MG1000 Series - Data Sheet



Micro Gear Liquid Pump Range

Overview: High Pressure Pump Range, Self Priming, Brushless Drive

The MG1000 series range of pumps deliver consistent flow with high or low pressure. It is suitable for low or high viscosity liquids and is self-priming. The body is constructed from precision CNC machined aluminium alloy and wetted parts are stainless steel, PEEK and polyacetal. The MG1000 range can be used with all common liquids and also resists most chemicals and solvents. The pump has two tubing connector options; stainless steel threaded tubing connectors for quick and easy to connection to tubing, or for directly mounting to your manifold. Flow is reversible.

Pump Variants



MG1000 Range - Available in different flow and pressure variants

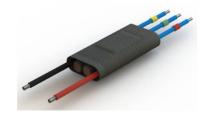


Note.

The MG1000 pump range utilizes high performance, efficient sensorless brushless motor technology.

These motors require a separate controller to operate and TCS Micropumps offer the EQ range of controllers for this purpose.





Typical Applications

- Medical devices
- Fuel Cells
- High Pressure Fuel Pump
- Cooling Systems
- Precision Flow
- Lubrication systems

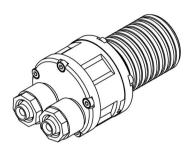
Features

- High pressure capability
- Self-priming
- High and low viscosity liquids
- Smooth almost pulseless flow
- Reversable flow
- CNC aluminum alloy construction
- Small size only 55 x 35 x 35 mm
- Weight 110g

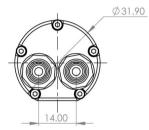


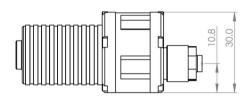
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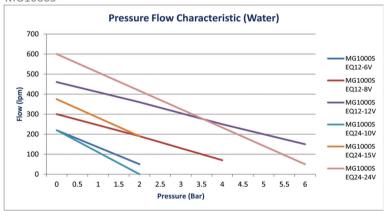


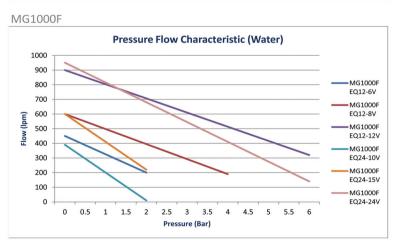
Connectors to suit 4mm bore tubing





MG1000S





Pressure shown is the not to exceed value. All MG1000 pump variants are capable of more than the indicated figure but exceding this may result in damage to the pump.

Materials

Wetted Parts

- Anodised 6000 Series Aluminum
- 316 Stainless Steel
- Viton
- Peak
- Polyacetal
- Materials typical to a Brushless Motor

Performance Data

Small Size
 70 x 32 x 30mm

Weight 104 grms

Opperating Temp -20 to 100 deg C

Smooth Pulseless Flow

IP Rating - Standard pumps IP67

Noise Levels

Measured at a distance of 1m with a 50dB ambient noise level

Viscosity upto 150,000 cSt

MTBF Stock Pumps 10,000hrs
Special Variants available to order >100,000hrs

Variant	Input	Power	Flow	Pressure
MG1000S	(V)	(W)	(ml/min)	(Bar)
EQ12	6	3.6	220	2
	8	7.8	300	4
	10	13.7	390	6
	12	17.3	460	6
EQ24	10	3.8	220	2
	15	7.5	375	2
	20	14.2	500	4
	24	21.2	600	6

Variant	Input	Power	Flow	Pressure
MG1000F	(V)	(W)	(LPM)	(mBar)
EQ12	6	8.0	450	2
	8	16.6	600	4
	10	27.6	760	6
	12	33.2	900	6
EQ24	10	6.3	390	2
	15	10.4	600	2
	20	20.8	800	4
	24	336	950	6

Performance for stock pumps running on TCS Coolant