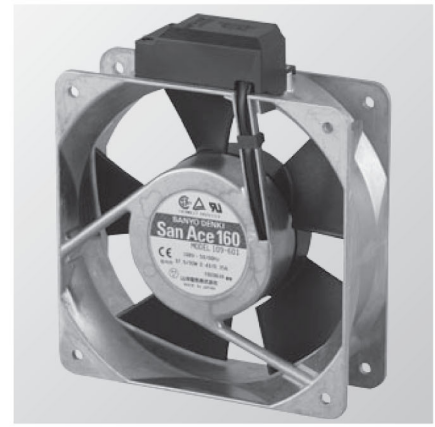


160mm sq.**San Ace160**51mm thick
51mm thick (with Sensor)**General Specifications**

- 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

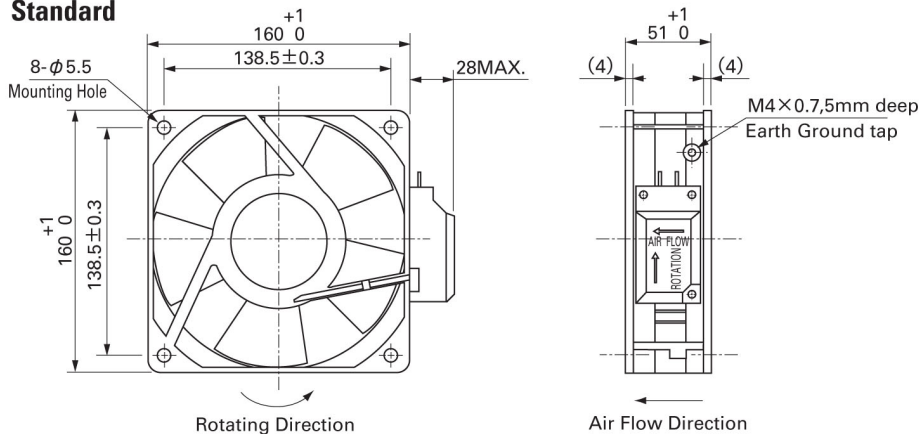
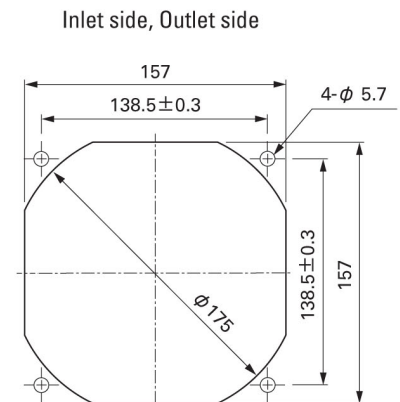
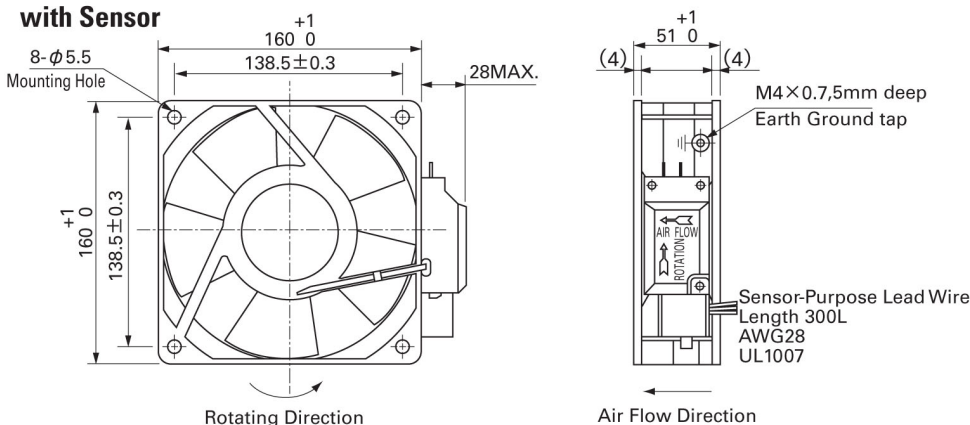
160×160×51mm [Mass : 1,100g / 1,100g (with Sensor)]**Specifications Standard**

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						

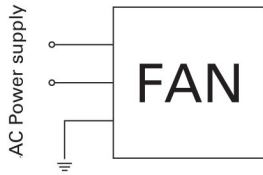
with Sensor

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.

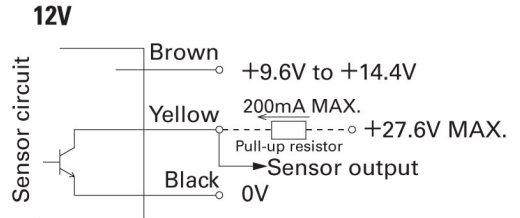
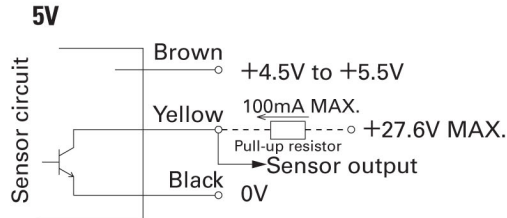
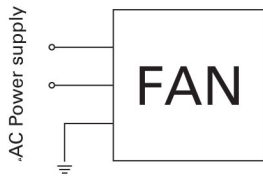
Dimensions (Unit : mm)**Standard****Reference dimension of mounting holes and vent opening (Unit : mm)****with Sensor**

Standard



with Sensor

(For fan power supply)

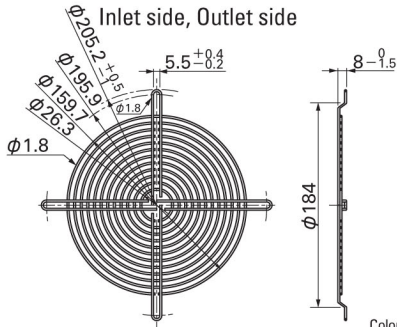


GND should be shared in case that power supply for sensor circuit and that for sensor pull-up are separated.

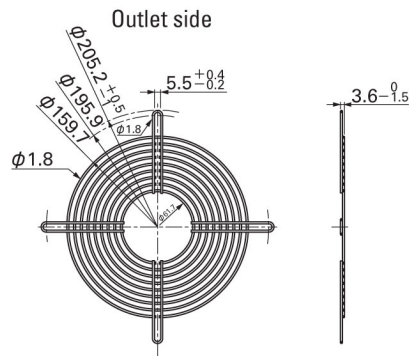
Options (Unit : mm)

Finger guards

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



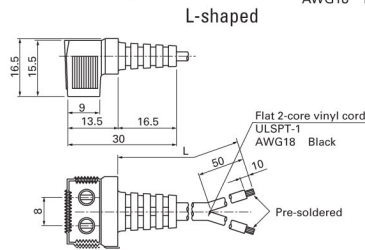
Model : 109-620 Surface treatment : Nickel-chrome plating Color (silver)



Plug cord

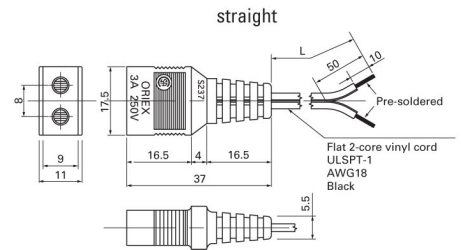
(UL/CSA CERTIFIED)
UL FILE No.E50197 CSA FILE No.LR67048
Model : 489-084-L10/489-084-L21

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

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

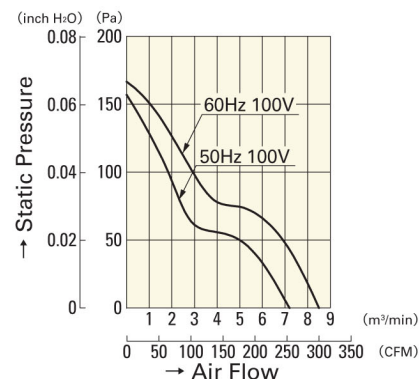


(Products compliant with Electrical Appliance and Material Safety Law)
Model : 489-1619-L10/489-1619-L21

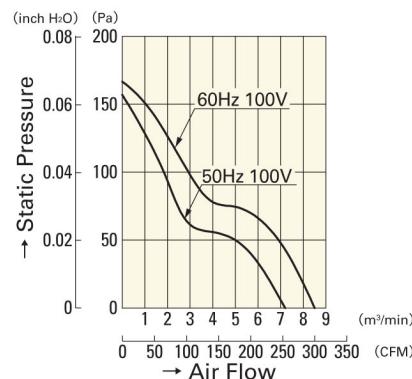
Model	Power cord length(mm)
- L10	1,000
- L21	2,100
- L28	2,800

Air Flow and Static Pressure Characteristics

Standard



with Sensor



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

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