

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 connection to tubing, or for directly mounting to your manifold. Flow is reversible.

Pump Variants



MG1000 Range - Available in different flow and pressure variants

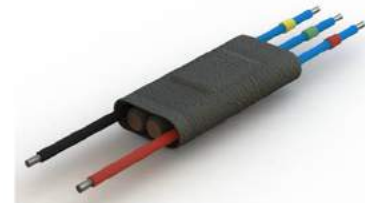
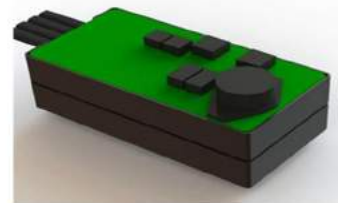


MG1000M - Manifold mount variant of the MG1000

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.

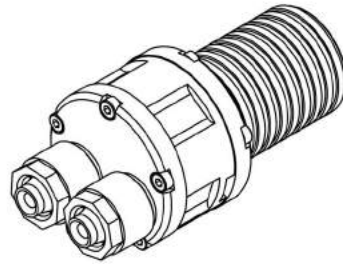
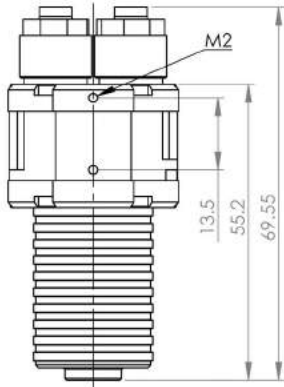


Typical Applications

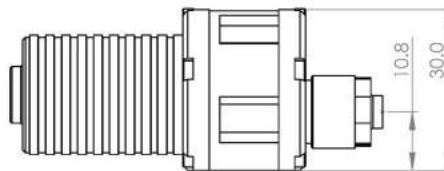
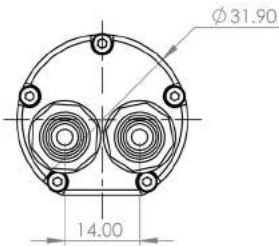
- Medical devices
- Fuel Cells
- High Pressure Fuel Pump
- Cooling Systems
- Precision Flow
- Lubrication systems

Features

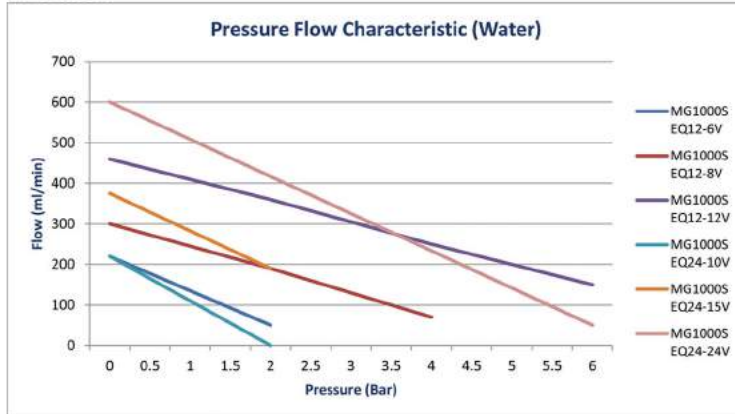
- High pressure capability
- Self-priming
- High and low viscosity liquids
- Smooth almost pulseless flow
- Reversible flow
- CNC aluminium alloy construction
- Small size only 55 x 35 x 35 mm
- Weight 110g



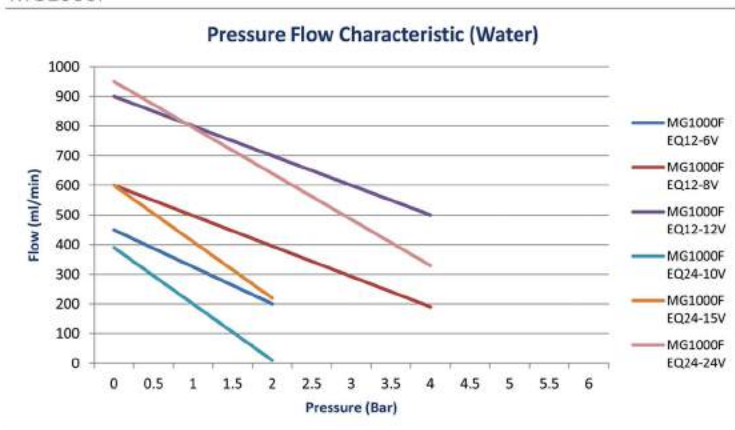
Connectors to suit 4mm bore tubing



MG1000S



MG1000F



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

Materials

Wetted Parts

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

Performance Data

- Small Size 70 x 32 x 30mm
- Weight 104 g
- Operating Temp -20 to 100 deg C
- Smooth Pulseless Flow
- IP Rating - Standard pumps IP67
- Noise Levels 15dB
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 (V)	Power (W)	Flow (ml/min)	Pressure (Bar)
MG1000S	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 (V)	Power (W)	Flow (ml/min)	Pressure (Bar)
MG1000F	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	33.6	950	6

Performance for stock pumps running on TCS Coolant