)	050.103.537 (1)	050.230.619	050.230.620				
3/4" JIC	050.123.301								
1/4 NPS	050.123.304		050.103.534 (1)	050.123.535	050.123.526				
3/8 NPS	050.123.533								
M 14 x 125					050.123.109				
M 18 x 125	050.123.521			050.123.101		050.123.110			
M 26 x 125					050.123.106				
1/4 BSPP (8x13)								904.533.003	
3/8 BSPP (12x17)							904.513.003		
1/2 BSPP (15x21)							904.513.005		904.533.009
3/4 BSPP (20x27)							904.513.011	904.513.012	
1 BSPP (26x34)									904.513.012

(1): Stainless steel

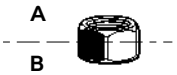
MALE TO FEMALE CONNECTION PMAX.= 60 BAR
FITTINGS AND ADAPTATOR BSP (GAS) / NPS / JIC

	Female (B)
Female (A)	**1/2" JIC**
1/4 NPS	050.123.304

(1): Stainless steel

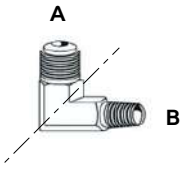
FEMALE TO FEMALE CONNECTION PMAX.= 60 BAR
FITTINGS AND ADAPTATOR METRIC / BSP (GAS)

	Female (B)		
Female (A)	**1/4 BSPP (8x13)**	**3/8 BSPP (12x17)**	**M 14 x 125**
1/4 BSPP (8x13)	904.593.002	904.503.003	050.221.401
	552.486		
	050.470.301 (1)		



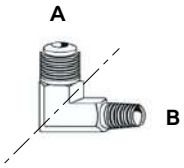
MALE TO MALE ELBOW FITTINGS AND ADAPTORS (PROTECTIVE COATED STEEL) PMAX. = 400 BAR

	Male (B)	
Male (A)	**1/2" JIC**	**3/4" JIC**
1/8 NPT	905.160.105 (2)	
1/4 NPT		905.160.102 (2)
3/8 NPT		905.160.103 (2)
1/2 NPT		
1/4 BSPT	550.596	550.923
3/8 BSPT	551.819	



MALE TO MALE ELBOW FITTINGS AND ADAPTORS (STAINLESS STEEL) PMAX. = 250 BAR

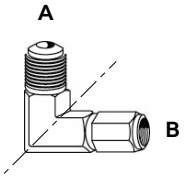
1/4 NPT	905.210.602 (3)	905.210.612
3/8 NPT	905.210.603	
1/2 NPT	905.210.604	
3/4 NPT		905.210.615



(2): up to 360 Bar; (3): 316L.

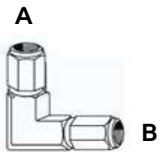
MALE TO FEMALE ELBOW FITTINGS (STAINLESS STEEL) PMAX = 360 BAR

	Female (B)
Male (A)	**1/2" JIC**
1/2" JIC	905.160.101



FEMALE TO FEMALE ELBOW FITTINGS (PROTECTIVE COATED STEEL) PMAX. = 400 BAR

	Female (B)	
Female (A)	**3/4 BSPP**	**1 BSPP**
3/4 BSPP	551011	
1 BSPP		551.012



Fittings

T FEMALE CONNECTION PMAX.= 25 BAR

Description	Part Number
1/4 BSPP (8x13)	904.303.002 550.038 (1)
3/8 BSPP (12x17)	904.303.003
1/2 BSPP (15x21)	904.303.004
1/4 NPT	905.083.301 (2)

(1): Stainless steel 80 Bar; (2): 250 Bar

T FMF CONNECTION PMAX.= 20 BAR

	Male (B)
Female (A)	1/4 BSPP (8x13)
1/4 BSPP (8x13)	552.441

PLUGS MALE PMAX.= 20 BAR

Description	Part number
1/8 BSPP (5x10)	906.333.106
1/4 BSPP (8x13)	906.333.102 906.314.211 (3)
3/8 BSPP (12x17)	906.333.104
1/2 BSPP (15x21)	906.333.103
3/4 BSPP (20x27)	906.333.105

PLUGS MALE PMAX.= 360 BAR

Description	Part number
1/8 NPT	906.333.108
1/4 NPT	905.210.303 (1)
3/8 NPT	905.210.304 (4)
1 BSPP	551.247

(1): Stainless steel 80 Bar; (2): 250 Bar; (3): Inox; (4): 316L

Y STAINLESS STEEL FITTING PMAX.= 500 BAR

	Male (B)
Female (A)	2x M 1/2" JIC
1/2" JIC	029.520.500

PLUGS FEMALE PMAX.= 360 BAR

Description	Part number
1/2" JIC	906.333.301

Valves

CHECK VALVE

Description	80 BAR	200 BAR	400 BAR	500 BAR
FF 1/4 NPT			903.160.512(1)	
FF 3/4 BSPP				601.278 (L86 mm)
FF 1 BSPP			625.119 (L141 mm)	
			625.759 (4) (L141 mm)	
MF 3/8 BSPP		900.011.229		
MF 1/2 BSPP	104.403 (1)			

(1): Stainless steel; (5): with plug

SWIVEL FITTINGS

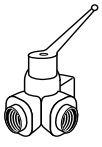
Description	Max pressure	Inlet	Outlet	Part number
TWIST SWIVEL FITTING, stainless steel	500	M ½" JIC	F ½" JIC	129.732.425
		M 1/4 NPSM	F ½" JIC	129.732.435

HIGH PRESSURE FLUID VALVES

Description	Input	Output	Maximum fluid pressure (bar)	Part number
FF3/8 BSPP	F 3/8 BSPP	F 3/8 BSPP	250	750.040
FF1/4 BSPP	F 1/4 BSPP	F 1/4 BSPP	400	903.091.101

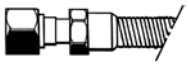
3 WAYS VALVE - PMAX.= 350 BAR

Description	Part number
FFF 3*1/4 BSPP Stainless steel	903.091.006



FITTINGS FOR LOW PRESSURE POLYAMIDE HOSES

Thread size	Material	Hoses Inter. Diameter (mm)	Part number
M 1/4 NPS	Nickel plated brass	6.35 - 1/4	050.231.450
M 3/8 NPS			050.231.350
M 3/8 NPS		9.52 - 3/8	905.140.103



Air line

Hoses

Used in majority of the applications, allows the equipment (gun and pump) to have the same potential, ATEX certified.

- **60% lighter**
- **150% more flexible**

AIR HOSES CONFIGURATION

Available in 3 diameters:	Small	Medium	Big
Technical Characteristics			
Material	TPU*	TPU*	Nitrile
Color	Black	Black	Black
Internal Diameter (mm)	6.5	8	10
External Diameter (mm)	10.5	12	16
Conductor	Yes	Yes	Yes
Weight (grams per meter)	61	75	130
Max operating pressure in bar	14	14	10
Operating temperature in °C	-40 to 80	-40 to 80	up to 60
Hoses with fittings	**Part number**		
Fittings	1/4 NPS		3/8" NPS
0.6m	050.382.105	050.389.109	-
1.2m	050.382.102	050.389.107	-
2m	050.382.111	050.389.110	-
5m	050.382.109	050.389.101	050.381.101
7.5m	050.382.114	050.389.103	-
10m	050.382.110	050.389.102	050.381.102
12.5m	050.382.106	-	-
15m	050.382.116	050.389.105	-
20m	-	050.389.108	-
30m	-	050.389.106	-
Hoses without fittings	**Part number**		
25m	050.382.001	050.389.001	050.381.001
152m	050.382.006	050.389.005	-
Fittings	**Part number**		
Hose crimp ring	906.311.237	906.311.238	906.311.226
KIT STRAIGHT CONN. + NUT 1/4 NPS	050.231.705	050.231.707	050.231.702
fitting = 1 crimp ring + 1 kit			
Manual Crimper (Diameters 5 to 22)	906.311.202		

** TPU : Thermoplastic Polyurethane*

POLYAMIDE OR POLYURETHANE AIR HOSES

Non-conductive hoses to clip on automatic guns or any other device.

Manual crimper

Conductive	No						
Max operating pressure	10 Bar						
Temperature	Up to 60°C						
Length	25m						
Material	Polyamide					Polyurethane	
Color	**Translucent**			**Black**		**Green**	**Black**
Diameter (internal/external) in mm	2.7 x 4	4x6	6x8	6x8	8x10	4x6	8x12
Part number	050.372.102	050.372.103	050.372.104	050.372.124	050.372.125	050.372.213	050.372.226

HOSE SLEEVE

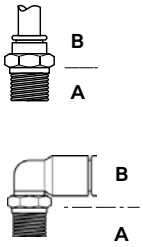
Hose sleeve adds a protection to the hose for a longer life

Product hole (mm)	Length (m)	Part number
40	15	129.270.087

Fittings

FAST FITTINGS FOR SMALL DIAMETER SPECIAL AIR HOSES

A	B (mm)	Straight	Right angle 90°
1/8 BSP (5x10)	4	905.120.907	905.120.926
	6	905.124.901	552.262
	8		905.120.934
1/4 BSP (8x13)	4		905.120.927
	6	905.120.965	905.120.905
	8	905.120.904	905.120.912
	10	905.190.406	552.280
3/8 BSP (12x17)	10		905.190.415

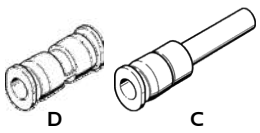


FAST FITTING T

Description	Part number
For hose 2,7 x 4	905.120.957
For hose 4 x 6	905.120.903
For hose 6 x 8	905.120.915
Reduction 2,7 x 4 / 4 x 6	905.120.928

FAST FITTING REDUCTION AND UNION

Description	to	Part number
Ø2,7 x 4	Ø4 x 6	905.120.945 (C)
Ø4 x 6		552.322 (D)
Ø6 x 8		905.120.923 (C)

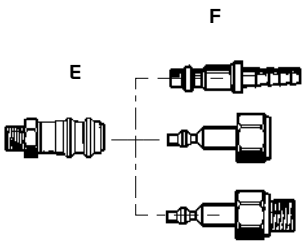


Y AIR FITTING

Description	to	Part number
F 1/4 NPS	2x M 1/4 NPS	129.029.920

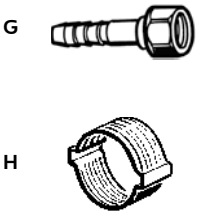
ISO 6150 QUICK-FIT FITTINGS (MAXIMUM PRESSURE: 10 BAR)

Type	Complete assembly E and F	Part E	Part F			
			Female fitting	Male fitting	Cuanneled	
					Ø 7	Ø 10
Ø5 (14x125)	905.030.405	905.030.102	905.030.406	-	905.030.203	-
Ø5 (1/4 BSP)	-	-	-	905.030.804	-	-
Ø5 (1/4 BSP)	-	-	905.030.803	-	-	-
Ø5 (1/4 NPS)	905.030.105	905.030.104	905.030.106	-	-	-
Holding collar	-	-	-	-	906.311.224	906.311.226



CRIMP FITTINGS FOR LOW PRESSURE AIR HOSES

Description	Thread size	Hoses Inter. Diameter (mm)	Part number	
			Part G	Part H
Nickel plated brass	1/4 NPS	7	050.231.705	906.311.224
Nickel plated brass	1/4 NPS	8	050.231.707	906.311.224
Nickel plated brass	1/4 NPS	10	050.231.702	906.311.226
Nickel plated brass	3/8 NPS	16	050.231.701	906.311.232
Nickel plated brass	M 14 x 125	10	050.230.602	906.311.226
Nickel plated brass	M 18 x 125	16	050.230.601	906.311.232



Valves

2 WAYS FEMALE/FEMALE VALVE

Descriptif	Input / Output	Part number
Air Valve 3/8	FF 1/4 BSPP	903.090.806
Air Valve 1/4	FF 3/8 BSPP	903.090.206

Pressure regulators

Air regulators

1/4" (with phosphor or black knob), 1/2" and 3/4" (with phosphor knob) regulators are used on the compressed air lines.

CONFIGURATION OF PRESSURE REGULATOR

Description	Inlet pressure (bar)	Max output (m3/h)	Inlet	Outlet	Part number
Phosphor knob regulator	3,5	25	F1/4"	F1/4"	016.240.500
Black knob regulator					016.380.500
Phosphor knob regulator	5,5				016.370.500
Black knob regulator					016.390.500
Phosphor knob regulator	9		F1/4"	F1/4"	016.365.500
Black knob regulator					016.360.500
Bare regulator	4	210	F1/2"	F1/2"	016.200.000
Bare regulator	9				016.280.000
Equipped regulator with pressure gauge and wall bracket					019.780.100
Phosphor ring regulator	10				016.470.000
Phosphor ring regulator		360	F3/4"	F3/4"	016.480.000
Wall bracket	-	-	-	-	016.180.010

PRESSURE GAUGES

Built to last in metal with glass lenses, they are completely impact and solvent resistant.

Description	Internal diameter (mm)	Pressure range (bar)	Part number
Pressure gauge - central inlet	40	0 - 6	910.011.205
Pressure gauge - central inlet	50	0 - 6	910.011.403
Pressure gauge - side inlet		0 - 10	910.011.402
		0 - 4	910.011.404

DE37 Purifier-regulator

Usually fitted in the paint spray booths. Its twin-body construction ensures completely water and oil free.

Standard equipment:

- One regulated pressure gauge
- One F1/4 BSP
- One tap valve F1/4 BSP
- Two air outlet taps: M1/4 NPS

Technical characteristics:

- Maximum operating air output: 37 m3/h
- Maximum operating air pressure: 10 bar
- Height: 290 mm
- Air inlet opening: F1/4 BSP

Specifications		DE37
Air output (m^3/h)		37
Maximum fluid pressure (bar)		10
Height (cm)		29
Fitting	Air Inlet	F8 x 13G
Set-up		1 regulated pressure gauge 1 valve F 1/4 BSP 1 ball valve F 1/4 BSP 2 air outlet taps M 1/4 NPS

Description	Part number
Purifier with DE 37 regulator	015.240.000
Blue cartridge for water	015.230.500
Red cartridge for oil	015.230.200

Accessories

Tripod and Carts

COMPATIBILITY OF CARTS

	Tripod	Essential tripod	Essential Cart	Dismountable cart	Dismountable cart with drum table	Double post cart	Reinforced double post cart
PUMPS	PART NUMBER						
	051.665.705	151.730.130	151.730.140	151.241.000	151.242.000	051.221.000	051.231.000
10C18	✓	✓	✓				
15C25		✓	✓	✓	✓		
15C50		✓	✓	✓	✓		
16C240						✓	
20C50						✓	
20C100						✓	
30C25		✓	✓	✓	✓		
35C50		✓	✓	✓	✓		
40C50						✓	
40C100						✓	
40C260							✓
16F240						✓	
17F60				✓	✓	✓	
20F50						✓	
20F100						✓	
20F440							✓
33F440							✓
34F60				✓	✓	✓	
40F50						✓	
40F100						✓	
40F260							✓

Description	Part number
(1) Drum table alone	151.240.009

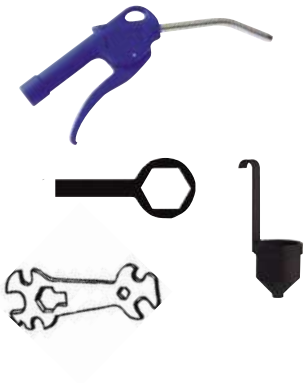
Description	Part number
Perforated rack with brackets	056.100.199

Miscellaneous

Lubricants and greases

LUBRICANTS AND GREASES FOR PUMPS

Description	Volume	Material	Part number
Lubricants for pump fittings			
T lubricant can	125ml	For solvent-based paints	149.990.020
P lubricant can	2L	For Polyurethane paint	149.990.022
Grease			
Box of PTFE grease	450g		560.440.001
Teflon® grease tube (Technilub)	10ml		560.440.101
Box of white grease	450g		560.420.005



MISCELLANEOUS

Description	Part number
M22 / Fpro /Xcite™ gun wrench	049.030.042
Large size brush	906.300.101
Small size brush	906.300.102
Wrench for product filters	049.030.018
Viscosity cup n° 4 CA4	049.221.400
Thickness gauge from 25 to 2000µ	000.790.020
Adhesive-roller with **Sames** logo (75mm x 100m)	571.141.003

Operators accessories

1 ANTI-STATIC COVERALLS

Size “S” to “XXL”. Grey.
Made of special fabric, extremely sturdy, recommended for liquid paints.
Reduces the risk of electric charges accumulation

2 HAT, GREY (ONE SIZE)

3 COVERBOOTS (ONE SIZE)

4 DUST MASK

Meets European standard EN-149-2001, class FFP2. Provides protection only from wearer from mechanically and thermally produced particulates. May be used to protect against concentrations up to 10 times the Average Exposure Value (AEV), Belgium upper limit (VLB).

5 ANTI-SOLVENT MASK

Complies with European standard EN 405:2001. Protection against most vapours/gases and particles such as:
• Inorganic vapours and acid gas, up to 1000 ppm or 10 x VME/VLB, taking the lowest of the 2.
• Particles up to 50 x VME/VLB

6 GLOVES - NITRILE RUBBER (ONE SIZE)

Provide protection against numerous chemicals such as alcohols, aromatic and chlorinated solvents (within the provisions of the chemical resistance chart).
Complies with European 89/686/CEE Directive.

N°	Part number
1	(S) W5GMAS059
	(M) W5GMAS060
	(L) W5GMAS061
	(XL) W5GMAS062
	(XXL) W5GMAS063
2	W5GMAS070
3	W5GMAS071# (x10 qt)
4	W5GMAS018 (x10 qt)
5	W5GMAS035
6	W5GGAM039

7 PROTECTIVE OVERALLS

Protects the operator. Comfortable to wear, giving protection for dust or plush.
Conforms to European Standards

- Made in non-woven fabric, they come with elasticated wrists and wide trouser legs to protect footwear

N°	Part number
7	(S) 564.504.001
	(M) 564.504.002
	(L) 564.504.003
	(XL) 564.504.004
	(XXL) 564.504.005
8	043.250.001

N°7 and 8: *set of 5 quantity*

8 PROTECTIVE HOOD

Protects the head and hair.

- Non-woven, light and lets the skin breathe
- Conforms to European Standards

9 RC 756 RESPIRATORS

Lightweight, comfortable respirators efficient for each type of paint and compliant with the latest european norms.
(Respirator: EN 140, Filters: EN 14393).

Description N° 9	Part number
RC 756 respirator	143.380.100
RC 756 respirator for SOLVENT-BASED PAINTS - A1 filters	143.380.200
RC 756 respirator for WATER-BASED PAINTS - A1B1P3 filters	143.380.300
RC 756 respirator for PLURAL COMPONENT PAINTS - ISOCYANATES - A1B1E1K1P3 filters	143.380.400

FILTERS AND PRE-FILTERS

Description	Type	Quantity	Part number
Filters for solvented paints	A1	10	143.380.210
Filters for water-based paints	A1B1P3	5	143.380.310
Filters for plural-components-isocyanates	A1B1E1K1P3	5	143.380410
Pre-filters for A1 filters	-	25	143.380.110

ACCESSORIES

Description	Quantity	Part number
Spare inlet/outlet valves	3	143.380.130

General informations

Paint

Decoration and protection are often two associated functions. To achieve these aims, and to re-finish products, we have at our disposal a tremendous number of surface treatments, (for example nickel or chrome plating etc.).

Paint is also perfect for both of these functions. In addition, paint is universally used, and can be applied on any surface, such as wood, metal, stone, leather, plastic and elastomers. Paint does not come as a finished product, and hence the quality of application will depend on all its stages of preparation, which we will call the "Painting System".

In general, the stages are as follows :

- Surface preparation
- Application of the coating (paints, stains, varnishes, etc.)
- Drying

Paint

Surfaces preparation

There is a wide range of physical and chemical treatments to which the surface to be coated can be subjected, before receiving the first coat.
Good surface preparation is the essential base for long-lasting protection and a good visual finish on any material.

The surface preparation is often the longest, and therefore the most important task involved in coating a part.

Material	Physical preparation	Chemical preparation
Steel:	stripping, shotblasting, brushing	acid
Aluminum:	Brushing	Vapor blast
Wood:	Sanding	
Plastic:	heating	plasma torch, acid

Once treated, the surfaces should be free from :

>> particulate or non-adherent substances

>> oil, silicone, grease and moisture

To obtain the best protection against corrosion (mainly for metal), we coat with either :

>> a wash primer or

>> an anti-corrosion paint

A **wash primer** is a liquid product of around 16s Zahn#2, which should be sprayed in a thin coat, to get into all the imperfections in the surface of the metal. The phosphoric acid which it contains attacks the surface of the metal and forms an isolating and impenetrable layer of phosphate. The wash primer is highly valued for its adhesion to the metal. Importantly, it should then be coated with a layer of paint, which plays the role of a protective shield.

16s CA_4

An **anti-corrosion** paint is a product which should be sprayed in a thicker layer than the wash primers. Containing anti-corrosive elements, it has the advantage of protecting the metal both physically and chemically at the same time. Also, it saves time, as a single coat applies both the anti-corrosive chemicals and the protective shield to the metal.

40s CA_4

These paints are used very frequently on metal framework, as the coating can be left as it is, or covered subsequently with the desired paint finish.

Paint

Looking at a painted object will tell us that paint is hard. However, the paint which we spray is a liquid.

This transformation is due in the main part to several components of paint whose functions are described below.

Components of paint

Paint contains one or more substances which are generally dissolved in a solvent (or in water) and which regain their solid consistency after drying on the surface.

Amongst these substances, we find :

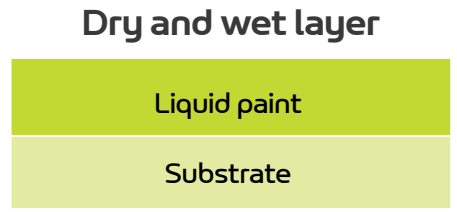
>> Binders
>> Pigments
>> Fillers

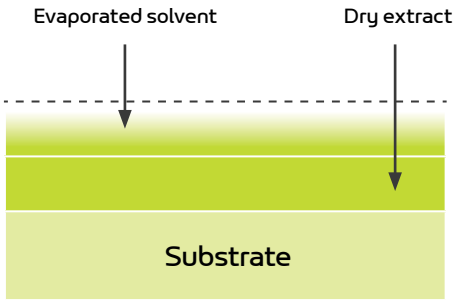
The binder is generally a more or less transparent body which resembles a resin. Dissolved on its own in a solvent it produces a lacquer:

Binder + Solvent = Lacquer

Paint often bears the name of the type of solvent on which it is based (cellulose paint is based on a cellulose solvent). To darken the finish, we add highly colored and very fine powders, which we call pigments:

Binder + Solvent + Pigments = Paint





GLOSSARY

>> **Sticky film :**
we say that a film is sticky when we put a finger on it and it feels like adhesive tape

>> **Dust-free film :**
we say that the film is dust-free, when any dust which lands on iot can be removed by blowing

>> **Film that is dry to the touch** : we say that the film is dry to the touch when a finger does not leave a mark on the surface.

>> **Finger-nail hard** : we say that the film is finger-nail hard when we cannot mark it. In this state, it can be polished or sanded.

Paint

Finally, to give the finish specific characteristics, we use a whole range of fillers and additives. Solvents make it possible to dissolve the other components of the paint, and can be classed into the following three groups:

>> **Fast solvents** : they evaporate extremely quickly, to such an extent that the paint can dry too quickly, not allowing it enough time to adhere correctly to the surface.
These solvents are never used on their own.

>> **Slow solvents** : they evaporate very slowly, allowing the paint to adhere properly. They leave a soft and smooth finish. Slow solvents are not very widely used because they significantly increase the drying time.

>> **Medium solvents** : they evaporate in a few seconds ; this is enough to ensure good adhesion, while giving a satisfactory drying time.

First of all in order to make the correct paint, the manufacturer makes a list of the solvents capable of dissolving all the binders he wishes to include, and then chooses those with a volatility suitable for the planned method of drying(whether at room-temperature or in an oven). Before application, paint viscosity is often reduced to give a consistency which is ideal for the task.

Paint consistency

Viscosity

The consistency of the paint should be adapted for the type of application. It is identified by the extent of its viscosity, which is expressed in centipoises or by measuring the time in seconds that it takes for a certain amount of paint to run through a calibrated viscosity cup. There are different viscosity cups used for measuring the viscosity of paints. The table below shows the relationship between cup size sand viscosities in Centipoises.

AFNOR 4 (CA4)	ISO 4	mPas.s	Centipoises	Ford 4 (CF4)	DIN 4 (D°)	CH (Fr)	ZAHN (n°2)
12	-	20	20	10	11	6	18
14	17	25	25	12	12	7	19
16	23	30	30	14	14	-	20
20	34	40	40	18	16	8	22
25	51	50	50	22	20	9	24
29	60	60	60	25	23	10	27
32	68	70	70	28	25	-	30
34	74	80	80	30	26	11	34
37	82	90	90	33	28	12	37
40	93	100	100	35	30	13	41
45	-	120	120	40	34	14	49
50	-	140	140	44	38	15	58
56	-	160	160	50	42	16	66
61	-	180	180	54	45	17	74
66	-	200	200	58	49	18	82
70	-	220	220	62	52	19	-

Nota: 1 poise = 100 centipoises and 1 mPas.s = 1 centipoise (If the density of the paint is equal as 1 and if it is a fluid Newtonien, that is to say no thixotrope).

Paint

The effect of temperature on viscosity

Viscosity of paint changes with variations in temperature; basically, the resins are far more fluid when they are hot.

The table below shows the changes in viscosity of a glycerophthalic paint as the temperature varies. It is worth noting that a paint which has a viscosity of 22 s at 68 °F will have a viscosity of 28 s at 54 °F and of 17 s at 90 °F.

viscosity in seconds CF#4	Temperatures (°C)																			
	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
	27	26	24	23	22	21	21	20	19	18	18	17	17	16	15	15	14	14	14	14
	33	31	29	27	26	25	23	22	21	20	19	18	18	17	16	16	15	15	14	14
	39	36	34	32	30	28	26	24	23	22	21	20	19	18	17	17	16	15	15	14
	46	42	39	36	34	31	29	27	26	24	23	22	21	19	18	17	17	16	15	15
	54	49	45	41	38	35	32	30	28	26	24	23	21	20	19	18	17	17	16	15
	56	51	47	43	40	36	33	31	29	27	25	23	21	20	20	19	18	17	16	16
	61	55	50	46	42	38	35	32	30	28	26	24	22	21	20	19	18	17	16	16
	69	63	56	52	46	42	39	35	32	30	28	25	24	23	21	20	19	18	17	16
	77	69	62	55	50	46	41	38	35	32	29	27	25	24	22	21	19	18	17	16
	84	74	67	61	54	50	44	40	36	34	30	28	26	25	23	22	20	18	17	16
	95	84	75	66	60	54	48	44	40	36	33	30	28	26	24	22	20	19	18	17
	104	92	81	73	65	58	52	46	42	38	35	31	29	27	24	23	21	20	19	18
	112	100	88	76	69	62	54	49	44	40	36	32	30	27	25	23	21	20	19	18
	122	108	90	85	75	66	59	53	47	42	38	35	31	28	26	24	22	21	19	18
	132	120	102	90	80	70	63	55	50	44	40	36	33	30	27	25	23	22	20	18
	142	124	108	95	84	74	65	58	52	46	41	37	34	31	27	25	23	22	20	18
	152	132	119	101	90	80	69	61	54	48	43	38	35	31	28	26	24	23	21	18
	164	140	123	106	94	83	73	64	56	50	45	40	36	32	29	27	24	23	21	18

Example : at a temperature de 20 °C for an announced viscosity of 22 s, you should be ready for the following results:

- at 12 °C, a viscosity of 28 s,
- at 32 °C, a viscosity of 17 s.

Quality problems tend to arise when the temperature of the paint changes during the course of the day. For example : During the course of this day, the viscosity of the paint has moved from 23 to 17 seconds, which leads to a 22 % increase in the output of the spray guns, leading to over-coloring and excessive product consumption.

Paint

	Temperatures (°C)	Viscosity - CA4 (seconds)	Spray gun output (cm3/mm)
morning, cool workshops	15	23	460
Later - workshop heats up	20	20	520
An oven switched on	25	17	560

Worse still, paint prepared in a hot workshop at 20 seconds can be at 28 seconds the following morning, before the workshop has got up to full working temperature: this would lead to a less fine spray and a much greater drying time.

Drying of paints

The component of paint can be classed in two groups :

>> **Dry extracts**

>> **VOC** (Volatile organic compounds), or water in case of water-based paints

Drying paint is all about allowing the volatile products to evaporate and the film to harden. We must distinguish between hardening and drying.

Drying gives us the dry film purely by the evaporation of the volatile products. This happens at two stages: during spraying and within the film. Depending on the temperature, the density of the spray, the type of spray gun and the distance of the spray, the paint can arrive on the surface more or less dry. That means that the majority of the solvent has evaporated before the paint reaches the surface. The drying of the wet film is accelerated when the surface is in a well-ventilated area which has dry air and is dust-free.

Two component material are characterized by chemical drying, i.e. the molecules making up the binder undergo chemical transformation at room temperature during the drying phase. This transformation presupposes a prior mixing of the two components, and implies a limited timeframe for the application of this mixture. After this period, known as the «pot-life» of the mixture, the product is no longer usable.

Practical pages

Choosing a pump

To optimize

- The pump capacity, work out the output you are going to require. This will include the number of sprayguns themselves, and any circulation you plan to have within this system. Once you have this figure, multiply by 1.2, and then choose the pump of which output at 20 cycles per minute is the nearest for a piston pump (30 cycles per minute for a diaphragm pump)

- The compression ratio you will need is defined by the atomizing pressure required on the paint datasheet and the pressure losses inducted by length and diameter of the hosing of your system. To calculate these pressure losses, see page 97.

Example

Let say you want to feed 3 sprayguns with an output of 300 cc/mn each, plus a circulation of 0,5 L/mn. The total output will thus be 1400 L/mn. The optimal pump capacity would be: (1 400 x 1,2) ÷ 20 = 84 cc/cycle. The best-suited pumps will be:

>> the 20C100 (output of 100cc/cycle) for low to medium viscosity materials or small paint circulation (pressure losses <20 bar).

>> the 40C100 (output of 100cc/cycle) for medium to high viscosity materials or medium size paint circulation (pressure losses <100 bar).

>> the 16C240 (output of 240cc/cycle) with possibility to increase the number of sprayguns for low to medium viscosity materials or small paint circulation (pressure losses <20 bar).

Pump Material Feeding

To guarantee the right delivery of product, we offer the following range of equipment for various product viscosity :

>> 0 - 300 cps
• suction rod.

>> 300 to 8 000 cps
• top outlet pressure pots,
• pumps (gravity or suction rod),
• pump with base intake valve.

>> 8 000 to 15 000 cps
• bottom outlet pressure pots,
• pumps with suction rods,
• compressor.

>> 15 000 to 30 000 cps
• no more pressure pot,
• no more suction rod,
• submerged hydraulic pump,
• compressor,
• pump with single action elevator.

>> 30 000 à 1 000 000 cps and +
• pumps with peak feeder and double action elevator.

Practical pages

Filtration equivalence

Mesh (number of holes in 25,4 mm)	Micron	N° filtre (mesh opening in µm)
10	1480	–
16	975	–
20	750	30
25	630	25
30	500	20
40	375	–
45	360	15
50	300	12
60	238	–
70	210	8
80	175	6
100	149	–
140	100	4
170	90	3
200	74	–
250	60	–
270	50	2
325	40	1
400	35	–

Pressure loss in fluid hoses

Pressure drop is the resistance that prevents material from moving forward in the pipe. Two pipe variables influence this resistance : the (inside/internal) diameter and the pipe length. The pump will generate a pressure, strong enough to move the fluid material through the pipe (or hose) to the material pipe outlet. This pressure must be enough to overcome the original pressure drop.
While it is hard to reduce the pipe length, it is relatively easy to select an appropriate internal pipe diameter.

PRESSURE DROP CALCULATION

$$\text{Pressure loss (bar/m)} = \frac{6.9 \times \text{Flow (l/min)} \times \text{Viscosity (cps)}}{D^4 \text{ (int dia in mm)}}$$

$$\text{Pressure loss (psi/Ft)} = \frac{2.73 \times \text{Flow (gpm)} \times \text{Vicosity (cps)}}{D^4 \text{ (int dia in inches)}}$$

FLOW RATE CALCULATION

$$\text{Flow (l/min)} = \frac{\text{Pressure loss (bar/m)} \times D^4 \text{ (int dia in mm)}}{6.9 \times \text{Viscosity (cps)}}$$

$$\text{Flow (gpm)} = \frac{\text{Pressure loss (psi/Ft)} \times D^4 \text{ (int dia in inches)}}{2.73 \times \text{Viscosity (cps)}}$$

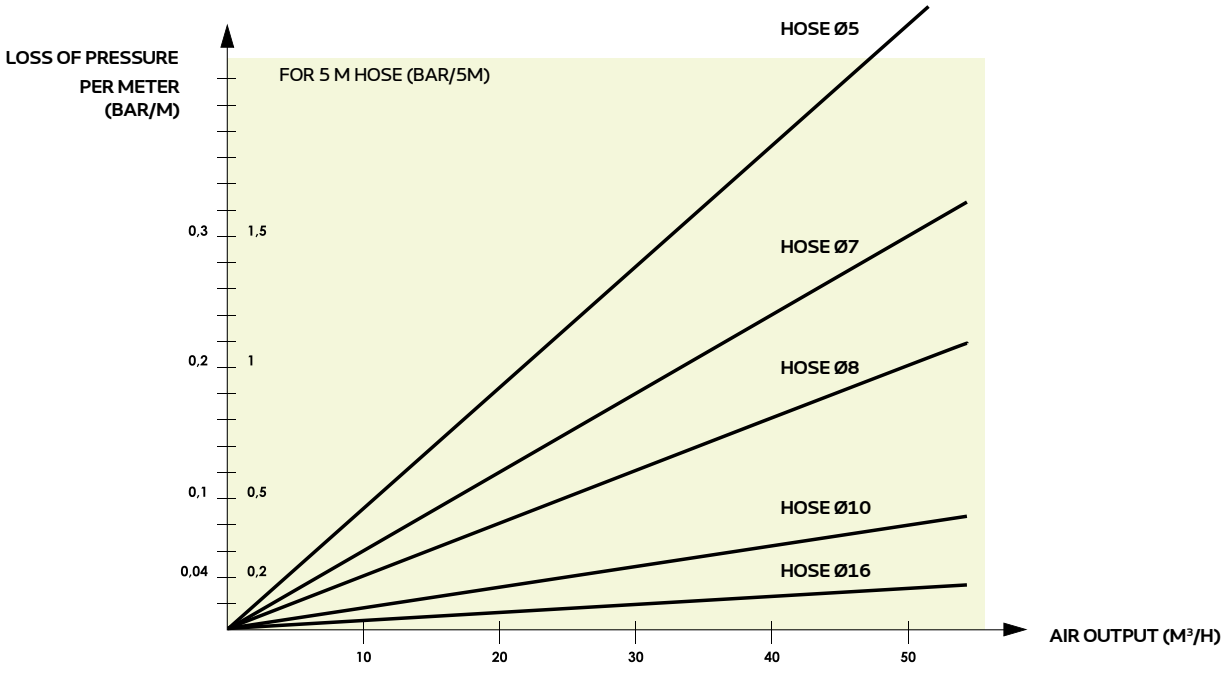
PIPE DIAMETER CALCULATION

$$\text{Interior Dia (mm)} = \sqrt[4]{\frac{6.9 \times \text{Flow (l/min)} \times \text{Viscosity (cps)}}{\text{Pressure Loss (bar/m)}}}$$

$$\text{Interior Dia (in)} = \sqrt[4]{\frac{2.73 \times \text{Flow (gpm)} \times \text{Viscosity (cps)}}{\text{Pressure loss (psi/Ft)}}}$$

Practical pages

Pressure loss in fluid hoses



Electrostatic spraying : suitability of the equipment depending on the resistivity of the paints

- The wrap-around effect is optimized with paints of resistivity range of 5 - 50 MΩ.cm.
- Specific hoses allows for wrap-around effects for resistivity range higher than 2MΩcm.
- For water-based materials (0 MΩ.cm), a special Isocube enclosure allows to benefit from all the advantages of electrostatic spraying in complete safety.

List showing the compressed air consumption of normal air tools

We generally multiply the instant consumption by a coefficient of 0.5 to 0.9 to allow for the time the tool is not in use.

The average air volume delivered by a compressor of 1 CV is of 8 m³/h.

Tool	Consumption	
	l/mn	m³/h
Projection equipment	800 at 1 800	48 at 108
Riveter	450 at 1 500	27 at 90
Pneumatic drill	600 at 1 200	36 at 72
Linisher Ø 230	1 200 at 4 000	72 at 240
Drill 13 mm	600	36
Rotating sander	200 at 400	12 at 24

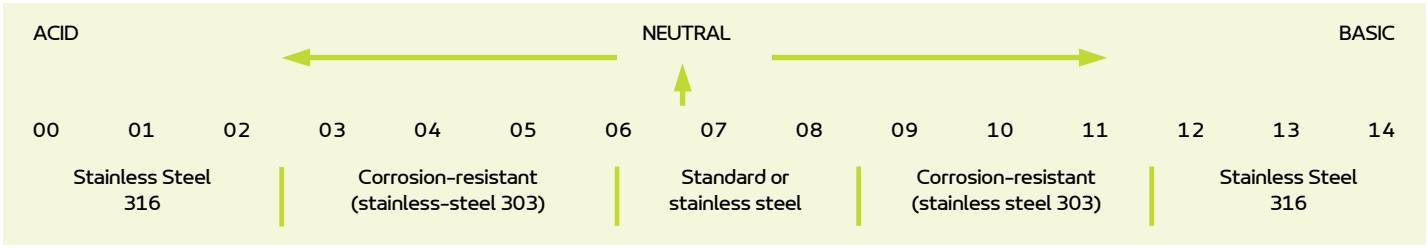
Tool	Consumption	
	l/mn	m³/h
Conventional gun	160 at 500	10 at 30
AIRMIX® gun	67 at 134	4 at 8
Pumps	160 at 1 350	10 at 80
Blower	200 at 400	12 at 24
Screwdriver	200 at 400	12 at 24

Calculate exactly the maximum air consumption of pump in l/mn: Q
The formula is :
Q = 1.2 x fluid output in liter at 20 cycles x pressure ratio x (air motor feeding pressure in bar + 1 bar for atmosphere)
EXAMPLE FOR A PUMP 16C240: Q = 1.2 x 4.8 x 16 x (6 + 1) = 645.12 l/mn or (645.12 x 60) : 1000 = 38.7 m3/h

Practical pages

Value of « PH »

The pH value of a liquid or a solution quantifies its concentration of hydrogen ions and tells us the extend to which it is acidic or alkaline. The PH value dictates the best materials to be used in construction of major paint handling and spraying equipment.



Practical information: Metric – english conversion

CONVERT FROM	TO	MULTIPLY BY
Centimeters	feet	0.03280
Centimeters	inches	0.3937
Centimeters/min.	feet/min.	1.9684
Centimeters/sec.	feet/sec.	0.03281
Cubic centimeters.	cubic feet	3.5314×10^{-5}

CONVERT FROM	TO	MULTIPLY BY
Cubic centimeters	ounces	0.033
Cubic centimeters	liquid gallons	0.0002642
Cubic feet	liquid gallons	7.4805
Cubic feet	cubic inches	1.728
Cubic feet/min.	gallons/min.	7.4805

CONVERT FROM	TO	MULTIPLY BY
Cubic inches	gallons	0.004329
Cubic inches	cubic centimeters	16.387
Cubic inches	cubic feet	0.0005787
Cubic meters	liquid U.S. gallons	264.17
Cubic meters	cubic centimeters	1×10^{6}

CONVERT FROM	TO	MULTIPLY BY
Cubic meters	cubic feet	35.31
Cubic meters	cubic inches	61,023.38
Feet	centimeters	30.48006
Feet	meters	0.3048006
Feet of water	atmosphère	0.02949

CONVERT FROM	TO	MULTIPLY BY
Feet of water	psi	0.443
Feet/hour	miles/hour	0.00018933
Feet/min.	meters/min.	0.3048
Feet/min.	miles/hour	0.01136
Feet/sec.	miles/hour	0.681818

CONVERT FROM	TO	MULTIPLY BY
Gallons	cubic cm	3 785,43
Gallons	cubic inches	231
Gallons	imperial gallons	0,83268
Gallons	cubic feet	0,13368
Gallons/min.	cubic feet/min.	0,13368

CONVERT FROM	TO	MULTIPLY BY
Inches	feet	0,083333
Inches	meters	0,254
Inches	millimeters	25,40005
Inches	mils	1 000
Kilograms	pounds	2,2046

CONVERT FROM	TO	MULTIPLY BY
Kilogrammes/cm²	psi	14,2233
Kilogrammes/mm²	psi	1 422,33
Liters	gallons	0,264178
Meters	feet	3,2808
Meters	inches	39,37

CONVERT FROM	TO	MULTIPLY BY
Poise	centipoise	100,0
Pints of water	gallons	0,11985
PSI	atmosphère (bar)	0,06804
Inches²	cm²	6,4516
Inches²	feet²	0,006944
Inches²	mm²	645,163
Millimètres²	inches²	0,0015499
daN	Kilograms	1.0

- For the diameter of a circle, multiply the circumference by 0.31831.
- For the circumference of a circle, multiply the diameter by 3.1416.
- For the surface of a circle, multiply the diameter² by 0.7854.
- For the surface of a sphere, multiply the diameter² by 3.1416.
- To find the side of a square that has the same surface area of a circle, multiply the diameter by 0.8862.
- To find the number of cubic inches in a sphere, multiply the diameter by 0.5236.
- To find the number of gallons inside a pipe or cylinder, divide the volume in liters by 231.
- To find the cubic volume of a cylinder or pipe, multiply the section area by the length.

Practical pages

Chemical compatibility charts

MATERIAL IN CONTACT (WETTED PARTS)

	Carbon steel	Aluminium	Brass	Stainless steel	Nylon	Nitrile	Vitton	Leather	P.U.
Butyl acetate	•••	•••	•••	•••	•••	N	N		N
Ethyl acetate	••	••	••	••	•••	N			
Acetal aldehyde	•••	•••	•••	•••	•••	N	N	••	N
Amonium acetate				•••					
Acedic acid	•••			•••	•••	N	N	N	N
Boric acid	•••	•••		•••	•••		•••	•••	•••
Hydrobromic acid					•••	N	•••		
Chloridic acid	N	N		N	•••	N	•••		
Chromic acid	N	N	N	•	•••	N			
Citric acid				•••	•••		•••		
Fluorohydric acid						N	•••		
Fluosilicic acid			•••		•••	N	N		
Formic acid	N	••	N	•	•••	N	•		
Nitric acid	N	N	N	•••	•••	N	•••		
Oxylic acid	N	N	N	N	•••		•••	•••	•••
Phosphoric acid	N	N		•••	•••	N	•••		
Ethylalcohol						•••	N		
Methylalcohol	•••						N	•••	N
Acetic aldehyde	•••	•••		•••	•••	N	N		N
Formic aldehyde	N	••	N	N	•••	N	•••		N
Sodium algenate					•••		N		
Starch						•••	•••		
Amines					•••	N	N	N	
Acetone	•••	•••		••	•••	N	N		N
Liquid ammonia	•••	•••		•••	••	••	N	N	
Benzene	•••	•••	•••	•••	•••	N	•••	••	•
Sodium bicarbonate		N	N	•••	•••	•••	•••		
Chlorine dioxide						N	•••		
Sodium bisulphate	N	N		N	•••	N	•••		
Brominate						N			
Calcium carbonate	•••			•••	•••	•••	•••	•••	
Sodium carbonate					•••		•••		
Chlorinate, gas						•••	•••		
Sodium chlorite							•••		•••
Aluminum chlorosulfate					•••	•••	•••	•••	
Calcium chloride	•••			•••	•••		•••		•••
Magnesium chloride	••	N		N	•••	•••	•••	•••	•••
Potassium chloride	N	N		••	•••	•••	•••	•••	•••
Sodium chloride					•••	•••	•••		•••
Zinc chloride	N	N		N	•••	•••	•••		•••
Ferrous chloride	N	N	N	N	•••		•••		
Ferric chloride	N	N	N	N	•••		•••		•••
Cyclohexane	•••	•••	•••	•••	•••	•••	•••		
Chlorobenzene	•••			•••	•	N	•••		N
Ethylene chloride		••			••	N	••		N
Methylene chloride	••	N	••	••	N	N	••		N
Diatoms						•••	•••		
Dichloroethylene					•••				
Diethylene glycol	•••	••		•••	•••	•••	•••		N
Bleach	N	••		•••	•••				•
Distilled water	N	•••	•••	•••	•••		•••	•••	•••
Oxygenated water	N		N	••	N		••		•••

Practical pages

Chemical compatibility charts

MATERIAL IN CONTACT (WETTED PARTS)

	Carbon steel	Aluminium	Brass	Stainless steel	Nylon	Nitrile	Vitton	Leather	P.U.
EDTA						•••	N		
Fertilizer						•••	N		
Ethanol					•••	•••	N		
Ethyl ether	••	••		••	•••	N	N		•
Ethylene glycol	••	••	•••	••	•••	•••	•••		N
Ethyl-mercapan						N	•••		
Fuel						N	•••		
Fluosilicate			•••		•••	•••	•••		
Formaldehyde	N	••		N	••	•••	•••		N
Glycol	••	••		••	•••	•••	•••		N
Gelatine	N	••		•••	•••	N	N		N
Sodium hydroxide					•••	N	N		N
Ammonium hydroxide				•••	•••	N	N	••	N
Potassium hydroxide	•	N		••	•••	N	N		N
Calcium hypochlorite				•	•••	N	•••	N	
Sodium hypochlorite					•••	N	•••		N
Sodium hyposulfite					•••	N	•••		
Fruit juice						•••	•••		
Methanol	N	•••		•••			N		•
Morpholine	•••	•••				N	N		
Methylethylcetone	•••	••		•••	•••	N	N		N
Sodium nitrite					N	N	•••		
Perchlorethylene (tetrachloret.)	•••	••		•••	N	••	•••		N
Permanganate de potassium	••	••		••	•••	N	•••		
Hydrogen peroxide	N	•••	N	••		N	••		
Chlorohated Peroxyde						N	•••		
Phenol	N	N			•••	N	•••		
Ammonium phosphate			•••	•••	•••	•••	•••		
Tridsodium phosphate	•••	N		•••	•••	•••	•••		
Aluminium polychlorite						•••	•••		
Polyelectrolytes						•••	•••		
Caustic potash		N		•••		N	•••		
Sodium silicate					•••	•••	•••		
Soda						N	N		
Aluminium sulfate					•••	•••	•••	•••	N
Ammonium sulfate					•••				•••
Calcium sulfate	•••	•••		•••	•••		•••		
Copper sulfate				•••	•••	•••	•••		•••
Ferrous sulfate		N		••	•••	•••	•••		
Ferric sulfate	N	N		N	•••	•••	•••		•••
Sodium sulfate	N				•••	•••	•••		
Hydrogen sulfur	•••				•••	•••	N		
Carbon tetrachloride	••		•••	•••	•••	N	•••		
Toluene	•••	•••		•••	N	N	•••		N
Trichlorethane	••	N		••	N	N	•••		N
Trichlorethylene	••	•••		••	N	N			N
Triethyleneglycol				••	•••		•••		
Urea	••	••		••	•••		•••		
Xylenes	••	••		••	•••	N	•••		N

•••= High Compatibility

••= Good Compatibility

•= Low Compatibility

N = Not Compatible

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