



## INTRODUCTION

The 03202 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

**CAUTION: REVERSED OR INCORRECT CONNECTION WILL PERMANENTLY DAMAGE THE ELECTRONICS IN YOUR PUMP!**

**Voltage: 3.0 to 12.0 Volts dc**

The simplest connection is Red, Green and Grey together to +ve (Positive) supply, Black to -ve (Negative) of supply

Wire Colour	Item	Standard	Connection
Black	GND	The negative connection	Required
Grey	VM (Motor Power)	3.5-12.0VDC (Motor Speed Control) for motor	Required
Red	Vcc - Electric Circuit Supply	12VDC (3.5-12.0VDC)	Required
Green	CW/CCW (Motor Rotation)	CW: to Vcc; CCW: to GND (Connect To Positive Vcc)	Required
Yellow	RPM	GND / Vcc 4 pulse / revolution square wave signal	Optional

Your Micropump can be connected to batteries

Pumping rate can be adjusted by varying input voltages between 3.0v and 12.0v dc. Further fine tuning can be made by restricting the outlet of your pump using a fixed jet restriction or flexible tubing and an adjustable clamp. The P 03202 pump is quite happy to run even with the outlet completely blocked. Pressure inside the pump will increase; yet load on the drive motor will reduce as flow is reduced.

Micropump life is increased at lower operating voltage/speed. Do not run your Micropump when dry.

**(DO NOT IMMERSE YOUR MICROPUMP UNLESS YOU HAVE A SUBMERSIBLE OR WATERPROOF VERSION)**

## MATERIALS

Housing: Anodised aluminium alloy  
Tubing connectors: Stainless steel  
Impeller: Polyacetal  
Seals: "Viton"