

**52**mm sq.

# San Ace 52

15mm 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)

**52×52×15**mm (Mass : 55g)

## Specifications External thermistor model

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 [°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).

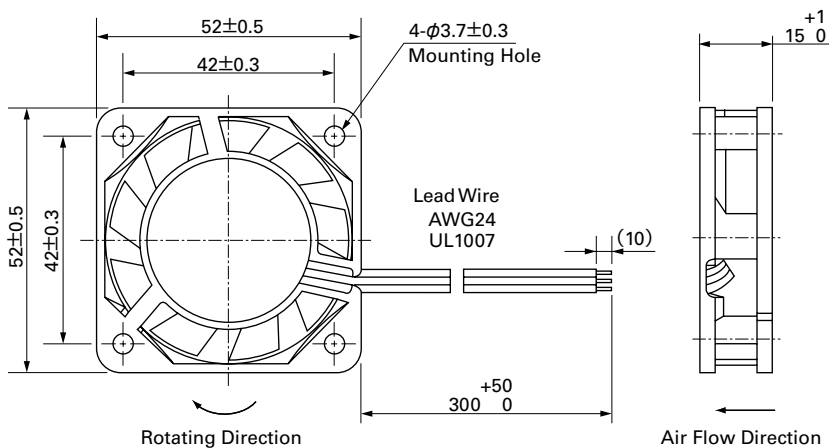
## Built-in thermistor model

Model No.	Rated Voltage [V]	Operating Voltage Range [V]	Rated Current [A]	Rated Input [W]	Rated Speed [min <sup>-1</sup> ]	Air Flow [m <sup>3</sup> /min] [CFM]	Static Pressure [Pa] [inchH <sub>2</sub> O]	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		

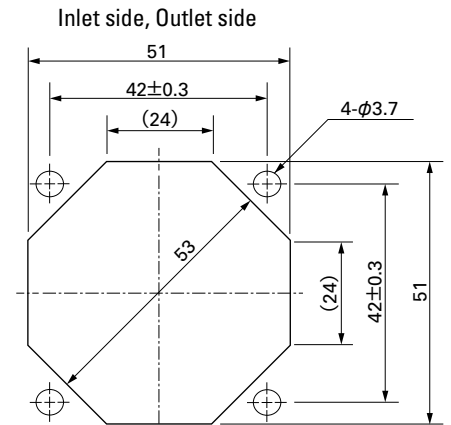
Note: The top row gives characteristics shown when the temperature is 40°C, while the bottom row gives characteristics shown when the temperature is 30°C.

## Dimensions (Unit : mm)

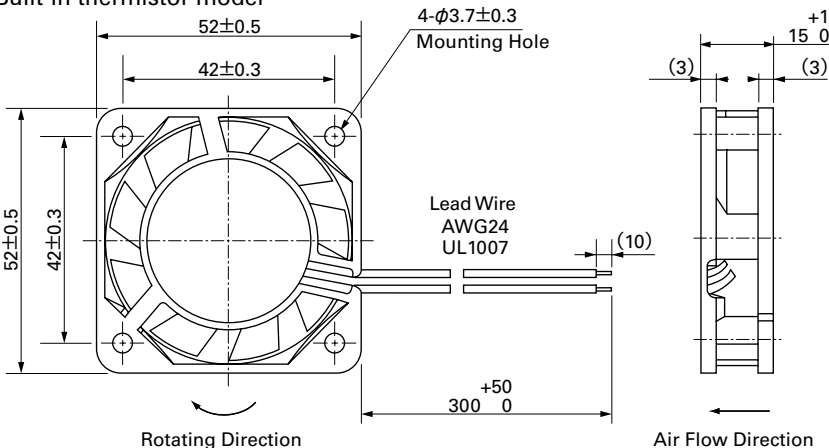
External thermistor model



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



Built-in thermistor model

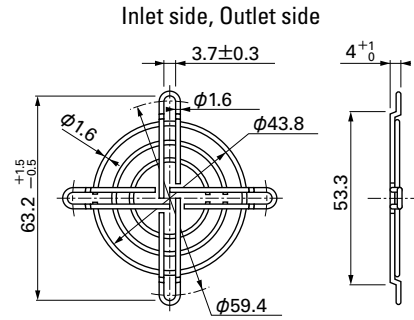
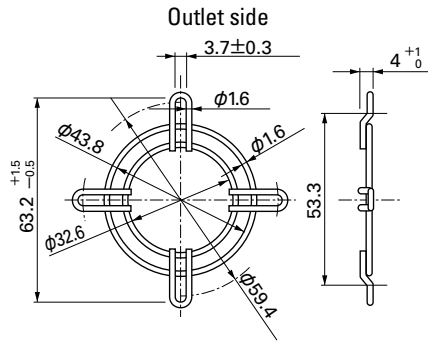


## Options (Unit : mm)

### Finger guards

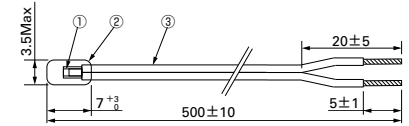
Model : 109-149 Surface treatment : Nickel-chrome plating Color (silver)

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



### Thermistor

Model : 169-002

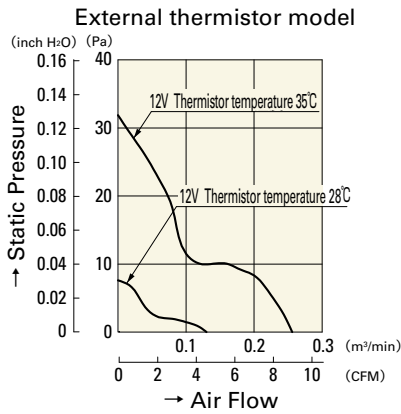


Number	Name	Standards, materials, etc.
①	Thermistor	Chip
②	Insulated cord	Epoxy resin
③	Lead	UL2555 CSA TR-64 AWG#28 (blue)

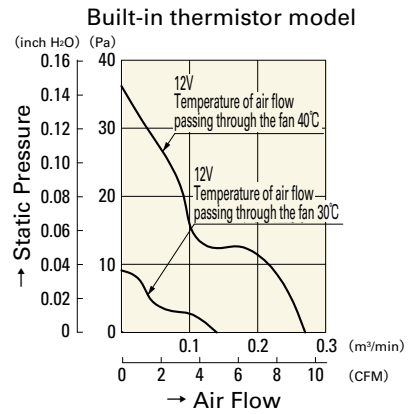
Item	Spec
2-1	Resistance R25 6.8KΩ ±3%
2-2	B constant B25/50 3950K ±2%
2-3	Maximum rated power 188mW (25°C under still air)
2-4	Insulation resistance 100MΩ or more (DC500V megger)
2-5	Dielectric strength No problem (AC1500V 1 minute)
2-6	Operating temperature range -30°C to +80°C
2-7	Storage temperature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

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

## Air Flow and Static Pressure Characteristics



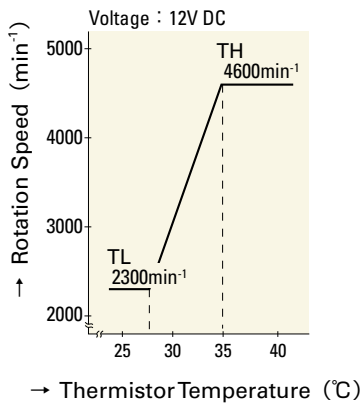
109P0512T7H12



109P0512T7H122

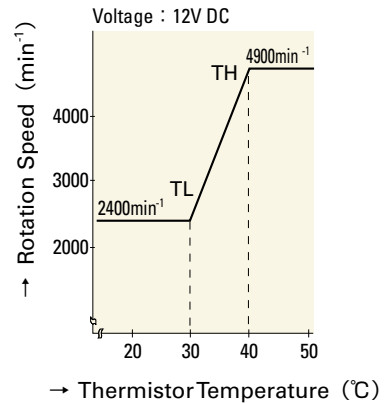
## Temperature-Rotation Speed Characteristics

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