



V4000 RANGE Overview:



PUMP TECHNOLOGY

The TCS V4000 Micropump is a high-quality vane pump for pumping liquids. It is highly efficient, self-priming and capable of pumping large volumes of fluid at pressure. This pump is powered by our EQI-V3 Controller (12v/24v) and can be found on our accessories page.

The V4000 Micropump is driven by sensorless brushless 'Out-runner' motor technology. This drive system requires an electronic driver circuit in order to be used, and for optimal thermal efficiency this drive controller has been mounted to the pumps casing.

Delivering a smooth consistent, almost pulseless flow, throughout the pressure range, these pumps are particularly suitable for systems where pressure and flow consistency are key requirements.

KEY FEATURES

- High pressure capability
- Self-priming
- Smooth almost pulseless flow
- Reversible flow
- Small size 134 x 106 x 104mm
- 10mm OD G1/4 thread Push-it connectors

TYPICAL APPLICATIONS

- Medical devices
- Fuel cells
- High pressure fuel pump
- Cooling Systems
- Precision flow
- Lubrication



V4000 RANGE Performance:

See further data below:

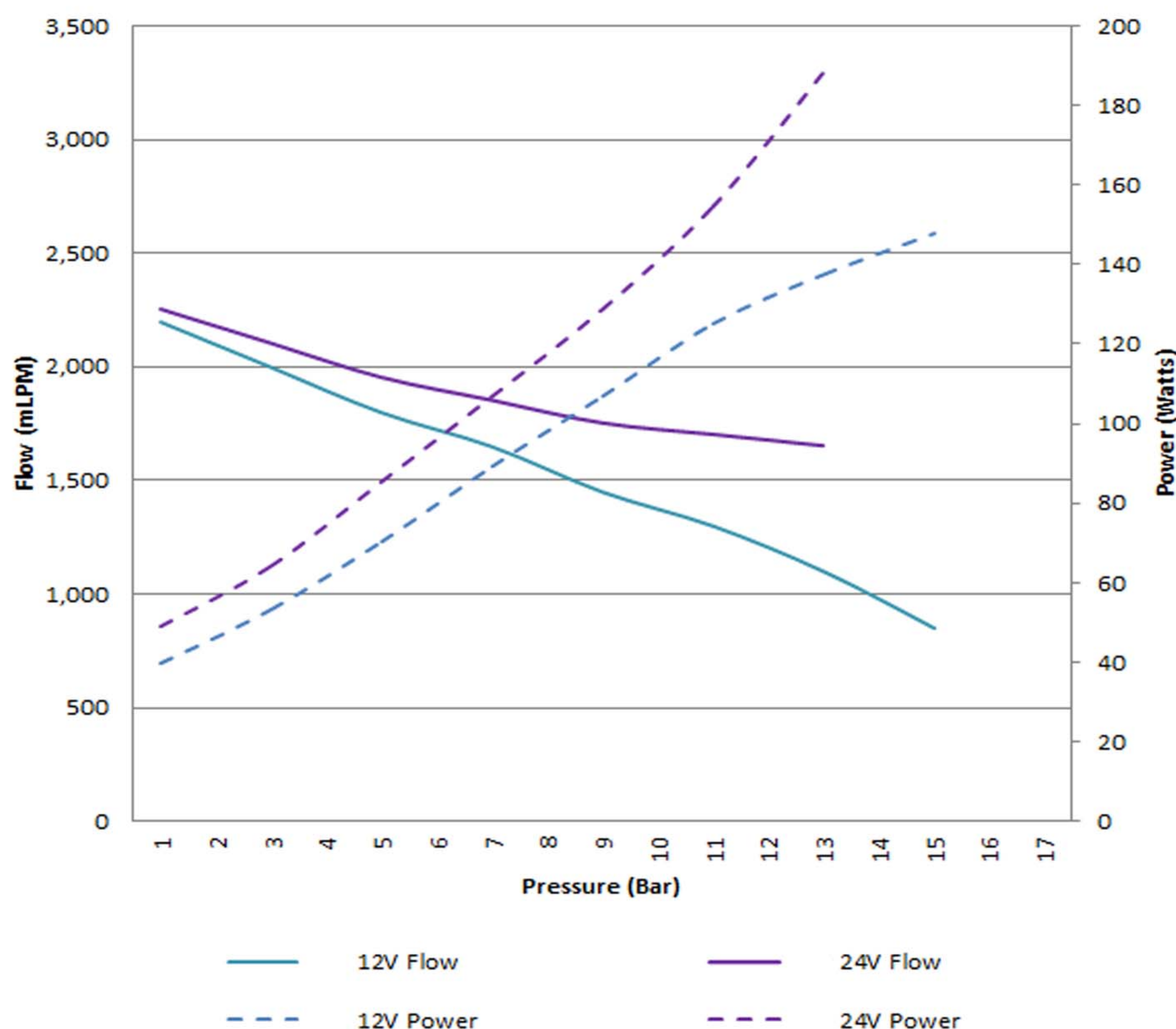
- **Size:** 134 x 106 x 104mm
- **Weight** 2200 grams
- **Operating temp:** 0-100 deg C
- **Typical life** >10,000 hours
- **IP Rating - Standard** IP21
- **Max system pressures** 25Bar

Voltage		Operating at 12v	Operating at 24v
Power	Minimum	40W	50W
	Maximum	160W	190W
Flow	Minimum	800ML/MIN	1100ML/MIN
	Maximum	2200ML/MIN	2250ML/MIN
Max pressure (BAR)	RECOMMENDED	15	15
	ABSOLUTE	15	15

DEPENDING ON MEDIUM & TEMPERATURE

V Series Operating range:

The V4000 series is capable of more than indicated, but exceeding these recommended operating ranges may result in damage to the pump and controller. These results were obtained with an EQI-3 being powered at 12v and 24v on TCS coolant. The graph below is displaying the **RECOMMENDED** performance figures compared against each variant.



V4000 RANGE

Other details:

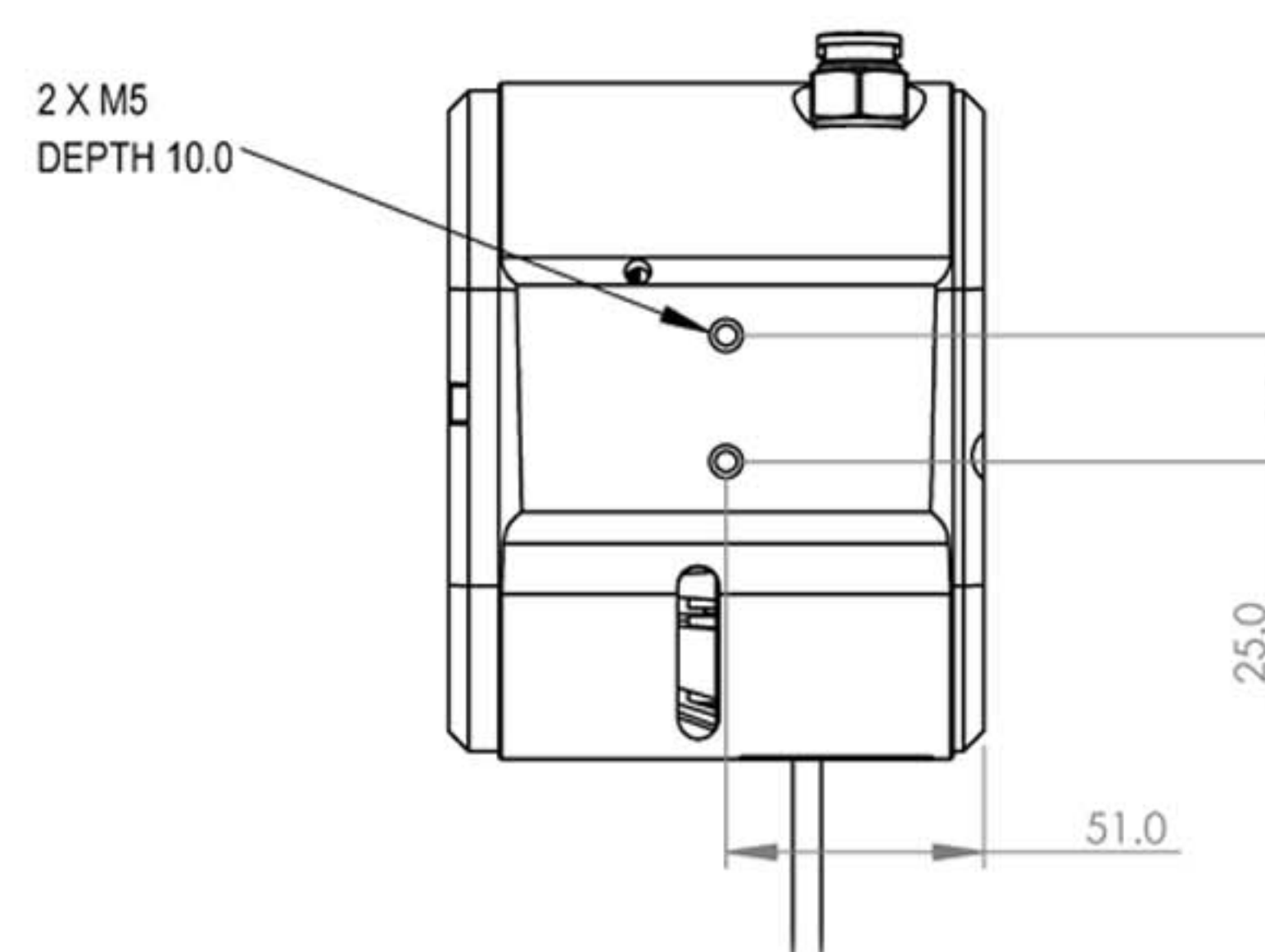
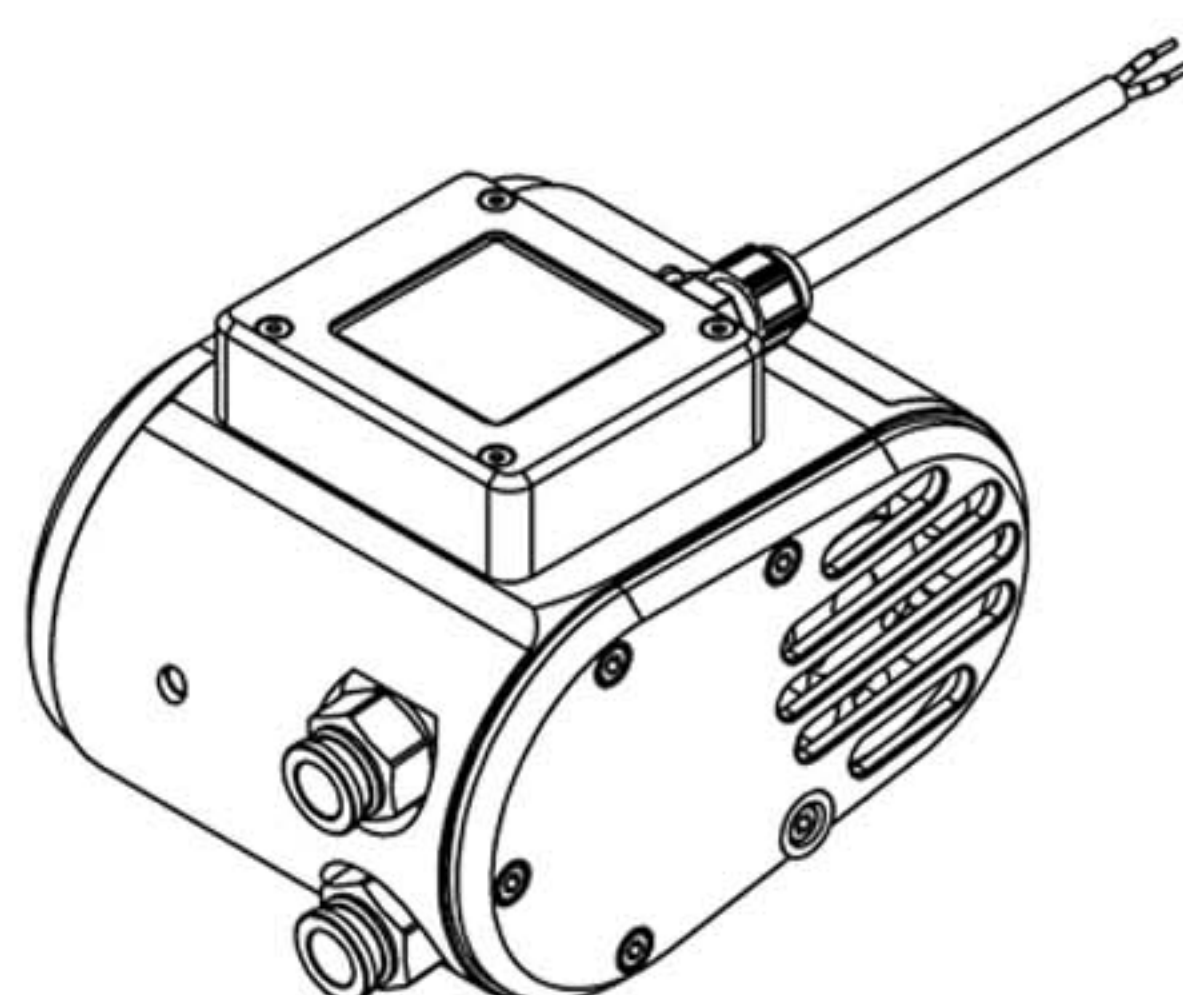
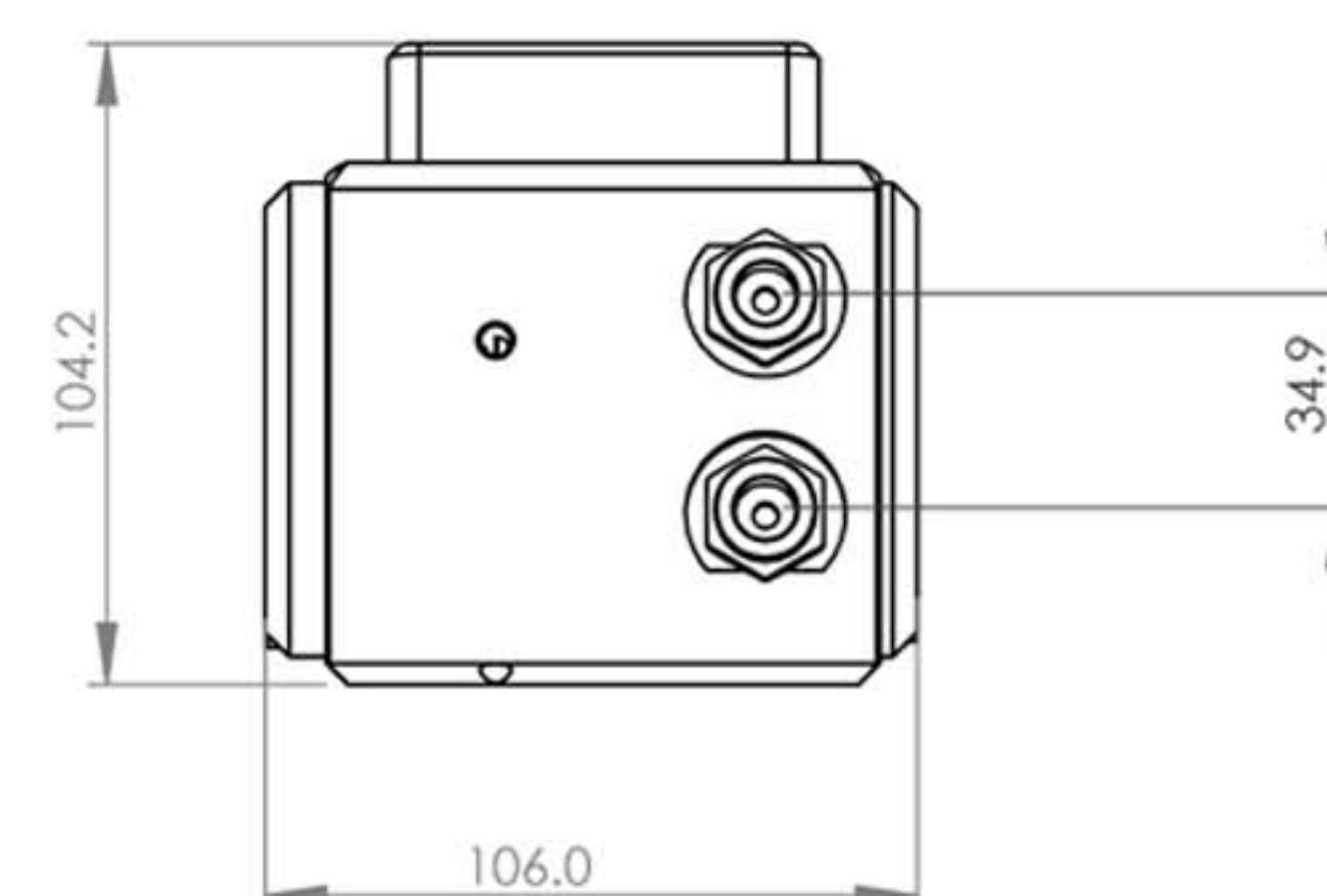
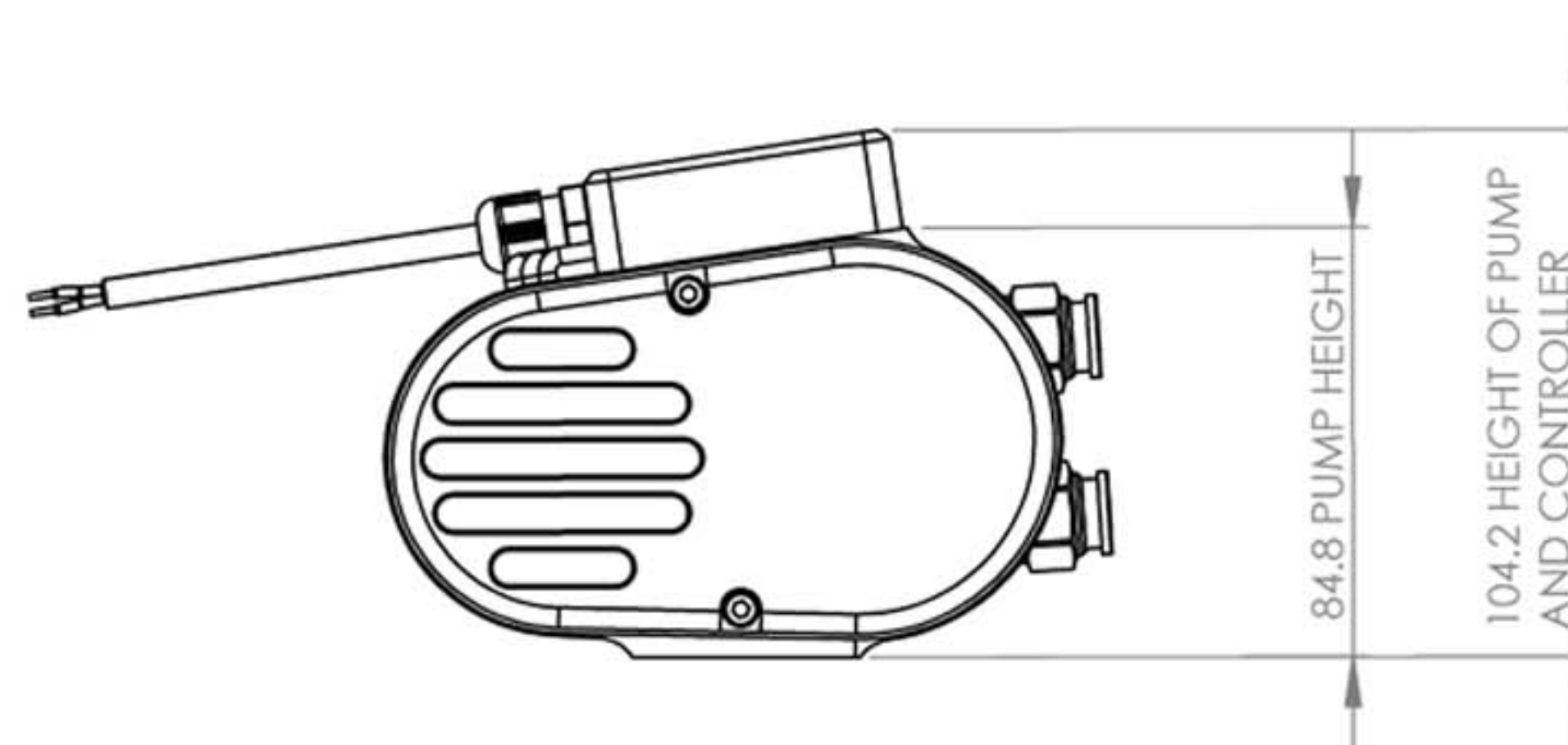
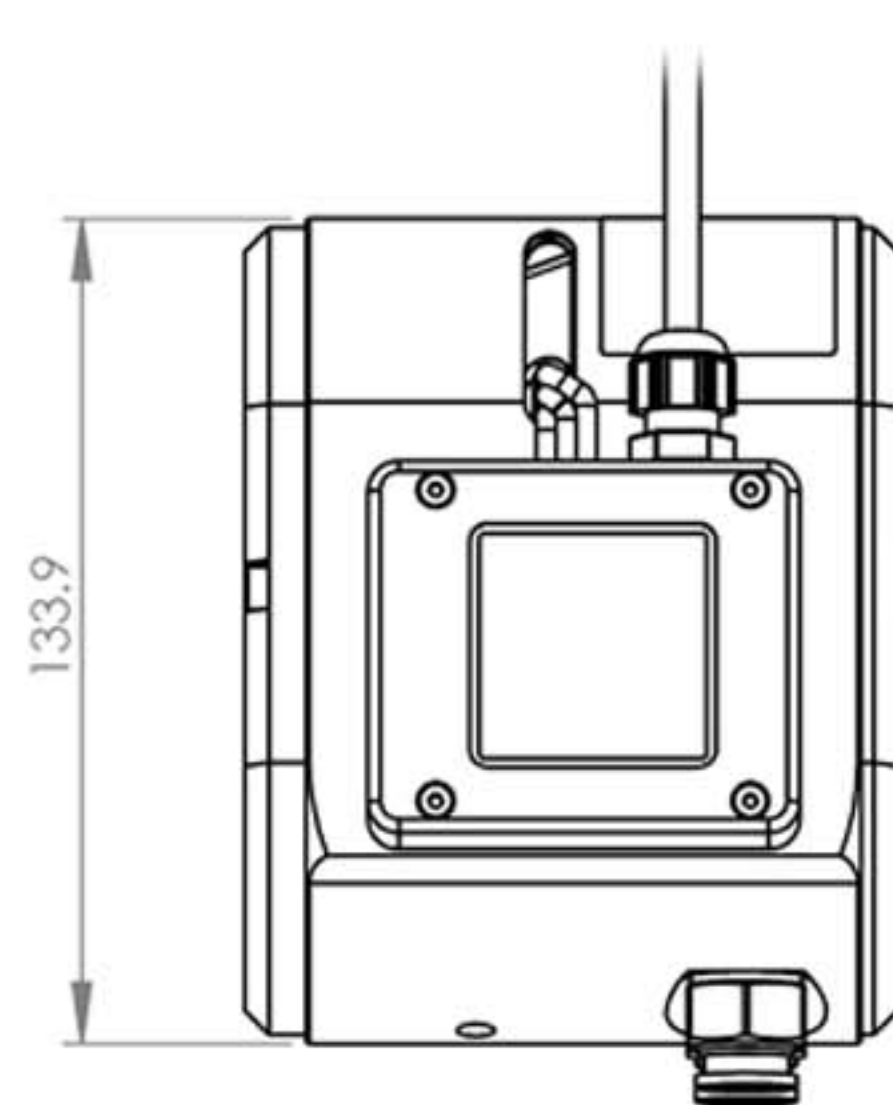
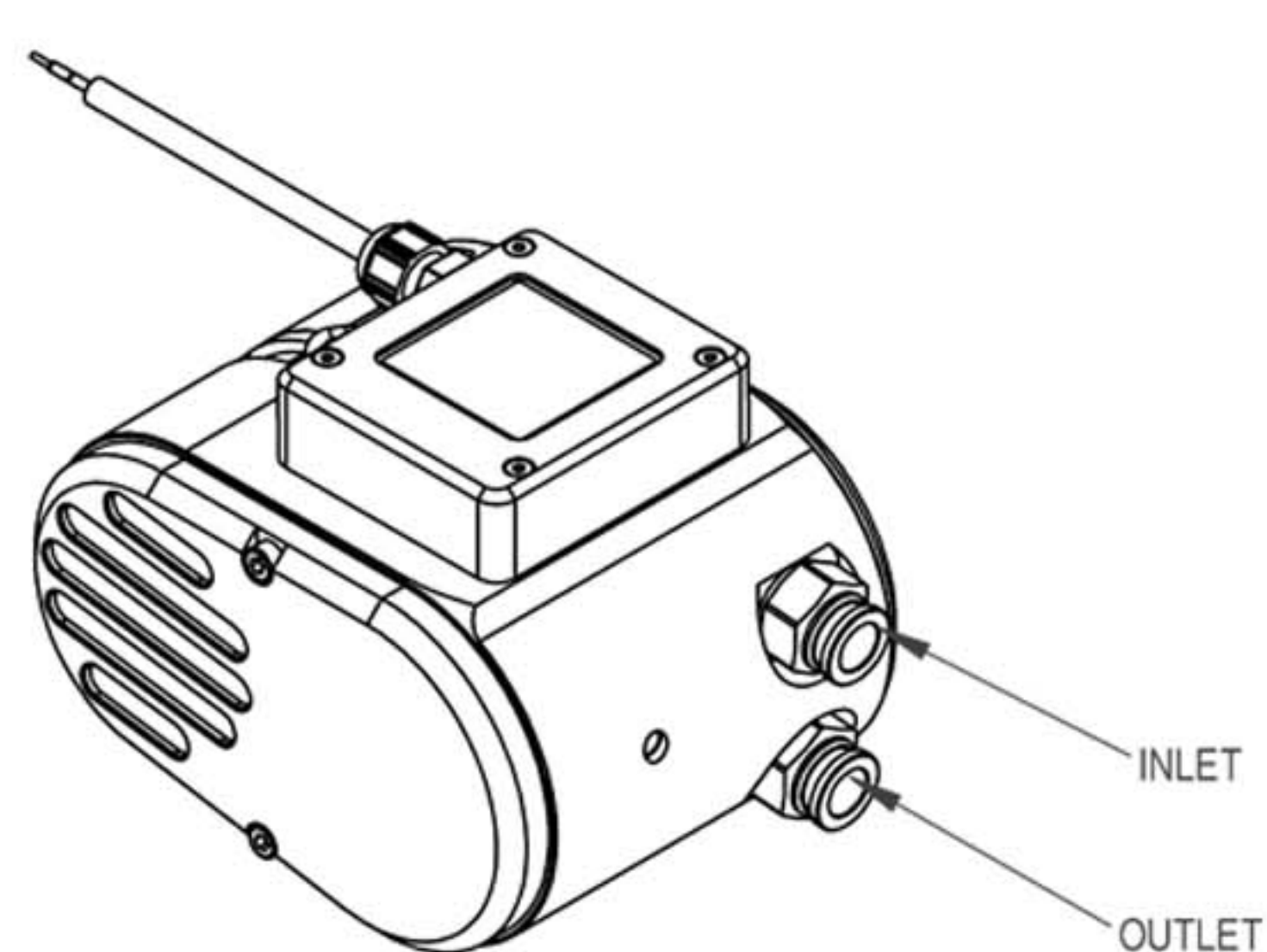
Standard Materials: Standard Wetted Parts

- Anodised 6000 Series Aluminium
- 316 Stainless steel
- Viton
- NBR
- Graphite

Other Materials:

- Materials typical to a brushless motor
- Nylon

DIMENSIONS:



TSO: Bespoke and custom solutions:

TCS Micropumps offers an innovative, 'outside-the-box' approach to designing and developing pumps that puts the company in a unique position to fulfil almost any client pump requirements via a bespoke design service, whether they be for small or large projects.

'TSO' (TCS SPECIAL OPERATIONS) is our significant and growing R&D department that is driving the company's future forward, providing solutions ranging from a simple modification to a product from our core range, through to a new, unique solutions developed and tailored exactly to meet the client's needs. Custom & Bespoke solutions are offered as an aim to always meet all the client's specifications.

TSO bespoke solutions may be subject to an NRE charge and this is calculated on the cost for us to develop, source, build, test and supply fully operational prototypes.

if you have a specific requirement that demands a unique pump or system, contact us at Enquires@micropumps.co.uk



www.micropumps.co.uk