

BD - 05TF Series - Micro Diaphragm Liquid Pump

Model:BD-05TF1400WBH

Performance Data	
Model	BD-05TF1400WBH
Voltage Option	24V
Free Water Flow	1.4L/min
Max Water Pressure	3bar
Water Pressure Head	10m
Water Suction Head	3m
Max Gas Pressure	+50kPa
Max Gas Vacuum	-30kPa
Motor Data	
Motor Type	DC Brushless Motor
No-load-Current	0.25A
Load-current	0.65A
Physical Properties	
Ambient Temperature	5°C~40°C
Fluid Temperature	5°C~60°C
Material/Other	
Connection type	G 1/8
Hose Suggest	ID6mm, OD8mm
Head of pump	PPS
Diaphragm	PTFE
Valve	FFKM
Noise	55dB
Lifetime	8000H
Dimension	102.2x40.2x90.5mm
Weight	500g

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.



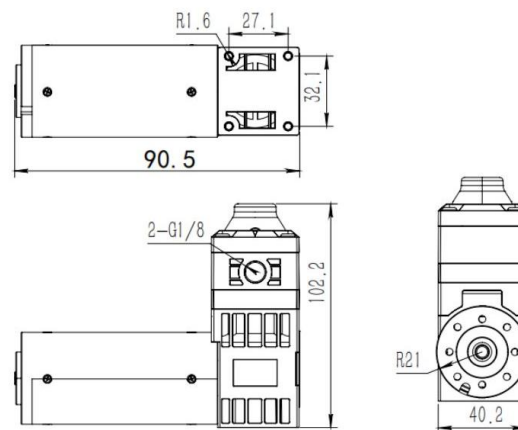
Features

- Oil-free, self-priming, gas-liquid compatible, low noise,
- Dry-running capable, compact size, low vibration, long service life.
- Integrated top-mounted pressure-relief valve protects the pump head from excessive pressure, improving operational safety and 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.

Drawing(mm)



Application Fields

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