

**Thermal Speed Controlled Fan**

**120mm**

**San Ace 120**

25mm thick, 38mm 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.
- Storage Temperature ..... -30°C to +70°C (Non-condensing)

**120mm × 25mm thick** (Mass : 210g)

**Specifications with an external thermistor**

Model No.	Rated Voltage (V)	Operating Voltage Range (V)	Rated Current (A)	Rated Input (W)	Rated Speed (min <sup>-1</sup> )	Air Flow (m <sup>3</sup> /min) (CFM)	Static Pressure (Pa) (inchH <sub>2</sub> O)	SPL (dB[A])	Operating Temperature Range (°C)	Life Expectancy (h)
109P1212T4H12(121)	12	10.2 to 13.8	0.55	6.6	2,800	2.5 88.3	53.9 0.216	40	-10 to +60	40,000
			0.22	2.64	1,400	1.25 44.1	13.7 0.055	25		

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.

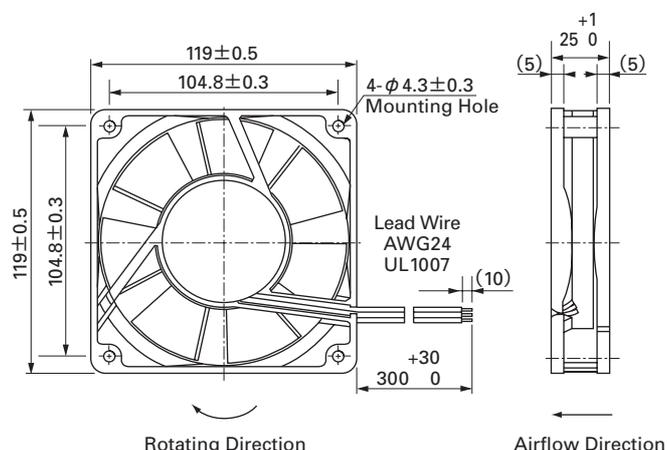
**with a built-in thermistor**

Model No.	Rated Voltage (V)	Operating Voltage Range (V)	Rated Current (A)	Rated Input (W)	Rated Speed (min <sup>-1</sup> )	Air Flow (m <sup>3</sup> /min) (CFM)	Static Pressure (Pa) (inchH <sub>2</sub> O)	SPL (dB[A])	Operating Temperature Range (°C)	Life Expectancy (h)
109P1212T4H122(123)	12	10.2 to 13.8	0.55	6.6	2,800	2.5 88.3	53.9 0.216	40	-10 to +60	40,000
			0.22	2.64	1,400	1.25 44.1	13.7 0.055	25		

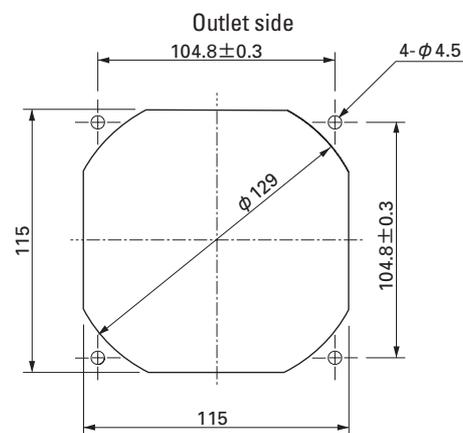
Note: The top row gives characteristics shown when the temperature is 40°C, while the bottom row gives characteristics shown when the temperature is 30°C.

**Dimensions (Unit : mm)**

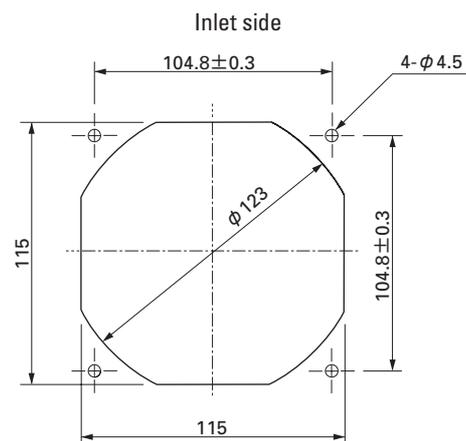
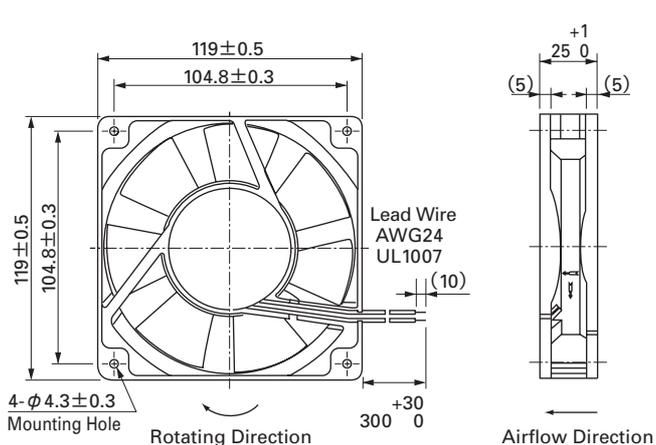
with an external thermistor



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



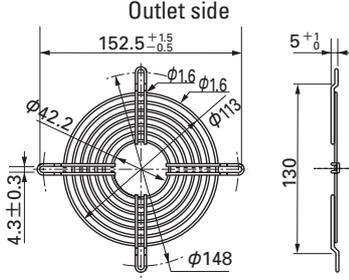
with a built-in thermistor



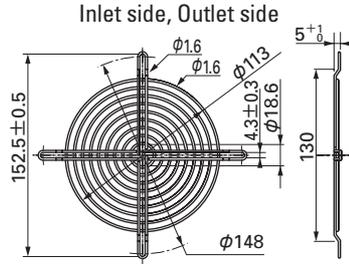
**Options (Unit : mm)**

**Finger guards**

Model : 109-019C Surface treatment : Nickel-chrome plating (silver)  
 : 109-019H : Cation electropainting (black)

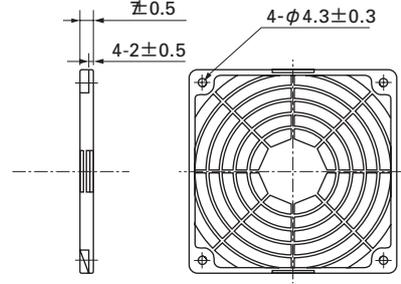
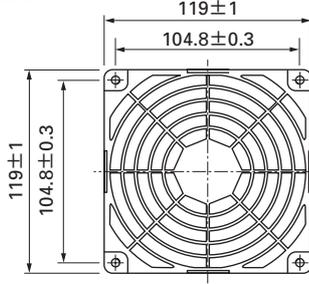


Model : 109-019E Surface treatment : Nickel-chrome plating (silver)  
 : 109-019K : Cation electropainting (black)



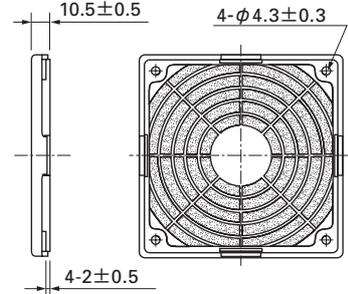
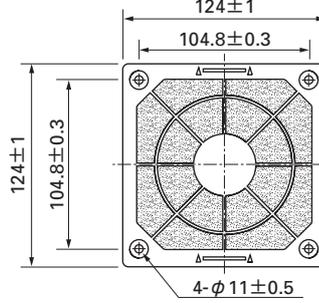
**Resin finger guards**

Model : 109-1000G



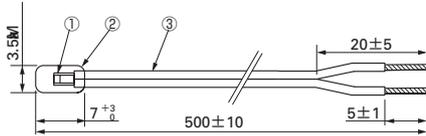
**Resin filter kits**

Model : 109-1000F13 (13PPI), 109-1000F20 (20PPI), 109-1000F30 (30PPI), 109-1000F40 (40PPI)



**Thermistor**

Model : 169-002

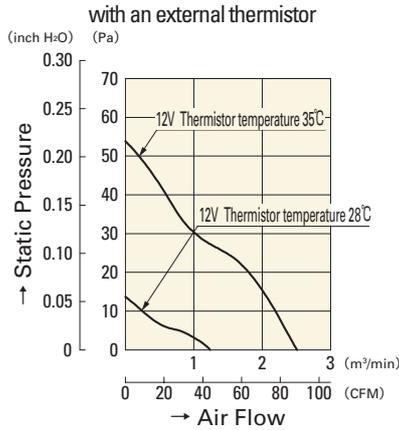


Number	Name	Standards, materials, etc.
①	Thermistor	Chip
②	Insulated cord	Epoxy resin
③	Lead	UL2555 CSA TR-64 AWG#28 (blue)

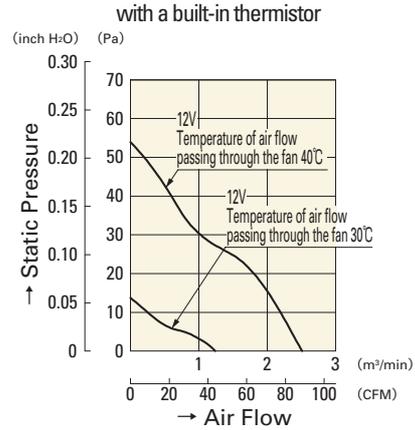
Item	Spec	
2-1	Resistance	R25 6.8KΩ ±3%
2-2	B constant	B25/50 3950K ±2%
2-3	Maximum rated power	188mW (25°C under still air)
2-4	Insulation resistance	100MΩ or more (DC500V megger)
2-5	Dielectric strength	No problem (AC1500V 1 minute)
2-6	Operating temperature range	-30°C to +80°C
2-7	Storage temperature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

Manufactured by OHIZUMI MFG CO. LTD

**Air Flow and Static Pressure Characteristics**

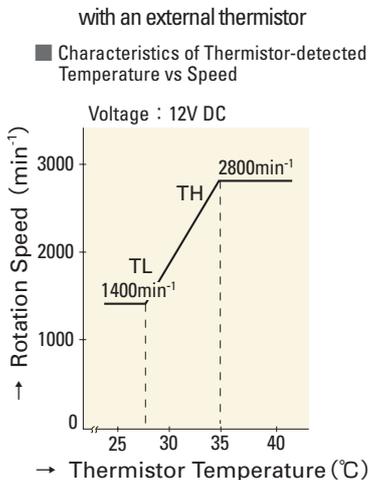


**109P1212T4H12(121)**

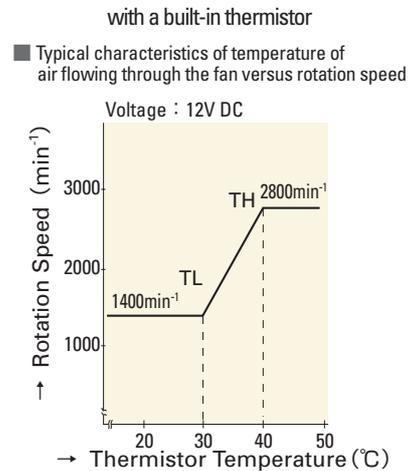


**109P1212T4H122(123)**

**Temperature-Rotation Speed Characteristics**



**109P1212T4H12(121)**



**109P1212T4H122(123)**