

Equipment

Designation	Part number
Pump RPG 4.5cc (Equipped with bypass block)	270000152
Pump RPG 6cc (Equipped with bypass block)	270000153
Pump RPG 9cc (Equipped with bypass block)	270000154

Kits

Designation	Part number
Retrofit kit to install "RPG" instead of "Easyrincing" Pump	910032529
Retrofit kit to install "RPG" instead of "FCG" Pump	910032531

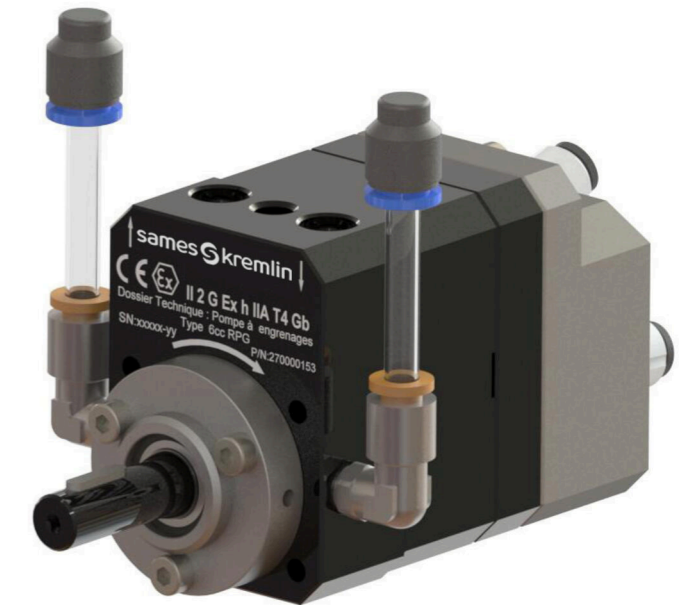
Spare Parts

Designation	Part number
Bypass block equipped	270000155
UPvalve, pilot valve	910012239S
Seal PTFE	160000284
Seal Oblong	160000285
O-Ring Seal	160000286
Main lip seal with O-Ring Seals	160000287
Oil Mesamol (1L)	H1HMIN037
Ball Bearing	180000580

RPG

Robotic Paint Gear Pump for Flow management

Electrostatic / Pumps



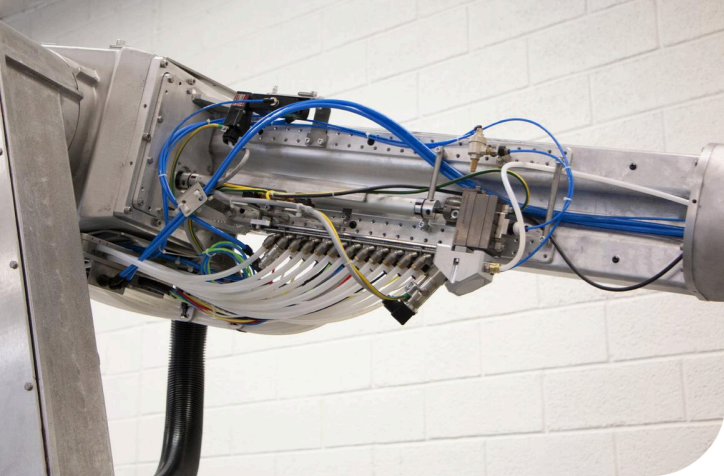
HIGH QUALITY GEAR PUMP FOR ROBOTIC BELL APPLICATION

- Compact Design
- Fast Color Change
- High Reliability

Markets



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RPG

Robotic Paint Gear Pump for Flow management

The Robotic Paint Gear pump "RPG" is dedicated for robotic applications. It combines fast color change with the most compact design of the market allowing both low paint loss and high flowrate output.

The **Robotic Paint Gear pump** range "RPG" is used for the supply of liquid paints, when a regular and accurate flow is mandatory, either solvent-based or water-based, for all **Sames** automatic sprayers. This pump comes in 3 capacities defined by the number of cubic centimeters of paint delivered per revolution:

- 4.5 cc / rev
- 6 cc / rev
- 9 cc / rev

These different models allow covering a flow range from 8 to 65 l/hour. The choice is made with respect to the target flow and the rotation speed range. We recommend to run at less than 150 rpm. The gear pump ensures a paint flow that is proportional to its rotation speed. In the case of a distribution system, the material pressure regulator is to be connected before the pump, whereas a flow meter is always connected after the pump. Upstream pressure facilitates priming but also ensures the flow corresponding to the capacity and speed of the pump.

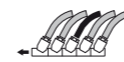
All the RPG range is fully compatible with the UPside CCV color change block from **Sames**. To allow high flexibility, these pumps can also fit perfectly the robot motor coupling. The Robotic Paint Gearpump "RPG" is 15% lighter than our previous range of gearpump. New pressure sensors are available to monitor the process with a compact design to be integrated directly in the robot process arm.

- **Compact Design:** Designed to be the most compact of the market integrating a paint pressure sensor with a 1/4" only interface to reduce the paint loss during color change and ease the integration on robot arm.
- **Fast Color Change:** Thanks to the ADLC coating and the dedicated solvent valve to clean the gear teeth, the color changing is faster than ever.
- **High Reliability:** Lifetime of the pump is increased thanks to the fact that key operating components are made of ceramic.



Technical data table

Designation	Value	Unit: metric (US)
Maximum Fluid Pressure	15 (220)	bar (psi)
Recommended Fluid Pressure	3 - 7 (45 - 100)	bar (psi)
Maximum Fluid Output	1080 (0,04)	cc/mn (cfm)
Minimum Output	30 (1)	cc/min (cc/oz)
Maximum Air Pressure	6 (90)	bar (psi)
Accuracy in Normal Conditions	± 2	%
Air Inlet	2.7x4	
ATEX Certification	II 2 G Ex h IIA T4 Gb	
Nominal maximum rotation speed	120	rpm



Upside Concept



Gear

Performance

- 1 Most compact robotic gearpump on the market (63mm height x 48mm width)
- 2 Quick color change thanks to its direct solvent injection system
 - ◆ High mechanical precision components ensure accurate & stable flow
 - ◆ High cleaning performance upon color change phase

Productivity

- 2 Process Plate Bypass & Fast cleaning enables optimum gear rinsing (teeth and axles)
- 3 Integrated lubrication system
- 3 Leak detection system thanks to transparent hoses revealing color in case of leakage
 - ◆ Three range capacities: 4.5 cm3/rev - 6 cm3/rev - 9 cm3/rev, with up to 150 rpm

Sustainability

- ◆ ADLC stainless steel Coating for an improved lifetime
- ◆ Easy to upgrade from previous generation with dedicated upgrade kits
- ◆ Low running costs - Low wearing parts with stainless steel ADLC
- ◆ Cleaning lubricates rotating parts for longer life



Description

