# **M500 Series - Data Sheet**



# Micro Centrifugal Liquid Pump Range

## Overview: Longlife, High Performance, Pump for Liquids

The M500 series range of pumps are driven by powerful brushless drive motors and can deliver unparalleled flow for their size. Constructed from precision CNC machined aluminium alloy with stainless steel tubing connectors and utilising a sealless pump design as standard. Optional seals, wetted part coatings and materials are also available enabling this pump range to suit most applications and resist most chemicals and solvents.

The pump uses efficient push fit connectors designed for 8.0mm flexible tubing.

### Pump Variants



M500S - Standard pump suitable for most applications

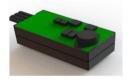


M500-SUB - Pump for submersion in pumping medium





The M500 pump range utilize 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**

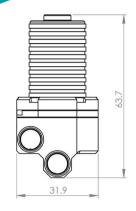
- Medical devices
- **Fuel Cells**
- **Battery and Solar Powered Systems**
- **Cooling Systems**
- Low Pressure Fuel Pump
- Lubrication systems

### **Features**

- Sealed waterproof design
- Sensorless, brushless drive motor
- CNC aluminum alloy construction
- Quiet pulseless smooth flow
- Small size only 64 x 32 x 31mm
- Weight 100g
- Free flow up to 10 litres per minute (water)
- Wide range of chemical resistance

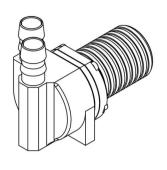


# **M500 Series - Data Sheet**



47.3

**Pressure Flow Characteristic (Water)** 



Connectors to suit 8.0mm bore tube

### Materials

#### Wetted Parts

- Anodised 6000 Series Aluminum
- 316 Stainless Steel
- Viton
- Polyacetal

#### Other

Materials typical to a Brushless Motor

### Performance Data

- Small Size
- 64 x 32 x 31mm
- Weight
- 100 102 grms
- Oppertaing Temp
- -20 to 100 deg C
- Smooth Pulseless Flow
- IP Rating Standard pumps
- IP67

- Noise Levels
- <15dB
- ivicasured at a distance
- Measured at a distance of 1m with a 50dB ambient noise level
- MTBF Stock Pumps
- 10,000hrs
- Special variants available to order
- >100,000hrs

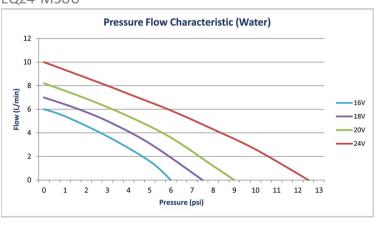


OUTLET

inlet Variants,

EQ12-M500

Flow (L/min)



Pressure (psi)

Variant	Input	Power	Flow	Pressure
	(V)	(W)	(LPM)	(mBar)
EQ12-M500	6.0	6.5	3.4	69
	10.0	12.6	6.3	344
	12.0	15.6	8.0	482
EQ24-M500	16.0	19.2	6.0	413
	18.0	22.8	7.0	517
	20.0	25.2	8.2	620
	24.0	32.4	10.0	861

(All M500 pump variants have the same performance)