

General Specifications

Motor Type: DC Brushless Motor

Motor Protection:

Auto Restart/Polarity Protection
(Motor withstands reverse connection for positive and negative leads.)

Insulation Resistance:

10M Ω or over with a DC500V Megger

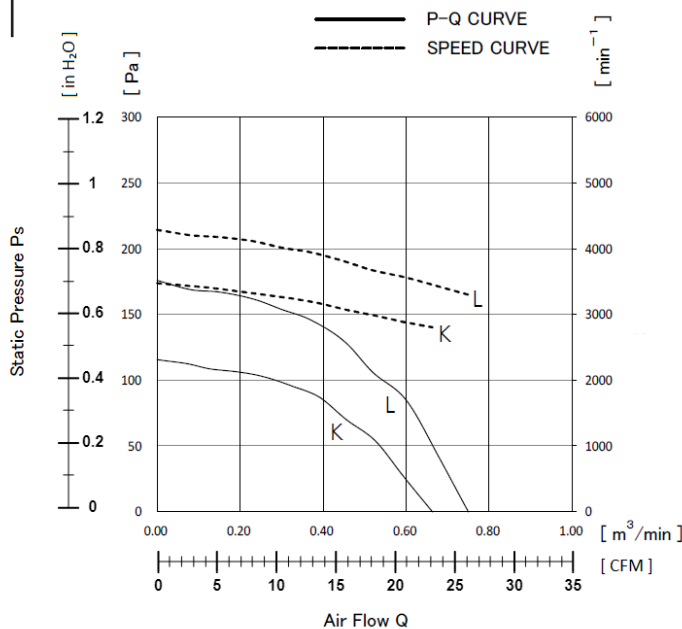
Dielectric Withstand Voltage:

AC 700V 1s or 500V 1min

Allowable Ambient Temperature Range:

-10°C ~ +60°C (Operating)
-40°C ~ +70°C (Storage)
(non-condensing environment)

Characteristics Curves



DC Blower Benefits & Applications

DC Blower

With high static pressure, NMB centrifugal blowers are suitable for cooling electronic systems generating lots of heat and high impedance from back pressure. A DC blower contains a circular impeller within an enclosed cage, which is often referred to as a “squirrel cage”. This design allows DC Blowers to create directed airflow under high pressure conditions. A DC Blower has a more concentrated airflow in which the equipment pulls air in from the sides and forces it out at a concentrated 90° angle.

Benefits

- High pressure and high airflow
- Cost savings with sleeve bearing, yet reliable
- Concentrated airflow to effectively cool target
- Smooth PQ curve with no knee
- Tacho Signal output for speed monitoring

Applications

- Factory Automation
- Humidifiers
- Telecomm
- OA Equipment
- Network Servers
- Home Appliances
- Medical Devices

Life Expectancy L10

40°C 50,000 Hours

Specifications

MODEL	Rating Voltage (V)	Operating Voltage (V)	Current		Input Power		Speed (min ⁻¹)*1	Max. Air Flow		Max. Static Pressure		Noise (dB)*1	Mass (g)
			Avg (A)*1	Max (A)*1	Avg (W)*1	Max (W)*1		(CFM)	(m ³ /min)	(in H ₂ O)	(Pa)		
09533GS-12K-ATD-0	12	6.0 ~ 13.8	0.26	0.34	3.12	4.08	2800	23.31	0.66	0.46	115	48.0	170
09533GS-12L-ATD-0			0.46	0.60	5.52	7.20	3300	26.49	0.75	0.72	180	52.0	

*1: Values in Free Air

TACHO Specifications

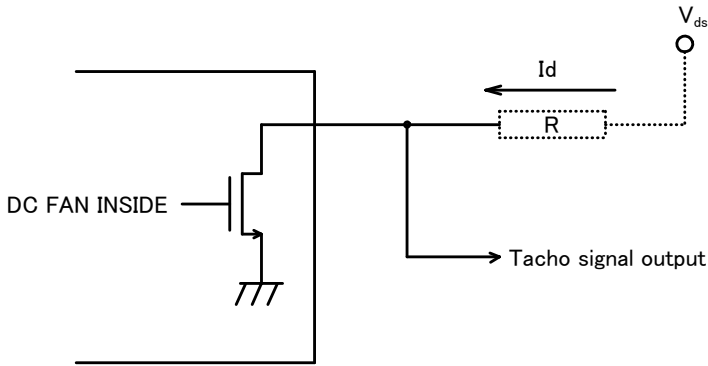
TACHOMETER SIGNAL

1. OUTPUT CIRCUIT : OPEN COLLECTOR
2. SPECIFICATION

Absolute Maximum Ratings at Ta=25°C

V_{CE} max : +15V

I_c max : 5mA [V_{ds}(sat)max = 0.5V]

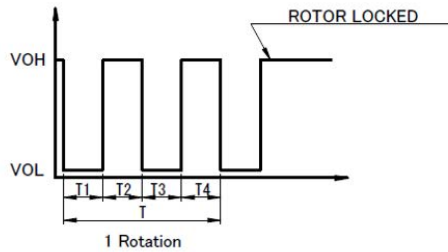


TACHO SIGNAL CIRCUIT

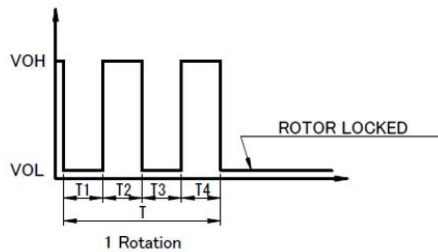
3. OUTPUT WAVEFORM : AT RATED VOLTAGE

4. OUTPUT SIGNAL VOLTAGE

3-1 Case-1



3-2 Case-2



- 1) When the rotor is locked at VOH position of signal, signal keeps VOH position.
- 2) When the rotor is locked at VOL position of signal, signal keeps VOL position.
- 3) $T = T1 + T2 + T3 + T4 = 60 / m = 1 \text{ rotation}$
 m : Fan Rotation Speed (min^{-1})
 Tach Duty Cycle = 50% ± 10%

Materials

Casing : Plastic (Black UL94V-0)

Impeller : Plastic (Black UL94V-0)

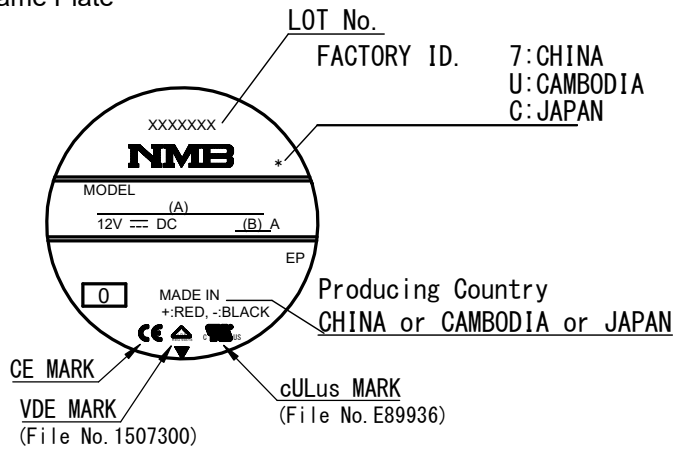
Bearing : Sleeve Bearing

Lead Wire : UL1007 AWG26

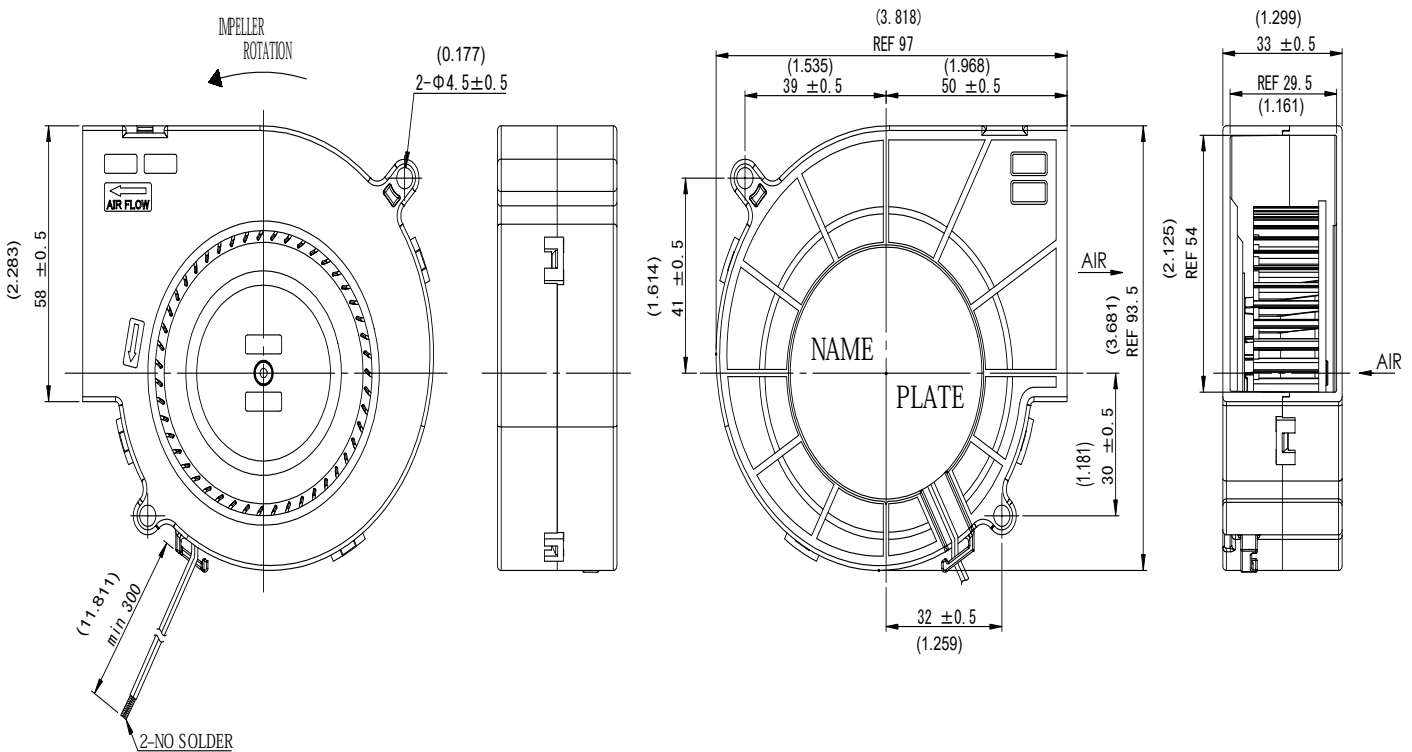
(+) : Red (-) : Black Tach : White

Outline

Name Plate



(A)	(B)
Model Name	Current
09533GS-12K-ATD	0.34
09533GS-12L-ATD	0.60



Unit: mm (inch)

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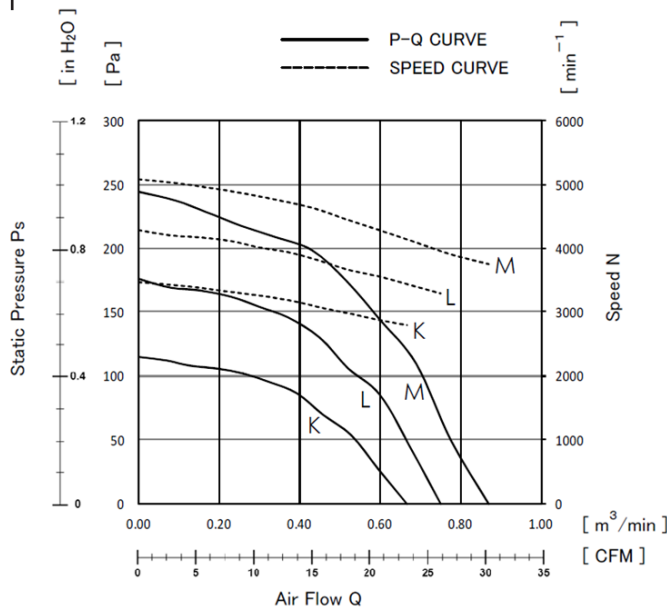
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09533GS-24K-ATD-0	24	10.0 ~ 26.4	0.14	0.19	3.36	4.56	2800	23.31	0.66	0.46	115	48.0	170
09533GS-24L-ATD-0			0.22	0.29	5.28	6.96	3300	26.49	0.75	0.72	180	52.0	
09533GS-24M-ATD-0			0.33	0.43	7.92	10.32	3800	30.72	0.87	0.98	245	55.0	

*1: Values in Free Air

TACHO Specifications

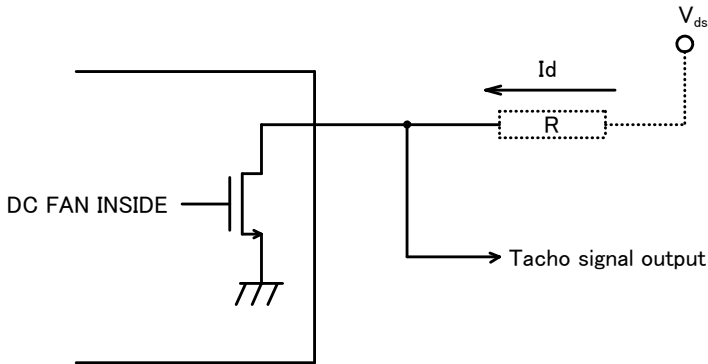
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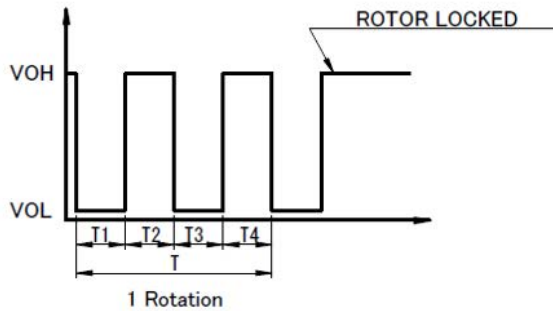


TACHO SIGNAL CIRCUIT

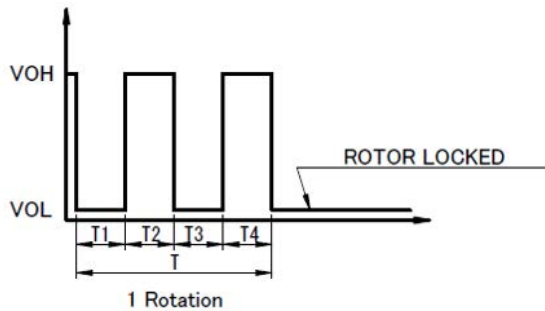
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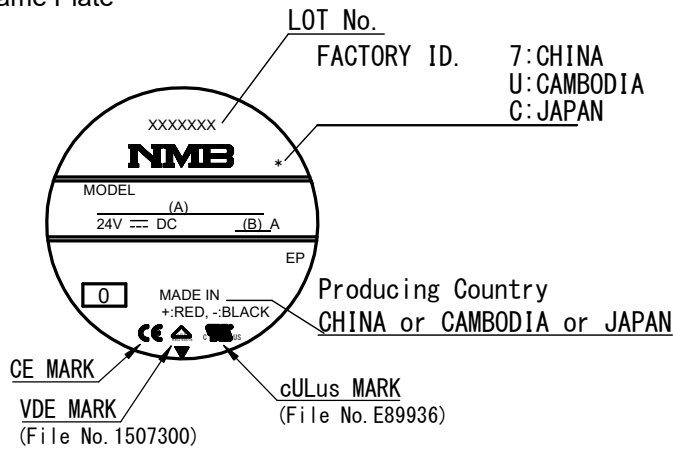
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- Impeller : Plastic (Black UL94V-0)
- Bearing : Sleeve Bearing
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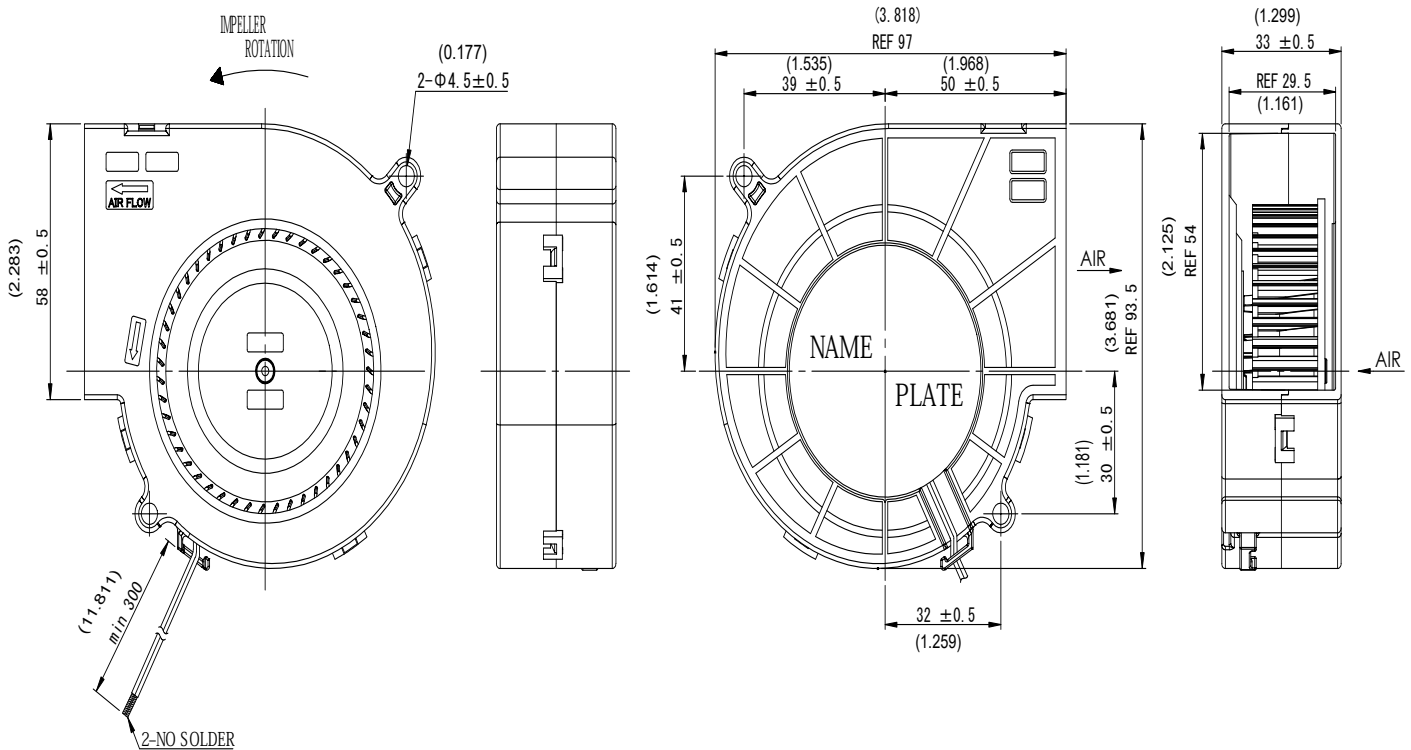
(+) : Red (-) : Black Tach : White

Outline

Name Plate



(A)	(B)
Model Name	Current
09533GS-24K-ATD	0.19
09533GS-24L-ATD	0.60
09533GS-24M-ATD	0.43



Unit: mm (inch)