BOXER
Series 11K Diaphragm Pumps
Gas to 2.6 l/min, DC Motor

DESCRIPTION

The 11K gas pumps are commonly applied for gas sampling applications.

With 2.0 l/min flow rate or greater, the Boxer 1100 has a unique flow to size ratio. The 11K, like all others of the Boxer range of pumps, can be tailored to your special requirements. The components can be produced in a wide range of materials, providing compatibility within a wide range of applications. Wetted path is free of any metal.

Our access to a variety of DC motors ensures that we are able to optimize the pump's performance for a minimal power consumption. The 11K pumps are ideal for battery operated applications.

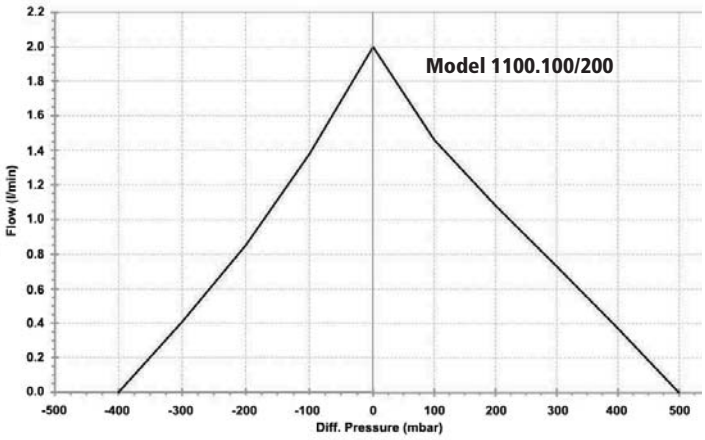
Model 1100.200

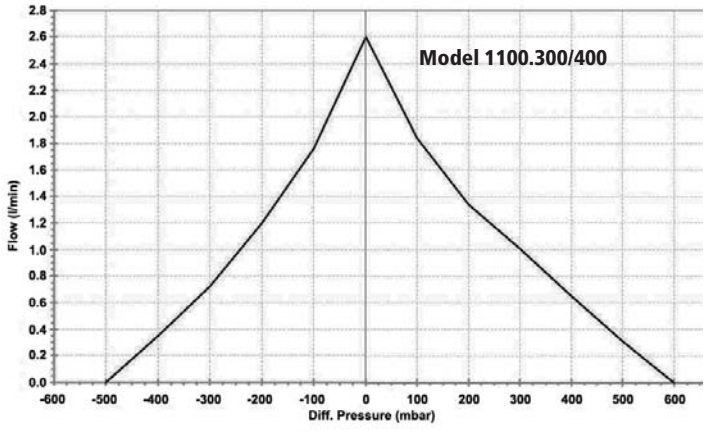
This series is available in iron core (2 versions), coreless and brushless DC (2 versions) motor options. Optional motor driver with integrated speed control is available for brushless versions.

	Model 1100.100	Model 1100.200	Model 1100.300/400
Motor	Coreless: 4, 7, 9 & 13.5 VDC	Iron Core: 12 & 24 VDC	Brushless: 24VDC
Free Flow	2 LPM (at 75% nominal pump voltage)	2 LPM	2.6 LPM- Regulation of flow via on-board trimmer
Max Pressure-Gas	225 mBar	500 mBar	600 mBar
Max Vacuum-Gas	-225 mBar	-400 mBar	-500 mBar
Tube Connection	4.8 mm OD Barb (for 2.5 to 4 mm ID tubing)		
Body Materials	PPS (Polyphenylene Sulphide)	PPS (Polyphenylene Sulphide)	PPS (Polyphenylene Sulphide)
Diaph. & Valve Material	EPDM	EPDM	EPDM
Weight	38g	54g	61g (without driver)

Model 1100.300 with Driver Board

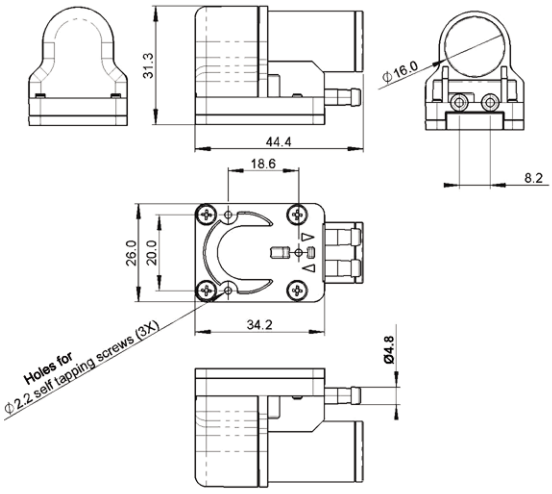
FLOW CURVES



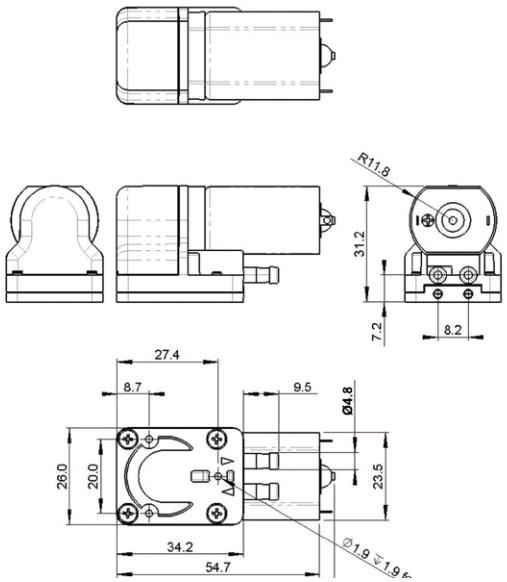


DIMENSIONS (MM)

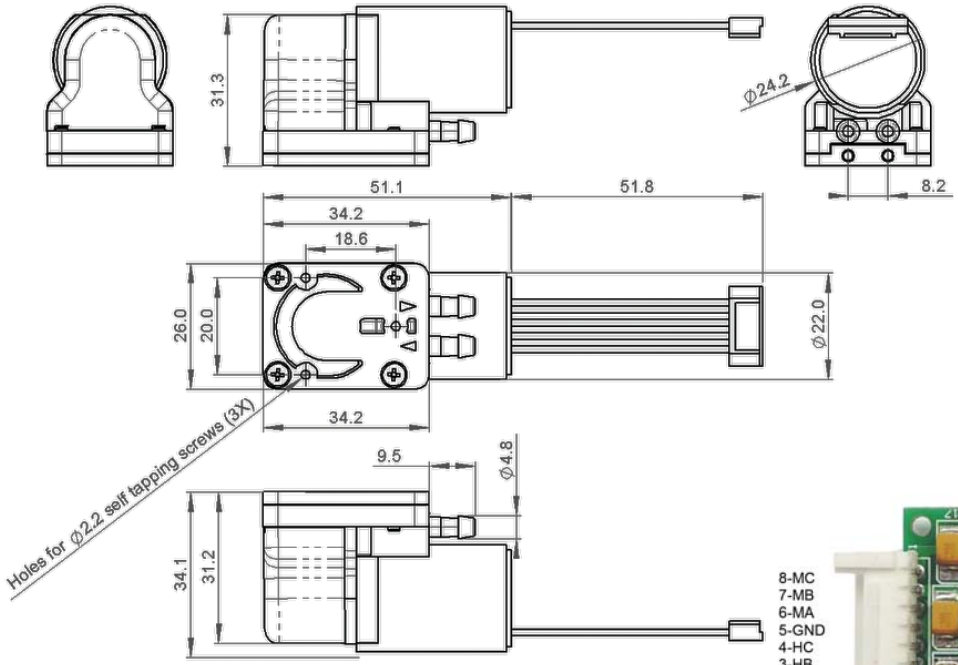
Model 1100.100

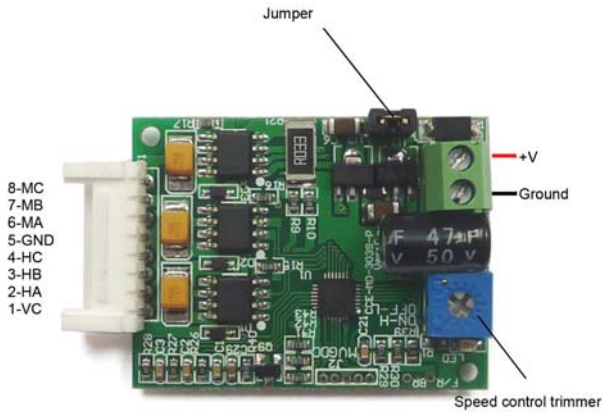


Model 1100.200



Model 1100.300/400





ORDERING INFORMATION

Model	Motor Type	Nominal Pump Voltage (VDC)	Nominal Motor Voltage (VDC)
1100.212	Iron Core-Economical	12	12
1100.211	Iron Core	12	12
1100.206	Iron Core	24	24
1100.101	CoreLess	4	6
1100.102	CoreLess	7	9
1100.103	CoreLess	9	12
1100.104	CoreLess	13.5	18
1100.402	Brushless-Economical	24	24
1100.302	Brushless	24	24
6900.005	Electronic driver for 1100.300		

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.

For operation at @ 24V remove the jumper.
For operation @ 12V jumper must remain in position.

The boards are generally supplied as 0-6000rpm boards whereby in some instances we customize the boards to run the motors at 1200rpm max speed.

Max permissible temperature on metal surface of motor in continuous operation is 80 °C (185F).