

BD - 05TF Series - Micro Diaphragm Gas-Liquid Pump

Model:BD-05TF1500WB

Performance Data	
Model	BD-05TF1500WB
Voltage Option	24V
Free Water Flow	1.5L/min
Max Water Pressure	3bar
Water Pressure Head	10m
Water Suction Head	3m
Free Gas Flow	4L/min
Max Gas Pressure	+50kPa
Max Gas Vacuum	-30kPa
Motor Data	
Motor Type	DC Brushless Motor
Max Power	6W
Physical Properties	
Ambient Temperature	5°C~40°C
Fluid Temperature	5°C~60°C
Material/Other	
Hose Suggest	ID6mm, OD8mm
Head of pump	PA66
Diaphragm	EPDM
Valve	EPDM
Noise	55dB
Lifetime	8000H
Dimension	90x40x77mm
Weight	390g



Features

Oil-free, self-priming, gas-liquid compatible, low noise, dry-running capable, compact size, low vibration, long service life.

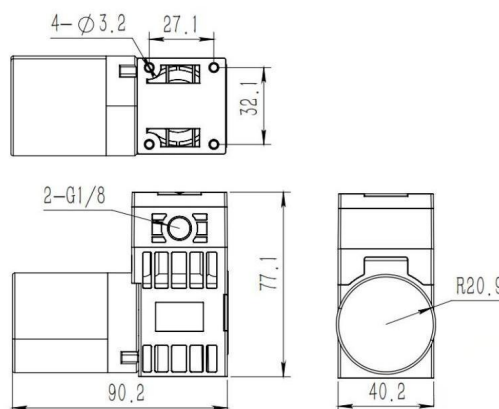
Principle

Driven by a motor, the diaphragm reciprocates to create suction and discharge cycles through check valves for stable gas and liquid transfer. Chemical resistance.

Chemical Resistance

Customizable PTFE diaphragm, and FFPM valves provide excellent resistance to corrosive gases and liquids.

Drawing(mm)



Installation & Usage Notes

1. Install a filter with a minimum filtration accuracy of $\leq 30 \mu\text{m}$ at the pump inlet to prevent particle ingress
2. Drill 4x $\Phi 3.2$ mm holes at the bottom. Use M4 self-tapping screws or M4 screws to secure the board installation.
3. Wiring Definition: Red wire: Positive (+); Black wire: Negative (-); Blue wire: PWM control signal (0-5V speed regulation); Yellow wire: FG (speed feedback signal).
4. Full-Speed Operation (Without Speed Control): Connect red + blue wires to positive (+); Connect black wire to negative (-); Leave yellow wire unconnected.

Application Fields

Digital printing equipment
Biochemical analyzers
Microplate washing equipment
Chemical analysis systems
Liquid sampling devices
Cleaning & Disinfection