FLUID DISPENSING TECHNOLOGY

FLUID DOSING COMPONENTS

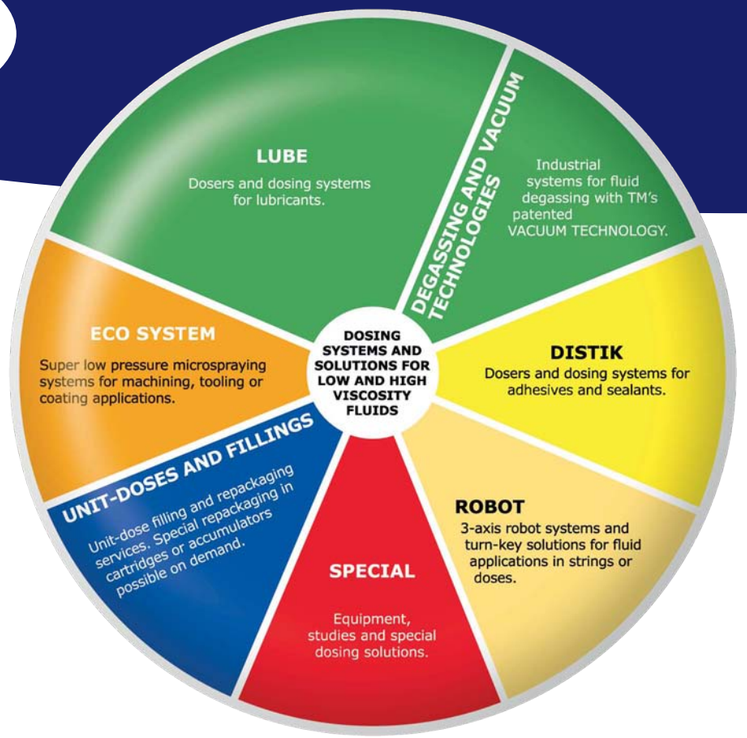


FLUID DOSING SYSTEMS AND INTEGRATED SOLUTIONS



MACHINES FOR FLUID DOSING AND TREATMENT





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REV. 02

FLUID DISPENSING TECHNOLOGY

HIGH PRESSURE VOLUMETRIC/METERING DOSERS

VVAP



LUBE

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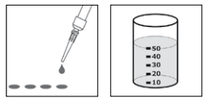
FLUID DISPENSING TECHNOLOGY

VVAP - HIGH PRESSURE VOLUMETRIC / METERING DOSERS



Suitable for the following products:

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

We have designed impulsive volumetric dosers mod. **VVAP** to lubricate industrial components during automatic processes for the assembling of components, such as mechanical parts, couplings, valves, micro-electronics, etc. Their special conception guarantee extremely accurate volumetric doses. Dosers **VVAP** generally work at high pressures (15 to 150 bars) allowing the realization of structurally simple systems with no need of pressure reducers and with the possibility of being remotely branched off from the extrusion pump, through pipes. They are also used as lubricant dispensers (volumetric dosages set by PLC) to lubricate kinematics of machines particularly complex, where the guaranteed lubrication must be absolute. The volumetric dosers mod. **VVAP05, VVAP1** and **VVAP2** can work with frequency cyclic drives for doses in rapid succession



Technical Code	Commercial Code	Description
G00001507	**VVAP05**	**VOLUMETRIC DOSER VVAP05** Precision volumetric doser for high pressures (15 to 150bar, minimum pressure depending on the product and on the system configuration). Double-acting pneumatic operation. Dose adjustable by graduated nonius. Body in anodized aluminium and brass. Suck-back device at the end of the dosage. **This doser is not suitable for abrasive or aggressive products** that may cause a shorter lifespan. **Dosing range from 0,02 to 0,5cc.** Approx. weight: 605 gr
G00000344	**VVAP1**	**VOLUMETRIC DOSER VVAP1** Precision volumetric doser for high pressures (15 to 150bar, minimum pressure depending on the product and on the system configuration). Double-acting pneumatic operation. Dose adjustable by graduated nonius. Body in anodized aluminium and brass. Suck-back device at the end of the dosage. **This doser is not suitable for abrasive or aggressive products** that may cause a shorter lifespan. **Dosing range from 0,05 to 1,2cc.** Approx. weight: 605 gr.
G00000408	**VVAP2**	**VOLUMETRIC DOSER VVAP2** Precision volumetric doser for high pressures (15 to 150bar, minimum pressure depending on the product and on the system configuration). Double-acting pneumatic operation. Dose adjustable by graduated nonius. Body in anodized aluminium and brass. Suck-back device at the end of the dosage.. **This doser is not suitable for abrasive or aggressive products** that may cause a shorter lifespan. **Dosing range from 0,50 to 2,50cc.** Approx. weight: 605 gr.



G00000300	**VVAP10**	**VOLUMETRIC DOSER VVAP10** Precision volumetric doser for high pressures (15 to 100bar, minimum pressure depending on the product and on the system configuration).Double-acting pneumatic operation. Dose adjustable by graduated nonius.B ody in anodized aluminium and brass. Suck-back device at the end of the dosage. **This doser is not suitable for abrasive or aggressive products** that may cause a shorter lifespan. **Dosing range from 1,50 to 10cc.** Approx. weight: 1 Kg.



G00001042	**VVAP30**	**VOLUMETRIC DOSER VVAP30** Precision volumetric doser for high pressures (15 to 100bar, minimum pressure depending on the product and on the system configuration). Double-acting pneumatic operation, equipped with piston actuation control sensor. Dose adjustable by graduated nonius. Body in anodized aluminium and brass. Suck-back device at the end of the dosage **This doser is not suitable for abrasive or aggressive products** that may cause a shorter lifespan. **Dosing range from 5 to 30cc.** Approx. weight: 2,6 Kg.

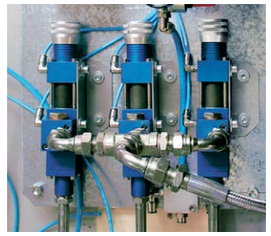


G00003195	**VVAP100**	**VOLUMETRIC DOSER VVAP30** Precision volumetric doser for high pressures (15 to 100bar, minimum pressure depending on the product and on the system configuration). Double-acting pneumatic operation. Dose adjustable by graduated nonius. Body in anodized aluminium and brass. Suck-back device at the end of the dosage. **This doser is not suitable for abrasive or aggressive products** that may cause a shorter lifespan. **Dosing range from 5 to 30cc.** Approx. weight: 2,6 Kg.

SPARE PARTS KIT	**VVAP05**	**G00002409**
SPARE PARTS KIT	**VVAP1**	**G00000913**
SPARE PARTS KIT	**VVAP2**	**G00001326**
SPARE PARTS KIT	**VVAP10**	**G00001322**
SPARE PARTS KIT	**VVAP30**	**G00001364**
SPARE PARTS KIT	**VVAP100**	**G00003203**

RECONDITIONMENT CODE	**VVAP05**	**R000G1507**
RECONDITIONMENT CODE	**VVAP1**	**R000G0344**
RECONDITIONMENT CODE	**VVAP2**	**R000G0408**
RECONDITIONMENT CODE	**VVAP10**	**R000G0300**
RECONDITIONMENT CODE	**VVAP30**	**R000G1042**
RECONDITIONMENT CODE	**VVAP100**	**R000G3195**

EXAMPLES OF SYSTEMS



Example of a VVAP1 dosers battery on an automatic assembling machine for hinges.Dosers are linked by one feeding collector with rapid connection.



Doser VVAP30 with vertical handle pneumatically operated for grease injection into concrete railway sleepers.



Couple of VVAP1 dosers, mounted on a bench structure manually operated (ciuf).This is a typical assembly-bench solution to treat components quickly and accurately.

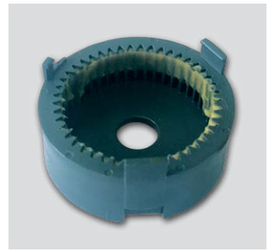


Doser mod. VVAP100 integrated on an automatic line for grease precision filling into automotive steering systems. The volumetric dose of 75cc is injected in a few seconds into the steering body. Extrusion pumps for 200Kg pails feed the system at 100bar.

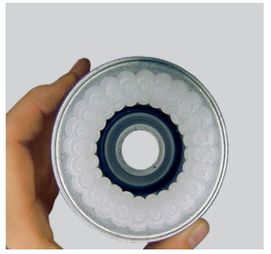
APPLICATION EXAMPLES



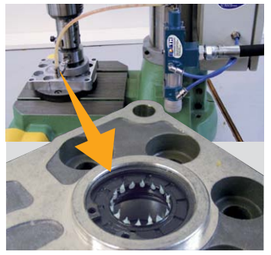
Micro dosing of grease into a circular cave Ø12mm, of the air collector of a household dryer. Dose of about 0,8cc dispensed in frontal crown by a special multi-channels terminal. The doser manually hold is equipped by a flow sensor VSF to check and certify the dose.



Micro dosing of grease into a Ø40mm rack and pinion of a planetary gearbox, before mounting the gears.Dose of about 0,2cc radially delivered by a customized terminal. Manual station.



Dosing of a silicon grease with high consistency to fill the breech of water pump.
The 20cc of grease are dosed in one only automatic cycle made by a doser VVAP30 that through a special terminal distributes the dose in a frontal crown.



Grease dose on a lip gasket during the assembling cycle of hydraulic actuator components.The doser VVAP1 is on board of a press with special customized terminals interchangeable and integrated in the punch of the press.

OPTIONAL ACCESSORIES



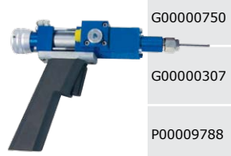
Technical Code	Commercial Code	Description
G00000266	VSF	Flow sensor ON/OFF **Suitable for VVAP05, 1 and 2.**
G00001599	VSFPZG	Flow analogic proportional sensor for greases **Suitable for VVAP05, 1 and 2.**
G00003440	VSFAP1/4" ON/OFF	High flows sensor 1/4" ON/OFF **Suitable for VVAP05, 1, 2 and 10.**
G00001342	VSFAP3/8" ON/OFF	High flows sensor 3/8" ON/OFF **Suitable for VVAP30.**
G00003684	VSFAP3/8" PZ	Proportional high flows sensor 3/8" **Suitable for VVAP30.**



Technical Code	Commercial Code	Description
G00003086	AIVP	Standard pneumatic vertical handle
G00003087	AIVPSF	Pneumatic vertical handle with sensor VSF
G00003686	AIVPPZO	Pneumatic vertical handle with sensor PZ for oils
G00003088	AIVPPZG	Pneumatic vertical handle with sensor PZ for greases
G00003904	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



Technical Code	Commercial Code	Description
G00000418	ASMVAP	Activation control for dosers VVAP, VVAPDV and VVFR.It verifies the doser activation and the pneumatic piston movement, at each cycle.



Technical Code	Commercial Code	Description
G00000750	AIPEV	Gun handle electrically operated
G00000307	AIPPV	Gun handle pneumatically operated
P00009788	AIPP30	Gun handle pneumatically operated **for VVAP30**
P00009937	AIPE30	Gun handle electrically operated **for VVAP30**