D10K Micropump Range for Gases

TCS MICROPUMPS: D10K

(Patents Pending, Quality Assured ISO 9001, RoHS compliant, IP45 protection rating)

Introduction

The TCS D10k Micropumps are high-quality pumps designed for use with gases. They are highly efficient, small and lightweight. The solid construction and wide temperature tolerance, enable them 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 D10K 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 TCS manufacture.

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

TCS Micropumps Electronic Driver Units

If a brushless motor controller is not available then TCS micropumps recommend the EQ12, EQ20 or EQ24 driver boards. These are small lightweight devices which are installed in-line with the pump's own wiring. The input voltage can be varied to suit the flow you require.

EQ12 driver - Can be used for supply voltages up to 12v.
EQ20 driver - Can be used for supply voltages from 6.5 to 24v
EQ24 driver - Can be used for supply voltages up to 24v.
See the Accessories page on the website http://www.micropumps.co.uk

Materials

Housing	Aluminium
Seals	EPDM
Fixings	Stainless Steel 316
Internal fixings	Nylon

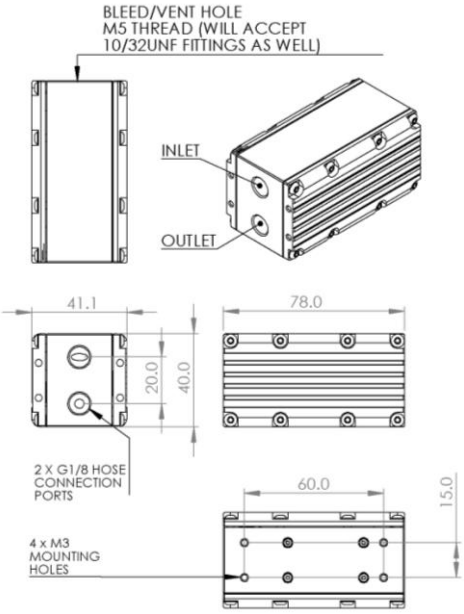
D10K Micropump Range for Gases

Mounting & Hose Connections

4 x M3 Mounting holes are located on the underside of the pump

2 x G1/8 threaded ports to enable hose connections of the users choice to be fitted

1 X M5 threaded port for venting purposes. Blank off with a plug if not required
Note connectors shown for illustrative purposes only and are not supplied



Notes on Operation

Pump life will be improved by operating the pump at the slowest speed that delivers a satisfactory flow.

Pump noise is greatly improved by placing a silencer on the intake port or by running a tube from this port to a place where the noise emitted is not sensitive.

CAUTION !

Do not exceed the maximum operating pressure of 8psi
Do not exceed the maximum operating flow of 12lpm
Do not exceed the maximum operating current draw of 2.0 Amps.
Do not operate on liquids

Exceeding these limits may cause damage to the micropump.