

**Thermal Speed Controlled Fan**

**52mm**

**San Ace 52**

**15mm 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)

**52mm × 15mm thick** (Mass : 55g)

**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)
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.

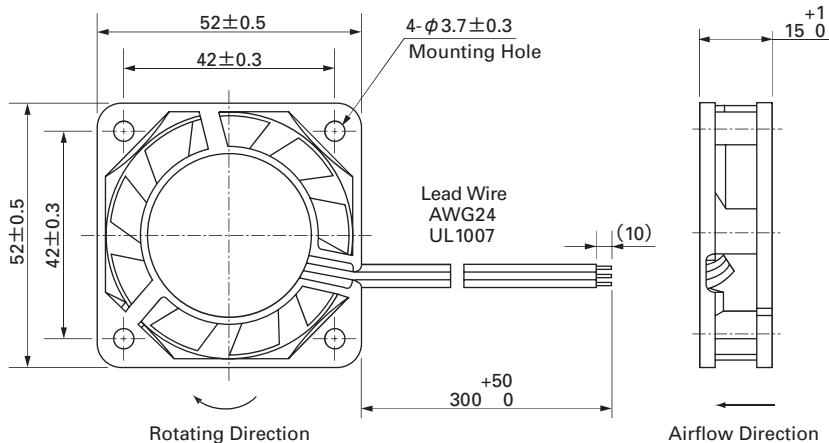
**with a built-in thermistor**

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)
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		

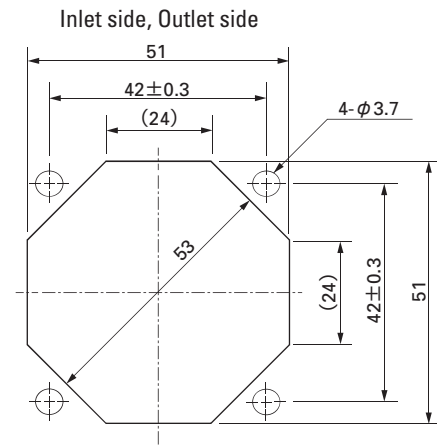
Note: The top row gives characteristics shown when the temperature is 40°C, while the bottom row gives characteristics shown when the temperature is 30°C.

**Dimensions (Unit : mm)**

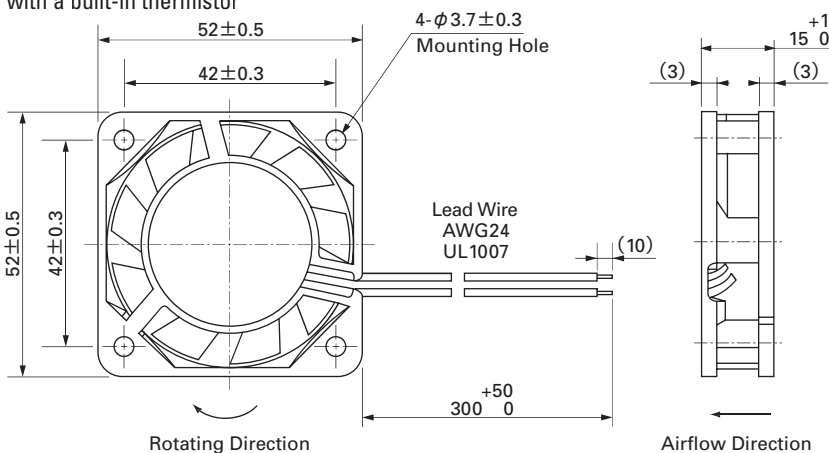
with an external thermistor



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



with a built-in thermistor

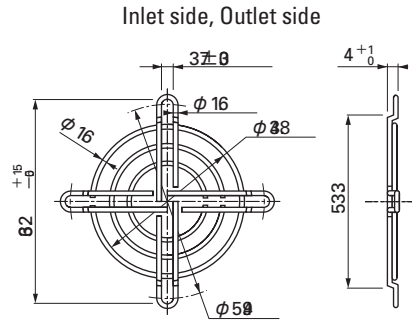
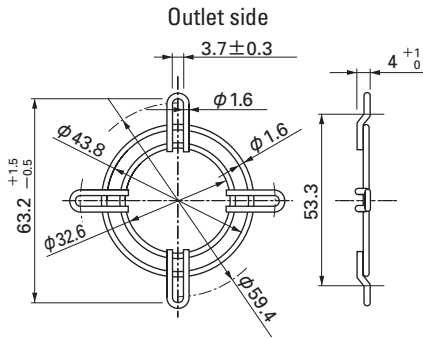


## Options (Unit : mm)

### Finger guards

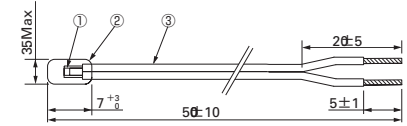
Model : 109-149 Surface treatment : Nickel-chrome plating (silver) Color

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



### Thermistor

Model : 169-002



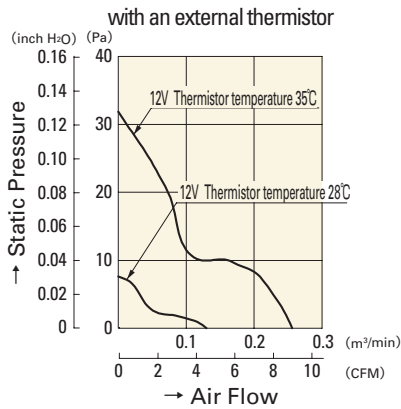
Number	Name	Standards, materials, etc.
①	Thermistor	Chip
②	Insulated cord	Epoxy resin
③	Lead	UL2555 CSA TR-64 AWG#28 (blue)

Item	Spec
2-1	Resistance 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

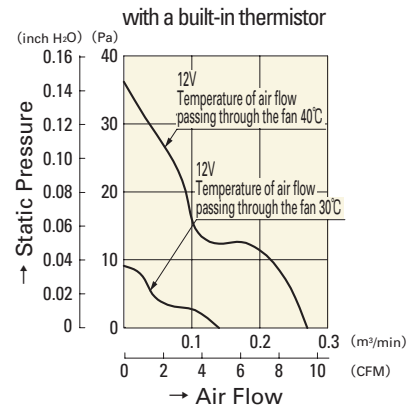
Manufactured by OHIZUMI MGF CO.,LTD.

Thermal Speed Controlled Fan 52mm

## Air Flow and Static Pressure Characteristics

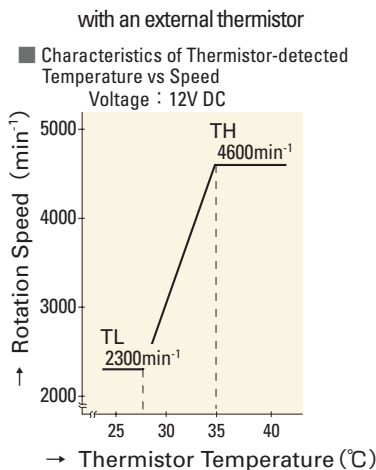


109P0512T7H12

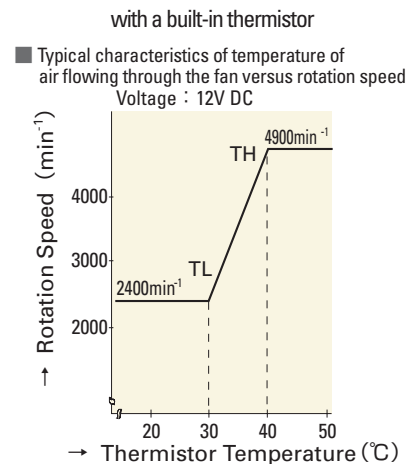


109P0512T7H122

## Temperature-Rotation Speed Characteristics



109P0512T7H12



109P0512T7H122

52mm