

D11 Flow Control

Precision Micro Pressure Gas Pump



Datasheet



Highlights

- High Flow rate
- Sturdy structure
- Flow adjustable
- Very low noise and vibration
- Modular hose connector options
- Industrial-grade reliability
- Very compact size
- No flow pulsation

Applications

- Gas sampling
- Gas transmission
- Analytical instruments
- Portable device

5K hours
lifetime test



PERFORMANCE DATA

Model	Voltage (V DC)	Max. Load Current (mA)	Max. Peak Flow rate (L/min)	Max. Average Flow rate (L/min)
Material Option A	Pump head: Ceramic Nitrile Polypropylene Pump Casing: Aluminum Alloy			
D11M	21.7	≤40	≥0.9	≥0.9
Note: The working voltage is 11V~21.7V, and the change of input voltage will affect the load current and flow.				

CONFIGURATION OPTIONS

Material Options

Pump Head	Ceramic Nitrile Polypropylene
Pump Casing	Aluminum Alloy
Hose connector	copper

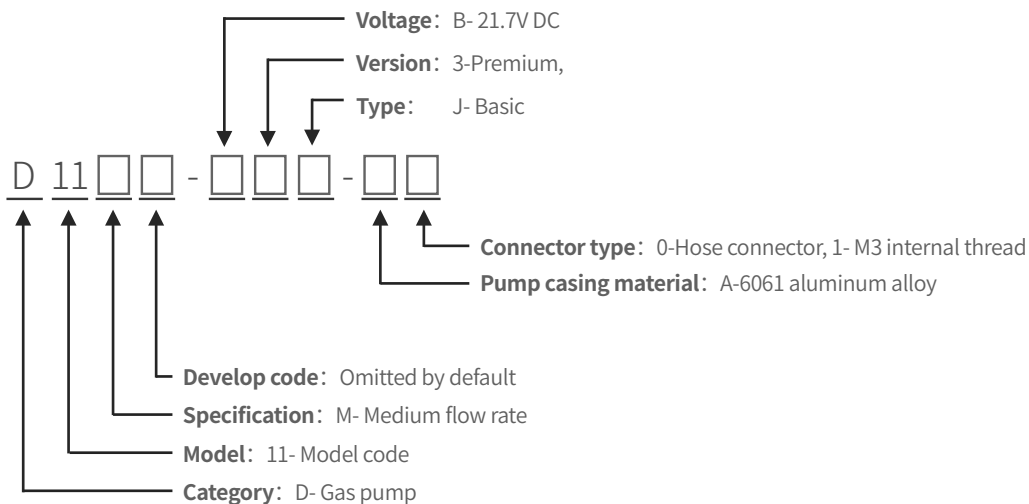
Connector Options

Default copper hose connector/ M3 internal thread

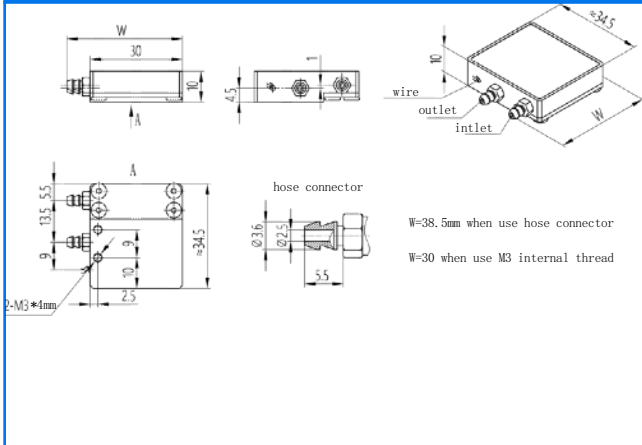
RELIABILITY DATA

Models	D11M	
Versions	Premium	
Lifetime (hrs)	5000 (Estimated)	
Test conditions	The pump inlet and outlet are directly connected to the atmosphere (dust-free and clean air), so that the pump works continuously under normal pressure for 24 hours without stopping. In a clean and non-corrosive laboratory, the ambient temperature fluctuates with the climate from 5 to 33°C. The relative humidity of the environment is 50% to 85%, fluctuating with the climate.	
Working Condition		
Operating Environment	The working ambient temperature of the pump is 0°C~40°C, the relative humidity is ≤90%, no condensation, the pump should not be exposed to the sun outdoors, It should be used in a clean, dust-free or low-dust environment.	
Medium	Non-corrosive, oil-free and dust-free gas. When pumping ordinary indoor and outdoor air, the filter membrane should be replaced at least every 300 cumulative operating hours due to the accumulation of dust inside the air that may cause the pump flow to drop and attenuate.	
Wetted materials	Ceramic, nitrile, polypropylene, aluminum alloy, copper etc; Not for use with corrosive gases	

D11M MODEL KEY



D11M DIMENSIONS



ACCESSORIES		
Descriptions	Illustration	Function
Shock-isolation mounting feet		Reduce the impact of vibration on the equipment during the operation of the pump. This accessory comes with the pump*4
Filter		The 80-mesh filter protect both pumps and other upstream instrumentation and hydraulic circuits against particulate, crystals and fibers . It is recommended to replace it regularly. This accessory comes with the pump*1
Check valve		Enhance the cut-off capability of the gas circuit system to ensure one-way gas flow. This accessory can be purchased on demand
Flow stabilizer		Eliminate and reduce pulsation, make gas output smooth and stable, this accessory can be purchased on demand
Manual control valve		It can be used to manually adjust the gas flow rate, pressure and vacuum. This accessory can be purchased on demand
DC power adapter		220V AC to DC switching power supply, this accessory can be purchased on demand
Silencer		It is used to eliminate and reduce the airflow noise caused by pumping operation, this accessory can be purchased on demand



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