



## *M510 Brushless Micropump*

**RS MICROPUMPS: 8170772, 8170781, 1253583, 1253555, 1253556, 1253557, 1253584.**

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

### ***INTRODUCTION***

The RS 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.

### ***ELECTRICAL CONNECTION***

The M510 Micropump is driven by sensorless brushless motor technology and will require an electronic driver circuit in order to be used (not supplied). This can be designed into your own control electronics or you can choose one of the standard control units that RS manufacture.

3 wire DC Sensorless Brushless Motor  
Supply Voltage: 6-24VC

### ***RS Micropumps Electronic Driver Units***

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

***EQi-M driver - Can be used for supply voltages up to 24v.***

### ***Materials***

Housing	Stainless steel 316 / PEEK / Anodised Aluminium (manifold Version)
Tubing Connectors	Stainless Steel 316
Impeller	Polyacetal
Seals	Viton

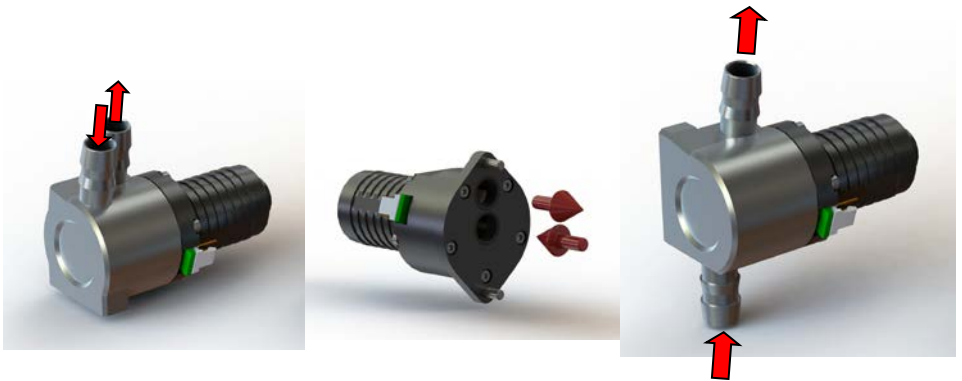


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### **TUBING & CONNECTORS**

The connectors are designed to accept flexible tubing 8.0mm I.D.

Standard flow direction as shown



### **Notes on Operation**

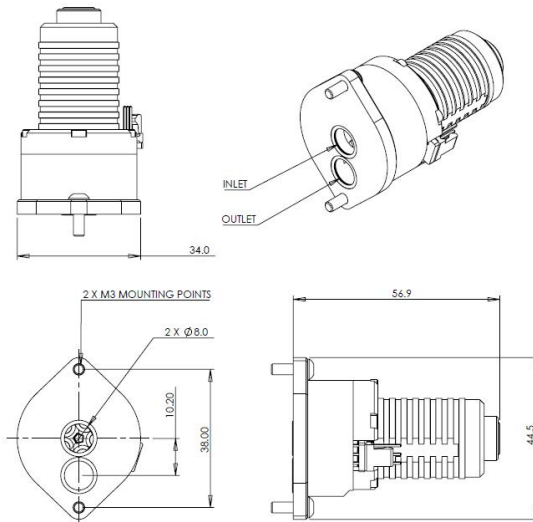
The M510 series Micropumps are required to be filled with liquid (primed) before they can operate.

**DO NOT run your Micropump dry. Ensure that the pump has been primed before use.**

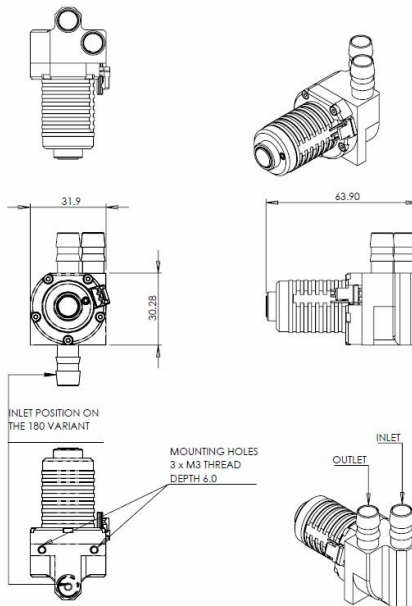
Standard pump IP44 Protection Rating

Waterproof, IP67 variants are available

## M510M dimensions

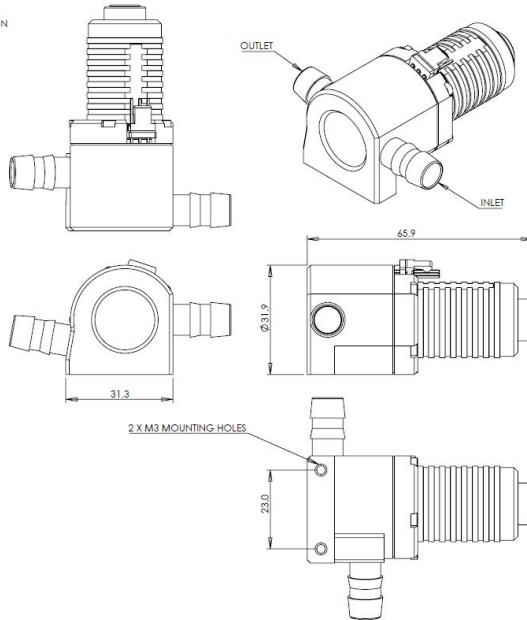


## M510S-180 dimensions



# M510S dimensions

STAINLESS STEEL VOLUTE  
180 DEG CONFIGURATION



# M510S Performance Data 040422

## M510S Performance Data

All tests conducted on TCS coolant at 12v using an EQ Controller

DATE  
15.02.18  
Operator  
WJ

