



MGD2000 Brushless Micropump



TCS MICROPUMPS: MGD2000 (all models)

(Patents Pending, Quality Assured ISO 9001, RoHS compliant, IP45 (Standard) IP67 (Waterproof) protection rating)

INTRODUCTION

The TCS MGD2000 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 MGD2000 Micropump is driven by sensorless brushless motor technology and will require an electronic driver circuit in order to be used (supplied separately). This can be designed into your own control electronics or you can choose one of the standard control units

3 wire DC Sensorless Brushless Motor
Supply Voltage: 12-30Vdc (Applied to EQi-MG2 driver board)

TCS Micropumps Electronic Driver Units

If a brushless motor controller is not available then TCS Micropumps recommend the EQi-MG2 driver board. This is a small lightweight device which is installed in-line with the pump's own wiring. The input voltage can be varied to suit the flow you require.

EQi-MG2 driver - Can be used for supply voltages up to 30v.
See the Accessories page on the website <http://www.micropumps.co.uk>

Materials

Housing	Anodised Aluminium
Tubing Connectors	Stainless Steel 316
Gears	PEEK
Volute	Ertalyte
Seals	Viton

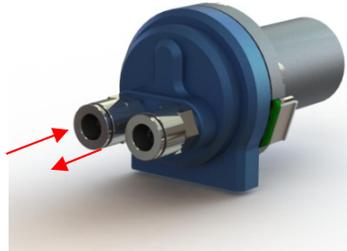
TUBING & CONNECTORS (Standard flow direction shown)

Tube Connection

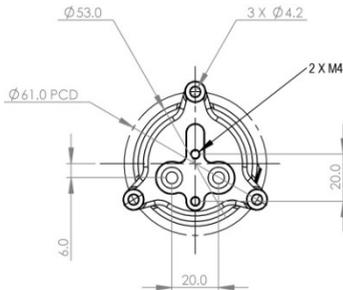
Supplied with connectors to suit 6mm ID 8mm OD tubing. TCS-613: Semi-rigid tubing 6.0mm bore and a range of various inline connectors are available to order from <http://www.micropumps.co.uk> (see the accessories page on the website)

Connectors are removable exposing a 1/8BSP thread to fit a connector of your choice.

In all installations the flow from the pump can be reversed by swapping any 2 of the 3 wires in the pump connection cable.



Manifold Connection MGD2000-M



Notes on Operation

Micropump life is increased at lower operating voltage/speed.

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

Maximum Operating Pressure

MGD2000S	-	10.0Bar (147psi)
MGD2000F	-	6.0Bar (88psi)

CAUTION

Do not exceed the maximum operating pressure for your pump
Do not exceed the maximum operating current draw of 6.5amps.
Exceeding these limits may cause damage to the Micropump.