BOXER
20K Series Diaphragm Pump
Gas Flow Rate to 500 ml/min

DESCRIPTION

The 20K series is a single headed miniature diaphragm pump. With a 'best-in-class' body width of just 12 mm it is designed for applications requiring minimized size, power and weight. Typical examples include portable environmental gas analysis, medical monitoring, medical therapy and chemical agents / biohazard detection.
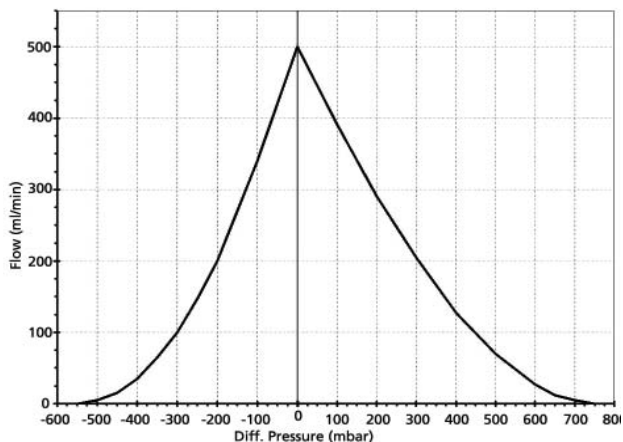
Recognizing that instrument miniaturization can often result in lower performance requirements, the 20K is additionally available in a 'Low Flow' configuration, which maximizes efficiency (longer battery life) at the lower end flow range of this series. This is achieved through the use of optimized low speed coreless motors combined with a pump head specifically designed for low flow. These pumps are listed below as 'Coreless LF'. Additionally stable flow valve technology ensures consistent operation at flows below 50 ml/m without influence from the pump's orientation.
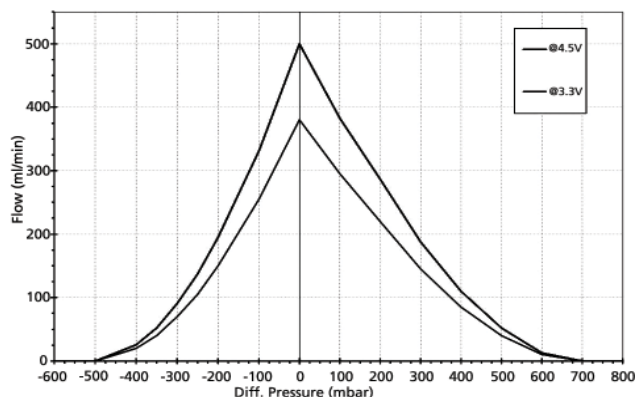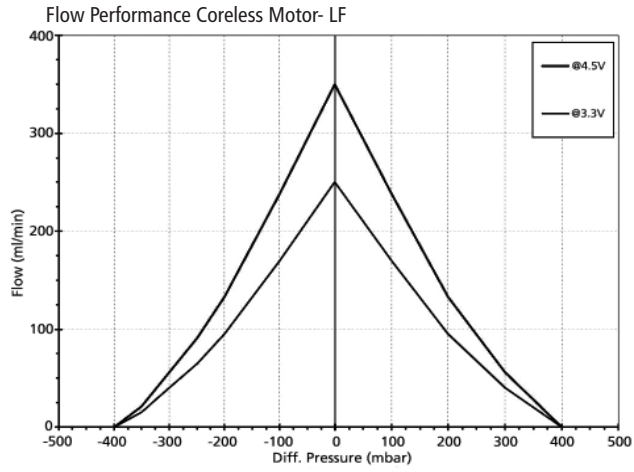
SPECIFICATIONS

Technical Data	Iron Core Motor	Coreless Motor	LF Coreless Motor
Free flow/Max Pressure/Max Vacuum at 6.5V	500 ml/min/750 mbar/-550 mbar	-	-
Free Flow/Max Pressure/Max Vacuum at 4.5V	-	500 ml/min/700 mbar/-500 mbar	350 ml/min/400 mbar/-400 mbar
Free Flow/Max Pressure/Max Vacuum at 3.3V	-	380 ml/min/700 mbar/-500 mbar	250 ml/min/400 mbar/-400 mbar
Power Consumption at 6.5V	0.3 to 0.7 W	-	-
Power Consumption at 4.5V	-	0.5 to 0.7 W	0.1 to 0.2 W
Power Consumption at 3.3V	-	0.3 to 0.5 W	0.1 to 0.2 W
Operating Temperature Range	5 to 60°C		
Operating Humidity Range	5 to 95% RH		
Elastomer Options	EPDM		
Other Wetted Parts	PPS (Polyphenylene Sulphide		
Motor Termination	Solder Tags	100 mm leads (red +, black -)	
Tube Connection	3.0 mm barb for 2.0 to 2.5 mm Ø tubing		
Weight	22g	16g	

Flow Performance Iron Core Motor

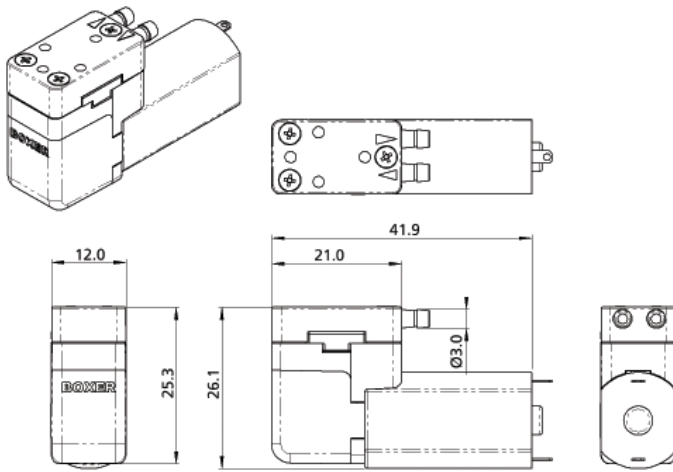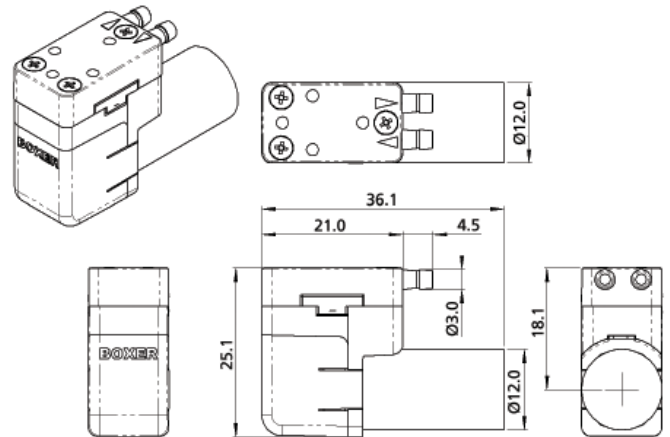Flow Performance Coreless Motor

Flow Performance Coreless Motor- LF

DIMENSIONS (MM)

Iron Core Motor

Coreless Motor & Coreless-LF

ORDERING INFORMATION

Model	Motor Type	Nominal Voltage (VDC)
20000.00	Iron Core	6.5
20100.001	Coreless	3.5
20100.002	Coreless- LF	3.3