



MGD1000 Brushless Micropump

RS MICROPUMPS: 8170722, 8170734, 1253560, 1253561, 1253562,

(Patents Pending, Quality Assured ISO 9001, RoHS compliant)

INTRODUCTION

The RS MGD1000 Micropump is a high-quality miniature pump for liquids. It is highly efficient, small, and lightweight. The solid construction and wide temperature tolerance, enable it to perform reliably even in hostile environments. Your Micropump can be quickly and easily installed into the smallest spaces, in a vast range of laboratory, prototype and production equipment. It is self-priming, and the direction of flow is reversible.

ELECTRICAL CONNECTION

The M510 Micropump is driven by sensorless brushless motor technology and will require an electronic driver circuit to be used (RS 1253560, 1253561 and 1253562 includes the EQi-MG1 brushless driver. RS 8170722 and 8170734 are pumps only and require a driver).

3 wire DC Sensorless Brushless Motor
Supply Voltage: 6-28V (EQi-MG1)

RS Micropumps Electronic Driver Units

If a brushless motor controller is not available, then RS recommend the EQi-MG1 driver board. This is a small lightweight device which are installed in-line with the pump's own wiring. The EQi-MG1 offers speed and flow control via on-board potentiometer or external 0-4v analogue control with a wide 6-28v input voltage range in which the driver will monitor and govern speed accordingly.

Materials

Wetted materials include – 316 Stainless Steel, PEEK, PET, Ertalyte, Nickel, FKM



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TUBING CONNECTION

The MGD1000 series as standard are supplied with push-fit connectors suitable for 6mm OD tubing. The connectors are removable. The pump housing has 2 x G1/8 (1/8th BSP) threaded ports on its front face that are suitable for a wide range of tubing connectors.



Notes on Operation

IP45 Protection Rating

Micropump life is increased at lower operating voltage/speed/pressure.

It is not advised to run your Micropump when dry for long periods.

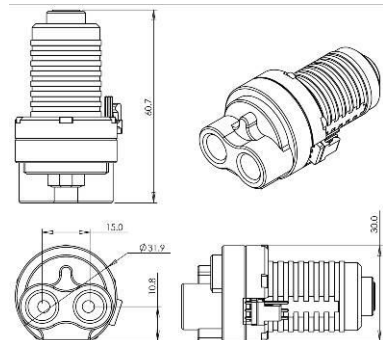
The pump must not exceed the maximum operating temperature of 80°C.

Maximum Operating Pressure

MGD1000P	-	10.0 Bar (145psi)
MGD1000	-	8.0Bar (116psi)
MGD1000F	-	4.0Bar (58psi)

Maximum Continuous Pressure

MGD1000P	-	7.5 Bar (145psi)
MGD1000S	-	6.0Bar (116psi)
MGD1000F	-	3.0 Bar (58psi)



CAUTION

Do not exceed the maximum operating pressure for your pump
Do not exceed the maximum operating current draw of 2 amps.
Exceeding these limits may cause damage to the Micropump.