



# TCS *Micropumps*

**Micropump Selection / Comparison Guide**






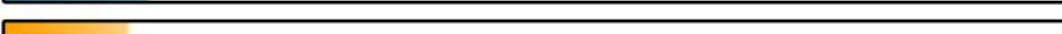

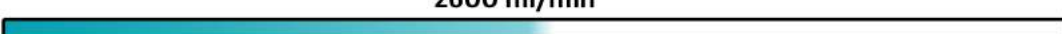




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Document Ref No.  
DS14 Rev 1.

## Centrifugal Liquid Pumps Range

Pump Range	Features	Performance (Water)	
<b>M100</b>	<ul style="list-style-type: none"> <li>Quiet pulseless smooth flow</li> <li>Power by Solar supply or batteries</li> <li>Wide range of chemical resistance *</li> </ul>	<ul style="list-style-type: none"> <li>Voltage range 1.5 - 6.5 Vdc</li> <li>Power Usage 0.4 - 2 W</li> <li>Viscosity upto 10 cSt</li> </ul>	 28 x 14 x 14 mm 10g
	Flow <b>400ml/min</b>  Pressure <b>1.6 psi</b> 		
<b>M200</b>	<ul style="list-style-type: none"> <li>Quiet pulseless smooth flow</li> <li>Power by Solar supply or batteries</li> <li>Wide range of chemical resistance *</li> </ul>	<ul style="list-style-type: none"> <li>Voltage range 1.5 - 6.5 Vdc</li> <li>Power Usage 0.4 - 1 W</li> <li>Viscosity upto 10 cSt</li> </ul>	 28 x 14 x 14 mm 11g
	Flow <b>700ml/min</b>  Pressure <b>3.2 psi</b> 		
<b>M400</b>	<ul style="list-style-type: none"> <li>Brushless drive motor + integral controller</li> <li>Quiet pulseless smooth flow</li> <li>Usable with power supply or batteries</li> <li>Wide range of chemical resistance *</li> </ul>	<ul style="list-style-type: none"> <li>Voltage range 3.0 - 12.0 Vdc</li> <li>Power Usage 0 - 6W</li> <li>Viscosity upto 20 cSt</li> </ul>	 41 x 26 x 25 mm 33g
	Flow <b>2600 ml/min</b>  Pressure <b>4.3 psi</b> 		
<b>M500</b>	<ul style="list-style-type: none"> <li>Sealed waterproof design</li> <li>Brushless drive motor</li> <li>Quiet pulseless smooth flow</li> <li>Wide range of chemical resistance *</li> </ul>	<ul style="list-style-type: none"> <li>Voltage range 6 - 24 Vdc</li> <li>Power usage 1W to 40W</li> <li>Viscosity upto 40 cSt</li> </ul>	 64 x 32 x 31mm 70g
	Flow <b>5000ml/min</b>  Pressure <b>14 psi</b> 		

All Micro Centrifugal Liquid Pumps come in different Variants; Standard, Waterproof, Submersible, 180' Connectors

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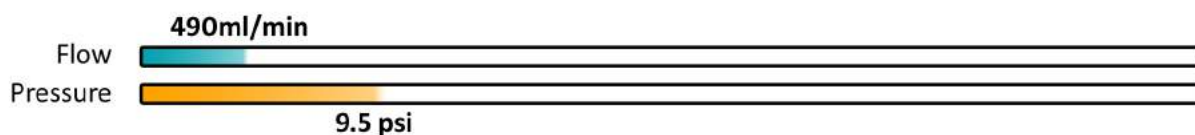
\* Alternative seal materials and optional wetted parts coatings and materials are also available. The Pump range's are fitted with Viton seals as standard.



**Pump Range**      **Features**      **Performance (Water)**

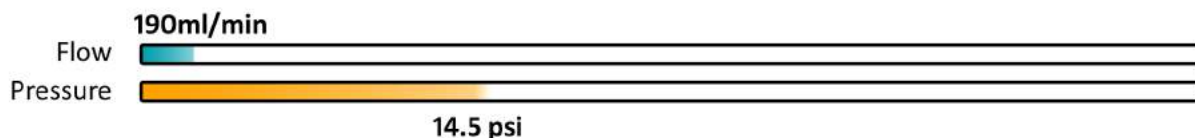
## Micro Diaphragm Pumps Range

- D250**
- High Efficiency
  - Variable flow rate and low power consumption
  - Usable with power supply or batteries
  - Voltage range 3.0 - 6.5 Vdc
  - Power Usage 0.6 - 1.8 W



42 x 27 x 17 mm 25g

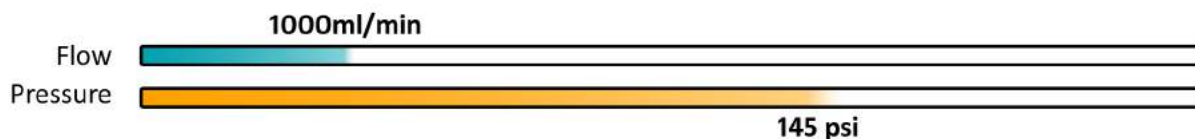
- D250-L**
- CNC aluminium alloy and precision injection moulded construction
  - Variable flow rate and low power consumption
  - Usable with power supply or batteries
  - Voltage range: 3.0 - 6.0 Vdc
  - Power usage: 0.6 to 1.8W



54 x 30 x 18 mm 26g

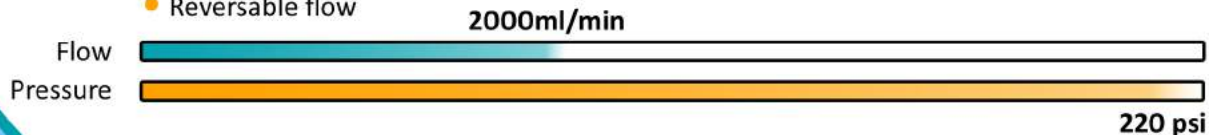
## Micro Gear Liquid Pumps Range

- MG1000**
- Self-priming
  - High and low viscosity liquids
  - Smooth almost pulseless flow
  - Reversible flow
  - Voltage range 6 - 24 Vdc
  - Power usage 2W to 30W
  - Viscosity upto 150,000 cSt



55 x 35 x 35 mm 110g

- MG2000**
- Self-priming
  - High and low viscosity liquids
  - Smooth almost pulseless flow
  - Reversible flow
  - Voltage range 6 - 24 Vdc
  - Power usage 10W to 100W
  - Viscosity upto 200,000 cSt



89 x 49 x 53 mm 340g

Both D250 Variants (D250 & D250-L) are also compatible to pump air/gases and can be found in the Gas Micropump Comparison section

There are three Variants of both of the Microgear pumps in the range. Standard Variant, a High Pressure Variant and a High Flow Variant.

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# Gas Micropump Comparison



## Pump Range

### Features

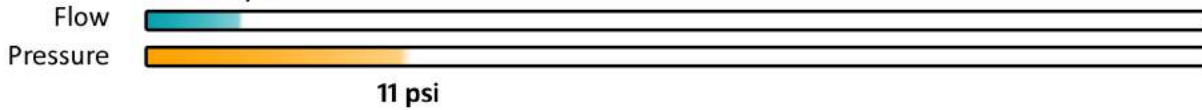
### Performance (Air)

## Micro Diaphragm Pumps Range

### D220

- High Efficiency
- Variable flow rate and low power consumption
- Usable with power supply or batteries
- Voltage range 3.0 - 6.5 Vdc
- Power Usage 0.1 - 0.6 W
- Vacuum Max 8psi @ 6.5V

450ml/min

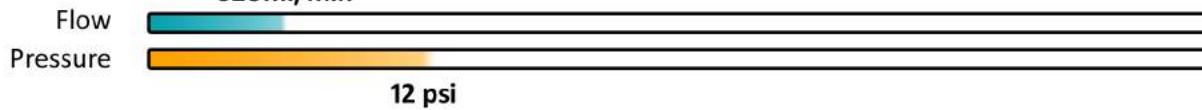


42 x 27 x 17 mm 25g

### D250

- High Efficiency
- Variable flow rate and low power consumption
- Usable with power supply or batteries
- Voltage range 3.0 - 6.5 Vdc
- Power Usage 0.1 - 0.6 W
- Vacuum Max 9psi @ 6.5V

620ml/min

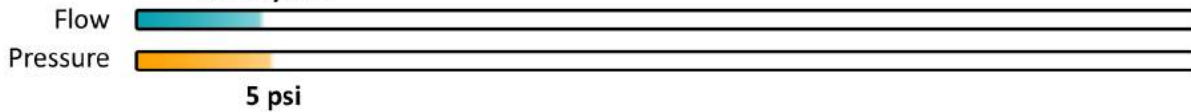


42 x 27 x 17 mm 25g

### D250-L

- CNC aluminium alloy and precision injection moulded construction
- Variable flow rate and low power consumption
- Usable with power supply or batteries
- Voltage range: 3.0 - 6.0 Vdc
- Power usage: 0.5 - 1.8 W
- Vacuum Max 2psi @ 6V

610ml/min



54 x 30 x 18 mm 26g

## Sliding Vane Pump Range

### V030

- Pressure + vacuum capability
- Large flow with small size
- Reversible flow
- Smooth almost pulseless flow
- Voltage range 8.0 - 24 Vdc
- Power Usage 88 - 168 W
- Vacuum Max 5psi @ 12V

43000ml/min



104 x 55 x 55 mm 440g

Both D250 Variants (D250 & D250-L) are also compatible to pump liquids and can be found in the Liquid Micropump Comparison section

If you require pumps outside of the performance indicated, we have an active custom design department for tailoring pumps to your exact requirements

Custom Design  
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Document Ref No.  
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