

52 mm Sq.

San Ace 52

15mm thick
External thermistor model /
Built-in thermistor model

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 \oplus red \ominus 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)



Note: Optional external thermistors are sold separately.

52×52×15mm (Mass : 55g)

Specifications External thermistor model

Model No.	Rated Voltage [V]	Operating Voltage Range [V]	Rated Current [A]	Rated Input [W]	Rated Speed [min⁻¹]	Air Flow [m³/min] [CFM]	Static Pressure [Pa] [inchH₂O]	SPL [dB(A)]	Operating Temperature [°C]	Life Expectancy [h]
109P0512T7H12	12	10.2 to 13.8	0.13	1.56	4,600	0.255 9.0	31.9 0.128	27	-10 to +70	60,000
			0.09	1.08	2,300	0.13 4.6	8.8 0.035	17		

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).

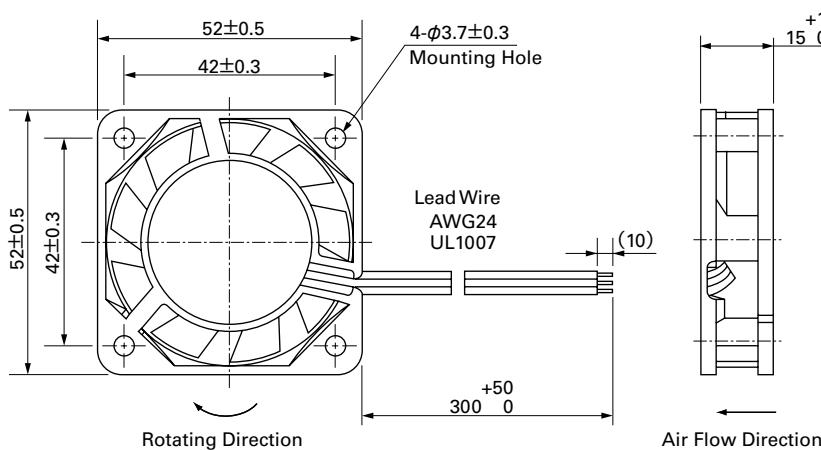
Built-in thermistor model

Model No.	Rated Voltage [V]	Operating Voltage Range [V]	Rated Current [A]	Rated Input [W]	Rated Speed [min⁻¹]	Air Flow [m³/min] [CFM]	Static Pressure [Pa] [inchH₂O]	SPL [dB(A)]	Operating Temperature [°C]	Life Expectancy [h]
109P0512T7H122	12	10.2 to 13.8	0.13	1.56	4,900	0.27 9.5	36.2 0.145	28	-10 to +70	60,000
			0.09	1.08	2,400	0.14 4.9	9.6 0.039	17		

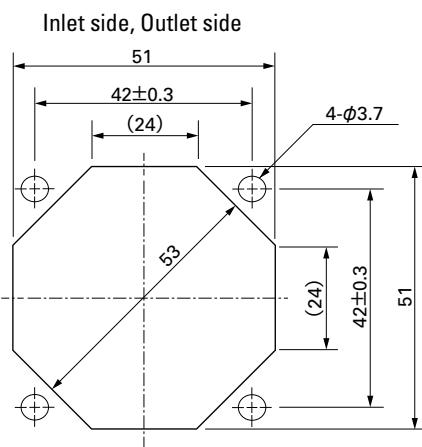
Note: The top row gives characteristics shown when the emperature is 40°C , while the bottom row gives characteristics shown when the temperature is 30°C .

Dimensions (Unit : mm)

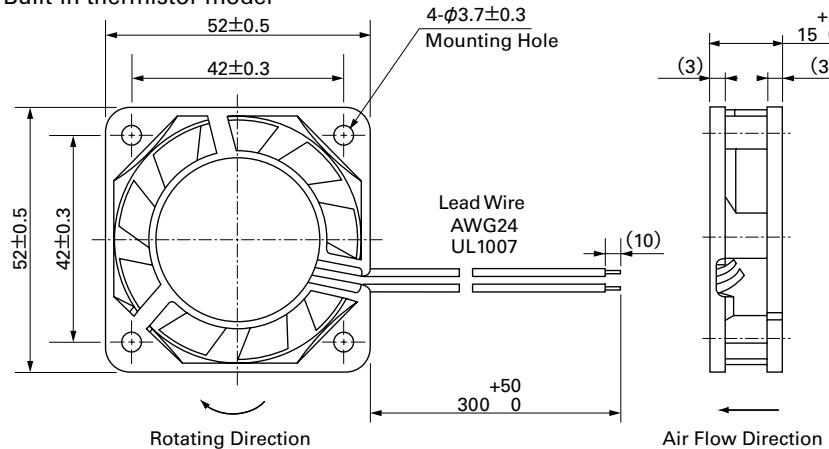
External thermistor model



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



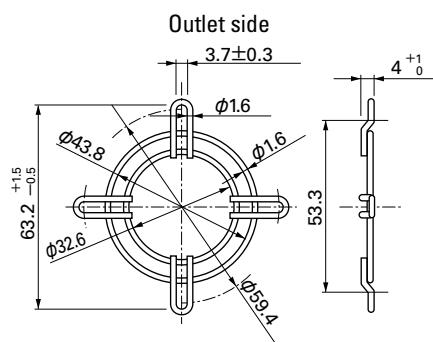
Built-in thermistor model



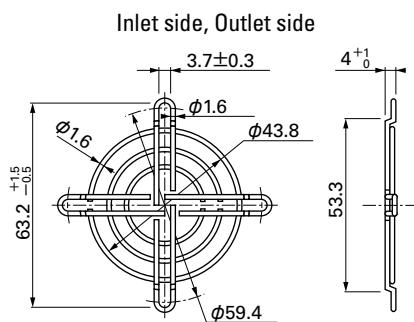
Options (Unit : mm)

Finger guards

Model : 109-149 Surface treatment : Nickel-chrome plating (silver) Color

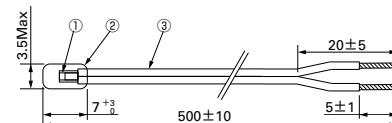


Model : 109-149E Surface treatment : Nickel-chrome plating (silver) Color



Thermistor

Model : 169-002



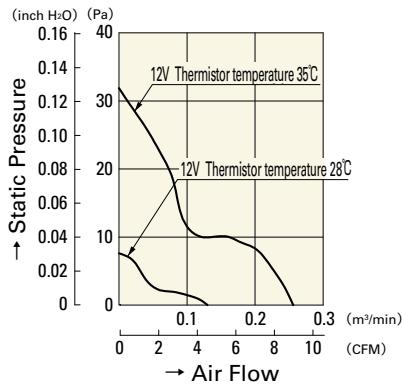
Number	Name	Standards, materials, etc.
①	Thermistor	Chip
②	Insulated cord	Epoxy resin
③	Lead	UL2555 CSA TR-64 AWG#28 (blue)

Item	Spec
2-1 Resistance	R ₂₅ 6.8KΩ ± 3%
2-2 B constant	B _{25/50} 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 □□□

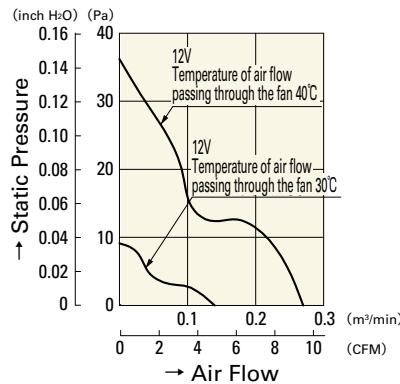
Air Flow and Static Pressure Characteristics

External thermistor model



109P0512T7H12

Built-in thermistor model

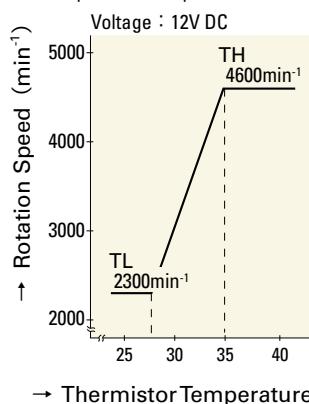


109P0512T7H122

Temperature-Rotation Speed Characteristics

External thermistor model

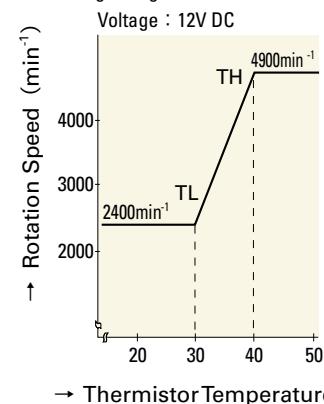
Characteristics of Thermistor-detected Temperature vs Speed



109P0512T7H12

Built-in thermistor model

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



109P0512T7H122

Thermal Speed Controlled Fan 52mm

52mm