DC Fan

80×80×38 mm

San Ace 80 9HVB type △ c ⒰ℒus

ECO PRODUCTS

■ General Specifications

· Material .... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-1)

· Expected life .... See the table below. (L10 life: 90% survival rate for continuous operation in free air at 60°C, rated voltage) Expected life at 40°C is for reference only.

· Motor protection function .... Locked rotor burnout protection, Reverse polarity protection For details, please refer to p. 580.

· Dielectric strength .... 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)

· Insulation resistance .... 10 MΩ min. at 500 VDC (between lead wire conductors and frame)

· Sound pressure level (SPL) .... A-weighted sound pressure level (SPL) at 1 m away from the air inlet.

· Storage temperature .... -30 to +70°C (Non-condensing)

· Lead wire .... ⊕Red ⊖Black [Sensor] Yellow [Control] Brown

· Mass .... 230 g

■ Specifications

The models listed below **have ribs and pulse sensors with PWM control function.** For models without ribs, append "1" to the end of model numbers.

Model no.	Rated voltage [V]	Operating voltage range [V]	PWM duty cycle* [%]	Rated current [A]	Rated input [W]	Rated speed [min⁻¹]	Max. airflow [m³/min]	[CFM]	Max. static pressure [Pa]	[inchH₂O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9HVB0812P1G001	12	10.8 to 12.6	100	4.8	57.6	18300	4.0	141.3	1600	6.42	75	-20 to +70	40000/60°C
			20	0.17	2.0	4300	0.94	33.2	105	0.42	40		(70000/40°C)

* PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.
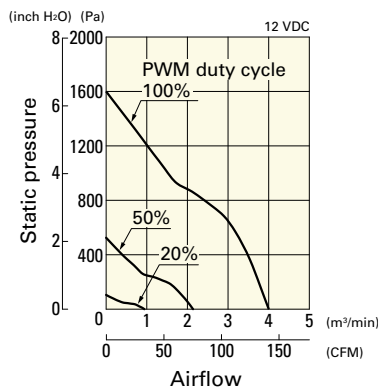
Note 1: Sensor and control options are available for selection. Refer to the table on p. 612.
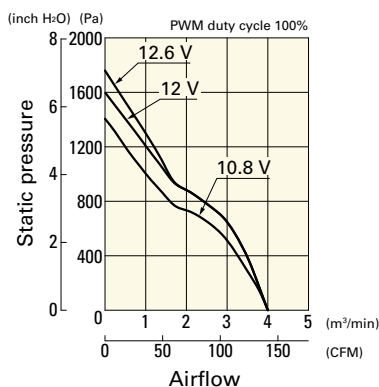Note 2: The ⓘ mark indicates Short Lead Time Service applicable models. See p. 630 for details.

■ Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

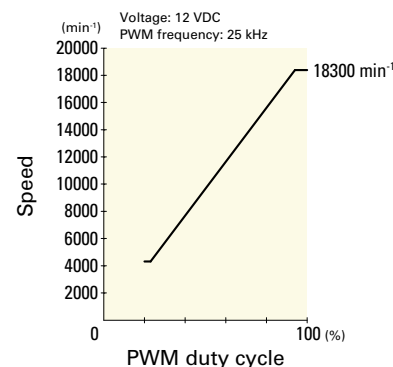**9HVB0812P1G001** With pulse sensor with PWM control function
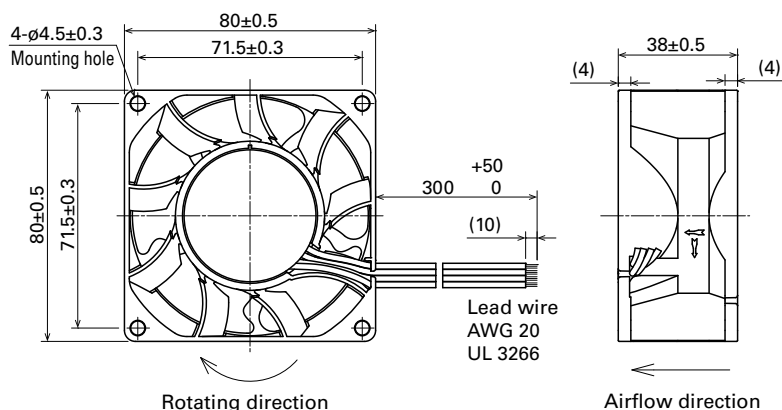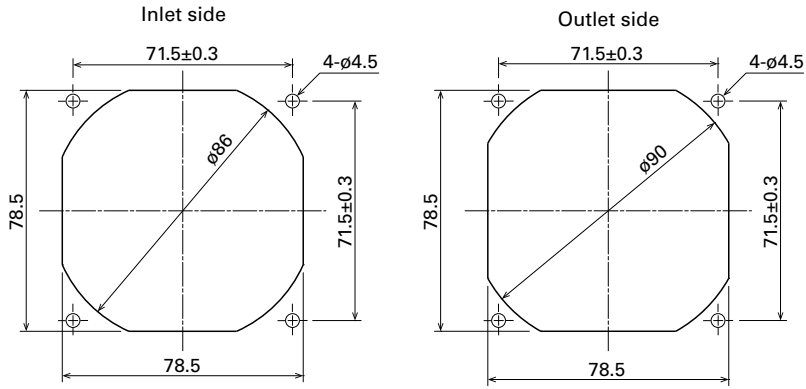
PWM duty cycle

Operating voltage range

PWM duty - Speed characteristics example

■ Dimensions (unit: mm) (With ribs)

Rotating direction

Airflow direction

■ Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)

Inlet side

71.5±0.3   4-ø4.5

ø86

78.5   71.5±0.3

78.5

Outlet side

71.5±0.3   4-ø4.5

ø90

78.5   71.5±0.3

78.5

■ Options

Finger guards	page: p. 564

Model no.: 109-049E, 109-049H, 109-049C

Resin finger guards	page: p. 571

Model no.: 109-1002G

Resin filter kits	page: p. 572

Model no.: 109-1002F13 (13PPI), 109-1002F20 (20PPI),
109-1002F30 (30PPI), 109-1002F40 (40PPI)