

Features

- DC fans often offer variable speed settings, allowing users to adjust the fan speed according to their preference or cooling requirements.
- They consume less power compared to traditional AC fans, making them more cost-effective and environmentally friendly.
- Many DC fans are designed to operate quietly, especially at lower speeds.
- DC fans feature PWM control, allowing for precise adjustment of fan speed by modulating the power supplied to the fan.



Specification

Rated Voltage	24 VDC
Operation Voltage	14 ~ 26.4 VDC
Input Current	0.70 ≤ (UL 0.75 A)
Input Power	16.8 W
Speed	7500 ± 10 %
Speed Control Type	PWM Control
Signal Output	Frequency Generator
Max. Air Flow (at Zero Static Pressure)	2.99 (2.69 min) m ³ / min 105.5 (95 min) CFM
Max. Air Pressure (at Zero Flow)	34.5 (27.95 min) mm-H ₂ O 1.36 (1.10 min) inch-H ₂ O
Acoustical Noise	59 (62 Max) dB-A
Insulation Resistance	10 MOhms @ 500 VDC
Dielectric Strength	5 mA @ 500 VAC 60Hz
Life Expectance	70,000 Hrs @ 40 °C; Humidity 15 % ~ 65 % RH
Rotation	Counter-Clockwise viewed from Inlet
Air Flow Direction	Air Exhaust over Strut
Insulation Class	UL: Class A

Mechanical

Frame	Thermoplastic Black/ PBT+30 % GF of UL 94-V0
Fan Blade	Thermoplastic Black/ PBT+15 % GF of UL 94-V0
Bearing System	Two Ball Bearings
Weight	193g

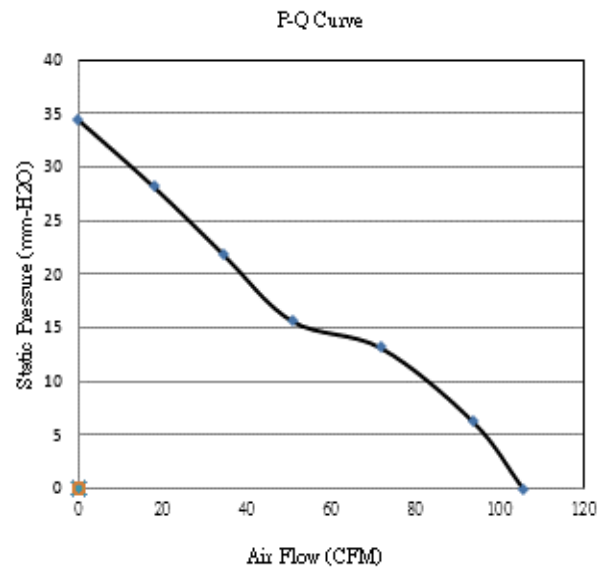
Environment

Operation Temperature	-25 ~ 70 °C
Storage Temperature	-40 ~ 75 °C
Operation Humidity	5 to 90 % RH
Storage Humidity	5 to 95 % RH
Sinewave Displacement	0.75 mm
Frequency Range	10-55 Hz/ 30 sec; 55-10 Hz/30 sec
Linear Scanning	120 cycle
Endurance Time per Axis	2 Hrs
Peak Acceleration	50 g
Compliance	ROHs
Fan Dust & Waterproof Level	IP67

Protection

Locked Rotor Protection	Yes
Polarity Protection	Yes
Auto-Restart Protection	Yes

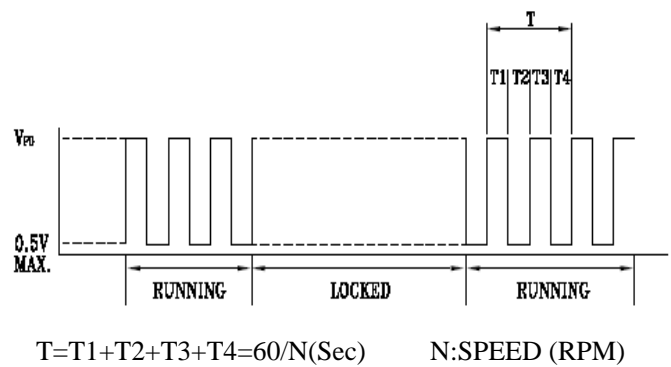
P & Q Curve



Signal Specification

Output Type	Open Collect
VFG Maximum Voltage	12 V
IC Maximum Current	5 mA
Low Level Voltage	0.5 V Max R ≥ VFG / Ic

Frequency Generator Waveform



PWM Control

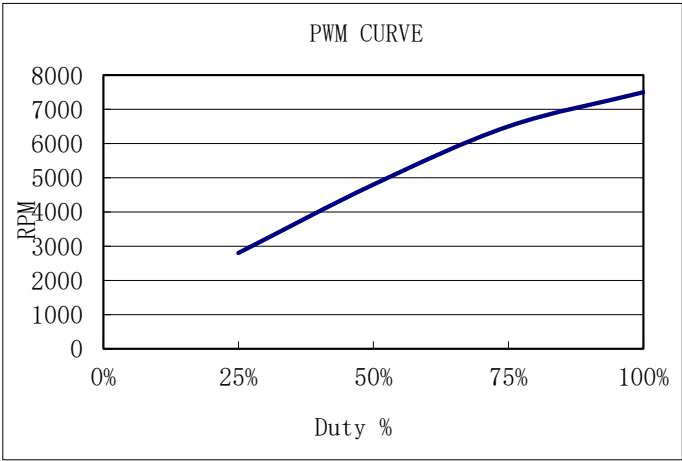
Control Signal	PWM Control
Input High Level Voltage	Min > 2.6 V, Max < 5 V
Input Low Level Voltage	< 0.5 V
PWM Frequency Range	1 KHZ ~ 100 KHZ
Max. Sink Current	8 mA

Fan Speed Control

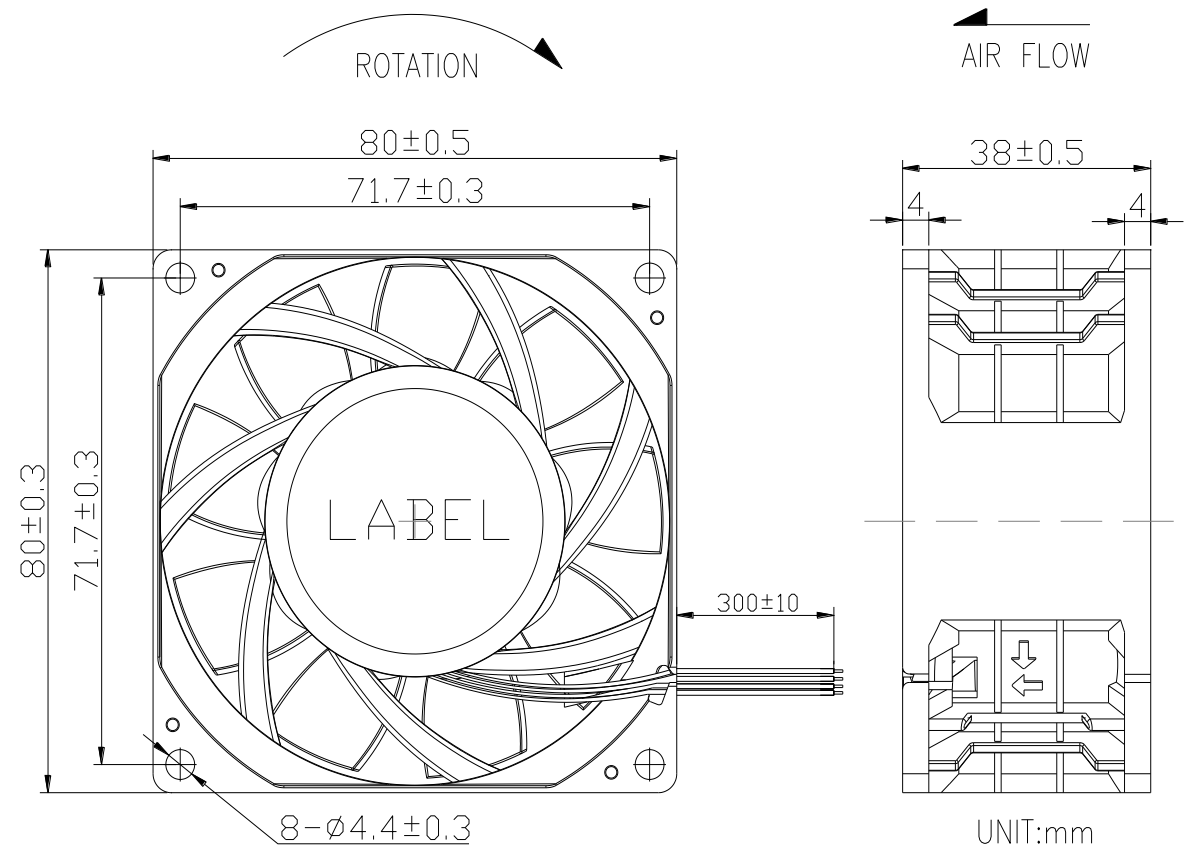
Input Voltage	5 VDC
PWM Frequency	25 KHZ

PWM Duty vs RPM Curved VD PWM Control Chart

Duty (%)	25%	50%	75%	100%
Speed R.P.M (REF)	2800 ± REF	4800 ± 25%	6500 ± 20%	7500 ± 10%



Drawing



Art. Nr.
RND 460-00171