Thermal Speed Controlled Fan



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)

 \cdot Life Expectancy $\,\,\cdots\cdots\,\,$ Varies for each model (L10:Survival rate:90% at 60°C ,

rated voltage, and continuously run in a free air state)

 \cdot Fail-safe $\cdots\cdots$ The motor becomes high speed when the thermistor is unable

to detect the temperature in case of open or short circuit etc.

· StorageTemperature··· -30°C to +70°C (Non-condensing)



120×120×25mm (Mass: 210g)

Specifications with an external thermistor The numbers in () represent ribless models.

Model No.	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input	Rated Speed	Air F	low	Static	Pressure	SPL	Operating Temperature	Life Expectancy
	[V]	[V]	[A]	[W]	[min ⁻¹]	[m³/min]	[CFM]	[Pa]	[inchH ₂ 0]	[dB(A)]	[°C]	[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		40,000

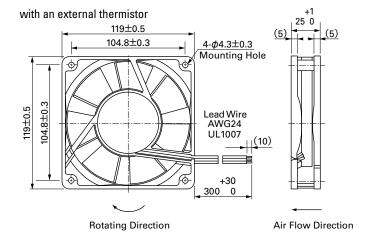
Note: The top row gives characteristics shown when the thermistor temperature is 35°C , while the bottom row gives characteristics shown when the thermistor temperature is 28°C .

with a built-in thermistor The numbers in () represent ribless models.

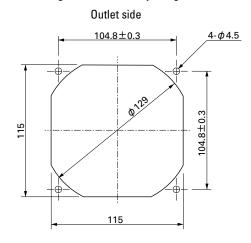
Model No.	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input	Rated Speed	Air F	low	Static	Pressure	SPL	Operating Temperature	Life Expectancy
	[V]	[V]	[A]	[W]	[min ⁻¹]	[m³/min]	[CFM]	[Pa]	[inchH2O]	[dB(A)]	[°C]	[h]
109P1212T4H122(123)	12	10.2 to 13.8	0.55	6.6	2,800	2.5	88.3	53.9	0.216	40	-10 to +60	40.000
	12		0.22	2.64	1,400	1.25	44.1	13.7	0.055	25		40,000

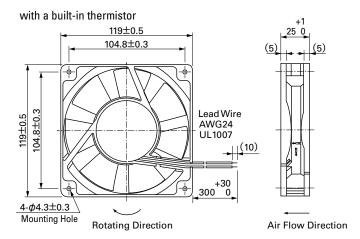
Note: The top row gives characteristics shown when the emperature is $40 \circ$, while the bottom row gives characteristics shown when the temperature is $30 \circ$.

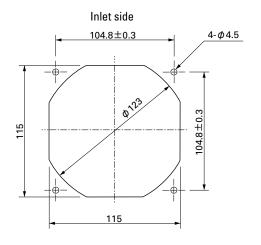
Dimensions (Unit : mm) (With ribs)



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







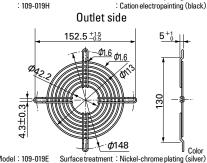
Options (Unit:mm)

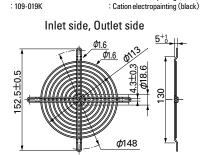
Model: 109-019E

Thermistor Model: 169-002 3.5Max

: 109-019K

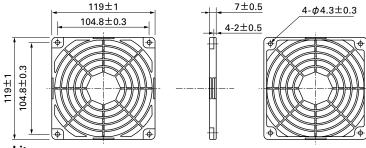
Finger guards Color ace treatment : Nickel-chrome plating (silver) Model: 109-019C : 109-019H





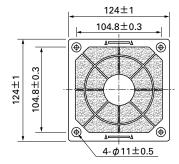
500±10

Resin finger guards

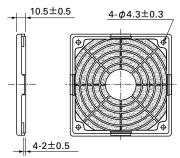


Resin filter kits

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



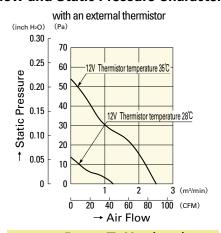
Number	Name	Standards,materials, etc.						
(E)	Thermistor	Chip						
2	Insulated cord	Epoxy resin						
3	Lead	UL2555 CSA TR-64 AWG#28 (blue)						



Item		Spec
2-1	Resistance	R25 6.8K $\Omega \pm 3\%$
2-2	B constant	B25/50 3950K±2%
2-3	Maximum rated power	188mW (25℃ under still air)
2-4	Insulation resistance	100MΩor 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

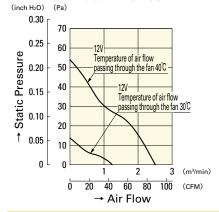
Manufactured by OHIZUMI MGF CO.,LTD.

Air Flow and Static Pressure Characteristics



109P1212T4H12(121)

with a built-in thermistor

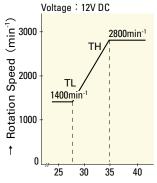


109P1212T4H122(123)

Temperature-Rotation Speed Chracteritics

with an external thermistor

■ Characteristics of Thermistor-detected Temperature vs Speed

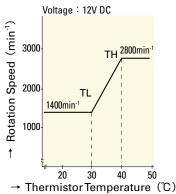


→ ThermistorTemperature (°C)

109P1212T4H12(121)

with a built-in thermistor

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



109P1212T4H122(123)