

General Specifications

Motor Type: 3 Phase DC Brushless Motor

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

Insulation Resistance: 10M Ω or over with a DC500V Megger

Dielectric Withstand Voltage: AC 500V 1min

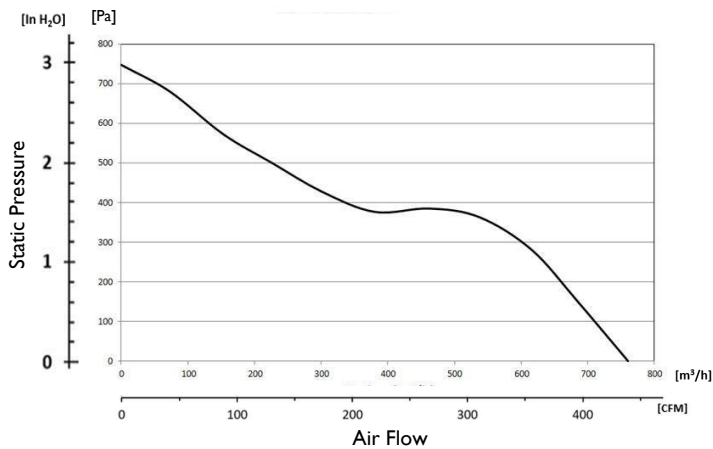
Allowable Ambient Temperature Range:

-30°C ~ +50°C (Operating)

-30°C ~ +60°C (Storage)

(non-condensing environment)

Characteristics Curve



IP Rated Fan Benefits & Applications

IP68

NMB offers Ingress Protection (IP) rated cooling fans. IP68 fans provide dust tight protection, and safeguard against wet location and powerful water jets for outdoor applications and other harsh environments. NMB fans are designed with NMB precision machined ball bearings assuring long life and high reliability.

Benefits

- IP68 rating per IEC 60529 standard
- Long life and high reliability with NMB precision ball bearings (L10 number)
- Open Collector Tacho Signal output for fan speed
- PWM Speed Control
- Fan Active Brake within 3 seconds to 0 RPM at 5-10%PWM input

Applications

- Outdoor Applications
- Factory Automation
- Food Processing
- Inverters
- Telecomm
- Horticulture

Life Expectancy L10

40°C 70,000 Hours

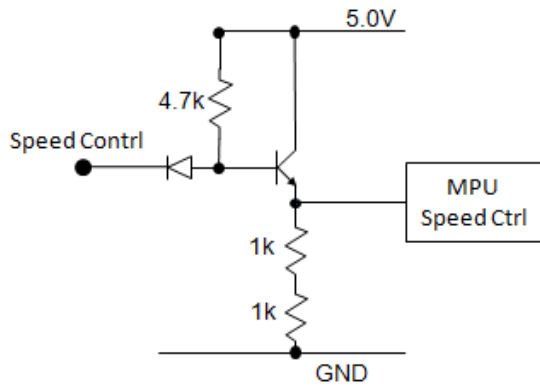
Specifications

MODEL	Rated Voltage	Operating Voltage	Current		Input Power		Speed	Max. Air Flow		Max. Static Pressure		Noise	Mass
			Avg	Max	Avg	Max		(CFM)	(m³/h)	(in H ₂ O)	(Pa)		
R150G2-051-D0560	(V)	(V)	(A) ^{*1}	(A) ^{*1}	(W) ^{*1}	(W) ^{*1}	(min ⁻¹) ^{*1}	(CFM)	(m³/h)	(in H ₂ O)	(Pa)	(dB) ^{*1}	(kg)
	24	21.6 ~ 26.4	3.3	6.6	79.2	158.4	6,000	447	760	3.00	748	72.0	0.92

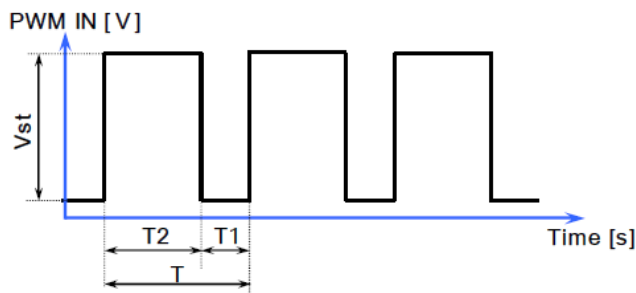
*1: Values in Free Air

PWM Specifications

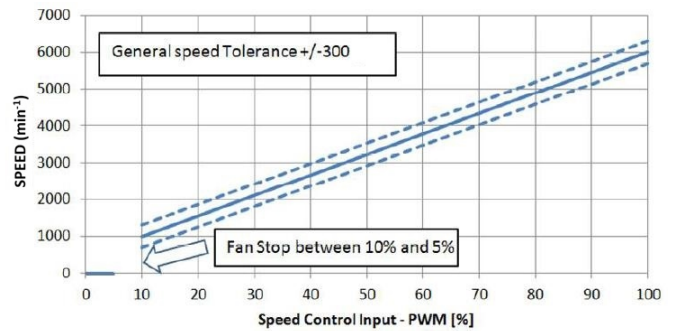
Connection wiring diagram



PWM Signal
 Duty Rate = $(T2/T) \times 100 [\%]$
 $V_{st} = 5 [V]$
 Frequency = 300 Hz to 50 kHz



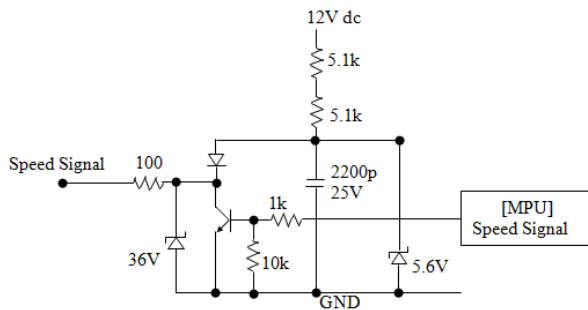
PWM Characteristic Curve



TACHO Specifications

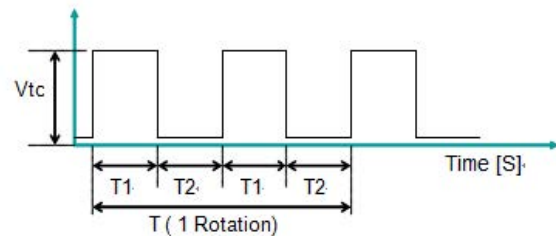
Connection wiring diagram

$V_{max} = 10V$
 $I_{max} = 5mA \text{ Max}$



Output Waveform
 2 Pulse / Revolution

$T1 = T2 (50 \pm 10\% \text{ Duty})$



Outline

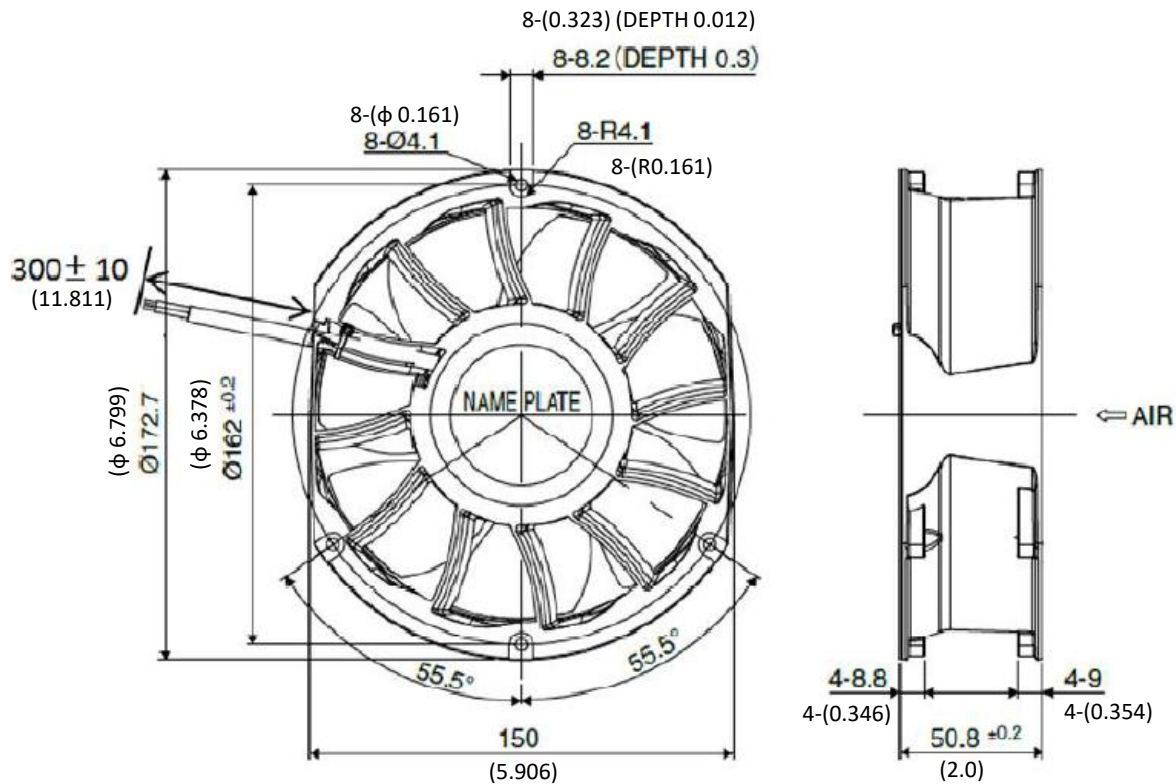


Product Label Drawing

Material

- Casing : Aluminum
- Impeller ; Plastic
- Bearing : Ball Bearing
- Lead Wire : UL3266, AWG20, 22 or equivalent

(+) : Red (-) : Black (PWM): Yellow (Tacho): White



Unit: mm (inch)

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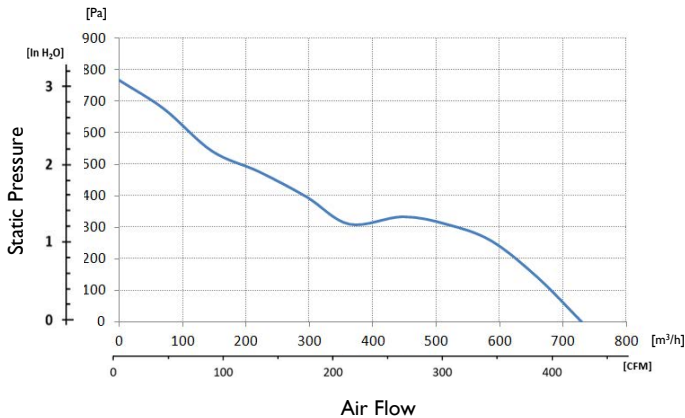
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Characteristics Curve



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	48	43.2 ~ 52.8	1.7	4.3	81.6	206.4	6,000	447	760	3.00	748	72.0	0.92

*1: Values in Free Air

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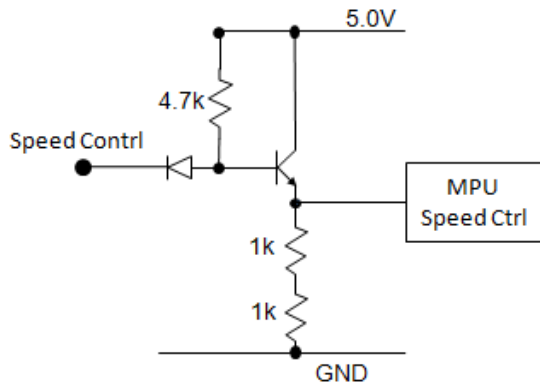
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Life Expectancy L10

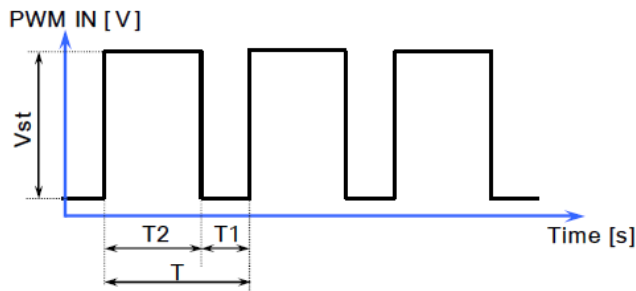
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PWM Specifications

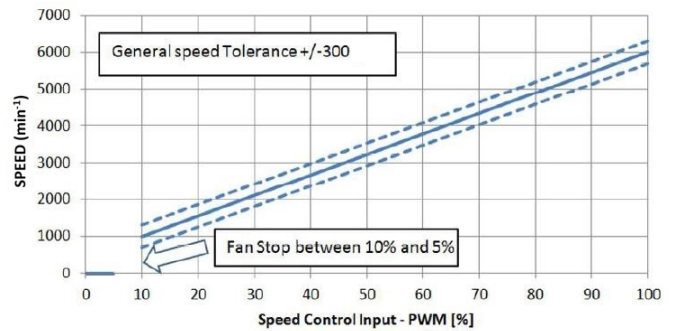
Connection wiring diagram



PWM Signal
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 $V_{st} = 5$ [V]
 Frequency = 300 Hz to 50 kHz



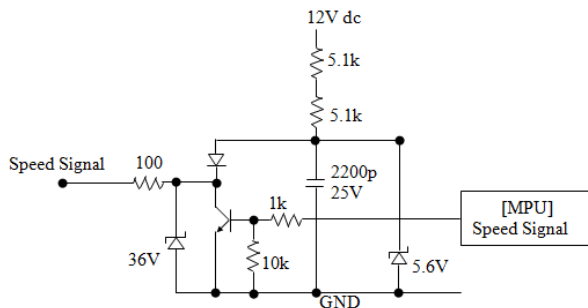
PWM Characteristic Curve



TACHO Specifications

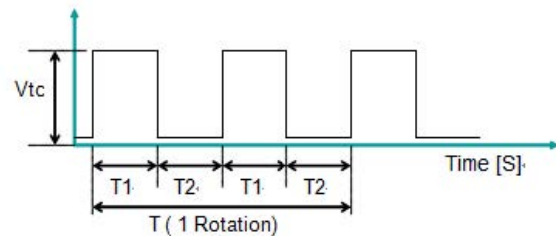
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$V_{max} = 10V$
 $I_{max} = 5mA$ max



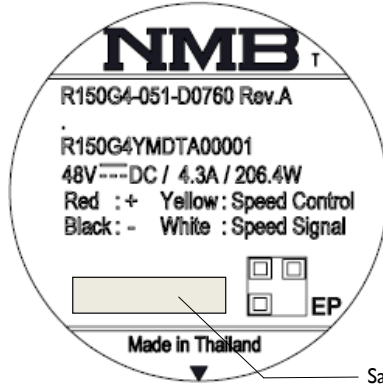
Output Waveform
 2 Pulse / Revolution

$T1 = T2$ (50 ± 10% Duty)



Outline

Material

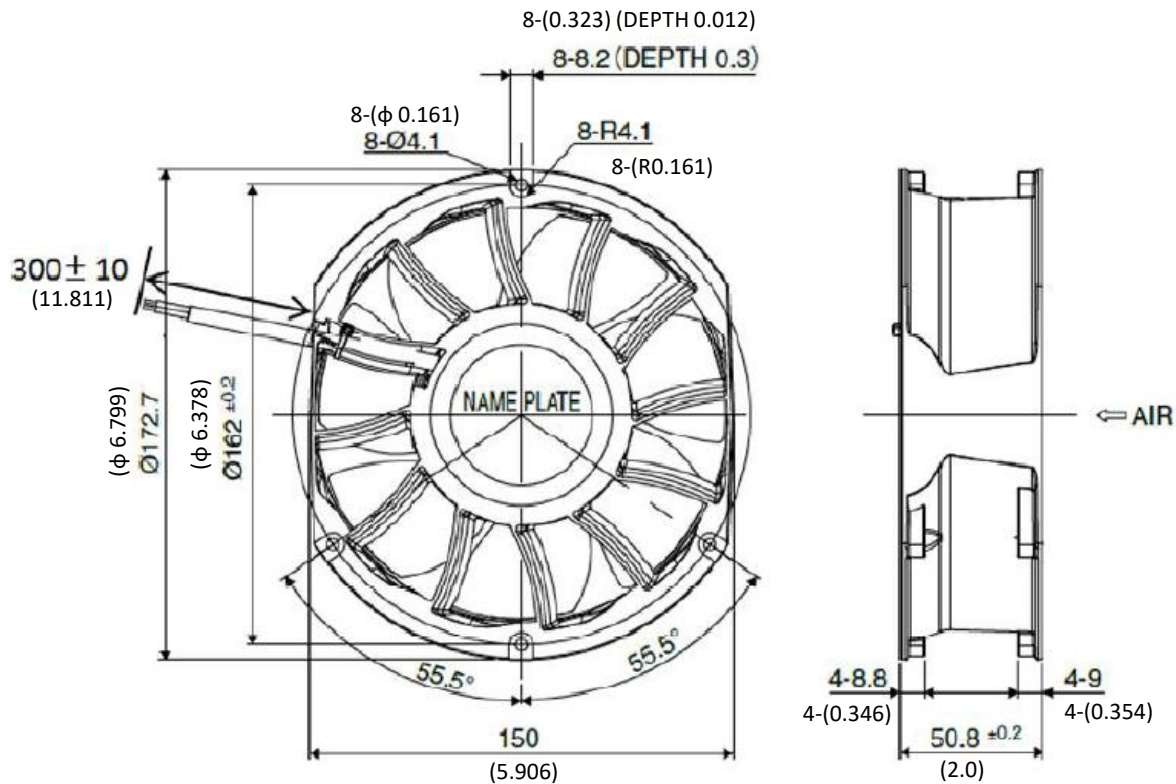


Safety Standard mark print position

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