

Low Voltage Axial Flow Fans



GM0500PEV Series

Micro Slim - 6 mm Deep



Features:

- 25, 30 and 40 mm 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 500 M Ω between internal stator and lead wire (+) measured at 500 V dc
Dielectric Strength	: Applied 500 V ac for one minute or 600 V ac for 2 seconds between housing and lead wire (+)
Noise Level	: Measured in a semi-anechoic chamber with background noise level below 15 db (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 minutes operation at rated voltage in clean air, and at ambient temperature of 25°C
Tolerance	: \pm 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	: 5 V dc
Operating Voltage Range	: 3 to 6 V dc
Starting Voltage	: 3 V 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 1.5 G and frequency 5 to 50 to 5 Hz 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	: 28 AWG, +Red, -Black

Low Voltage Axial Flow Fans

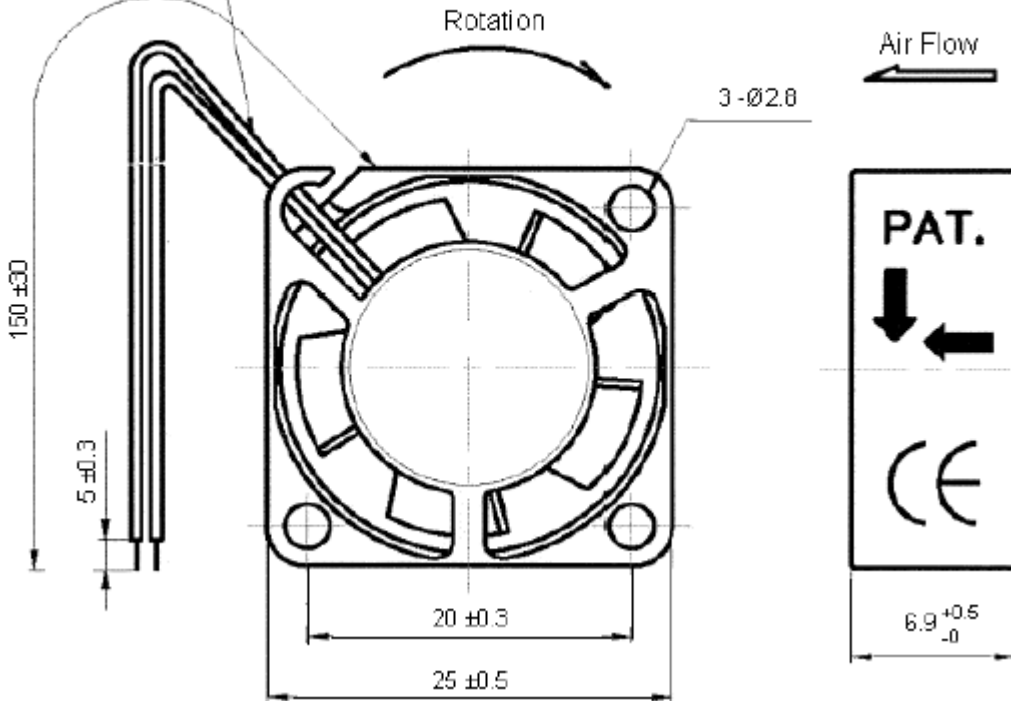


GM0500PEV Series

GM0502PEV1-8.N.GN

28 AWG

+ Red - Black

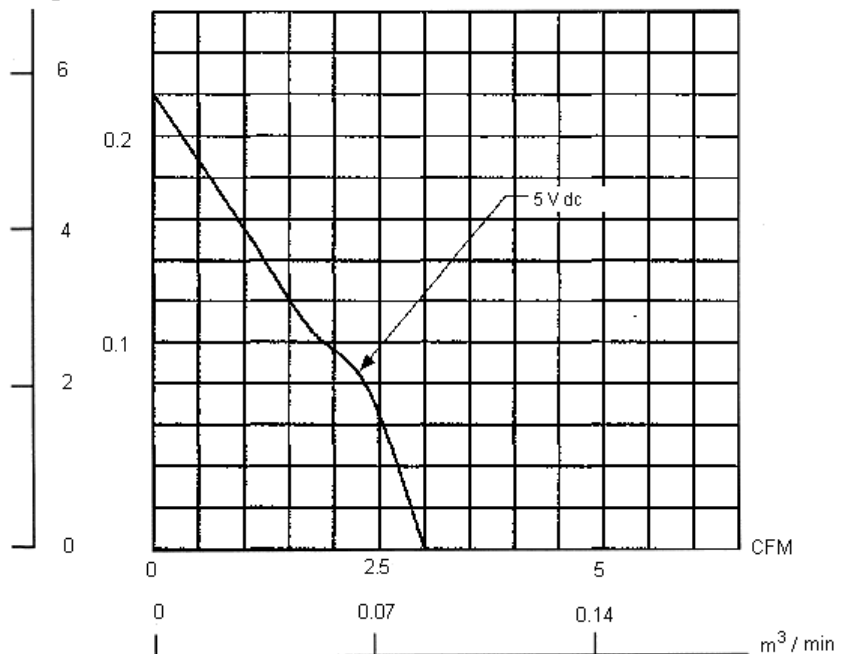


Dimensions : Millimetres

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

Performance Curves

Static Pressure
 mm-H₂O Inch-H₂O



Specifications:

Rated Speed : 13,000 rpm ±20%
 Air Delivery : 3 CFM
 Static Pressure : 0.22 inch-H₂O
 Rated Current : 0.11 A
 Rated Power : 0.6 watts
 Noise Level : 31 db (A)

Low Voltage Axial Flow Fans

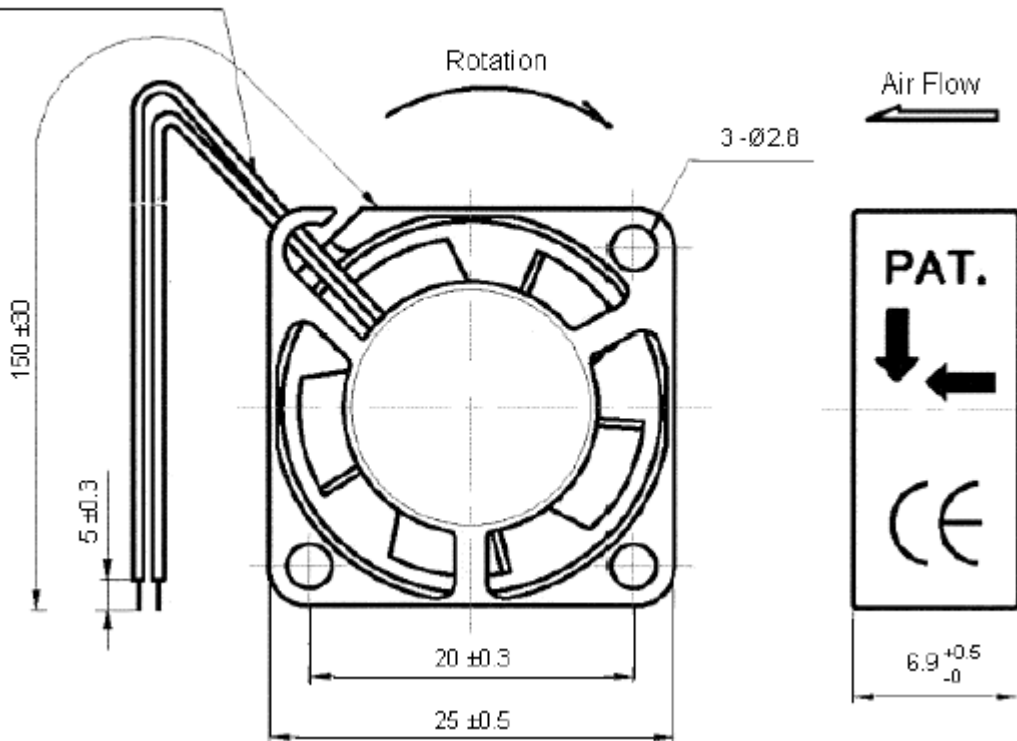


GM0500PEV Series

GM0502PEV2-8.N.GN

28 AWG

+ Red - Black



Dimensions : Millimetres

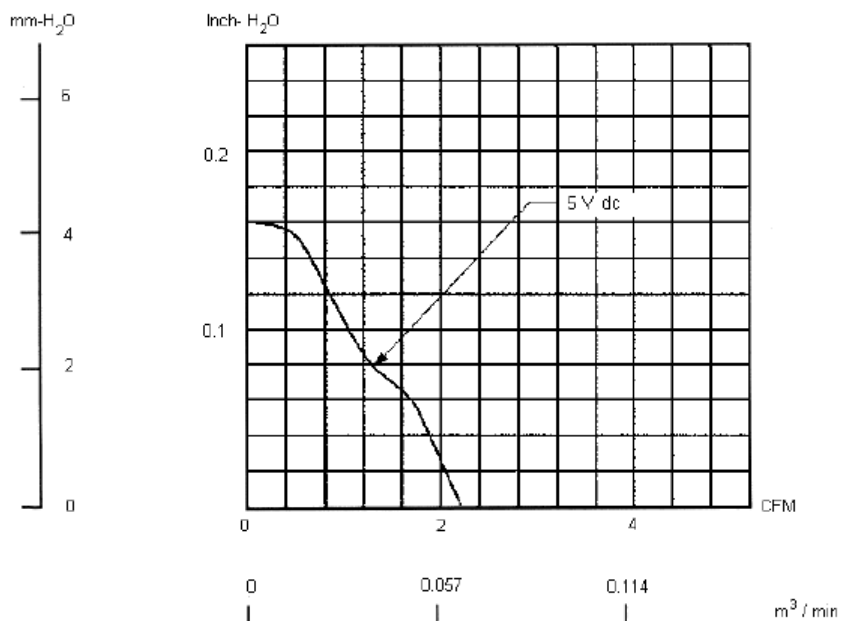
Air flow direction : Toward label side
 Best mounting direction : Any orientation

Specifications:

Rated Speed : 10,000 rpm \pm 30%
 Air Delivery : 2.2 CFM
 Static Pressure : 0.16 inch-H₂O
 Rated Current : 0.08 A
 Rated Power : 0.4 watts
 Noise Level : 23 db (A)

Performance Curves

Static Pressure



Low Voltage Axial Flow Fans

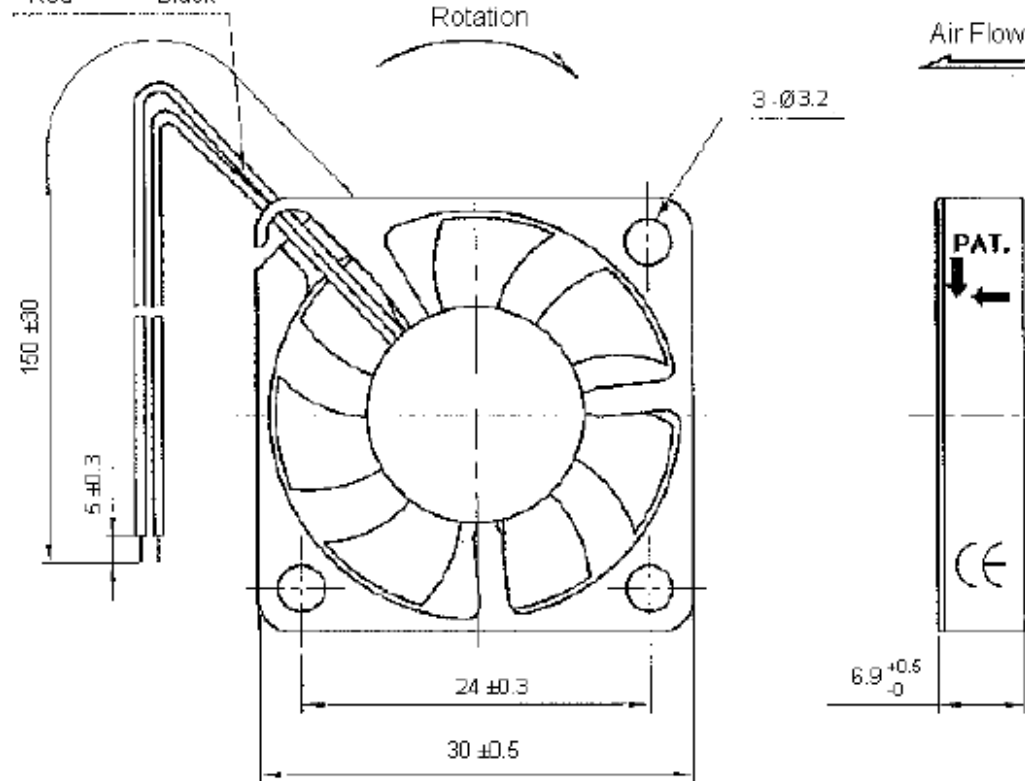


GM0500PEV Series

GM0503PEV1-8.N.GN

28 AWG

+ Red - Black



Dimensions : Millimetres

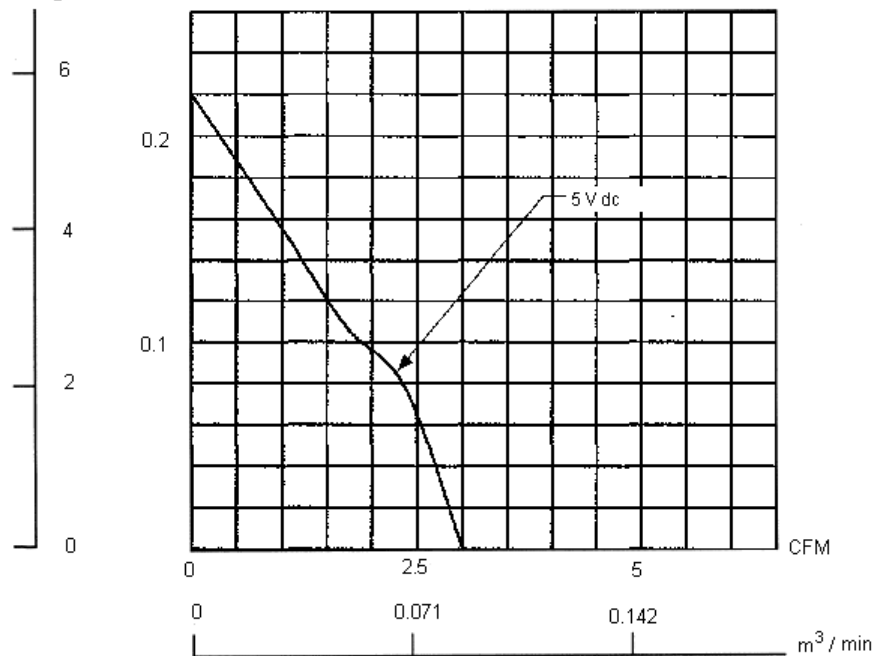
Performance Curves

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

Static Pressure
mm-H₂O Inch- H₂O

Specifications:

Rated Speed : 9,500 rpm ±30%
Air Delivery : 4.9 CFM
Static Pressure : 0.14 inch-H₂O
Rated Current : 0.13 A
Rated Power : 0.7 watts
Noise Level : 28 db (A)



Low Voltage Axial Flow Fans

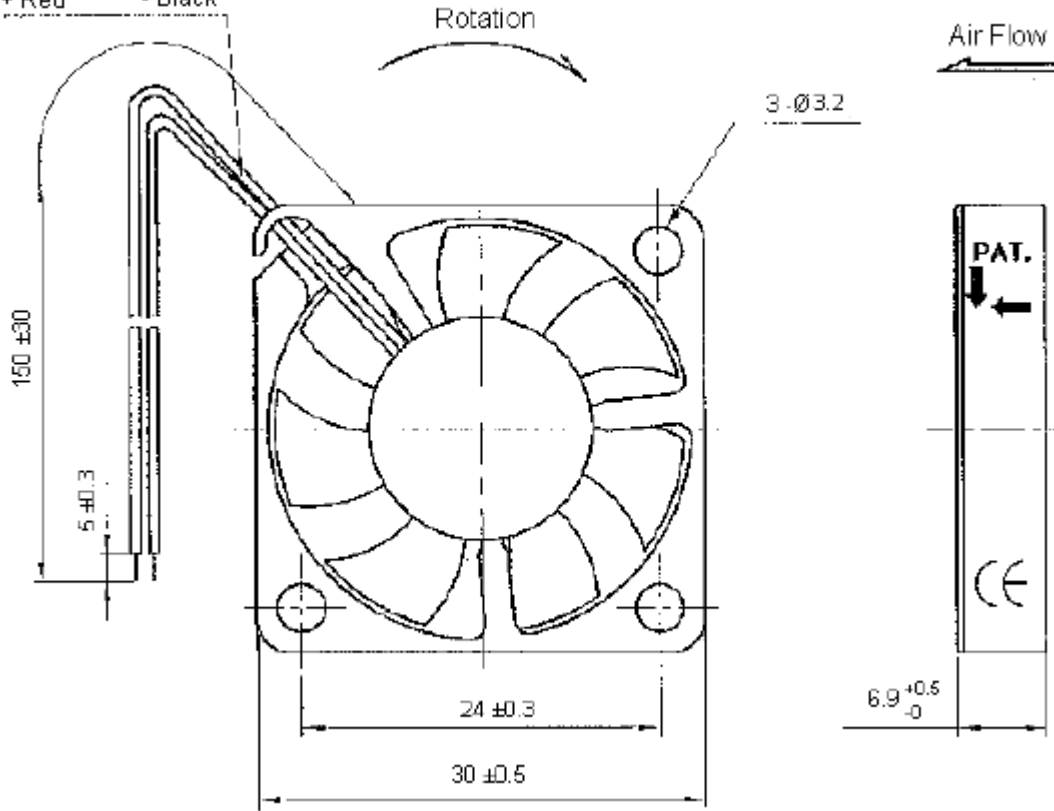


GM0500PEV Series

GM0503PEV2-8.N.GN

28 AWG

+ Red - Black



Dimensions : Millimetres

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

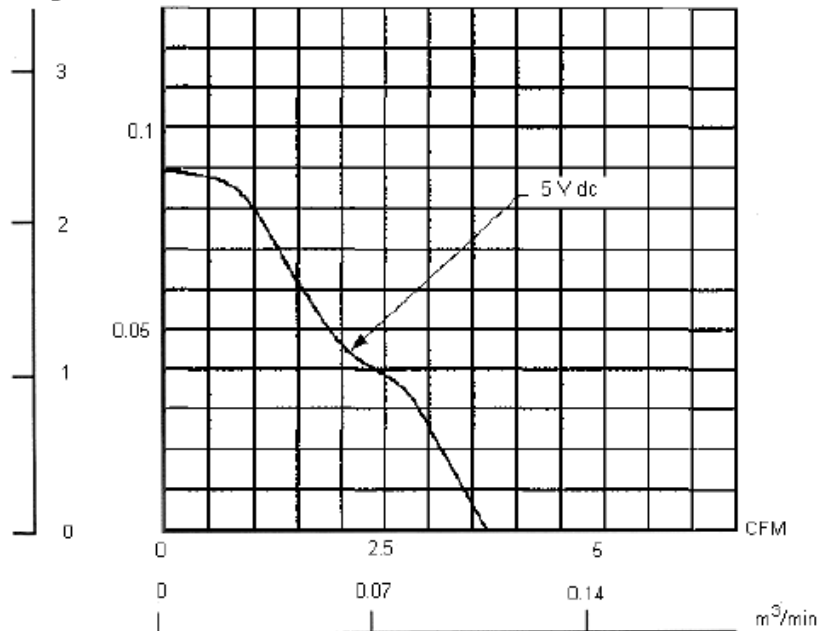
Specifications:

Rated Speed : 7,500 rpm ±30%
Air Delivery : 3.7 CFM
Static Pressure : 0.09 inch-H₂O
Rated Current : 0.08 A
Rated Power : 0.4 watts
Noise Level : 24 db (A)

Performance Curves

Static Pressure

mm-H₂O Inch-H₂O



Low Voltage Axial Flow Fans

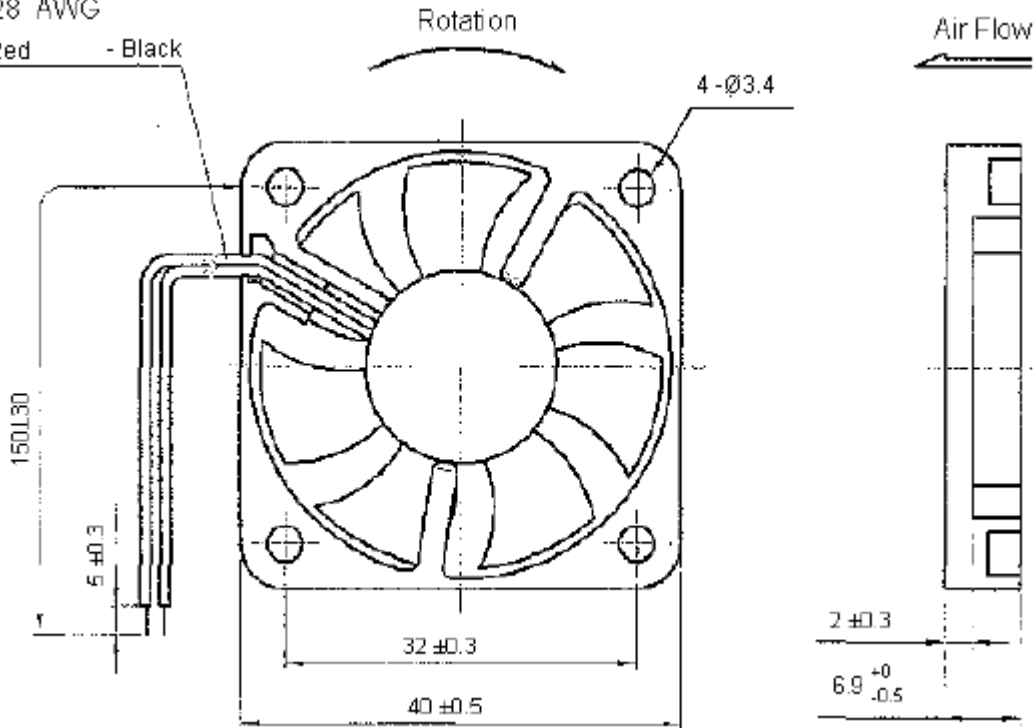


GM0500PEV Series

GM0504PEV1-8.GN

28 AWG

+ Red - Black



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

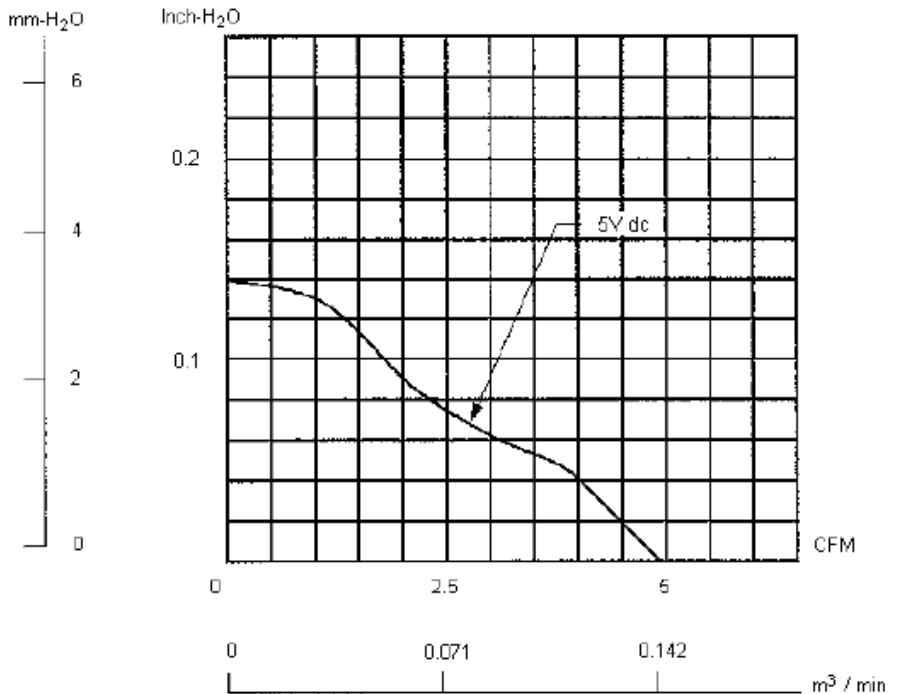
Dimensions : Millimetres

Specifications:

Rated Speed : 7,000 rpm ±30%
 Air Delivery : 5.9 CFM
 Static Pressure : 0.1 inch-H₂O
 Rated Current : 0.09 A
 Rated Power : 0.5 watts
 Noise Level : 32 db (A)

Performance Curves

Static Pressure



Low Voltage Axial Flow Fans

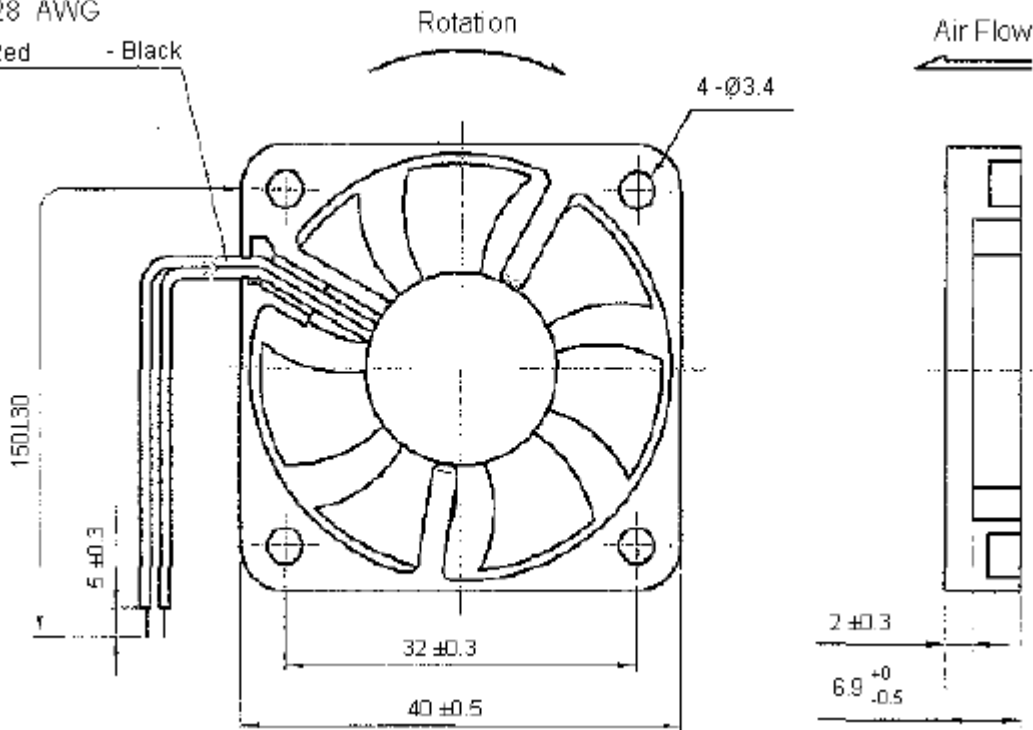


GM0500PEV Series

GM0504PEV2-8.GN

28 AWG

+ Red - Black



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

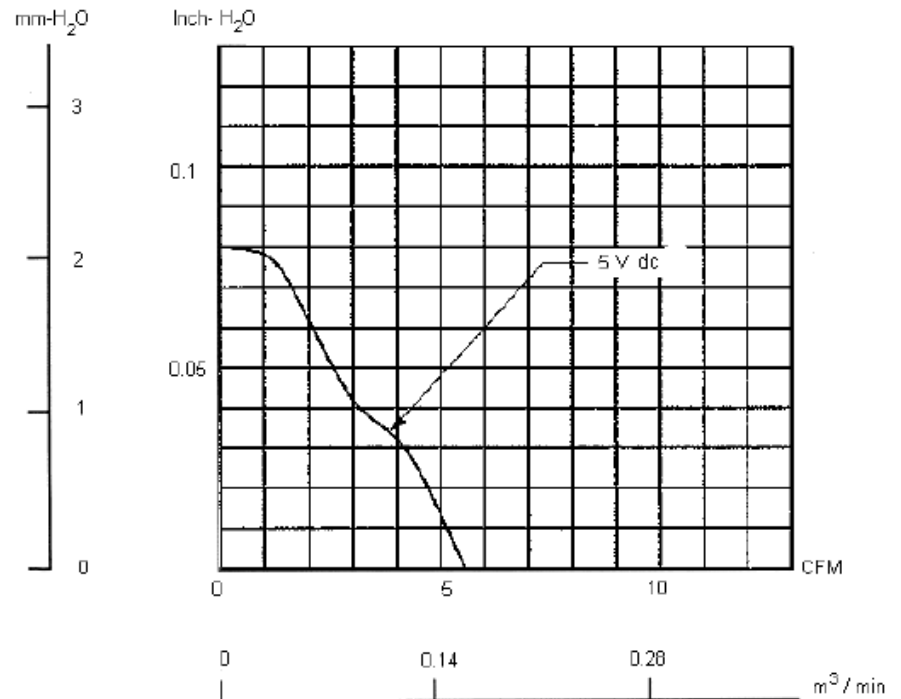
Dimensions : Millimetres

Specifications:

Rated Speed : 6,000 rpm ±30%
 Air Delivery : 5.5 CFM
 Static Pressure : 0.08 inch-H₂O
 Rated Current : 0.07 A
 Rated Power : 0.4 watts
 Noise Level : 26 db (A)

Performance Curves

Static Pressure



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GM0500PEV Series

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.
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 1 m)	Dimension			Part Number
			cu ft / min	ltrs / sec		H	W	D	
Standard, 25 mm	5	0.6	3	0.76	31	25	25	6.9	GM0502PEV1-8.N.GN
Low Noise, 25 mm		0.4	2.2	0.57	23				GM0502PEV2-8.N.GN
Standard, 30 mm		0.7	4.9	1.43	28	30	30		GM0503PEV1-8.N.GN
Low Noise, 30 mm		0.4	3.7	1.15	24				GM0503PEV2-8.N.GN
Standard, 40 mm		0.5	5.9	2.6	32	40	40		GM0504PEV1-8.GN
Low Noise, 40 mm		0.4	5.5	2.07	6				GM0504PEV2-8.GN

Dimensions : Millimetres

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