



Hydraulic Proportioning Unit **evolution VR**



AUTOMATIC VARIABLE RATIO - TOTAL CONTROL



Main Applications: Polyurethane Foam & Coatings - Polyurea

GAMA SPRAY EQUIPMENT
Designed with the Customer in Mind!

GAMA Proportioners represent the best and most efficient partner for high quality applications

EVOLUTION

The **evolution** series of exclusive designs are the result of an ambitious improvement process based on the experience and knowledge of the market's highest demands that has allowed the incorporation of important technical improvements that give the new units a reliable, high performance and maintenance friendly platform.

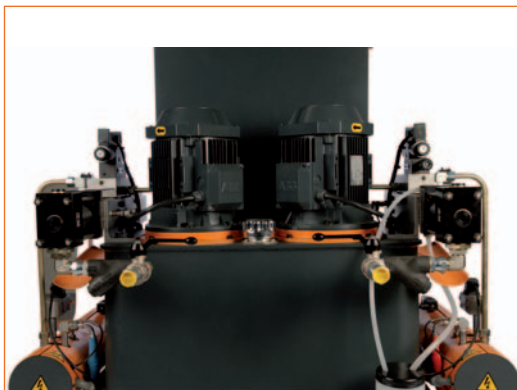
A **GAMA** PROPORTIONER IS MUCH MORE THAN THE SUM OF ITS FEATURES!

With the **evolution VR**, you not only receive a compact and innovately designed unit, you also receive additional features that will allow you to obtain higher productivity and excellent quality in your applications with complete reliability.

- Total warranty on parts and labor.
- More than 20 years experience in the urethane industry.
- Immediate response to your questions.
- Specialists' technical assistance.
- Ability to adapt to your specific needs.

GAMA parts have been designed and manufactured with the same rigor, quality and attention to detail as the **evolution** units so that they perfectly mate to them to support the most demanding application conditions.

Quality stands out in the details!



FEATURES AND CHARACTERISTICS

The new **evolution VR** hydraulically driven proportioning unit has been designed and manufactured for the application of Polyurea, Polyurethane Foam and other two-component systems requiring precise control over temperature, pressure and mixing ratio.

Primary Heating System

The primary heating system consists of two separate independent block heaters. Each heater incorporates 6 each 1250W (1500W optional) heating elements that supply a total power of 7500W (9000W optional) with the necessary control and safety features for the accurate and reliable performance of the system. The special design of the heaters allows for a ΔT of 50°C and enables it to reach applications temperatures of 90°C in normal environmental temperature conditions.

Independent Hose Heating System

Designed with two 4000W isolation transformers, the **evolution VR** unit allows the individual heating of each component hose up to 93m. The system incorporates an innovative concept of heated hose in which the copper resistance element is homogeneously spread around the hose. This allows accurate and uniform control of the application temperature of the products and avoids the heat concentrations that are produced in traditionally manufactured hoses.

Double Acting Piston Proportioning Pumps

Each pump is individually driven by a hydraulic cylinder to deliver the adequate volume of each component in order to achieve the desired mixing ratio. This particular positive-displacement design assures constant output and stabilised pressures, eliminating asymmetrical loads and extending the life of the pump packing seals. Several pump sizes are available to obtain the required pressures and ratios.

Recirculation System

The Recirculation System allows to heat the products automatically, with no need to switch on the machine, reducing the time of preparation prior to start spraying. Once the time intervals and desired temperatures have been programmed, the machine will automatically control them without interruption until the time to start working.

The valves can be activated manually or automatically. (OPTIONAL)

Central Processing Unit (CPU)

The CPU's software processes and controls all application parameters entered on the screens assuring that any alteration that may occur will be corrected while the unit continues working. When the problem cannot be resolved within the established tolerance parameters the CPU will stop the unit and display the type of failure occurred.

Flowmeters

The unit incorporates two flowmeters that measure the correct dosing of each component precisely.

TECHNICAL SPECIFICATIONS

Maximum Output:	15 kg/min	33 lb/min
Minimum Output:	1 kg/min	2,2 lb/min
(Other options available)		
Max. Rated Pressure:	300 kgf/cm ² (29,4 MPa)	4300 psi
Heating Power:	15 (18) Kw	
Hose Heating Power:	8 Kw	
Electrical:	66-70 amps	3x400V 50/60Hz
	115-122 amps	3x230V 50/60Hz
Weight:	500 kg	1100 lb
Dimensions:	1250 mm x 1110 mm x 1200 mm	
	50 in	45 in 48 in

GARRAF MAQUINARIA S.A.

WARNING: the installation and operation of the described equipment should only be done by qualified personnel and strictly following the instructions included in the operating manuals. The information and data given on this brochure is considered to be correct; however, it should not be considered binding nor shall it constitute any explicit or implicit warranty or liability. On its constant effort to improve the design, features and performance of the equipment, GARRAF MAQUINARIA, S.A. reserves its right to make modifications without previous notice.