

**80**mm sq.

# San Ace 80

15mm thick (9GA type), 15mm thick (9P type), 20mm thick (9GA type)  
 20mm thick (9P type), 25mm thick (9GA type), 25mm thick (9S type)  
 25mm thick (9GV type), 25mm thick (9R type)  
 25mm thick (San Cooler) (9A type), 32mm thick (9GA type)  
 32mm thick (9P type), **38mm thick (9HV type)**, 38mm thick (9GA type)  
 38mm thick (9GV type), 38mm thick (9G type)



## General Specifications

- Material ..... Frame: Plastics (Flammability: UL94V-0), Impeller: Plastics (Flammability: UL94V-0)
- Expected Life ..... Refer to specifications (L10:Survival rate:90% at 60°C , rated voltage, and continuously run in a free air state)
- Lead Wire ..... ⊕red ⊖black or blue (Sensor) yellow
- Storage Temperature ..... -30°C to +70°C (Non-condensing)

**80×80×38mm** (Mass : 230g) **9HV type**

## Specifications

The following nos. **have PWM controls, pulse sensors, and ribs.** For ribless, append "1" to the model no.

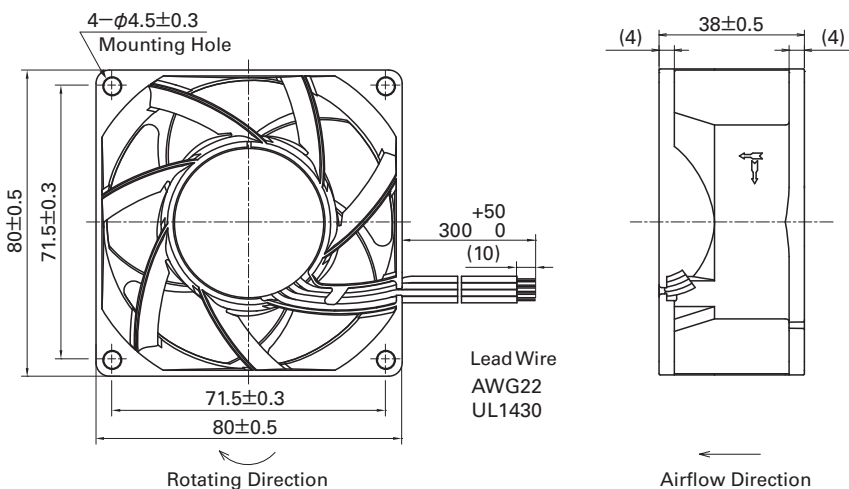
Model No.	Rated Voltage [V]	Operating Voltage Range [V]	PWM duty cycle※ [%]	Rated Current [A]	Rated Input [W]	Rated Speed [min <sup>-1</sup> ]	Max. Airflow [m <sup>3</sup> /min] [CFM]	Max. Static Pressure [Pa] [inchH <sub>2</sub> O]	SPL [dB(A)]	Operating Temperature [°C]	Expected Life <sup>nom</sup> [h]
9HV0812P1G001	12	10.8 to 13.2	100	3.4	40.8	14,900	3.7 130.7	1,000 4.0	69	-20 to +70	40,000/60°C (70,000/40°C)
			0	0.64	7.68	4,400	1.06 37.5	87.2 0.35	40		
9HV0848P1G001	48	36 to 57	100	0.85	40.8	14,900	3.7 130.7	1,000 4.0	69	-10 to +70	40,000/60°C (70,000/40°C)
			0	0.13	6.24	4,400	1.06 37.5	87.2 0.35	40		

Note: Expected life at 40°C ambient is just reference value.

※PWM Frequency : 25kHz

Some models can also be equipped without sensors or with pulse sensors (no PWM control functions) as an option. Please refer to the index (pp. 417 to 437).

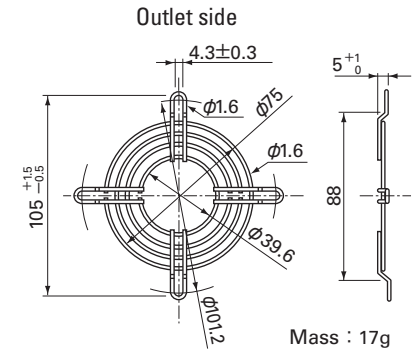
## Dimensions (unit : mm) (With ribs)



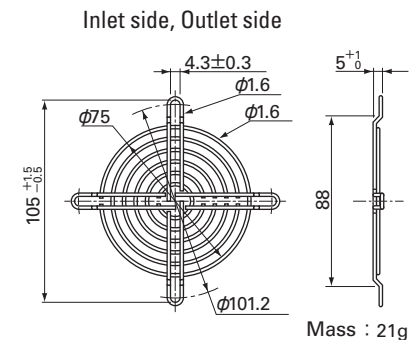
## Options (unit : mm)

### Finger Guards

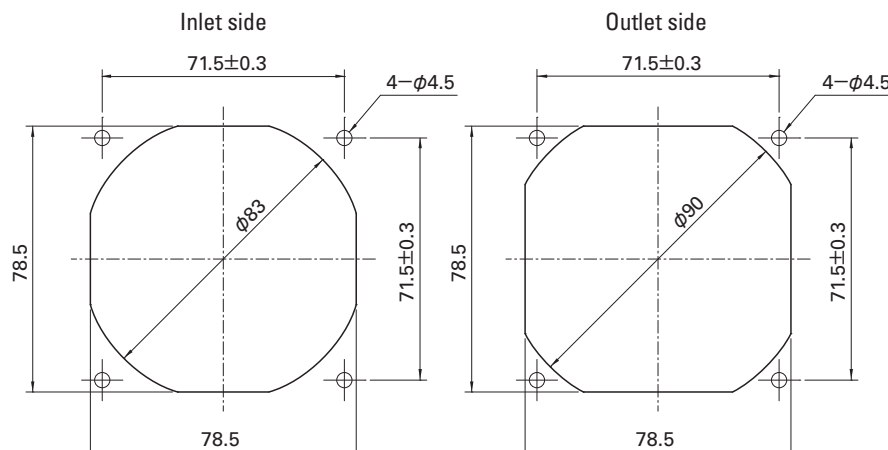
Model : 109-049C Surface treatment : Nickel-chrome plating (silver) Color



Model : 109-049E Surface treatment : Nickel-chrome plating (silver) Color : Cation electropainting (black)



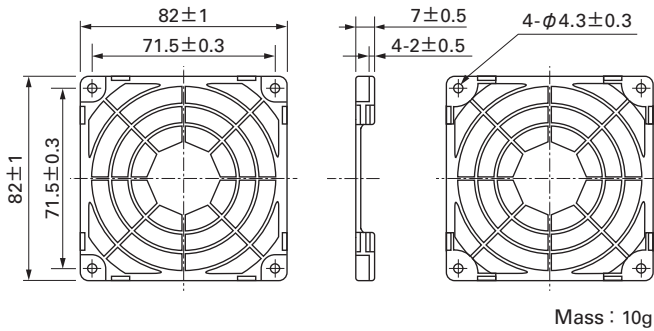
## Reference Dimension of Mounting Holes and Vent Opening (unit : mm)



Options (unit : mm)

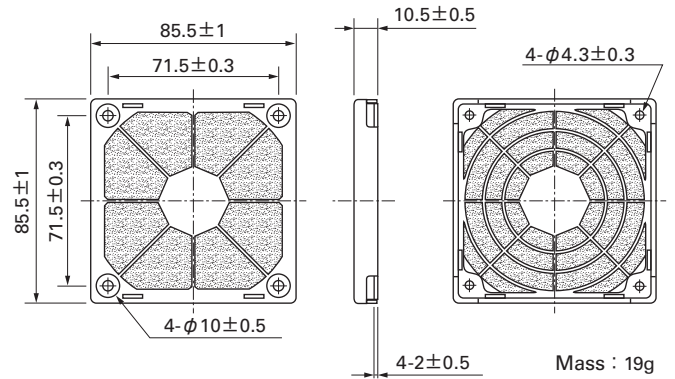
Resin Finger Guards

Model : 109-1002G



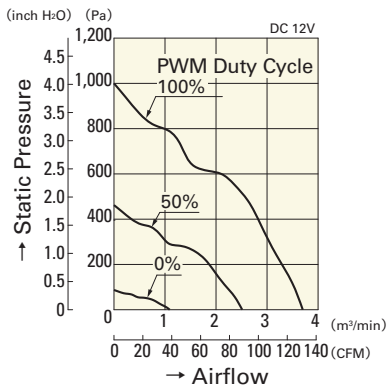
Resin Filter Kits

Model : 109-1002F13 (13PPI), 109-1002F20 (20PPI)  
: 109-1002F30 (30PPI), 109-1002F40 (40PPI)

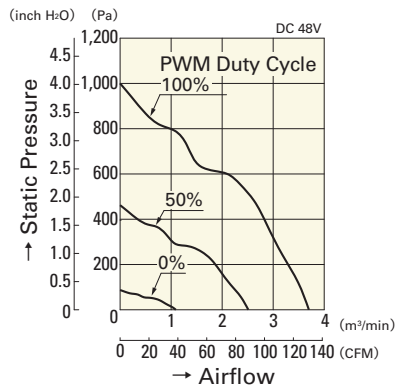


Airflow - Static Pressure Characteristics

PWM Duty Cycle

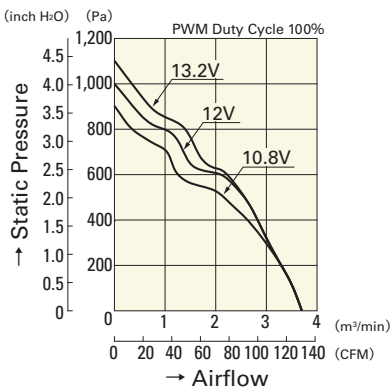


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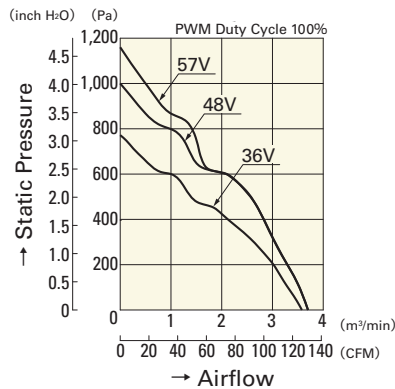


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Operating Voltage Range

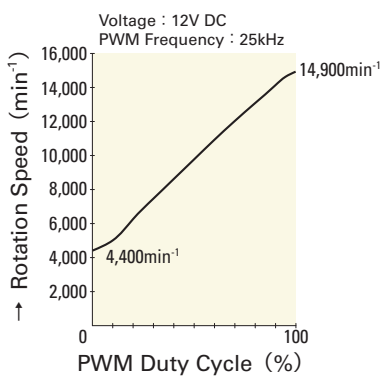


9HV0812P1G001

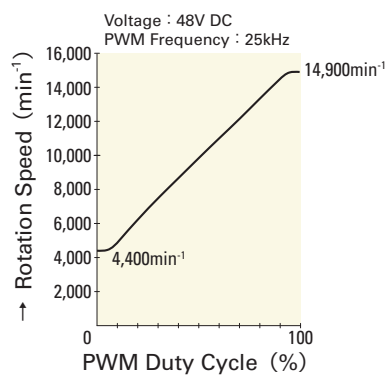


9HV0848P1G001

PWM Duty - Speed Characteristics Example



9HV0812P1G001



9HV0848P1G001