

## GOTEC EMS 10 Miniature Piston Pump

Solenoid Operated, Flow to 20 L/H (5.68 GPH)  
Pressure to 1.3 Bar (18.9 PSI)

### DESCRIPTION

Models EMS 10 and EMS 10-BD oscillating piston pumps are an economical solution for low volume liquid pumping applications where small size is a critical factor. All material in contact with fluid media is stainless steel or plastic

The pump is self priming.

### SPECIFICATIONS

#### GENERAL

Pump Materials-

Piston: 431 stainless steel

Springs: 316 stainless steel

Body & Connectors: POM plastic (Hostaform)

Duckbill Valves: NBR

Maximum Pressure- EMS 10: 1 bar (14.5 PSI)  
EMS 10-BD: 1.3 bar (18.9 PSI)

Maximum Flow- EMS 10: 10 L/H (2.64 GPH)  
EMS 10-BD: 20 L/H (5.68 GPH)

Suction Height- EMS 10: 3 meters (9.84 ft)  
EMS 10-BD: 1 meter (3.28 ft)

Viscosity Range- 1...600mm<sup>2</sup>/s

Particle Tolerance- 100 mesh

Supply Voltage- 12, 24, 110, 230VAC, diode rectified

Frequency- 50/60 Hz

DC Operation: Optional model PD-106 DC driver board



Electrical Connections- Male DIN Spade (3 x 6.3 mm x .08 mm),

ISO/DIN 43650 form B, or 130 mm flying leads

Coil Insulation- class F, class H on request, Class 1

Power Consumption- 18 W

Operating Factor- 100% continuous @ 68°F

Operating Ambient Temperature-1 to 50°C (33.8 to 122°F)

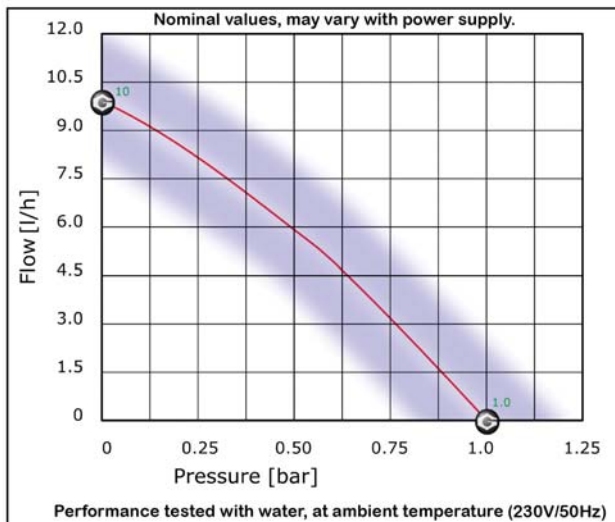
Noise Level- Dry Running ~45dbA, open flow ~32dbA, max pressure ~30dbA

Optional Mounting- Integral Heat Sink w/2ea 1/8" Holes 3/4" on center (see drawing)

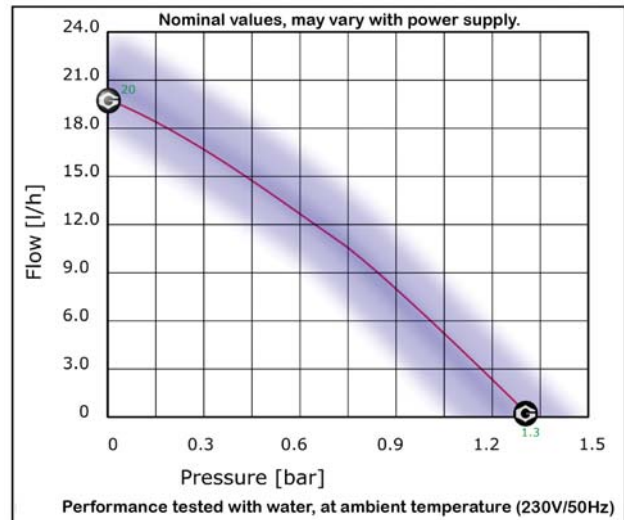
Weight- 95 g (0.21lb)

### FLOW CURVES

EMS 10

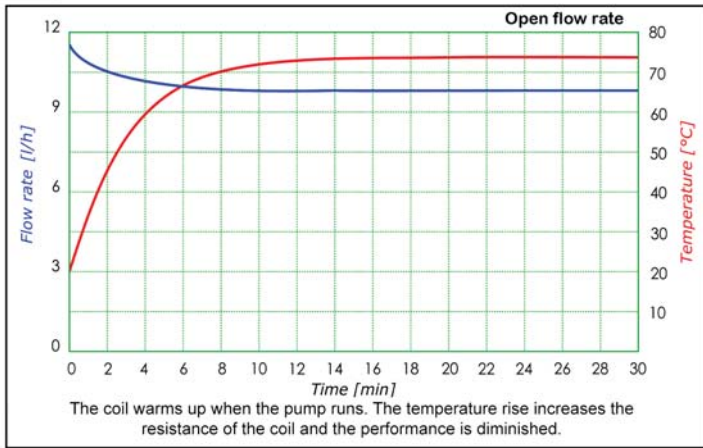


EMS 10-BD

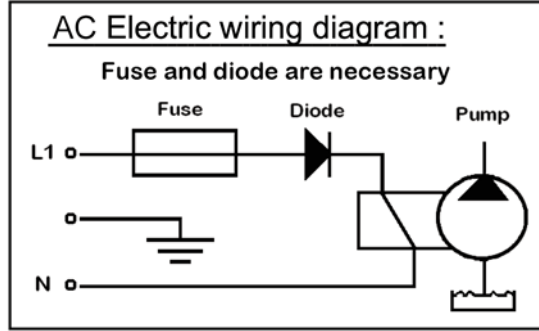


## EFFECT OF COIL TEMPERATURE RISE ON FLOW RATE

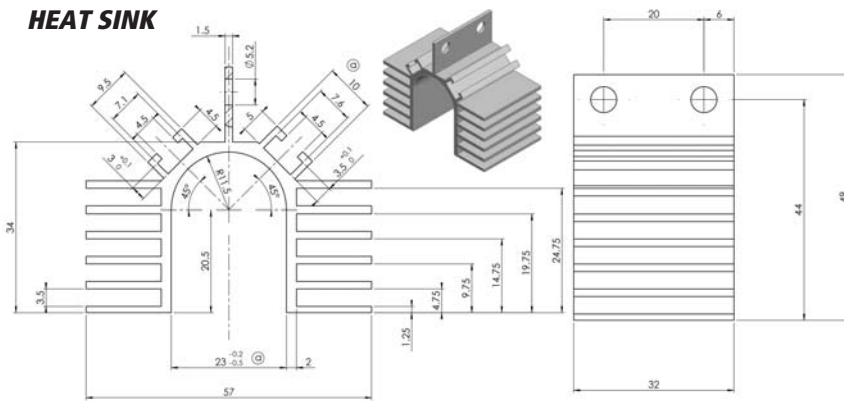
EMS 10



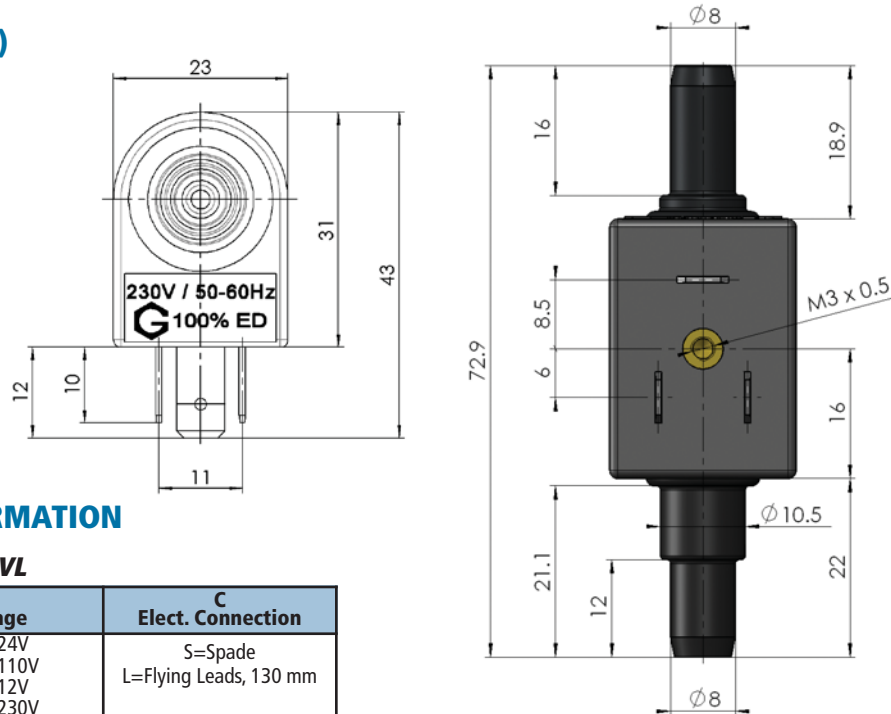
## ELECTRICAL



## HEAT SINK



## DIMENSIONS (MM)



## ORDERING INFORMATION

ABC  
EXAMPLE: EMS10-24V

A Model	B Voltage	C Elect. Connection
EMS10	24V=24V	S=Spade
EMS10-BD	110V=110V	L=Flying Leads, 130 mm
	12V=12V	
	230V=230V	

Options			
Model	Description	Model	Description
Model PD-106	DC driver board, 9-35 VDC in, 9-35V pulsed DC out	106628	Heat Sink
Model 1N5406	Diode		