# [ Paint applicators with air and electrostatics



# USES

The automatic TRP 501-00D (single gun) and TRP 502-00D (twin-gun) atomizers have been designed for the electrostatic application of all kinds of liquid paints:

solventborne, waterborne, high-solids, two-component, clear coat, etc.

They can be used with paints at room temperature or preheated up to 50° C (120 F).

These high-flow TRP 501-00D and TRP 502-00D atomizers have been designed to spray not only on large surfaces, but also tubes, wirework and intricately-shaped parts.

They guarantee fast color changes.

They can be used in a stationary position or installed on a reciprocator, a single axis or a multi-axes robot.



# MAIN ADVANTAGES

### Ease of use

Parameter adjustments (paint flow, atomisation, spray pattern) are set manually, remotely or automatically with a PLC.

## Important paint savings

The electrostatic process permits the paint to be concentrated on the object. An excellent transfer efficiency is obtained thanks to the high voltage adjustable between 0 and 100 kV. Up to 60% paint can be saved depending on the part, the paint and the setting.

#### Excellent finish

Fine atomization and an excellent film build are achieved thanks to the use of high voltage.

## No booth contamination from flushing

The manifold has an in-built dump valve for emptying, flushing and refilling so that no waste is dumped to the booth during color change.

## Paint flow control

This type of atomizer is a component of efficient paint systems with parts detection triggering the guns only when there are parts to spray.

#### High flow operations

An extra feature of particular interest is the TRP 502-00D twin-gun configuration. Two guns fixed on a common manifold work simultaneously to form a single spray pattern with paint flows up to 1200 cm<sup>3</sup>/min.





# **DESCRIPTION AND OPERATING PRINCIPLE**

These electrostatic paint guns are made up of a standard manifold on which are fixed:

## Either one TRP (TRP 501-00D) atomizer OR Two TRP (TRP 502-00D) atomizers.

The TRP-501-00D and TRP 502-00D atomizers are connected to a high voltage cascade driven by a low voltage power supply.

The operating voltage is between 60 and 100 kV. The TRP 501-00D and TRP 502-00D atomizers comprise:

- paint inlet fitting
- high voltage inlet
- dump outlet fitting
- atomizing air inlet fitting
- trigger inlet fitting
- dump valve pilot fitting

OPTIONAL: a paint regulator with manual or automatic control.

The TRP 501-00D atomizers may be equipped with fan or round spray (Vortex) nozzles.

The **TRP 502-00D** atomizers are mounted only with fan spray nozzles working simultaneously to form a single spray pattern the width of which can be adjusted.

All the paint, air and control lines are common to the two guns.

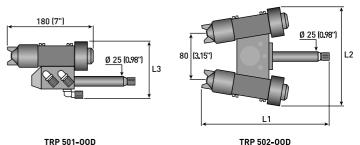
Solventborne, waterborne and metal bases can be sprayed with these atomizers.

With waterborne and certain metal bases the supply lines must be completely isolated. SAMES is at the disposal of its customers to find the right solution to their needs.

# TECHNICAL CHARACTERISTICS

Dimensions (mm)	L1 L2 L3	Weight Operating Max (g) voltage voltage
TRP 501-00D	300 44 90	800 between 40 et 90 kV 100kV
TRP 502-00D	300 180 44	1200 between 40 et 90 kV 100kV

EXAMPLES	<b>TRP 501</b> Round spray Fan spray min max min max			<b>TRP 502</b> Fan spray min max		
Paint flow (cm³/min)	100	500	100	800	200	1200
Atomizing air pressur (Nm <sup>3</sup> /h)	e 7	27	7	40	14	80
(CFM)	[4]	(16)	(4)	[24]	(8)	[48]
Size of spray pattern (mm) for a target distance of 205 mm	100 to 400		100 to 500		100 to 500	
(10")	(4" t	o 16")	(4" t	o 20")	(4"	to 20")



TRP 501-00D

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