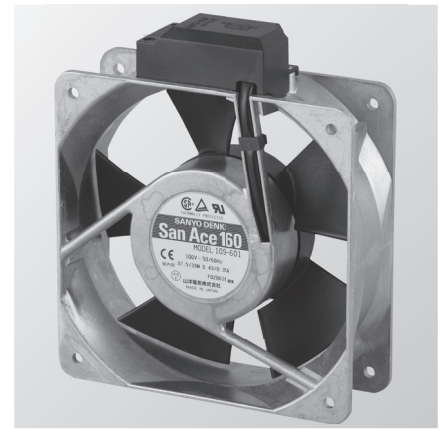


160mm sq.

San Ace160

51mm thick
51mm thick (with Sensor)



General Specifications

- Material..... Frame: Aluminum, 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)
- Dielectric Strength 50/60Hz 1,500VAC 1minute (between input terminal and frame)
- Dielectric Strength (With Sensor) ... between AC input and DC input(Sensor output)
: 50/60Hz 1,000VAC 1minute
between AC input and G
: 50/60Hz 1,500VAC 1minute,
between G and DC input(Sensor output)
: 50/60Hz 1,000VAC 1minute
- Sensor-Purpose Lead Wire ... ⊕ brown ⊖ black (Sensor) yellow

160×160×51mm (Mass : 1,100g / 1,100g (with Sensor))

Specifications Standard

Model No.	Voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked Rotor Current [A]	Rated Speed [min ⁻¹]	Air Flow [m ³ /min] [CFM]	Static Pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating Temperature Range [°C]	Life Expectancy [h]
109-601	100	50/60	37.5/33	0.43/0.35	0.72/0.70	2,850/3,350	7.2/8.5 254.4/300.4	156.8/166.6 0.630/0.669	56/60	-30 to +60	25,000
109-604	115			0.39/0.31	0.62/0.61						
109-602	200			0.23/0.18	0.36/0.35						
109-603	230			0.21/0.16	0.32/0.31						

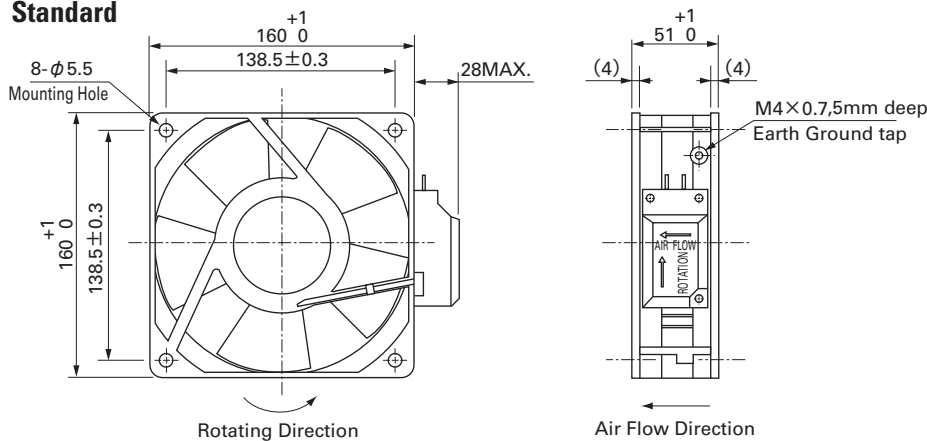
with Sensor

Model No.	Voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked Rotor Current [A]	Rated Speed [min ⁻¹]	Air Flow [m ³ /min] [CFM]	Static Pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating Temperature Range [°C]	Life Expectancy [h]
109-641	100	50/60	37.5/33	0.43/0.35	0.72/0.70	2,850/3,350	7.2/8.5 254.4/300.4	156.8/166.6 0.630/0.669	56/60	-10 to +60	25,000
109-644	115			0.39/0.31	0.62/0.61						
109-642	200			0.23/0.18	0.36/0.35						
109-643	230			0.21/0.16	0.32/0.31						

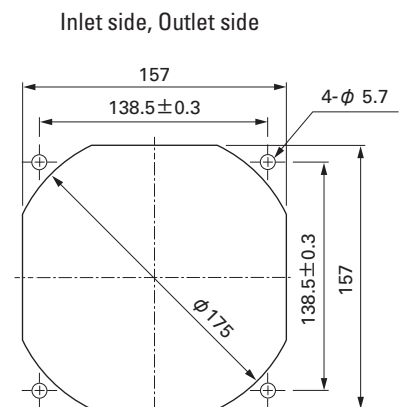
Two types of power supplies, 5V and 12V, are available in fans with sensor attached.

Dimensions (Unit : mm)

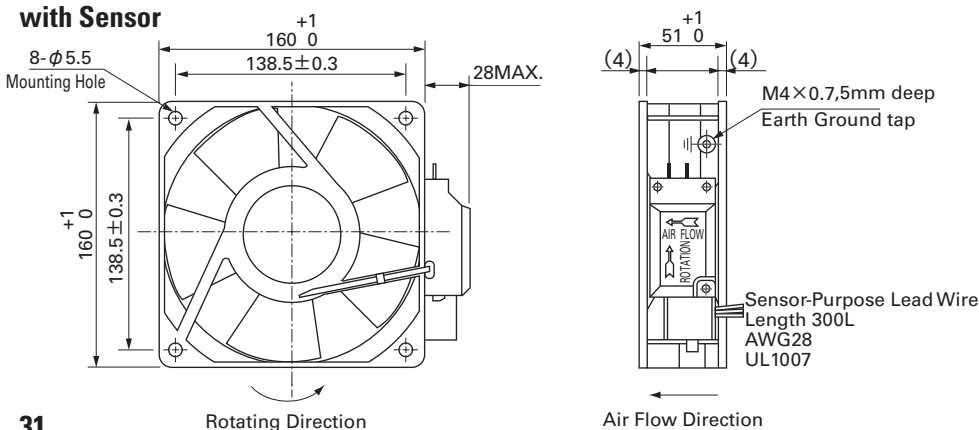
Standard



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

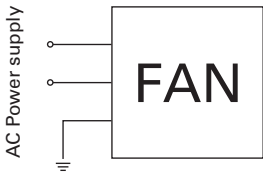


with Sensor

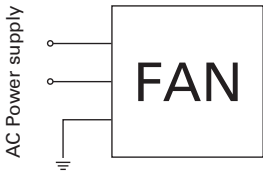


Wiring diagram

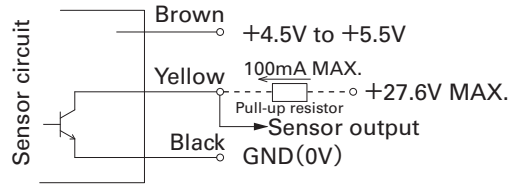
Standard



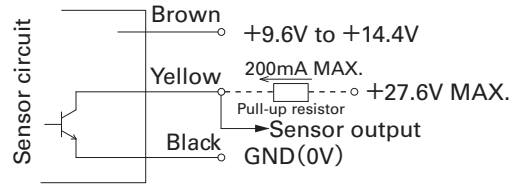
with Sensor
(For fan power supply)



5V



12V

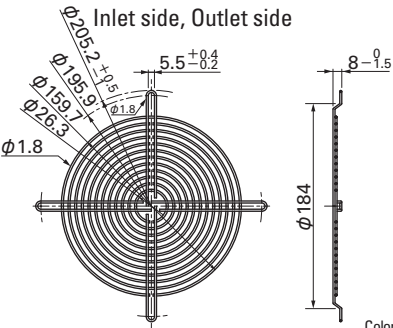


GND (Black) should be shared in case that power supply for sensor circuit (Brown) and that for sensor pull-up (Yellow) are separated.

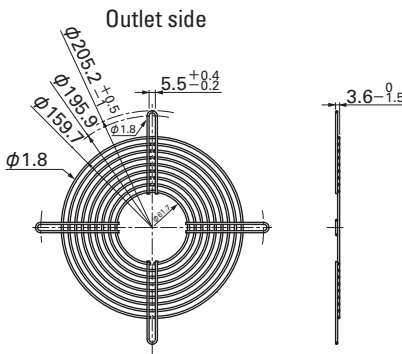
Options (Unit : mm)

Finger guards

Model : 109-619E Surface treatment : Nickel-chrome plating Color



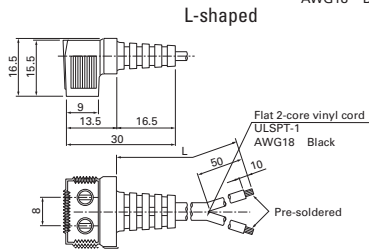
Model : 109-620 Surface treatment : Nickel-chrome plating Color (silver)



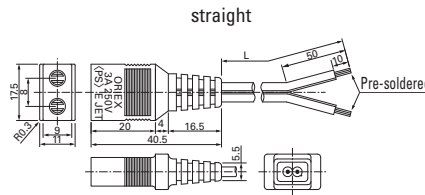
Plug cord

(UL/CSA CERTIFIED)
UL FILE No.E50197 CSA FILE No.LR67048
Model : 489-084-L10/489-084-L21

Flat 2-core vinyl cord
ULSPT-1
AWG18 Black

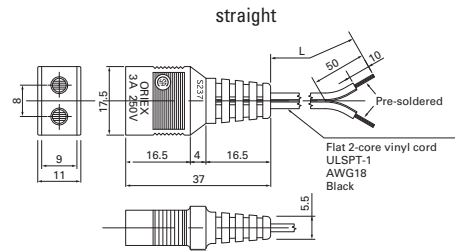


(Products compliant with Electrical Appliance and Material Safety Law)
Model : 489-1618-L10/489-1618-L21/489-1618-L28

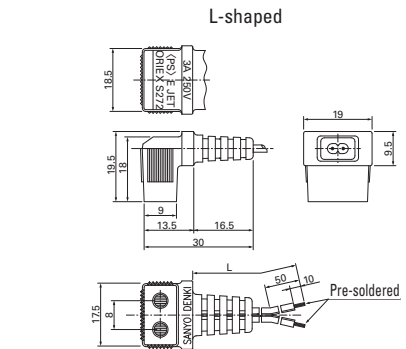


Model	Power cord length(mm)
- L10	1,000
- L21	2,100
- L28	2,800

(UL/CSA CERTIFIED)
UL FILE No.E50197 CSA FILE No.LR67048
Model : 489-086-L10/489-086-L21

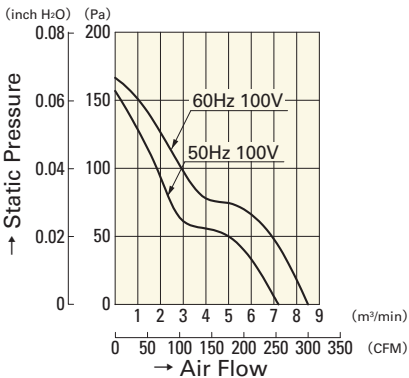


(Products compliant with Electrical Appliance and Material Safety Law)
Model : 489-1619-L10/489-1619-L21

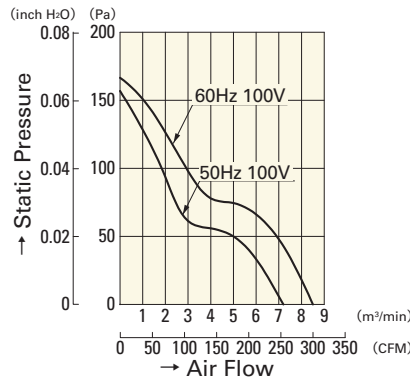


Air Flow - Static Pressure Characteristics

Standard



with Sensor



109-601	109-604
109-602	109-603

109-641	109-644
109-642	109-643