



FLUID DOSING COMPONENTS



**LOW PRESSURE
VOLUMETRIC/METERING DOSERS**

VVPP

**FLUID DOSING SYSTEMS
AND INTEGRATED SOLUTIONS**

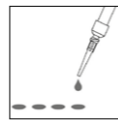


**MACHINES FOR FLUID
DOSING AND TREATMENT**



TM reserves the right to change technical data, pictures or technical descriptions without prior notice.

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Suitable for the following products:

Oils and lubricant greases, assembling pastes, low and mid viscosity fluids.

We have designed impulsive volumetric dosers mod. **VVPP** to lubricate industrial components during automatic processes for the assembling of components, such as mechanical parts, couplings, valves, micro-electronics, etc.... Their special conception gives an extreme precision in dosing minimum quantities of product. Dosers **VVPP** generally work at low pressures (below 14bars) and guarantee the product integrity (sometimes greases might separate if used at high pressures). They are even suitable with lubricants (volumetric cycles set by PLC) to lubricate complex machinery cyneatisms where the lubrication must be absolutely guaranteed.

The volumetric dosers **VVPP** can work with frequency cyclic drives for doses in rapid succession.

The high constructive sturdiness makes these dosers suitable also for high circulation lines with fast cycles and high productions.

The volumetric / metering dosers model **VVPP** guarantee:

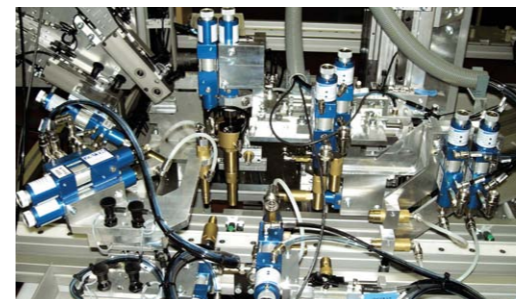
- minimum and constant product quantities
- high dosing precision
- objectification of doses and cycles
- repeatability and reliability
- control of the process
- increase in quality
- increase in productivity
- clean components and machines
- product saving
- reduction of utilities consumption
- reduction of cycle time
- reduction of scrapped parts
- high constructive sturdiness



Technical Code	Commercial Code	Description
G00000249	VVPP3	VOLUMETRIC DOSER VVPP3 Precision impulsive volumetric doser. Double-acting pneumatic operation. Maximum product supply pressure 14bar. Maximum compressed air pressure 10bar. Dose adjustable by graduated nonius. Body in anodized aluminium and brass. This doser is not suitable for abrasive or aggressive products that may cause a shorter lifespan. Dosing range from 0,003 to 0,100cc. <u>Pay attention: do not remove the inlet valve!</u> Approx. weight: 580 gr.
G00000251	VVPP5	VOLUMETRIC DOSER VVPP5 Precision impulsive volumetric doser. Double-acting pneumatic operation. Maximum product supply pressure 14bar. Maximum compressed air pressure 10bar. Dose adjustable by graduated nonius. Body in anodized aluminium and brass. This doser is not suitable for abrasive or aggressive products that may cause a shorter lifespan. Dosing range from 0,020 to 0,250cc. <u>Pay attention: do not remove the inlet valve!</u> Approx. weight: 580 gr.
G00000253	VVPP8	VOLUMETRIC DOSER VVPP8 Precision impulsive volumetric doser. Double-acting pneumatic operation. Maximum product supply pressure 14bar. Maximum compressed air pressure 10bar. Dose adjustable by graduated nonius. Body in anodized aluminium and brass. This doser is not suitable for abrasive or aggressive products that may cause a shorter lifespan. Dosing range from 0,050 to 0,750cc. <u>Pay attention: do not remove the inlet valve!</u> Approx. weight: 580 gr.
G00001400	VVPP10	VOLUMETRIC DOSER VVPP10 Precision impulsive volumetric doser. Double-acting pneumatic operation. Maximum product supply pressure 14bar. Maximum compressed air pressure 10bar. Dose adjustable by graduated nonius. Body in anodized aluminium and brass. This doser is not suitable for abrasive or aggressive products that may cause a shorter lifespan. Dosing range from 0,2 to 1cc. <u>Pay attention: do not remove the inlet valve!</u> Approx. weight: 580 gr.

SPARE PARTS KIT	VVPP3	G00000521	RECONDITIONMENT CODE	VVPP3	R000G0249
SPARE PARTS KIT	VVPP5	G00000522	RECONDITIONMENT CODE	VVPP5	R000G0251
SPARE PARTS KIT	VVPP8	G00000523	RECONDITIONMENT CODE	VVPP8	R000G0253
SPARE PARTS KIT	VVPP10	G00001422	RECONDITIONMENT CODE	VVPP10	R000G1400

EXAMPLES OF SYSTEMS



Example of a VVPP5 dosers battery on an automatic assembling line for boilers' manifolds. The 32 dosers are equipped with customized terminals for radial dosing. They are supplied by a VACUUM TOWER degasser, directly connected to the line, though two tanks SB4-AUTO with automatic exchange.



Example of a doser mod. VVPP applied to an anthropomorphic robot capable of dosing different points in the space. The doser is supplied by a pressurized tank model SB4-AUTO, filled with de-aerated product.

APPLICATION EXAMPLES



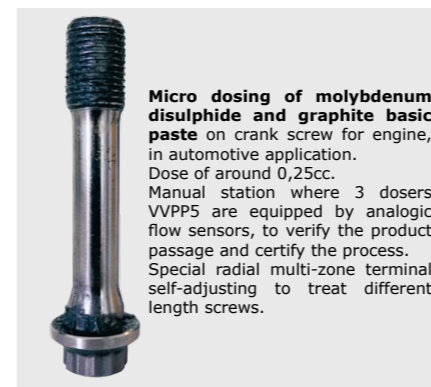
Micro dosing of jelly grease on a sliding contact Ø45mm. Grease deposited on the sliding areas of the programs selector, on the electronic boards of house appliances. Dose of around 0,1cc. Station integrated in a semi-automatic bench. Doser VVPP5 equipped with a frontal customized terminal.



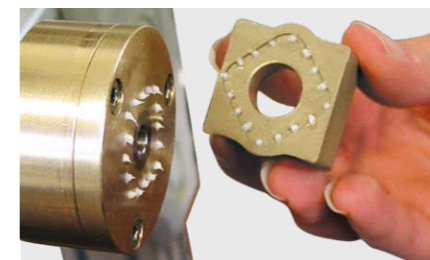
Micro dosing of fluorinated grease inside of a Ø16mm circular area to lubricate 2 O-rings before their assembling on an automatic station. Dose of about 0,01cc. The doser VVPP3 is equipped by a radial customized terminal.



Micro dosing of grease on the electrical contacts of some program selectors of household appliances. Frontal dose of about 0,05cc distributed in microdots dosed by one single multichannel terminal, on one Ø25mm area. Manual station on assembly bench.



Micro dosing of molybdenum disulphide and graphite basic paste on crank screw for engine, in automotive application. Dose of around 0,25cc. Manual station where 3 dosers VVPP5 are equipped by analogic flow sensors, to verify the product passage and certify the process. Special radial multi-zone terminal self-adjusting to treat different length screws.



Micro dosing of silicon grease along the circumference and the cams of a selector switch Ø20mm. Dose of about 0,03cc. Manual station. Doser model VVPP5 equipped with special multi-zone customized terminal.



Micro dosing of fluorinated grease along the perimeter area 1mm to hold the gasket during the assembling of a pneumatic valve, for textile machines. Dose of about 0,02cc. Manual Station. Doser model VVPP3 equipped with frontal customized terminal.

OPTIONAL ACCESSORIES

Technical Code	Commercial Code	Description	Technical Code	Commercial Code	Description
G00000266	VSF	Flow sensor ON/OFF Suitable for VVPP3, 5, 8 and 10.	G00003086	AIVP	Standard pneumatic vertical handle.
G00001063	VSFPZO	Flow analogic proportional sensor for oils Suitable for VVPP3.	G00003087	AIVPSF	Pneumatic vertical handle with sensor VSF.
G00001599	VSFPZG	Flow analogic proportional sensor for greases Suitable for VVPP3, 5, 8 and 10.	G00003686	AIVPPZO	Pneumatic vertical handle with sensor PZ for oils.
G00003440	VSFAP1/4" ON/OFF	High flows sensor 1/4" ON/OFF Suitable for VVPP3, 5, 8 and 10.	G00003088	AIVPPZG	Pneumatic vertical handle with sensor PZ for greases.
G00000245	AVSAWPP	Activation control for doser VVPP and VVPPDV. It verifies the doser activation and the pneumatic piston movement, at each cycle.	G00002238	AIVE	Standard electric vertical handle.
			G00003090	AIVESF	Electric vertical handle with sensor VSF.
			G00003687	AIVEPZO	Electric vertical handle with sensor PZ for oils.
			G00003091	AIVEPZG	Electric vertical handle with sensor PZ for greases.
			G00000750	AIPE	Gun handle electrically operated.
			G00000307	AIPP	Gun handle pneumatically operated.