

D60 Flow Control

Micro Vacuum Pump & Compressor



Datasheet



Highlights

- Low electromagnetic interference
- Optional corrosion-resistant material
- Long service life under max load
- Modular pneumatic connection options
- Optional remote signal flow control
- Driven by BLDC motor
- Industrial-grade reliability
- Good air tightness
- Multiple self-protection
- Compact size

Applications

- Gas sampling
- Medical equipment
- Analytical instruments
- Pneumatic automation

10K 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) | Max. Vacuum (-kPa) | Max. Pressure (kPa) |
|--------------------------|--|------------------------|-----------------------------|--------------------------------|--------------------|---------------------|
| Material Option A | Diaphragm:EPDM Valves:EPDM Pump Head: Fiber reinforced PA6 | | | | | |
| D60L | 24V | ≤1.3A | ≥26 | ≥18 | ≥50 | ≥100 |
| Material Option B | Diaphragm:FKM Valves:FKM Pump Head: Fiber reinforced nylon | | | | | |
| | | | | | | |

CONFIGURATION OPTIONS

Material Options

| | | |
|-----------|----------------------|-----|
| Pump Head | Fiber reinforced PA6 | |
| Diaphragm | EPDM | FKM |
| Valves | EPDM | FKM |
| Motor | BLDC | |

Connector Options

Default PA hose connector/PP hose connector/Stainless steel hose connector/PC6 push-in quick connector/PC8 push-in quick connector /PA Rc1/8 inside thread

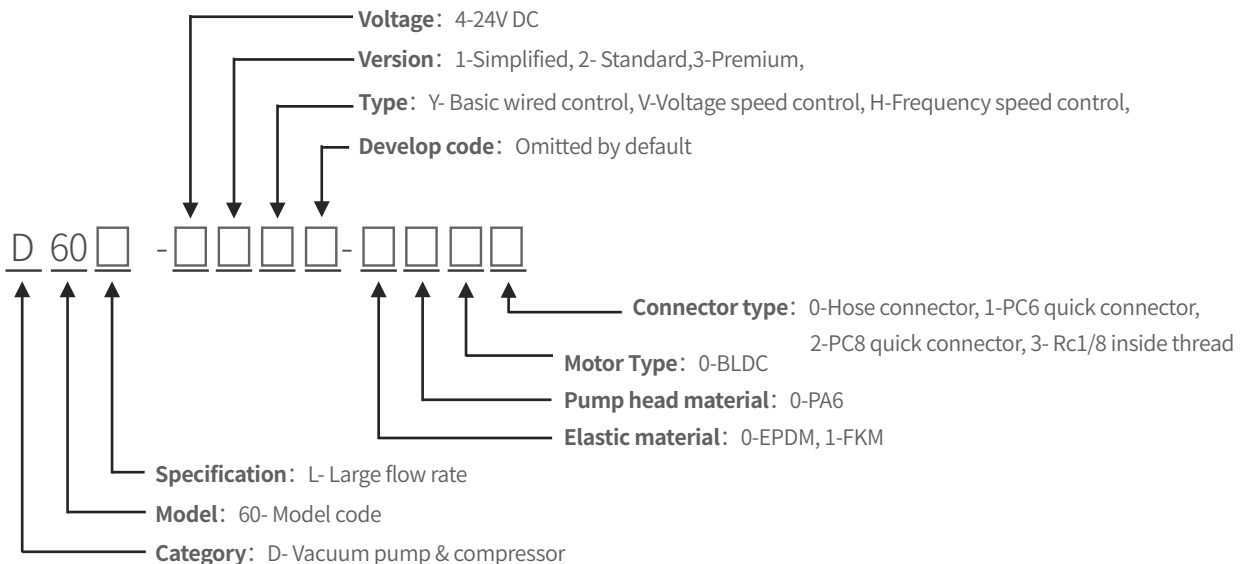
Function Options

| | | |
|---------------------|-----------------------|-------------------------|
| Basic wired control | Voltage speed control | Frequency speed control |
|---------------------|-----------------------|-------------------------|

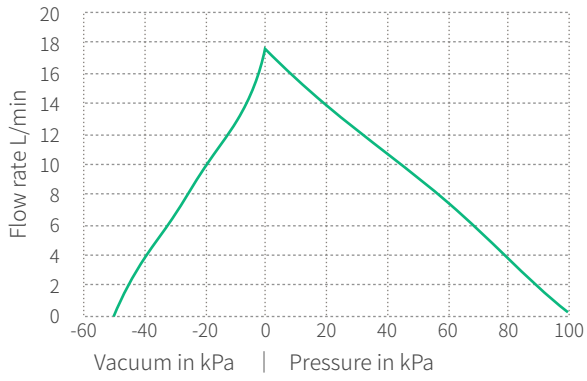
RELIABILITY DATA

| Models Versions | D60L | | |
|-----------------------------|--|----------|---------|
| | Simplified | Standard | Premium |
| Fully Loaded Lifetime (hrs) | 5000 | 7500 | 10000 |
| Unloaded Lifetime (hrs) | 8000 | 12000 | 15000 |
| Motor Lifetime (hrs) | 10000 | 15000 | 20000 |
| Test conditions | In a clean and non-corrosive laboratory, the pump is fully loaded (the outlet is blocked, the inlet is directly connected to the atmosphere) or unloaded (the inlet and outlet are directly connected to the atmosphere), and runs continuously around the clock; ambient temperature: 5°C~33 °C, relative humidity: 50%-85%, fluctuates with the climate. | | |
| Working Condition | | | |
| Operating temperature | Permissible ambient temperature is 0°C~50°C, it is not suitable to be exposed to the sun, and it should work in a clean and ventilated environmen | | |
| Medium | Permissible temperature of the medium is 5°C~50°C, the transferring gas is allowed to be rich in water vapor, but cannot contain solid particles | | |
| Wetted materials | EPDM, FKM as optional; fiber reinforced nylon, tolerance to alcohol, acid, alkali, etc. (except strong acid, concentrated acid, lipids, benzene, gasoline, etc.) | | |

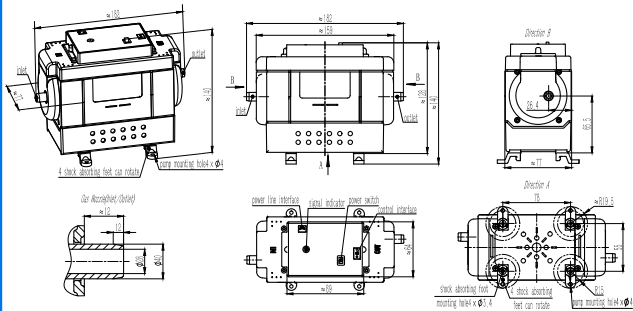
D60 MODEL KEY



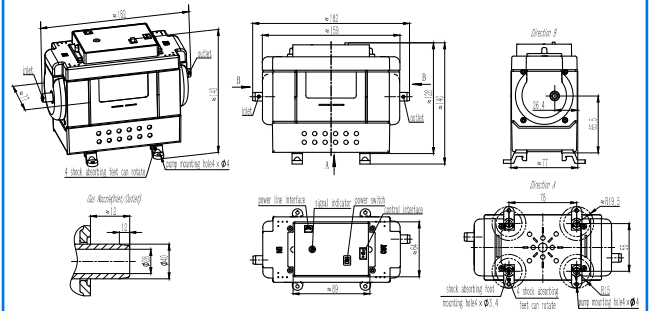
D60L FLOW CURVES



D60 BASIC WIRED CONTROL TYPE



D60 VOLTAGE/FREQUENCY CONTROL TYPE



| 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 |
| Manul control valve |  | It can be used to manually adjust the gas flow rate, pressure and vacuum. This accessory can be purchased on demand |
| 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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