

Datasheet

RS Stock No. 9146978

RS Pro Micro Conical Liquid and Gas Pumps

Overview : Liquid and Gas Pump - Efficient, Reversible, Self Priming

The R400 pump range utilise a new and patented pumping methodology developed by TCS Micropumps that is unique in the world. They provide excellent pressure and flow capability for both liquids and gasses. They are self priming in operation, reversible and contain no internal valves.

Constructed from CNC machined aluminium alloy (6000 series + anodising) and components fitted with viton internal seals as standard, for good chemical compatibility. Supplied with either stainless steel threaded tubing connectors or as a manifold mounted pump that eliminates the need for hose connections.

They can be powered by either a DC brushed motor or a brushless motor that offers increased performance and longer life.

Pump

R400BL
Brushless Drive Unit



R400BL-M
Brushless Drive Unit.
Manifold Mount



R400S
Brushed Drive Unit



R400S-M
Brushed Drive Unit.
Manifold Mount



Typical Applications

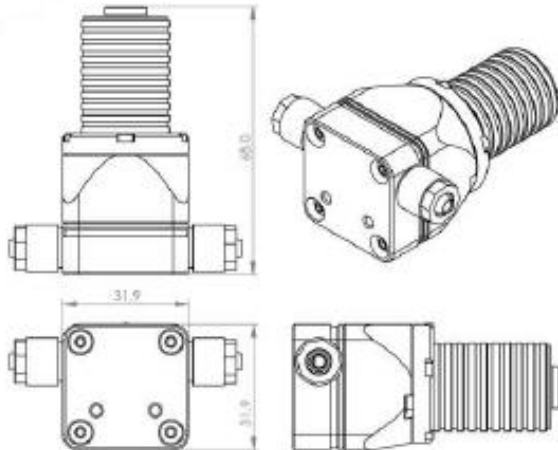
- Medical devices
- Analysis Systems
- Gas detection and monitoring
- Precision Flow
- Food Grade
- Chemical Handling
- Cooling Systems

Features

- Quiet
- Small size
- Self Priming
- Robust
- Dry Running
- Precise Flow Control
- Valveless
- Reversible

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Materials

Wetted Parts

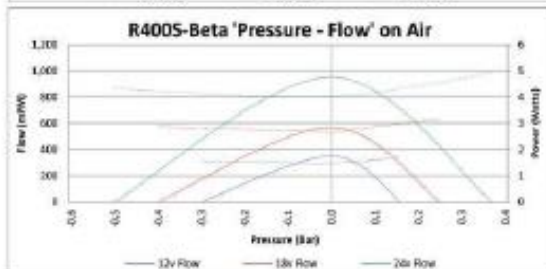
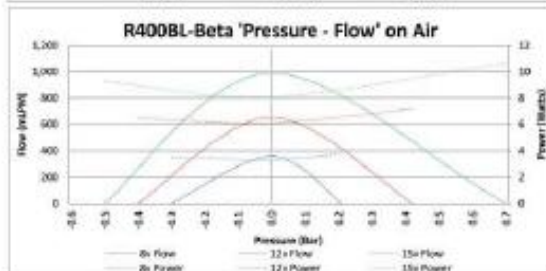
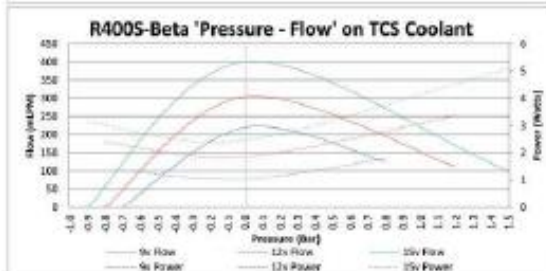
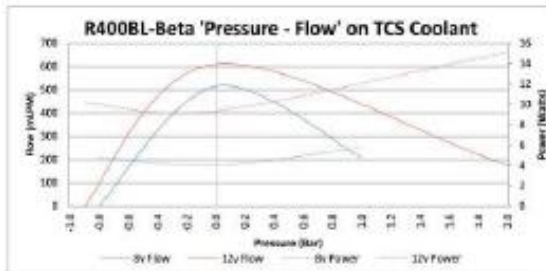
- Anodised 6000 Series Aluminium
- 316 Stainless Steel
- Viton

Other Parts

- 316 Stainless Steel
- Anodised 6000 Series Aluminium

Performance Data

- Small Size 32 x 32 x 68mm
- Weight 156g
- Operating Temp 0 to 100 deg C
- IP Rating IP41
- Noise Levels <20dB
Measured at a distance of 1m with a 50dB ambient noise level
- MTBF Stock Pumps 5,000hrs
Special variants available to order >20,000hrs



LIQUID (Data Obtained with Water)

MODEL	Input	Power	Flow	Pressure
	(v)	(W)	(mLpm)	(Bar)
R400BL	8	5.8	460	1.0
ALL MODELS	12	15.3	550	2.0
R400S	9	1.8	215	0.8
ALL MODELS	12	3.4	300	1.2
	15	5.2	450	1.5

GAS (Data Obtained With Air)

MODEL	Input	Power	Flow	Pressure
	(v)	(W)	(mLpm)	(Bar)
R400BL	8	3.8	360	0.2
ALL MODELS	12	7.2	650	0.4
	15	10.7	990	0.7
R400S	12	1.7	350	0.15
ALL MODELS	18	3.2	550	0.25
	24	5	950	0.35