

80mm sq.

San Ace 80

20mm thick, 25mm thick
External thermistor model /
Built-in thermistor model



Note: Optional external thermistors are sold separately.

General Specifications

- Material Frame: Plastics (Flammability: UL94V-0), Impeller: Plastics (Flammability: UL94V-1)
- Life Expectancy Varies for each model (L10: Survival rate: 90% at 60°C, rated voltage, and continuously run in a free air state)
- Lead Wire ⊕red ⊖black (Control) brown (Only for external thermistor type)
- Fail-safe The motor becomes high speed when the thermistor is unable to detect the temperature in case of open or short circuit etc. (Models equipped with a pulse sensor are excluded.)
- Storage Temperature... -30°C to +70°C (Non-condensing)

80×80×25mm (Mass : 110g)

Specifications External thermistor model

The numbers in () represent ribless models.

Model No.	Rated Voltage [V]	Operating Voltage Range [V]	Rated Current [A]	Rated Input [W]	Rated Speed [min ⁻¹]	Air Flow [m ³ /min] [CFM]	Static Pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating Temperature [°C]	Life Expectancy [h]
109R0812T4H12(121)	12	10.2 to 13.8	0.14	1.68	2,900	1.03 36.4	35.3 0.142	29	-10 to +60	60,000
			0.09	1.08	1,450	0.51 18.0	8.8 0.035	14		

Note: The top row gives characteristics shown when the thermistor temperature is 35°C, while the bottom row gives characteristics shown when the thermistor temperature is 28°C (Thermistor: 169-002).

Built-in thermistor model

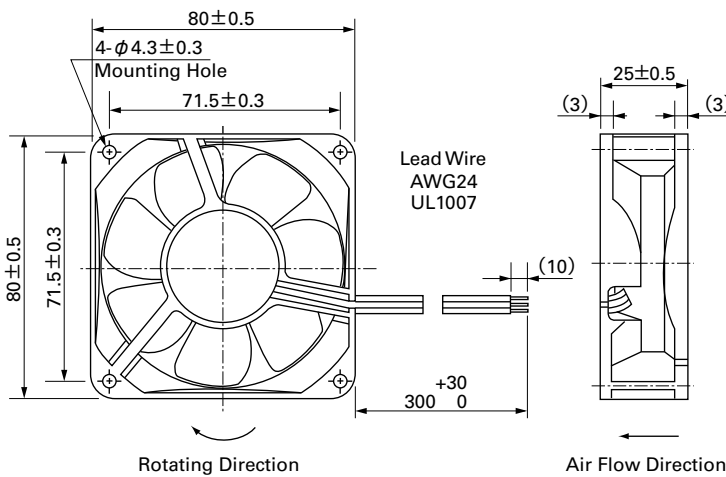
The numbers in () represent ribless models.

Model No.	Rated Voltage [V]	Operating Voltage Range [V]	Rated Current [A]	Rated Input [W]	Rated Speed [min ⁻¹]	Air Flow [m ³ /min] [CFM]	Static Pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating Temperature [°C]	Life Expectancy [h]
109R0812T4H122(123)	12	10.2 to 13.8	0.14	1.68	3,000	1.07 37.8	37.7 0.151	29	-10 to +60	60,000
			0.09	1.08	1,450	0.51 18.0	8.8 0.035	14		

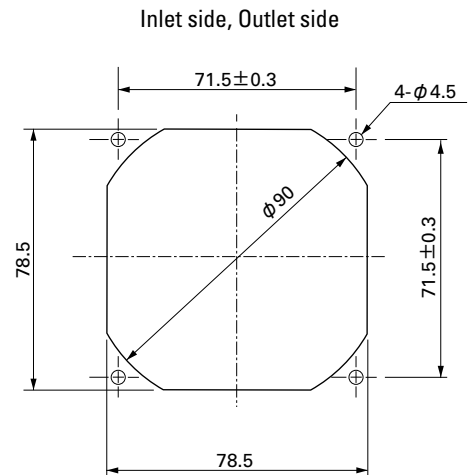
Note: The top row gives characteristics shown when the temperature is 40°C, while the bottom row gives characteristics shown when the temperature is 30°C.

Dimensions (Unit : mm) (With ribs)

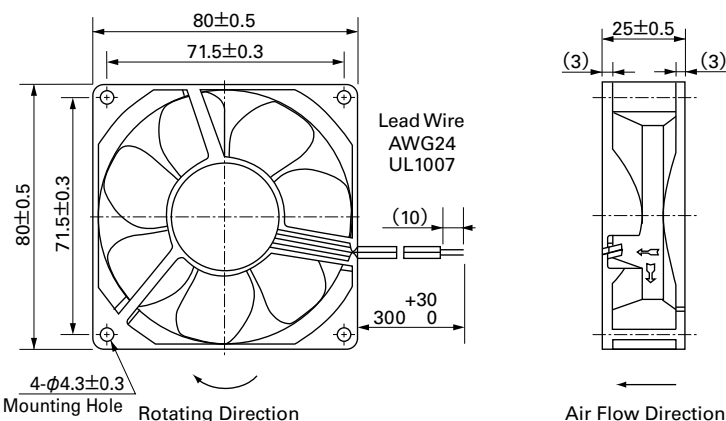
External thermistor model



Reference dimensions of mounting holes and vent opening (Unit : mm)



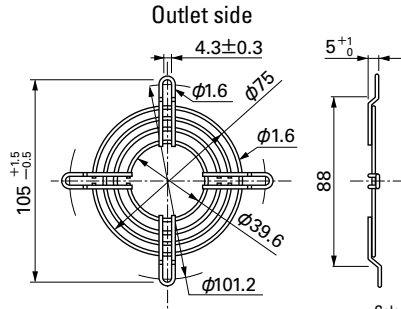
Built-in thermistor model



Options (Unit : mm)

Finger guards

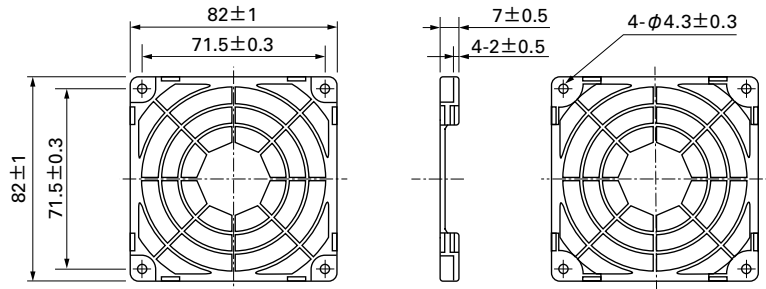
Model : 109-049C Surface treatment : Nickel-chrome plating (silver) Color : 109-049H



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

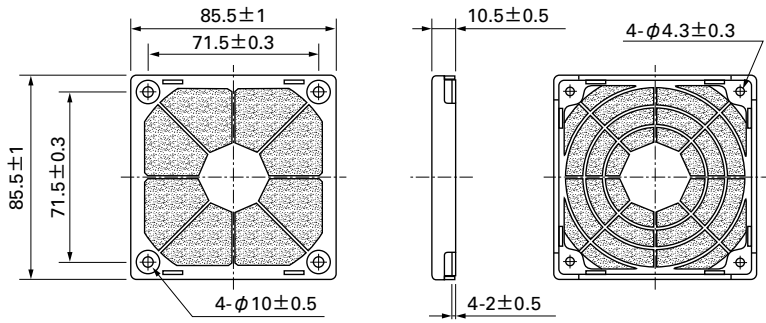
Resin finger guards

Model : 109-1002G



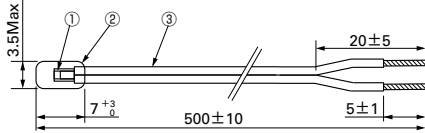
Resin filter kits

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



Thermistor

Model : 169-002



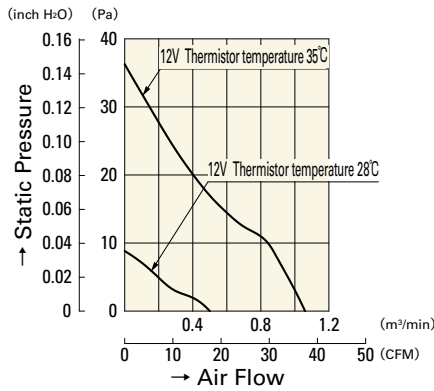
Number	Name	Standards, materials, etc.
①	Thermistor	Chip
②	Insulated cord	Epoxy resin
③	Lead	UL2555 CSA TR-64 AWG#28 (blue)

Item	Spec
2-1	Resistance R25 6.8KΩ ±3%
2-2	B constant B25/50 3950K ±2%
2-3	Maximum rated power 188mW (25°C under still air)
2-4	Insulation resistance 100MΩ or more (DC500V megger)
2-5	Dielectric strength No problem (AC1500V 1 minute)
2-6	Operating temperature range -30°C to +80°C
2-7	Storage temperature range -40°C to +100°C

Manufactured by OHIZUMI MFG CO.,LTD.
Mfr. Part No. 159-682-86

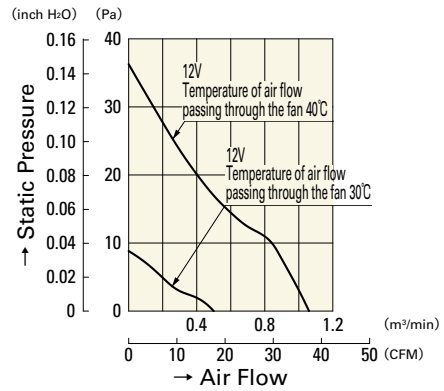
Air Flow and Static Pressure Characteristics

External thermistor model



109R0812T4H12(121)

Built-in thermistor model

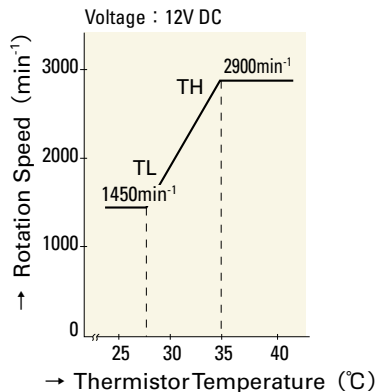


109R0812T4H122(123)

Temperature-Rotation Speed Characteristics

External thermistor model

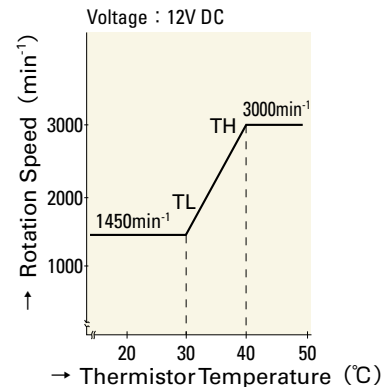
Characteristics of Thermistor-detected Temperature vs Speed



109R0812T4H12(121)

Built-in thermistor model

Typical characteristics of temperature of air flowing through the fan versus rotation speed



109R0812T4H122(123)