

Thermal Speed Controlled Fan

80mm

San Ace 80

20mm thick, 25mm thick
with an external thermistor/
with a built-in thermistor



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)

80mm × 20mm thick (Mass : 100g)

Specifications with an external thermistor

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 Range (°C)	Life Expectancy (h)
109P0812T6H12	12	10.2 to 13.8	0.18	2.16	2,900	0.84 29.7	29.4 0.118	31	-10 to +60	60,000
			0.1	1.2	1,450	0.42 14.8	7.4 0.030	18		

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.

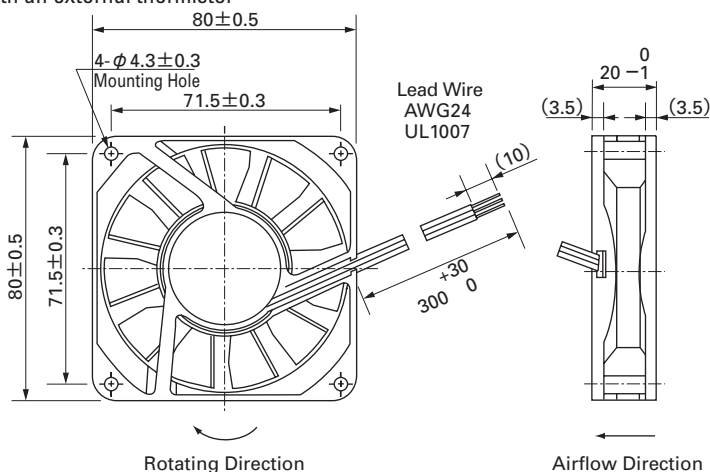
with a built-in thermistor

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 Range (°C)	Life Expectancy (h)
109P0812T6H122	12	10.2 to 13.8	0.18	2.16	3,050	0.88 31.0	32.5 0.131	32	-10 to +60	60,000
			0.1	1.2	1,450	0.42 14.8	7.4 0.030	20		

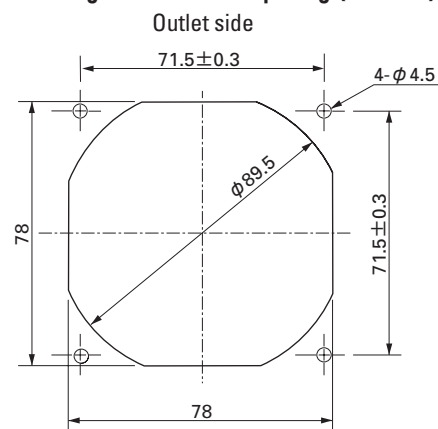
Note: The top row gives characteristics shown when the emperature is 40°C, while the bottom row gives characteristics shown when the temperature is 30°C.

Dimensions (Unit : mm)

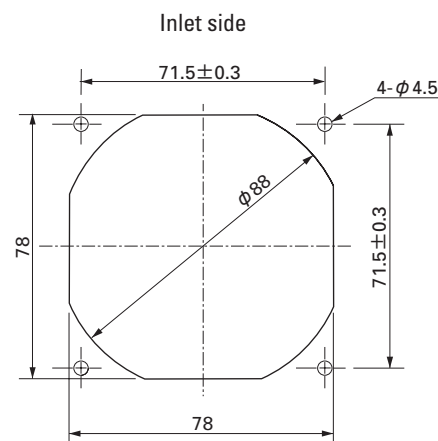
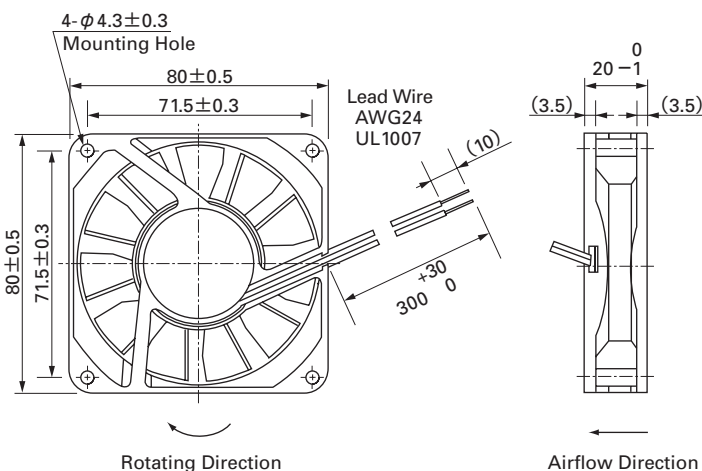
with an external thermistor



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



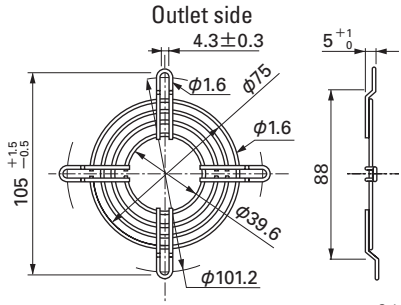
with a built-in thermistor



Options (Unit : mm)

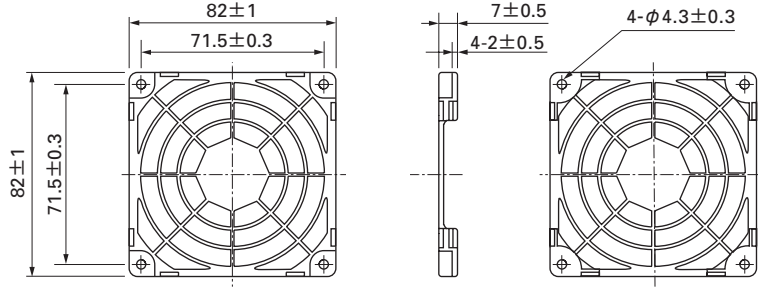
Finger guards

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



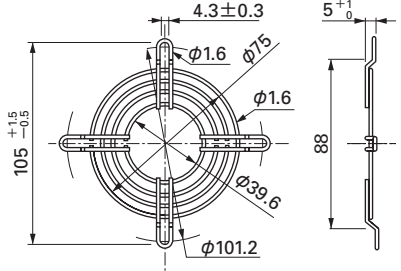
Resin finger guards

Model : 109-1002G



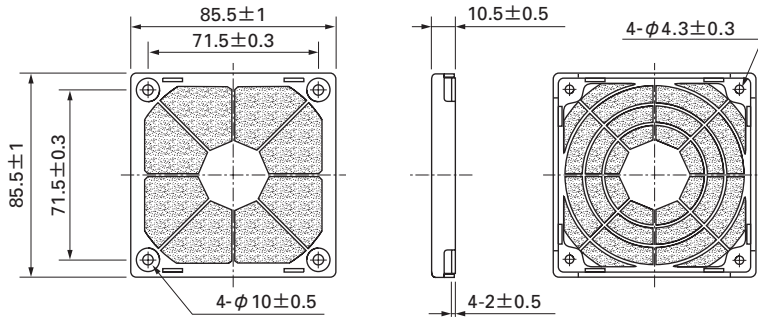
Model : 109-049E Surface treatment : Nickel-chrome plating (silver) : 109-049H : Cation electropainting (black)

Inlet side, Outlet side



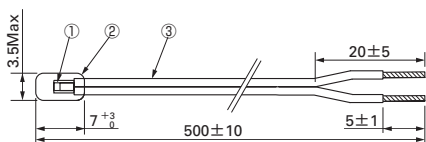
Resin filter kits

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



Thermistor

Model : 169-002

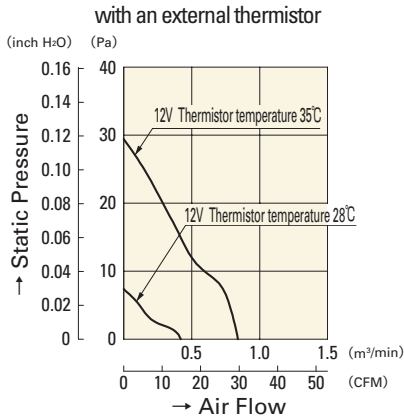


Number	Name	Standards, materials, etc.
①	Thermistor	Chip
②	Insulated cord	Epoxy resin
③	Lead	UL2555 CSA TR-64 AWG#28 (blue)

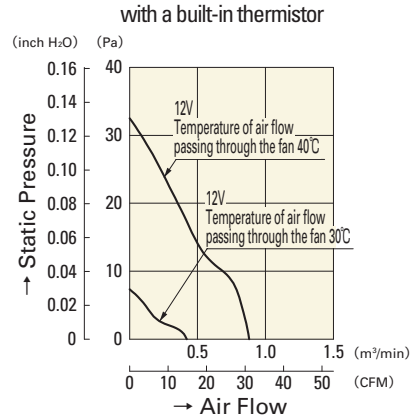
Item	Spec
2-1	Resistance R25 6.8KΩ ±3%
2-2	B constant B25/50 3950K ±2%
2-3	Maximum rated power 188mW (25°C under still air)
2-4	Insulation resistance 100MΩ or more (DC500V megger)
2-5	Dielectric strength No problem (AC1500V 1 minute)
2-6	Operating temperature range -30°C to +80°C
2-7	Storage temperature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

Manufactured by OHIZUMI MGF CO.,LTD.

Air Flow and Static Pressure Characteristics



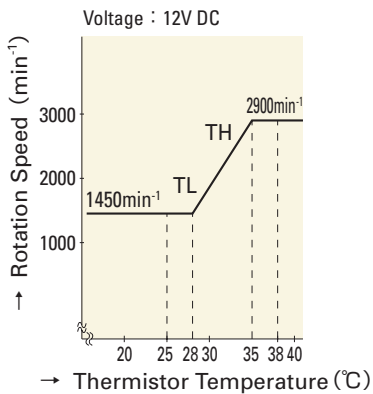
109P0812T6H12



109P0812T6H122

Temperature-Rotation Speed Characteristics

with an external thermistor
 ■ Characteristics of Thermistor-detected Temperature vs Speed



with a built-in thermistor
 ■ Typical characteristics of temperature of air flowing through the fan versus rotation speed
 Voltage : 12V DC

