

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

Model:BD-05TF650WBD

Performance Data	
Model	BD-05TF650WBD
Voltage Option	12/24V
Free Water Flow	650±100mL/min
Max Water Pressure	5bar (Suggested for use within 3 bar)
Water Pressure Head	>12m
Water Suction Head	4m
Free Gas Flow	0.8L/min
Max Gas Pressure	45kPa
Max Gas Vacuum	-28kPa
Motor Data	
Motor Type	DC Brushless Motor
Load Current	0.8A/0.4A
Physical Properties	
Ambient Temperature	5℃~40℃
Fluid Temperature	10℃~60℃
Material/Other	
Hose Suggest	ID4mm, OD6mm
Head of pump	PPS
Diaphragm	EPDM
Valve	EPDM
Noise	55dB
Lifetime	10000H
Dimension	79xR27x77mm
Weight	290g



Features

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

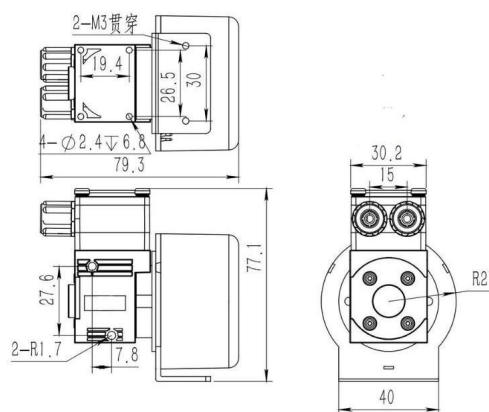
Principle

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 FFKM valves provide excellent resistance to corrosive gases and liquids.

Drawing(mm)



Installation & Usage Notes

1. Install a filter with a minimum filtration accuracy of ≤30 μm at the pump inlet to prevent particle ingress
2. Use 2 × M3 threaded holes on the base for mounting and fixation.
3. Wiring Definition: Red wire (+) positive, black wire (–) negative, blue wire 0–5V PWM (speed control), and yellow wire FG (frequency/speed output).

Application Fields

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