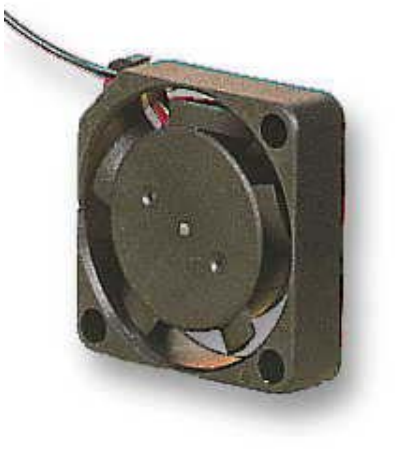
GM0500PEV Series

Low Voltage Axial Flow Fans

Micro Slim - 6mm Deep



Features:

- 25, 30 and 40mm micro slim fans.
- Ideally for precision cooling or compact equipment.
- Patented single-coil brushless 8 pole motor.
- Locked rotor protection.
- Precision ball bearings.

Characteristics:

Motor design	: Patented single-coil DC brushless 8 pole motor design.
Insulation resistance	: More than 500MΩ between internal stator and lead wire(+) measured at DC 500V.
Dielectric strength	: Applied AC 500V for one minute or AC 600V for 2 seconds between housing and lead wire(+).
Noise level	: Measured in a semi-anechoic chamber with background noise level below 15db(A). The fan is running in free air with the microphone at a distance of one meter from the fan intake.
Input power, current and speed	: Measured after continuous 10 minute operation at rated voltage in clean air, and at ambient temperature of 25°C.
Tolerance	: ±15% on rated power and current.
Air performance	: Measured by a double chamber. The values are recorded when the fan speed has stabilized at rated voltage.

Specifications:

Rated voltage	: 5V dc.
Operating voltage range	: 3 ~ 6V dc.
Starting voltage	: 3V dc (25°C Power On/Off).
Direction of rotation	: Counter-clockwise viewed from front of fan blade.
Operating temperature	: -10 to +70°C.
Storage temperature	: -40 to +70°C.
Bearing system	: Vapo bearing system.
Vibration	: Vibration of acceleration 1.5G and frequency 5~50~5Hz is applied in all 3 directions (X, Y, Z), in cycles of 1 minute each, for a total vibration time of 30 minutes.

Material:

Frame	: Thermoplastic PBT.
Impeller	: Thermoplastic PBT.
Bobbin	: Thermoplastic PBT.
Lead Wire	: 28AWG, +Red, -Black.

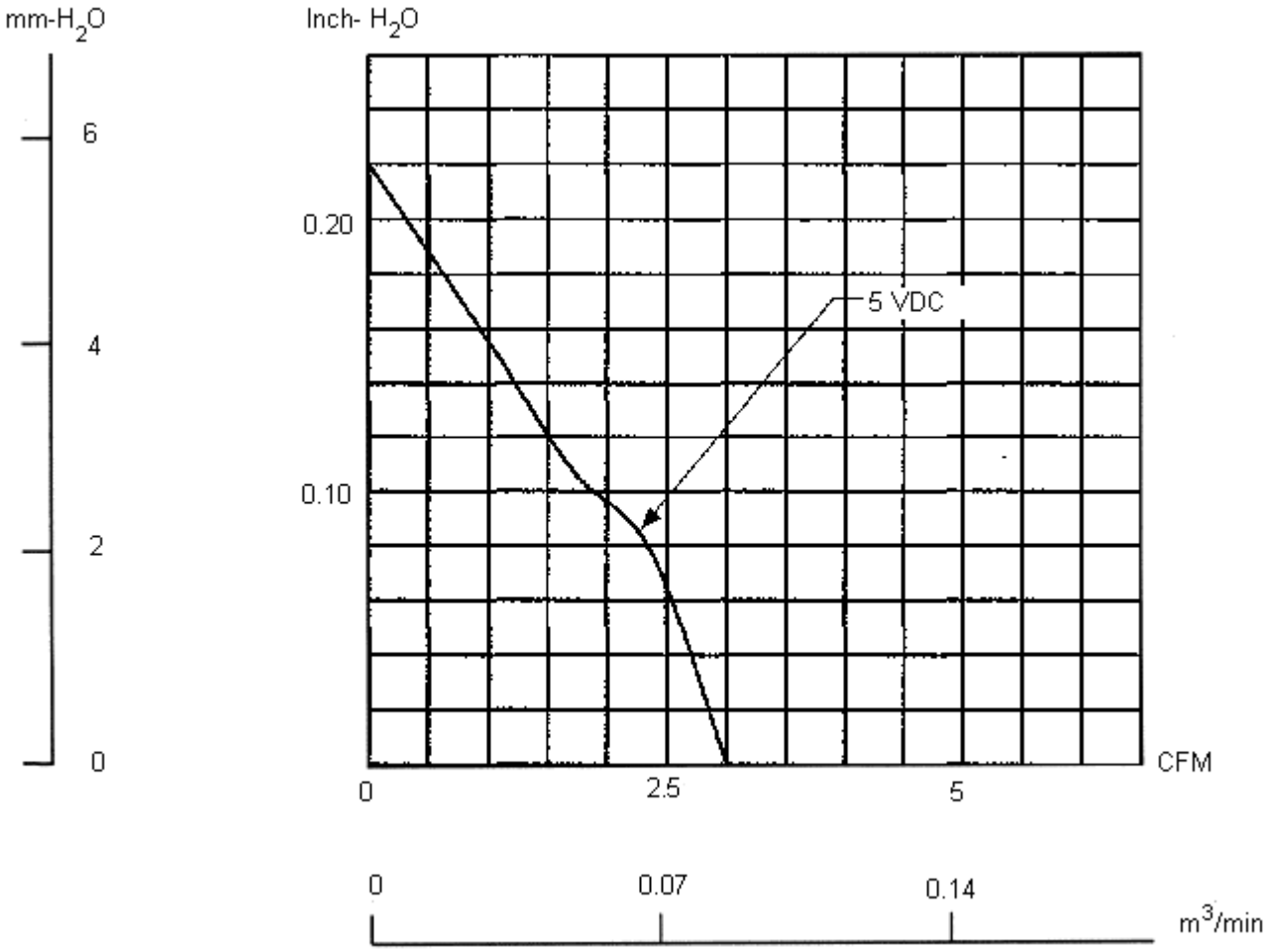
GM0502PEV1-8.N.GN:

Rated speed	: 13,000RPM ±20%.
Air delivery	: 3.0CFM.
Static pressure	: 0.22 inch-H_2O.
Rated current	: 0.11 Amp.
Rated power	: 0.6 watts.
Noise level	: 31db(A).

Performance Curves

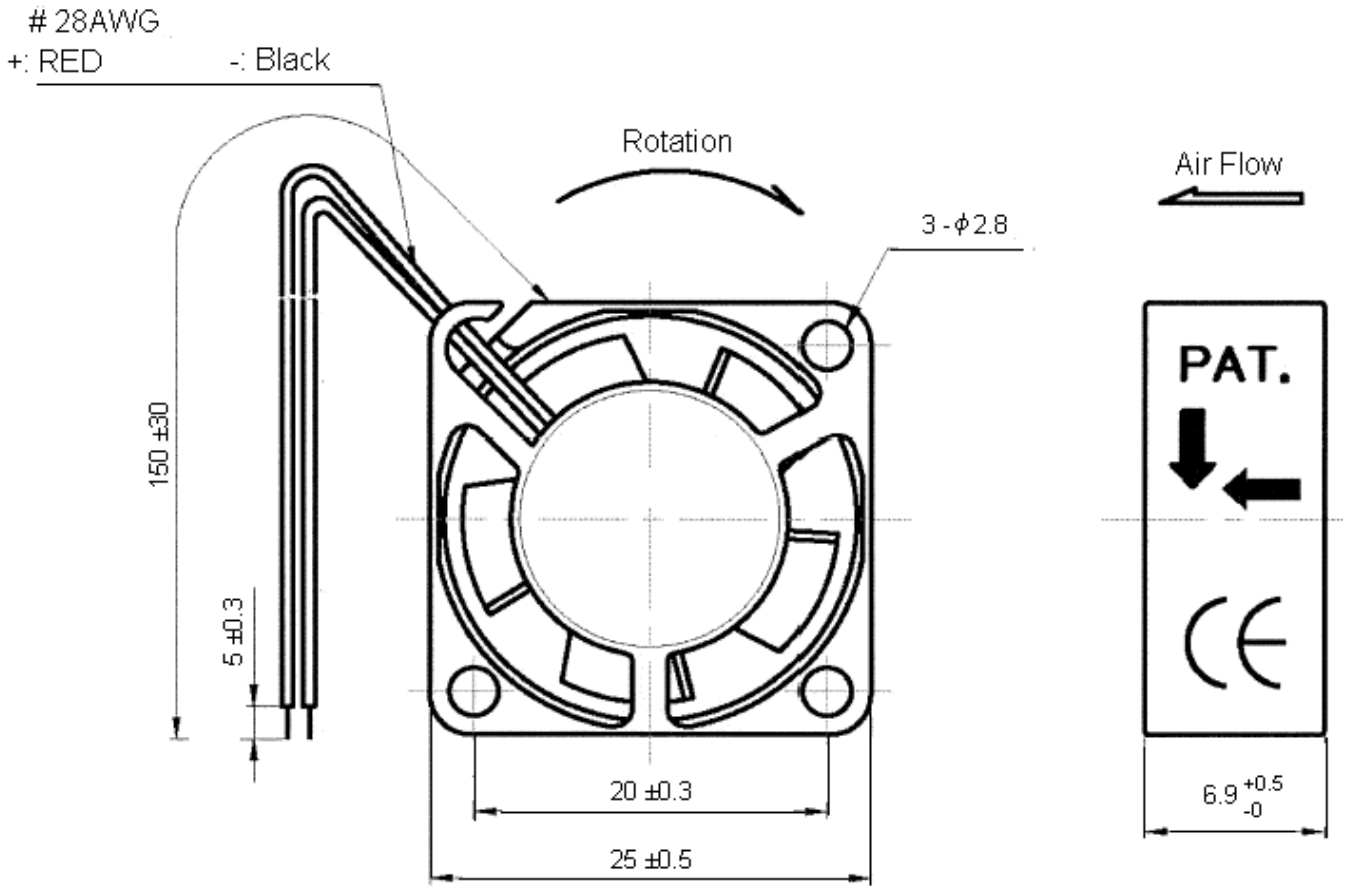
Static Pressure

GM0502PEV1-8.N.GN



Dimensions

GM0502PEV1-8.N.GN



Air flow direction : Toward label side.
Best mounting direction : Any orientation.

Specifications:

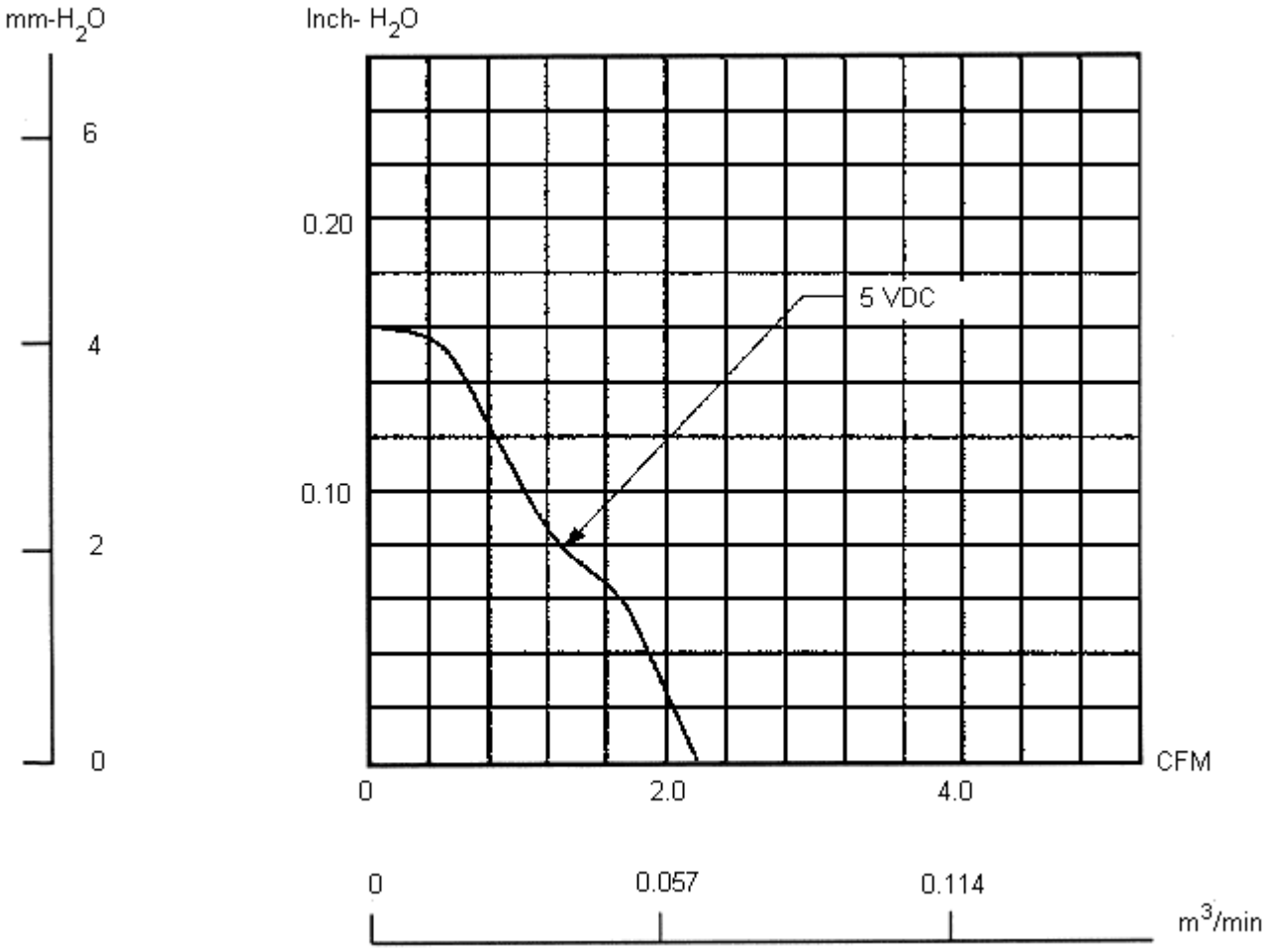
GM0502PEV2-8.N.GN:

Rated speed	: 10,000RPM ±30%.
Air delivery	: 2.2CFM.
Static pressure	: 0.16 inch-H_2O.
Rated current	: 0.08 Amp.
Rated power	: 0.4 watts.
Noise level	: 23db(A).

Performance Curves

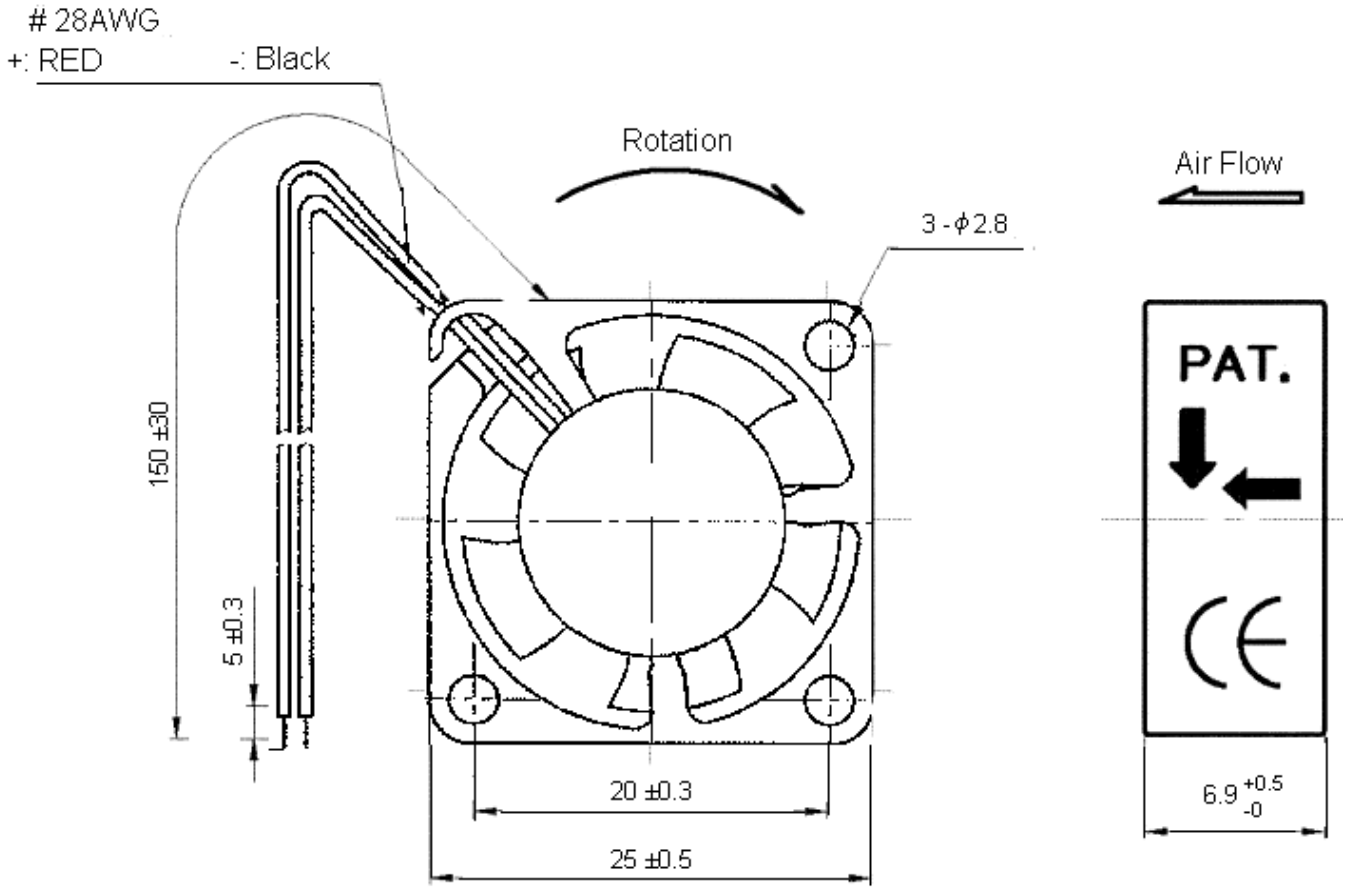
Static Pressure

GM0502PEV2-8.N.GN



Dimensions

GM0502PEV2-8.N.GN



Air flow direction : Toward label side.
Best mounting direction : Any orientation.

Specifications:

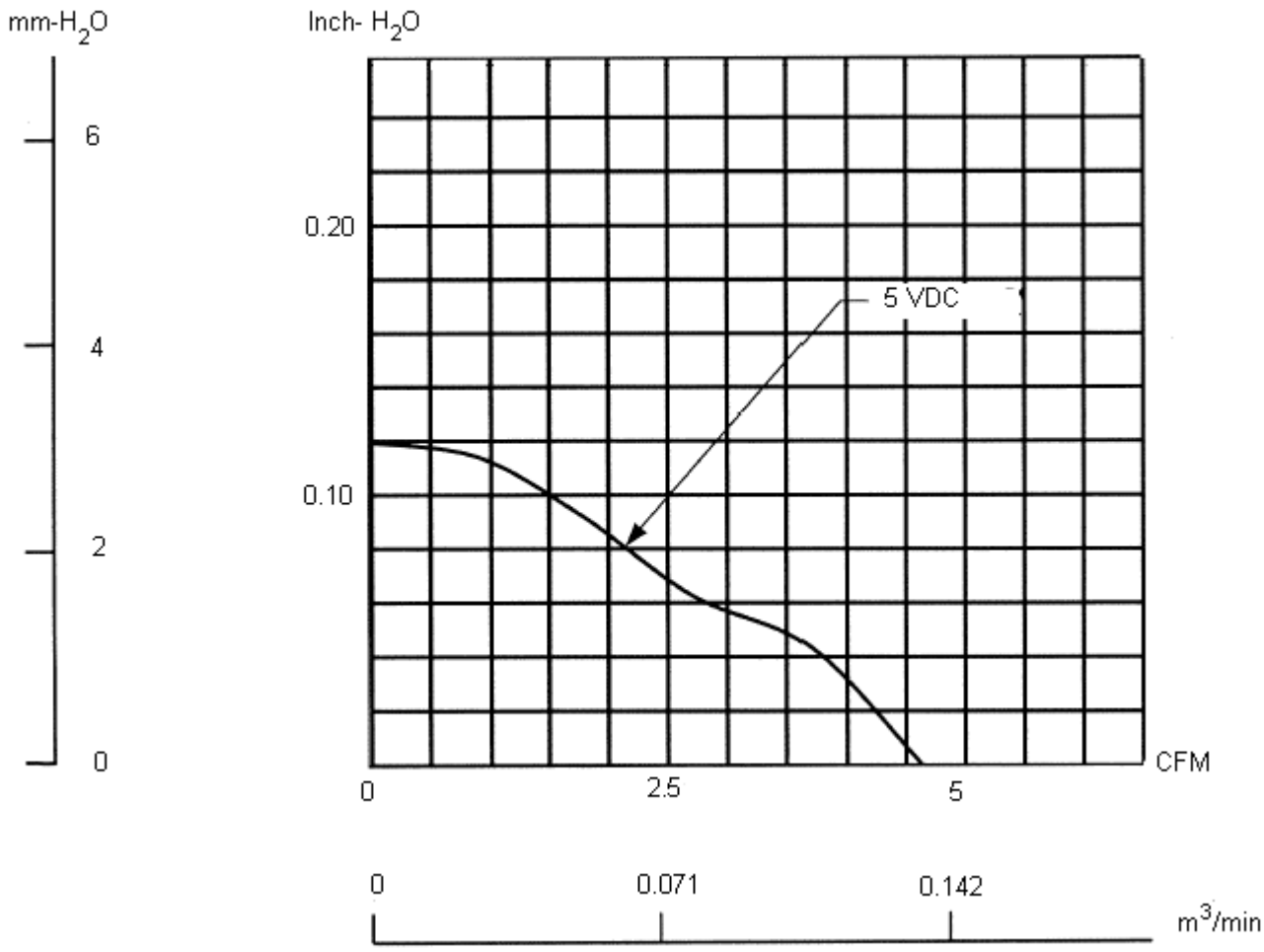
GM0503PEV1-8.N.GN:

Rated speed	: 9500RPM ±30%.
Air delivery	: 4.9CFM.
Static pressure	: 0.14 inch-H_2O.
Rated current	: 0.13 Amp.
Rated power	: 0.7 watts.
Noise level	: 28db(A).

Performance Curves

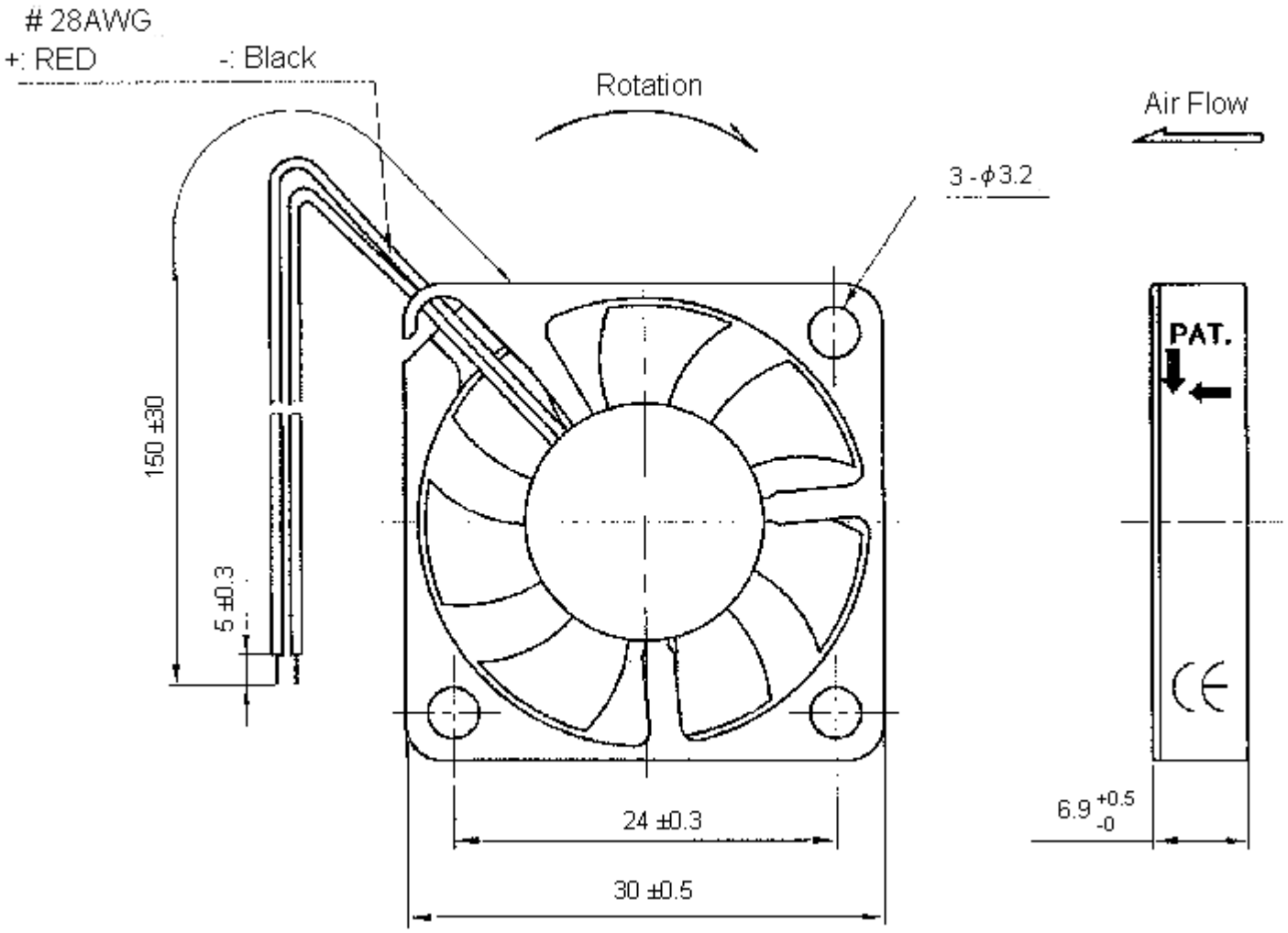
Static Pressure

GM0503PEV1-8.N.GN



Dimensions

GM0503PEV1-8.N.GN



Air flow direction : Toward label side.
Best mounting direction : Any orientation.

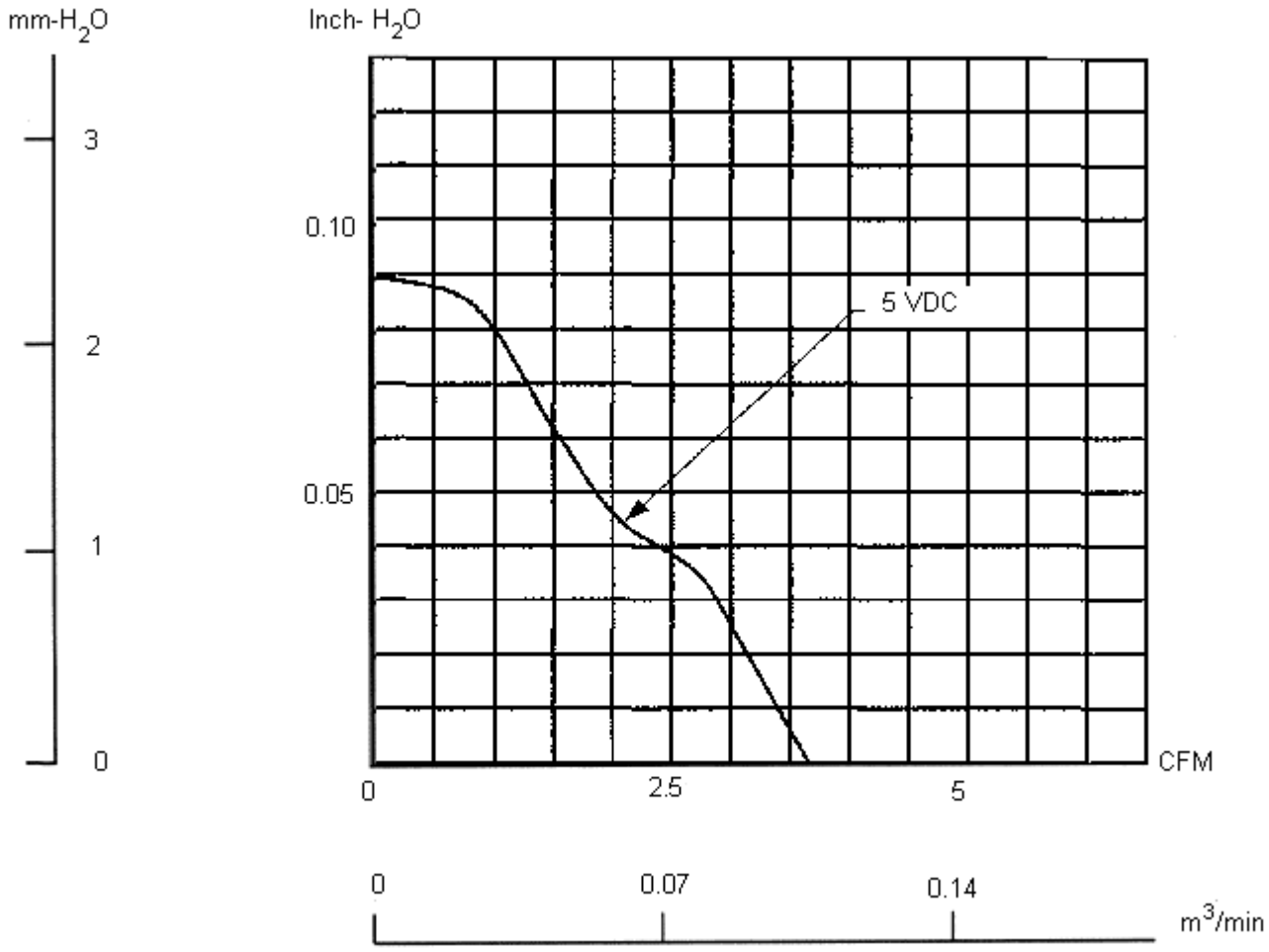
Specifications:

GM0503PEV2-8.N.GN:

Rated speed	: 7500RPM ±30%.
Air delivery	: 3.7CFM.
Static pressure	: 0.09 inch-H_2O.
Rated current	: 0.08 Amp.
Rated power	: 0.4 watts.
Noise level	: 24db(A).

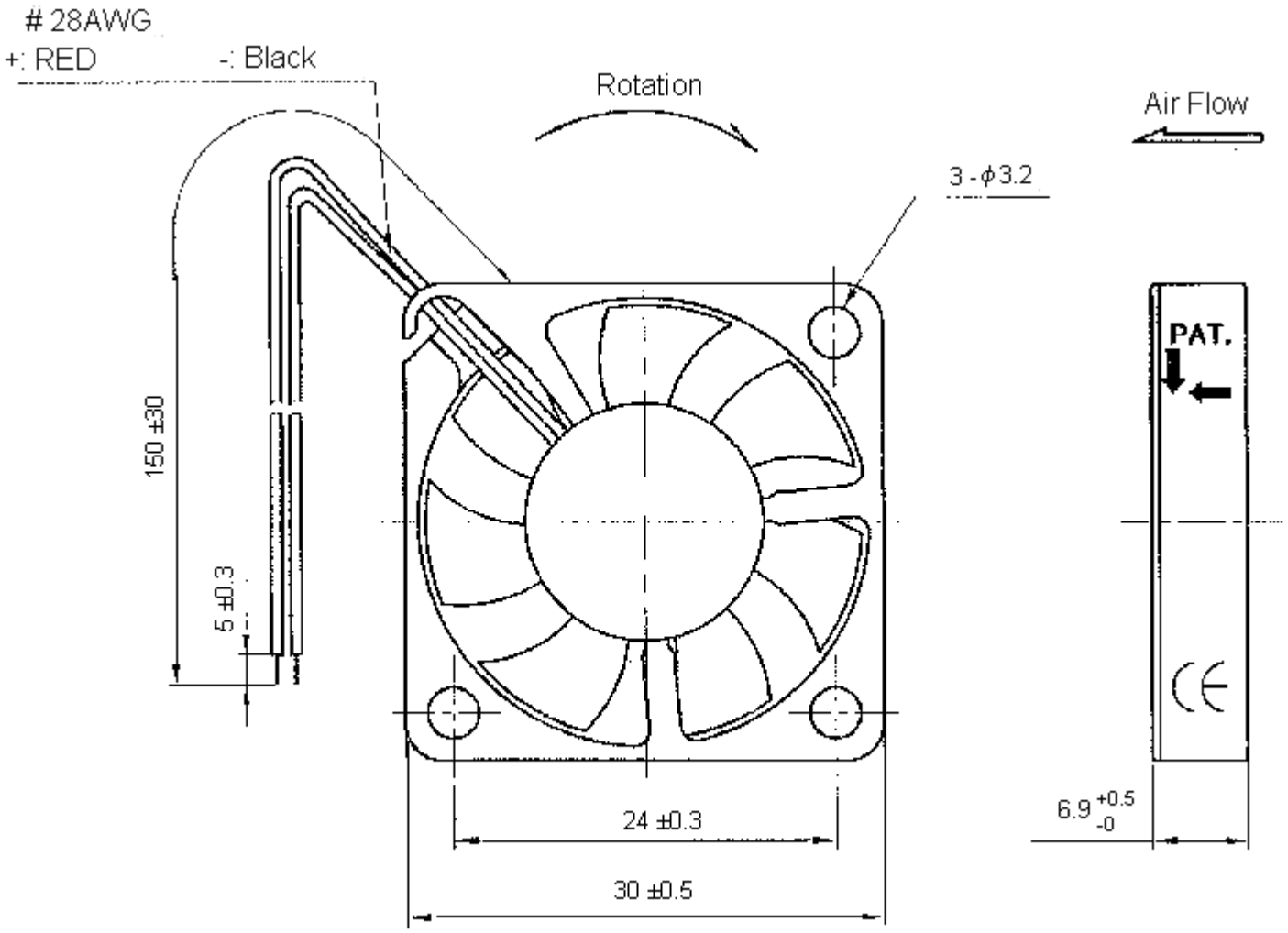
Performance Curves

Static Pressure **GM0503PEV2-8.N.GN**



Dimensions

GM0503PEV2-8.N.GN



Air flow direction : Toward label side.
Best mounting direction : Any orientation.

Specifications:

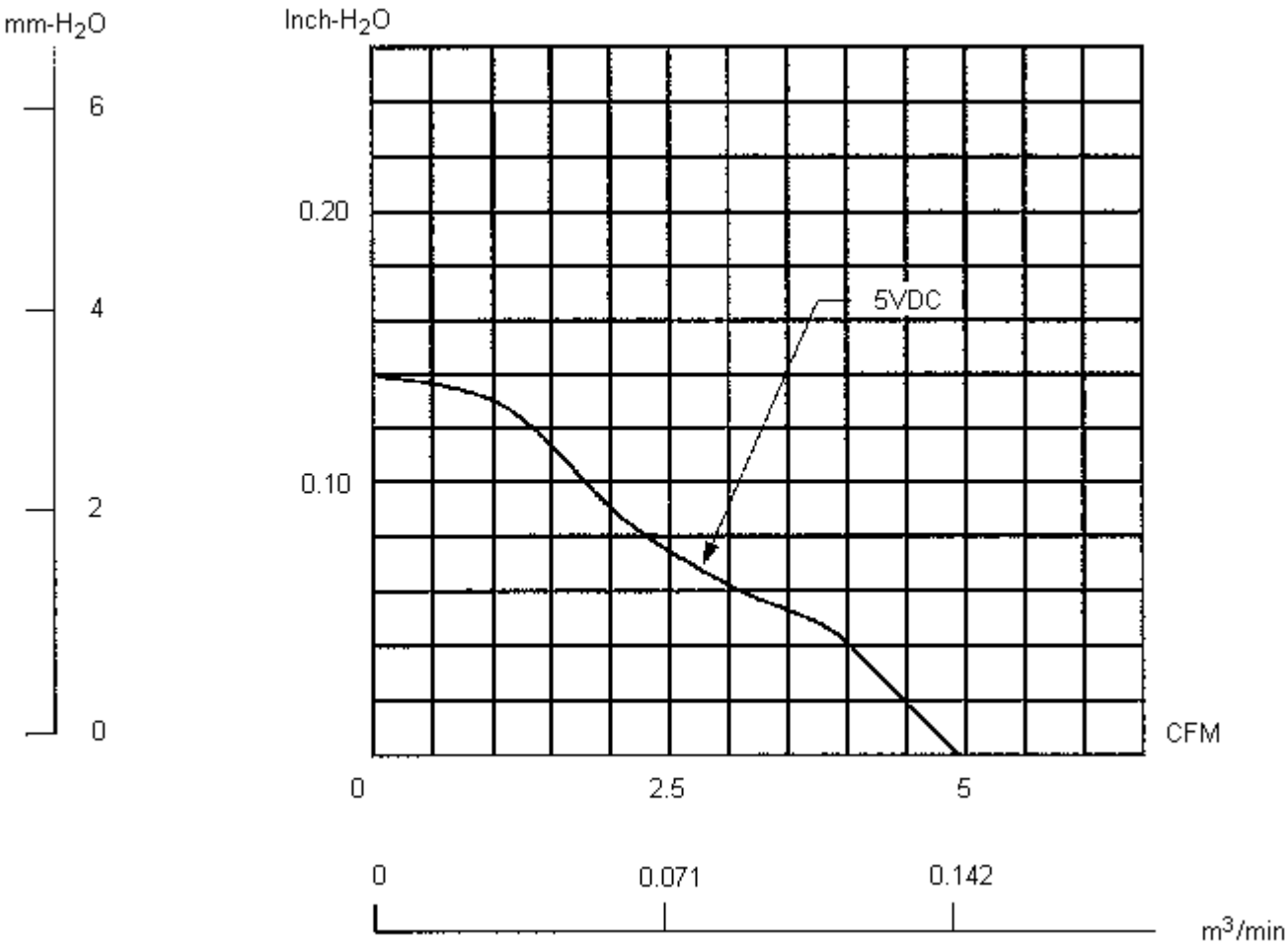
GM0503PEV2-8.N.GN:

Rated speed	: 7000RPM ±30%.
Air delivery	: 5.9CFM.
Static pressure	: 0.10 inch-H_2O.
Rated current	: 0.09 Amp.
Rated power	: 0.5 watts.
Noise level	: 32db(A).

Performance Curves

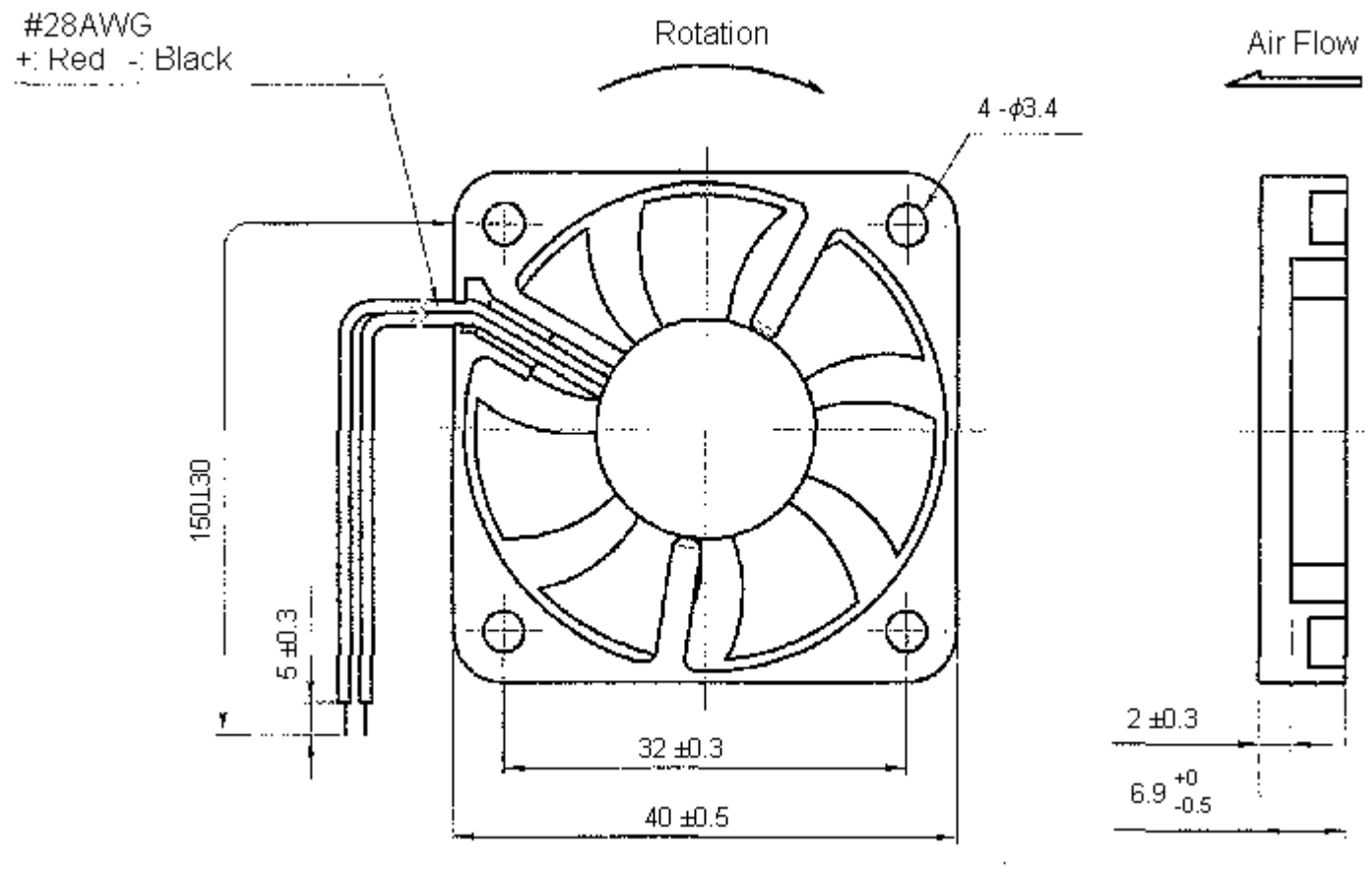
Static Pressure

GM0504PEV1-8.GN



Dimensions

GM0504PEV1-8.GN



Air flow direction : Toward label side.
Best mounting direction : Any orientation.

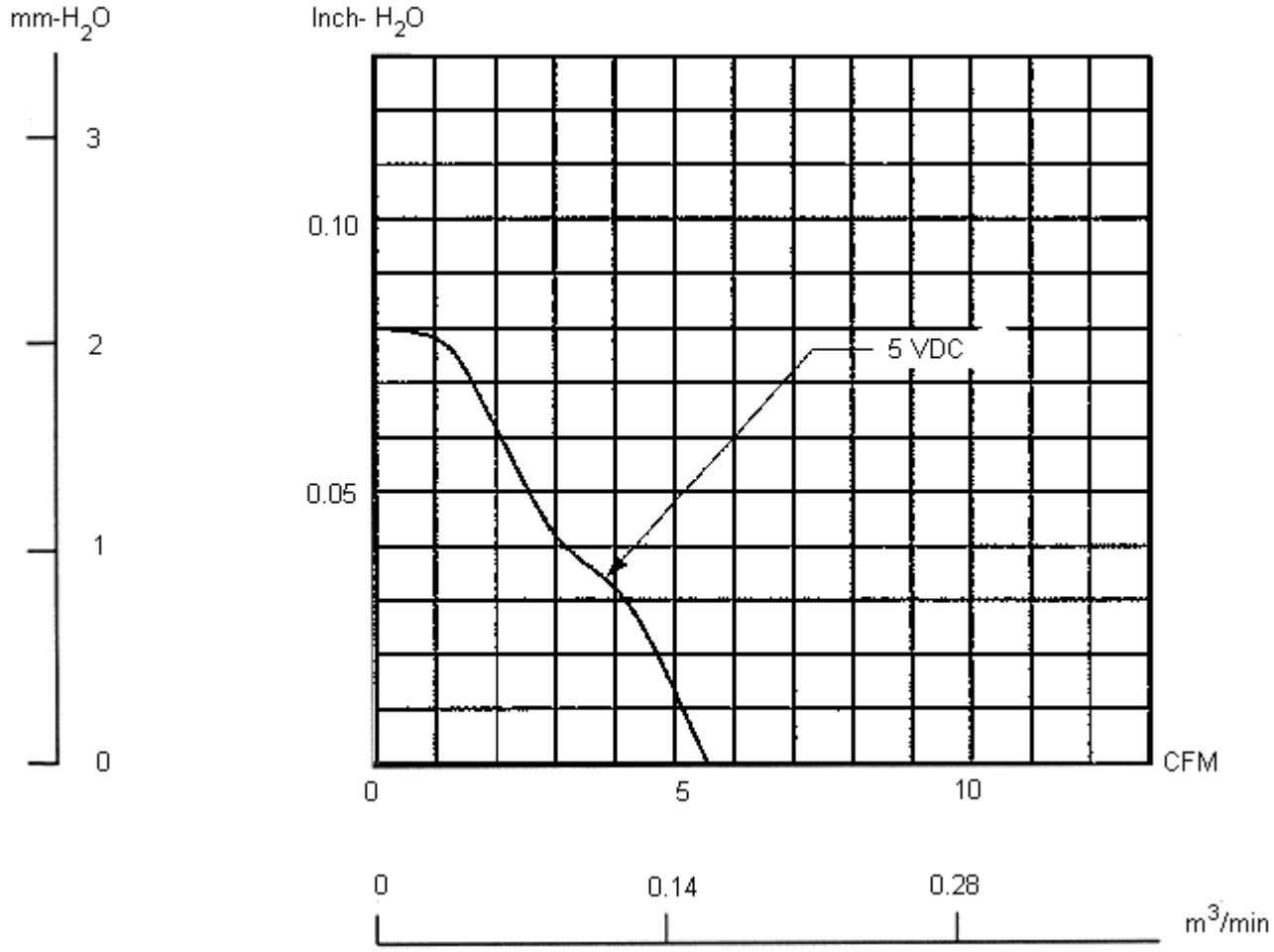
Specifications:

GM0504PEV2-8.GN:

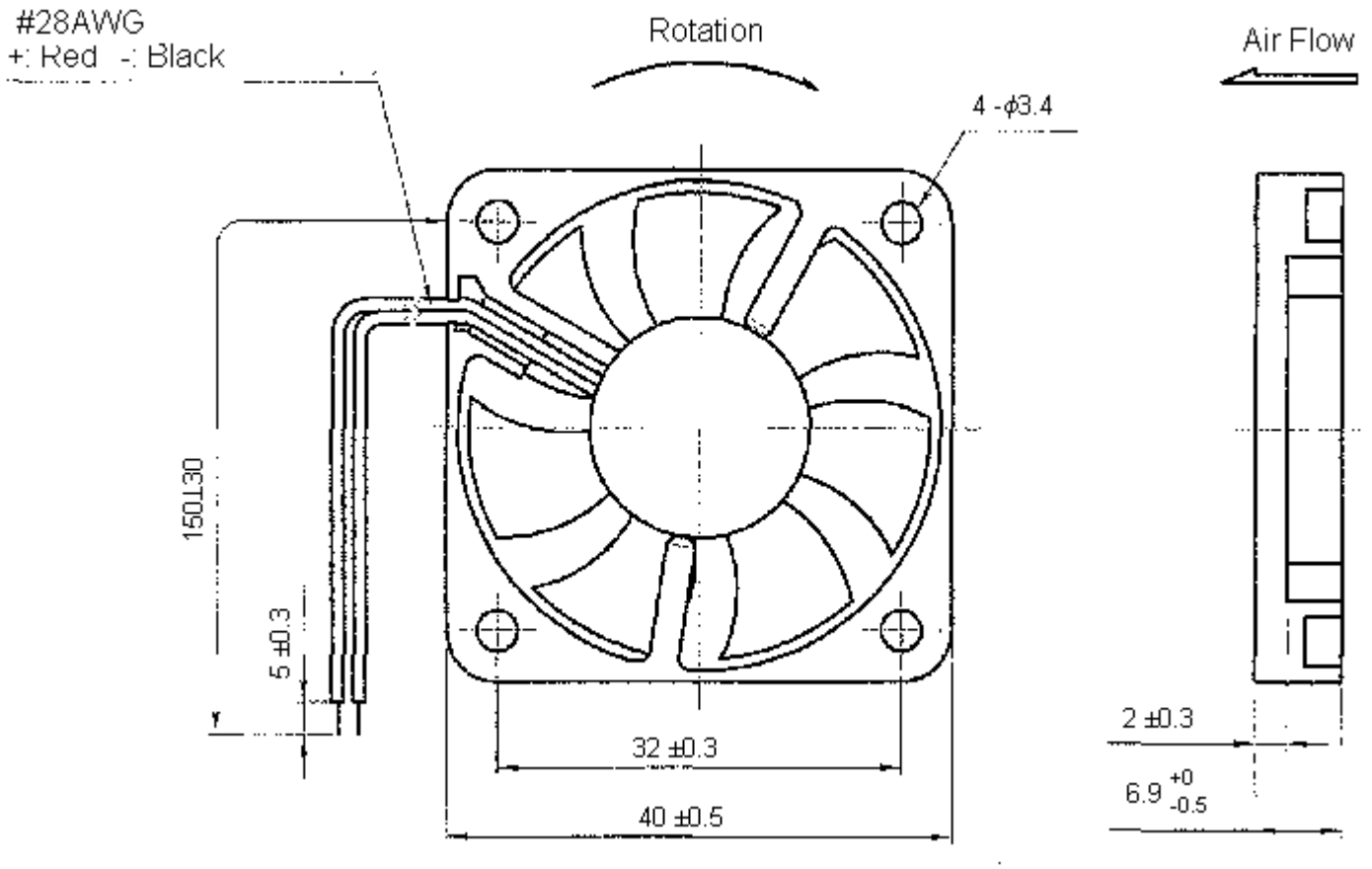
Rated speed	: 6000RPM ±30%.
Air delivery	: 5.5CFM.
Static pressure	: 0.08 inch-H_2O.
Rated current	: 0.07 Amp.
Rated power	: 0.4 watts.
Noise level	: 26db(A).

Performance Curves

Static Pressure **GM0504PEV2-8.GN**



Dimensions



Air flow direction : Toward label side.
Best mounting direction : Any orientation.

Notes:

Safety:

1. There is no thermo-protector installed in this product, such as thermo-fuse, or current-fuse, or thermo-protector. There may be smoking, ignition, or electric shock by insulation degradation in cases of motor lock, motor lead short circuit, overload, over voltage, and/or other failure. Please add the protection circuit to your product.
2. There is no reverse-connection prevention diode of VDC (+) and GND (-) installed in this product. Therefore, if VDC (+) and GND (-) are reverse connected, it may cause smoking, ignition, and/or destruction, although these conditions may not manifest immediately. We recommended that a protection device be installed on your product when there is possibility of reverse connection.
3. Please verify that this product is being installed and used in compliance with all safety standards.
4. Please handle and install this product carefully. Hitting and dropping this product this may cause damage.
5. Please donot damage this product including coil and lead wires while installing or wiring. There may be smoking or fire.

Other:

1. When building your device, please examine thoroughly any variation of EMC, temperature rise, life data, quality, etc. of this product by shock/drop/vibration testing, etc. If there are any problems or accidents in connection with this product, it should be mutually discussed and examined.
2. Fan holders or bearings may be damaged if touched with fingers or other objects. Additionally, static electricity (ESD) may cause damage the internal circuits. Please handle this product carefully.

Other:

3. Please avoid operating this product in poisonous material (organic silicon, cyanogens, formalin, phenol, etc.) or corrosive gas environments (H2S, SO2, NO2, Cl2, etc).
4. Improper mounting may cause harsh resonance, vibration, and noise. Please mount securely.
5. Safety is a top priority. Please furnish guard accessories to prevent injury to personnel.
6. Unless otherwise noted, all tests are conducted at 25°C ambient temperature and 65% relative humidity.
7. Always ensure that fans are stored according to the storage temperatures specified. Donot store in a high humidity environment. If the fans are stored for more than 6 months, with functional testing recommended before use.
8. This reserves the right to use components with equivalent specifications from multiple sources.

Specification Table

Type	Voltage (V dc)	Power (Watts)	Air Flow		Noise (dBA at 1m)	Dimension			Part Number
			cu ft/min	ltrs/sec		H	W	D	
Standard,25mm	5	0.6	3	0.76	31	25	25	6.9	GM0502PEV1-8.N.GN
Low Noise, 25mm		0.4	2.2	0.57	23				GM0502PEV2-8.N.GN
Standard,30mm		0.7	4.9	1.43	28	30	30		GM0503PEV1-8.N.GN
Low Noise,30mm		0.4	3.7	1.15	24				GM0503PEV2-8.N.GN
Standard,40mm		0.5	5.9	2.6	32	40	40		GM0504PEV1-8.GN
Low Noise,40mm		0.4	5.5	2.07	26				GM0504PEV2-8.GN

Dimensions : Millimetres (Unless Specified)

Notes:

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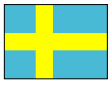

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