



D250BL-L Brushless Micropump



TCS MICROPUMPS: D250BL-L (all models)

(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.

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)

ELECTRICAL CONNECTION

Voltage: 3.0 to 6.0 volts dc (Maximum 0.5 Amps) Liquids

Simplest connection is Red, Green and Grey together to +ve (Positive) supply, Black to –ve (Negative) of supply

Wire Colour	Description	Connection	Status
Black	GRD The negative connection	-Ve	Required
Grey	VM Motor Power Supply	+Ve 3.0-6.0	Required
Red	Vcc Onboard Controller Supply Circuit	+Ve 3.0-6.0	Required
Green	CW/CCW Motor Rotation	+Ve 3.0-6.0	Required
Yellow	RPM Signal Wire	GND Vcc 4 pulse / revolution square wave signal	Optional

Your Micropump can be connected to batteries or TCS power supply TCS-600 (see accessories page on website).

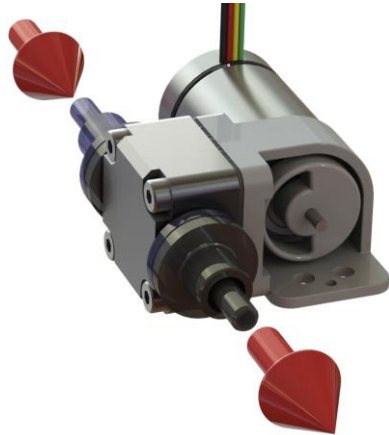
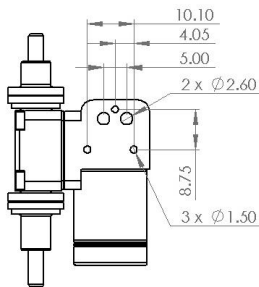
Pumping rate can be adjusted by varying input voltages between 3.0v and 6.0v dc.

MATERIALS

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

TUBING & CONNECTORS

(Standard flow direction shown)



TUBE CONNECTION

TCS-602: Flexible tubing 2.4mm bore and a range of various inline connectors are available to order from <http://www.micropumps.co.uk/TCSAccessories.html> (see the accessories page on the website)

NOTES ON OPERATION

DO NOT IMMERSE YOUR MICROPUMP

Micropump life is increased at lower operating voltage/speed/pressure.

Do not operate above 1bar (14.5psi) or against a closed outlet as permanent damage can occur

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