

PRISMA

STEPPER MOTOR DOSING PUMP



The PRISMA diaphragm and stepper motor metering pump is designed for applications requiring high precision dosing volumes and reliable repeatability. Thanks to the microprocessor controlled stepper motor and excellent pitch resolution of 1: 4800, the entire stroke and suction cycle is controlled with maximum precision.

The PRISMA dosing pumps ensure precise control of the stroke frequency and therefore a precise and low pulsation of the liquid additives even when dosing viscous substances. (max 10000 centi poise @ 10% slow mode).



SLOW MODE

With the exclusive SLOW MODE functionality of the PRISMA metering pumps, the stroke speed during the suction cycle can be reduced to 75%, 50% and even 25%. This feature facilitates the adaptation of the pump to the metering medium and increases the reliability and venting of high viscosity dosing media.

COLOR DISPLAY AND ENCODER CONTROL

The PRISMA dosing pump is equipped with an encoder for quick and easy menu navigation, as well as a large display for a convenient setting of the operating parameters and monitoring of the pump functions.

The intelligent multi-function software allows the operator to precisely set the dosage required by the application. This allows you to enter the desired value and read it directly in ml/h or l/h via the graphic display. All operating modes are displayed clearly and easily through self-explaining symbols.

OPERATING MODE

- > Constant
- > Proportional control by external input, mg/l (ppm) mode
- > Proportional control by external input, percentage (%) mode
- > Start-Pause
- > Weekly timer
- > External input (start and/or pause)

Operating messages are easily recognizable by different background colors of the display:



White: Pump in StandBy **Green:** Pump running **Red:** Alarm
Yellow: Warning (product in tank at minimum)

TURNDOWN FUNCTION

Prisma stepper motor-driven pumps give you the most accurate control over the stroke speed, providing an outstanding turndown ratio of up to 4800:1. It means prisma can split up the dosing process into a maximum of 4800 steps in order to

offer the most homogeneous and precise distribution of the product to dose according to the required application.

INPUTS

- Multi-function input for
- > Level (with pre-alarm)
 - > Pulse sender water meter (PPM mode, %, mlq, mA, V, pulse)
 - > Standby
 - > External contact (in a freezing process)

OUTPUT

- > alarm (common to all alarms)

INTERFACE

- > RS485
- > Modbus RTU

HYDRAULIC PARTS

- > PVDF
- > PP
- > stainless steel (AISI 316)
- > acrylic glass (PMMA)
- > double ball check valves
- > FKM B, EPDM, nitrile, PTFE O-rings

MEMBRANE

- > PTFE membrane

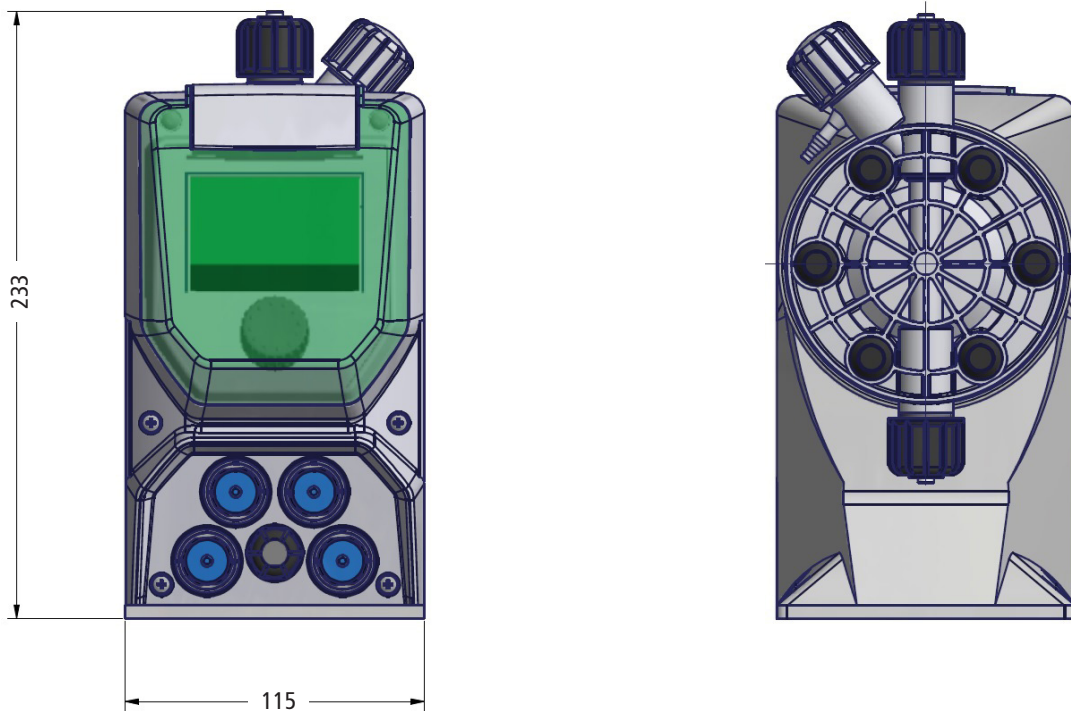
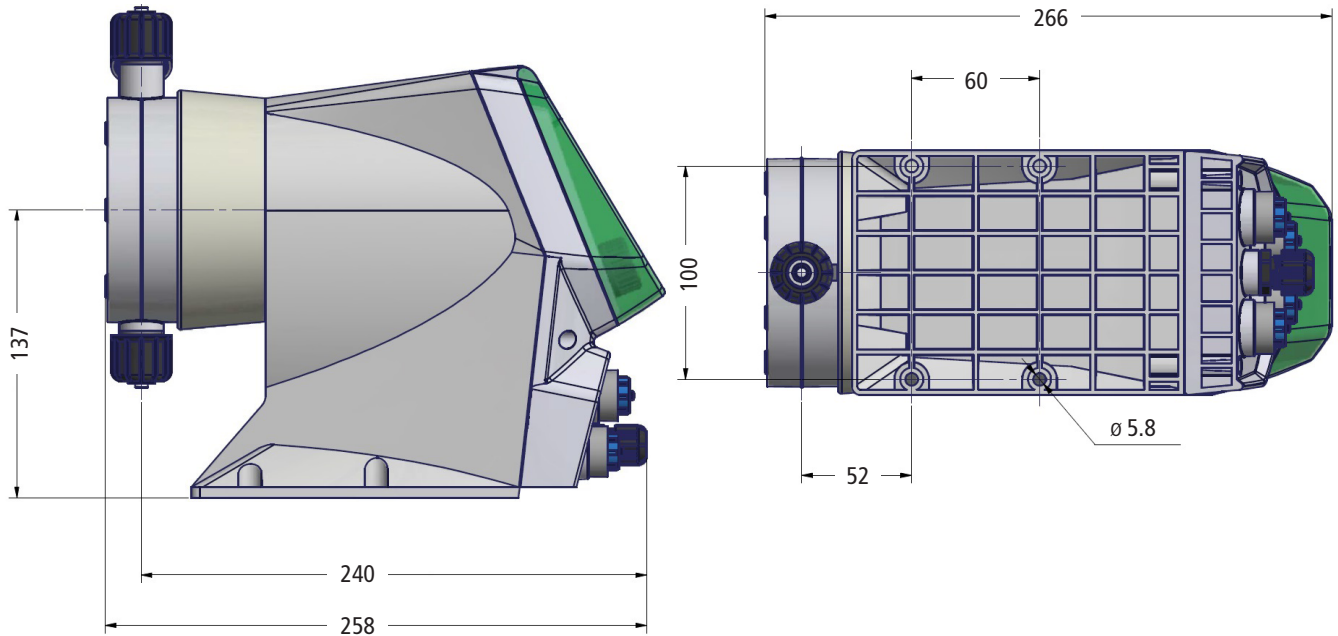
ACCESSORIES

- > 1/2", injector (made of PVDF or PP)
- > Axial bottom valve (made of PVDF or PP)
- > Empty signal level switch
- > 2m suction, suction and ventilation pipe (PVDF or PE and PVC)
- > INPUT multifunction cable
- > ALARM cable

MODEL		2004.5	10012	05025	02075
Flow	l/h	4.5	12	25	75
Pressure (max)	bar	20	10	5	2
Pump Head		L	M	N	N
Hoses		PVDF, PP, SS (AISI 316), Acrylic Glass (PMMA)			
Membrane		PTFE			
O-Ring		FKM B, EPDM, Nitril, PTFE			
Liquid-ends (S/D)	mm	4x6 / 4x6	6x8 / 6x8	8x12 / 8x10	8x12 / 8x10
Pump Head		3/8"	3/8"	1/2"	1/2"
Injection		1/2"	1/2"	1/2"	3/4"
Stroke Length reduction		1:4800			
Protection		IP65 Humidity 85% und T ≤ 40 °C; 70% und T = 50 °C (no condensation)			
Pump housing		PP plastic reinforced with glass fiber			
Installation class		II			
Pollution level		2			
Environment Temperature	°C	10 - 45			
Operating Temperature	°C	1 - 50			
Transport & Storage Temperature	°C	-10 - 50			
Power Supply		110 - 240 VAC, 50/60 Hz			
Energy consumption		30 W			
Inputs	Pulses	max. 24 VDC, max. 50 mA			
	Pulses (Hall)	max. 12 VDC, max. 50 mA, with extra output +12V			
	Analog	0 - 20 mA 0 - 10V (max load 500 Ω)			
Outputs	Alarm	Free contact relais N.O./C/N.C. max load 250 VAC, 2A			
Level connection		12 VDC, max. 50 mA			
Communication		RS485 Modbus RTU (Optional)			

DIMENSIONS (mm)

PRISMA 2004.5 and 10012



DIMENSIONS (mm)

PRISMA 05025 and 02075

