

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

Model:BD-05TF450WB

| Performance Data | |
|---------------------|--------------------|
| Model | BD-05TF450WB |
| Voltage Option | 6V/12/24V |
| Free Water Flow | 450mL/min |
| Max Water Pressure | 2.5bar |
| Water Pressure Head | >15m |
| Water Suction Head | 7m |
| Free Gas Flow | 4L/min |
| Max Gas Pressure | 1bar |
| Max Gas Vacuum | -60kPa |
| Motor Data | |
| Motor Type | DC Brushless Motor |
| Max Power | 7W |
| Physical Properties | |
| Ambient Temperature | 5°C~40°C |
| Fluid Temperature | 10°C~60°C |
| Material/Other | |
| Hose Suggest | ID4mm, OD6mm |
| Head of pump | PA66 |
| Diaphragm | EPDM |
| Valve | EPDM |
| Noise | 55dB |
| Lifetime | 10000H |
| Dimension | 94x31.1x60.3mm |
| Weight | 200g |



Features

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

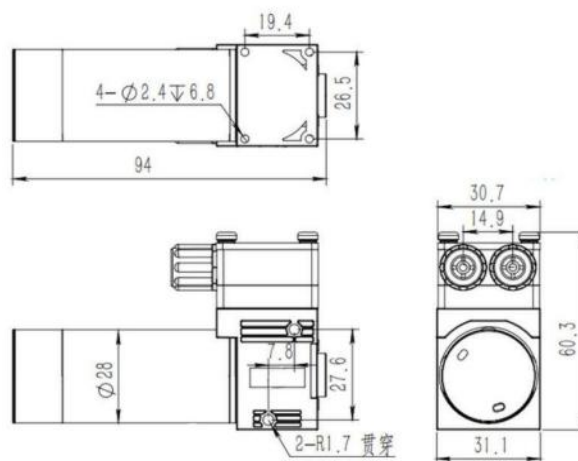
Principle

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 PPS pump head, 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. Bottom mounting: 4x $\Phi 2.4$ mm holes (depth 6.8 mm), recommended to use M3 self-tapping screws for through-board fixation
3. Side mounting: 2xR1.7 mm through holes, use M3 screws for through-board installation and secure fixation
4. Wiring Definition: Red wire (+) positive, black wire (-) negative

Application Fields

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