



D250BLZ-L **Brushless Micropump**

TCS MICROPUMPS: D250BLZ-L

(Patents Pending, Quality Assured ISO 9001, RoHS compliant, IP23 protection rating)

INTRODUCTION

The TCS Micropump is a high-quality miniature pump for liquids and gases. 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 6.0 Volts dc (Maximum 0.5Amps)

The simplest connection is Red +ve (Positive) supply, Black to -ve (Negative) supply with the pump output controlled via the supply voltage.

Wire Colour	Description	Connection	Status
RED	Supply	+Ve	Required
GREEN	Speed control Signal	Speed Signal Output	Optional
YELLOW	CW/CCW control	-Ve Motor rotates counter clockwise viewed from output shaft end when connected and clockwise if unconnected.	NOT USED
BLACK	Supply	-Ve	Required
BLUE	PWM Speed Control	Connect to PWM signal to adjust motor speed. Motor runs full speed if unconnected	Optional

Your Micropump can be connected to batteries, a DC power source of up to 6V or a TCS power supply TCS-600 (see accessories page on website).

Pumping rate can be adjusted by varying input voltages between 3.0v and 6.0v dc.



D250BLZ-L Brushless Micropump

MATERIALS

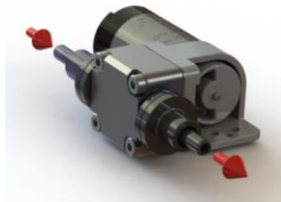
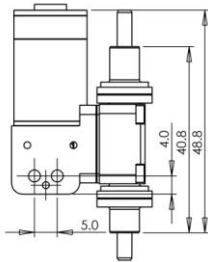
Motor housing	Polymer
Tubing Connectors	Polycarbonate
Pump Head	Anodised aluminium (6000 series)
Valves	Silicon (DEHP- and latex-free)
Diaphragm	Viton or EPDM
Fixings	Stainless Steel A2

TUBING

D200 series: 2.4mm (3/32") bore flexible tubing

NOTES ON OPERATION

All 'D series' pumps are self priming by design. Simply connect the pump into your flow circuit, noting the flow direction shown below, and begin pumping.



Accessory - TCS-303
Flow reversing manifold
For use with both gases and
liquids. Changes the direction
of flow within a given circuit

PERFORMANCE

GENERAL

VOLTAGE RANGE 3.0 – 6.0 Vdc

POWER USAGE 0.6 – 2.4 W

AIR

FLOW: FREE FLOW 0 – 610 mL/min
PRESSURE MAX 200 mBar (3 psi)

WATER

FLOW: FREE FLOW 0 – 160 mL/min
PRESSURE MAX 340 mBar (5 psi)