

## Micro Diaphragm Gas and Liquid Pump Range

### Overview : Gas Pump, Very Efficient, High Pressure, Low Flow

The D200 series range of pumps are constructed from glass filled nylon or aluminium alloy (6000 series + anodising) with stainless steel tubing connectors. They are fitted with Nitrile / Silicon diaphragm and valves as standard but alternative wetted part options are available enabling this pump range to resist most chemicals and solvents. The pump uses efficient push fit connectors designed for 2.4mm bore flexible tubing.

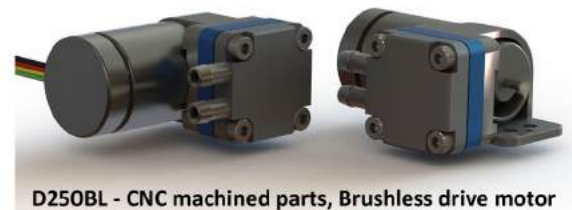
### Pump Variants



D220BL - Moulded parts, Brushless drive motor



D220S - Moulded parts, Standard drive motor



D250BL - CNC machined parts, Brushless drive motor



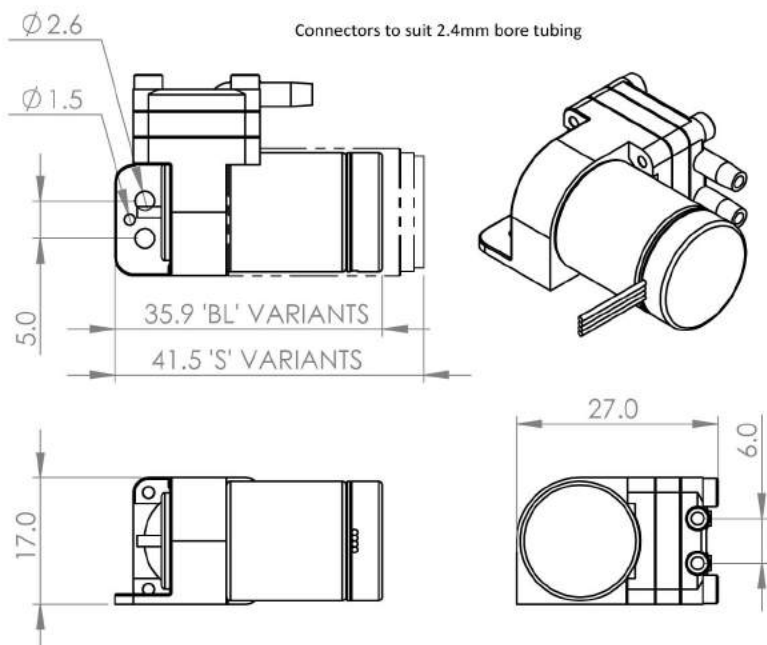
D250S - CNC machined parts, Standard drive motor

### Typical Applications

- Medical devices
- Analysis Systems
- Gas detection and monitoring
- Cooling Systems
- Precision Flow
- Battery + Solar Operated Systems

### Features

- High Efficiency
- Variable flow rate and low power consumption
- Small size only 42 x 27 x 17 mm
- Usable with solar power, PSU or batteries
- Wide range of chemical resistance
- Light weight 25-34g
- Head can be realigned to one of 4 positions for easy inlet and outlet tube connection



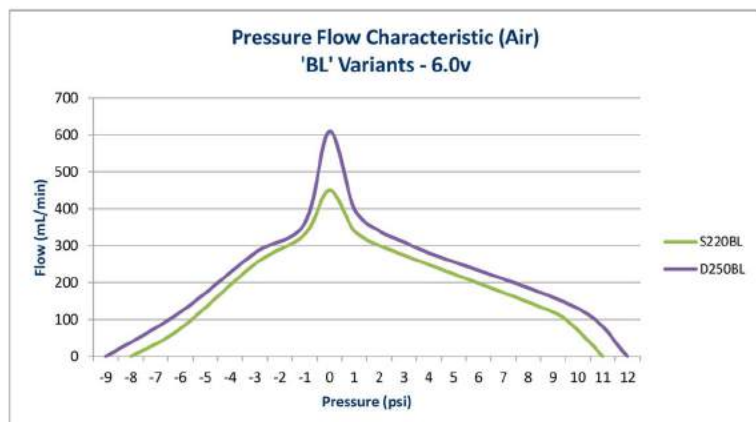
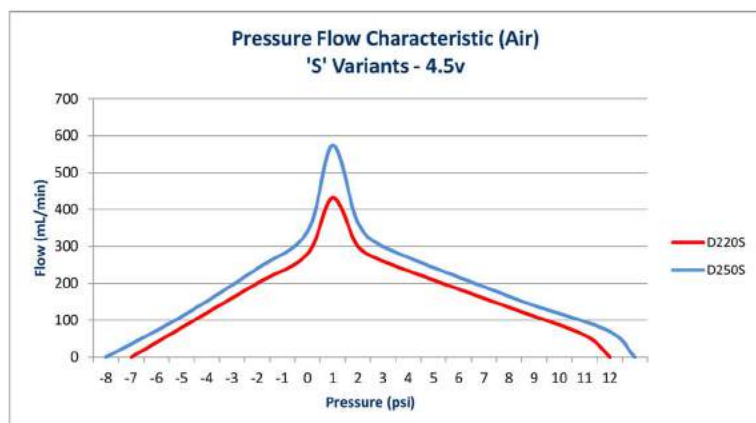
## Materials

### Wetted Parts

- Anodised 6000 Series Aluminium or glass filled nylon
- 316 Stainless Steel
- Silicon Nitrile or EPDM

## Performance Data

- Small Size 42 x 27 x 17mm
- Weight
  - D220S 31g
  - D250S 34g
  - D220BL 25g
  - D250BL 28g
- Operating Temp -20 to 100 deg C
- IP Rating - IP41
- Noise Levels <15dB  
Measured at a distance of 1m with a 50dB ambient noise level
- MTBF 'BL' stock pumps 10,000hrs  
'S' stock pumps 5,000hrs  
Special variants available to order >100,000hrs



### Tested on Air

Variant	Input	Power	Flow	Pressure
	(V)	(W)	(ml/min)	(psi)
D220S	4.5	0.4	425.0	11.0
	4.5	0.4	-300.0	-8.0
D220BL	6.0	0.7	450.0	10.0
	6.0	0.7	-380.0	-8.0
D250S	4.5	0.4	580.0	11.0
	4.5	0.4	-360.0	-8.0
D250BL	6.0	0.7	620.0	12.0
	6.0	0.7	-420.0	-8.0

### Tested on Water

D220S	4.5	1.8	90.0	9.0
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