

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

Model:BD-05TF600WBD

Performance Data	
Model	BD-05TF600WBD
Voltage Option	12/24V
Free Water Flow	600mL/min
Max Water Pressure	3bar
Water Pressure Head	10m
Water Suction Head	2m
Free Gas Flow	1.3L/min
Max Gas Pressure	5bar
Max Gas Vacuum	-30kPa
Motor Data	
Motor Type	DC Brushless Motor
Max Power	0.5A/0.3A
Physical Properties	
Ambient Temperature	5℃~40℃
Fluid Temperature	10℃~60℃
Material/Other	
Hose Suggest	ID4mm, OD6mm
Head of pump	PA66
Diaphragm	PTFE
Valve	EPDM
Noise	55dB
Lifetime	10000H
Dimension	79.3xR27x77mm
Weight	290g



Features

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

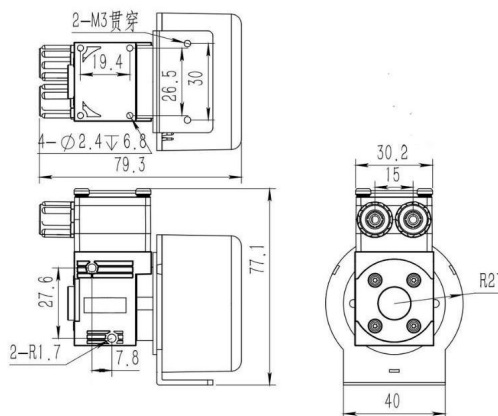
Principle

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 $\leq 30 \mu\text{m}$ at the pump inlet to prevent particle ingress.
2. Install and secure the pump using the base 2 × M3 threaded mounting holes.
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