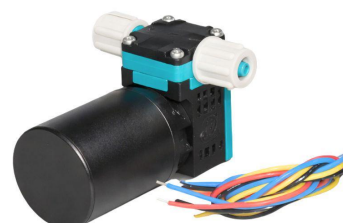


# BD - 05TF Series - Micro Diaphragm Gas-Liquid Pump

## Model:BD-05TF400WB

Performance Data	
Model	BD-05TF400WB
Voltage Option	6V/12/24V
Free Water Flow	400mL/min
Max Water Pressure	6bar
Water Pressure Head	>15m
Water Suction Head	4m
Free Gas Flow	0.4L/min
Max Gas Pressure	70kPa
Max Gas Vacuum	-35kPa
Motor Data	
Motor Type	DC Brushless Motor
Max Power	5W
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	8000H
Dimension	66.1x54.2x42.1mm
Weight	150g
Speed Control Pressure Range	0.5V~4.5V



### Features

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

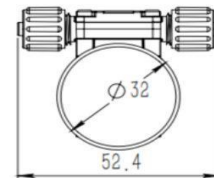
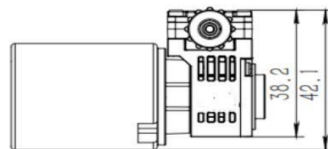
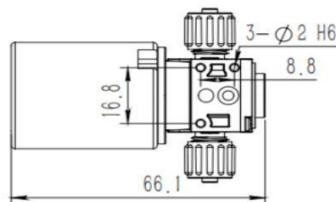
### Principle

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

11. Install a filter with a minimum filtration accuracy of  $\leq 30 \mu\text{m}$  at the pump inlet to prevent particle ingress

12. Bottom mounting: 3x $\Phi 2.4$  mm holes (depth 6 mm), recommended to use M2.5 self-tapping screws for through-board fixation

3. Wiring Definition: Red wire (+) positive, black wire (-) negative, blue wire 0-5V control signal for speed regulation, and yellow wire for frequency output (FG signal).

### Application Fields

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