

## BOXER

# 22KD Series Diaphragm Pump

Gas Flow Rate to 2.6 l/m

### DESCRIPTION

The 22KD series is a double headed miniature diaphragm pump designed for a wide range of applications including gas sampling, gas detection and monitoring. This pump series is of certain interest for applications requiring flow above 2 l/min in a compact envelope. Additionally, when run at lower speeds with a flow of 1 l/min and below, sound and vibration is reduced to levels which cannot be matched with a single headed pump.

Like all other pumps in the Boxer range, this series of miniature diaphragm pump can be customized to specific requirements. Diaphragms are available not only in different materials but also different thicknesses and profiles depending on the exact needs of the application. Likewise eccentrics from 0.5 to 0.85 mm can be configured.

This series is available with either iron core or BLDC motors.

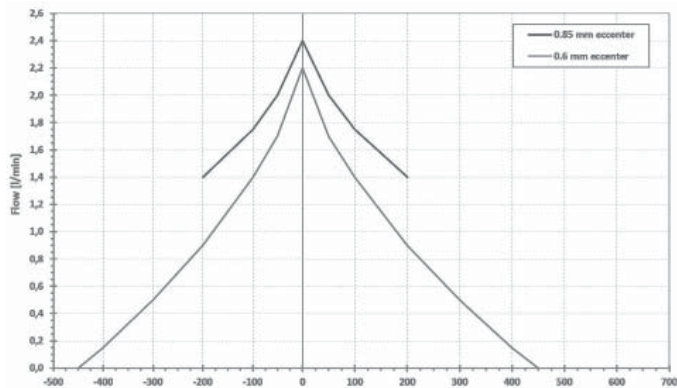
- › Flow rate to 2.6 l/min
- › Low sound and vibration
- › BLDC motor option with speed input for ultimate flow control
- › Compact and versatile
- › Antivibration mounting foot available

Flow control is available in combination with PWM Flow Controller.

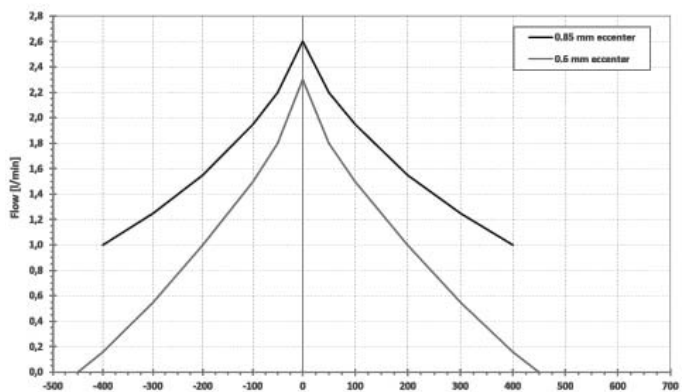


SPECIFICATIONS	Iron Core Motor	BLDC Motor
Voltage Options	3.5/4.5 V DC	24V DC
Power Consumption 0.85 mm Eccenter	0.7 to 1.6 W	2.0 to 3.0 W
Power Consumption 0.6 mm Eccenter	0.5 to 1.6 W	2.0 to 3.0 W
Free Flow 0.85 mm Eccenter	2.4 l/min	2.6 l/min
Free Flow 0.6 mm Eccenter	2.2 l/min	2.3 l/min
Max Pressure 0.85 mm Eccenter	200 mbar	400 mbar
Max Pressure 0.6 mm Eccenter	450 mbar	450 mbar
Max Vacuum 0.85 mm Eccenter	-200 mbar	-400 mbar
Max Vacuum 0.6 mm Eccente	-450 mbar	-450 mbar
Motor Termination	Solder Tags	45 cm leads terminated with connection for BLDC Driver
Oper. Temp. Range	5 to 60oC	
Oper. Humidity Range	5 to 95% RH	
Elastomer Options	EPDM, Silicone	

## FLOW CURVES

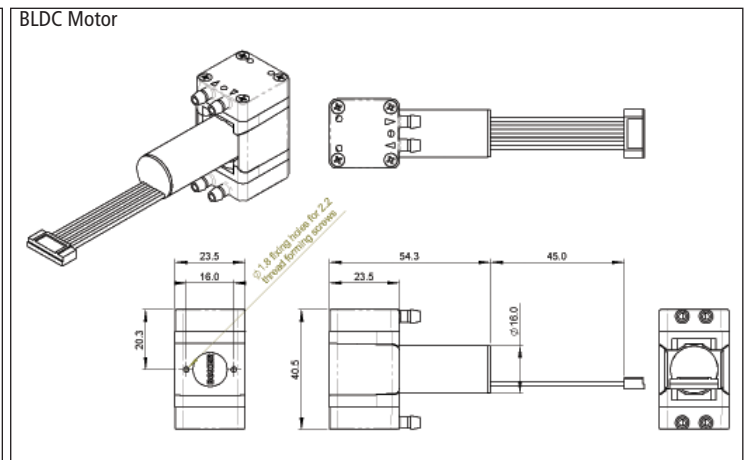
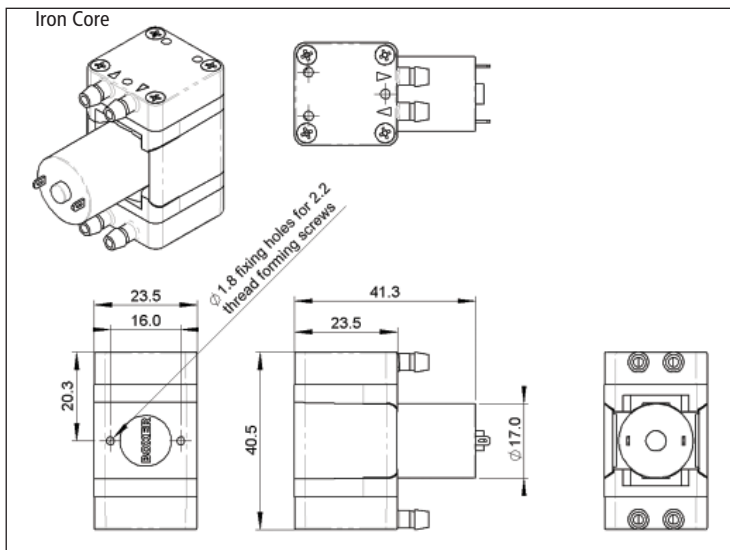


Iron Core Motor



BLDC Motor

## DIMENSIONS (MM)



**Model 6900.005 Driver Board for Brushless Motors**  
The board is equipped with a trimmer which allows the regulation of the pump's speed i.e. flow.

## ORDERING INFORMATION

### Iron Core Motor

Part Number: 22002.004 3.0 V DC / EPDM 0.85 mm eccentric  
Part Number: 22002.006 4.5 V DC / EPDM 0.85 mm eccentric

Part Number: 22002.003 3.0 V DC / EPDM 0.6 mm eccentric  
Part Number: 22002.005 4.5 V DC / EPDM 0.6 mm eccentric  
Part Number: 6900.009 Pulse Width Modulation Flow Controller

### BLDC Motor

Part Number: 22602.002 24 V DC / EPDM 0.85 mm eccentric  
Part Number: 22602.001 24 V DC / EPDM 0.6 mm eccentric  
Part Number: 6900.005 Driver Board for BLDC Motors

Part Number: 22000.3001 Optional antivibration mounting foot

