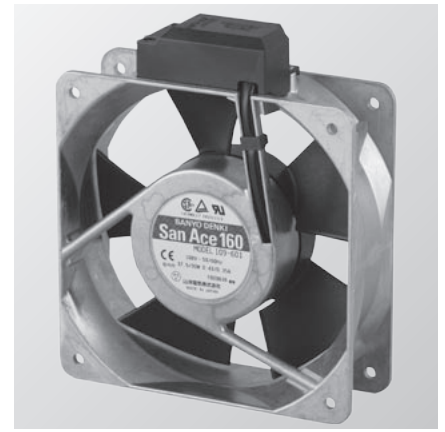


**160**mm sq.

# 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 <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]
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						

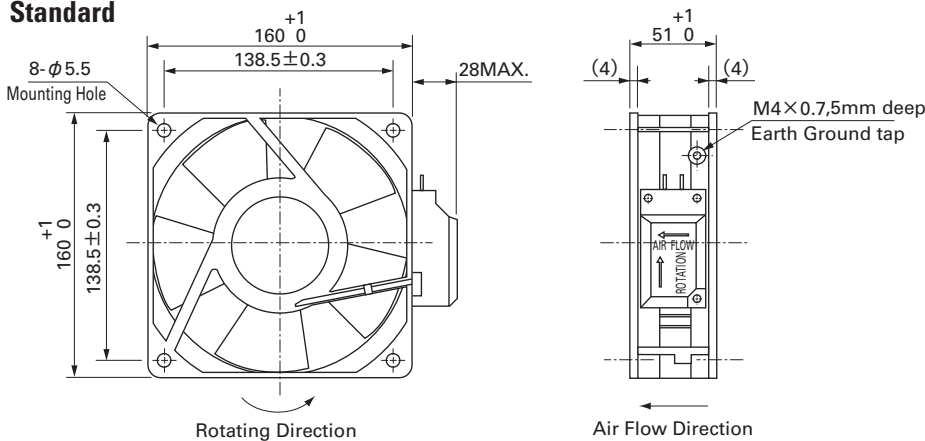
## with Sensor

Model No.	Voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked Rotor Current [A]	Rated Speed [min <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]
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						

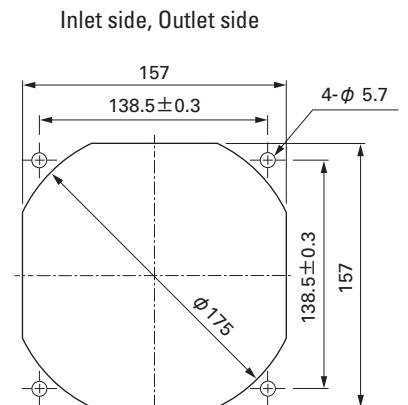
Two types of power supplies, 5V and 12V, are available in fans with sensor attached.

## Dimensions (Unit : mm)

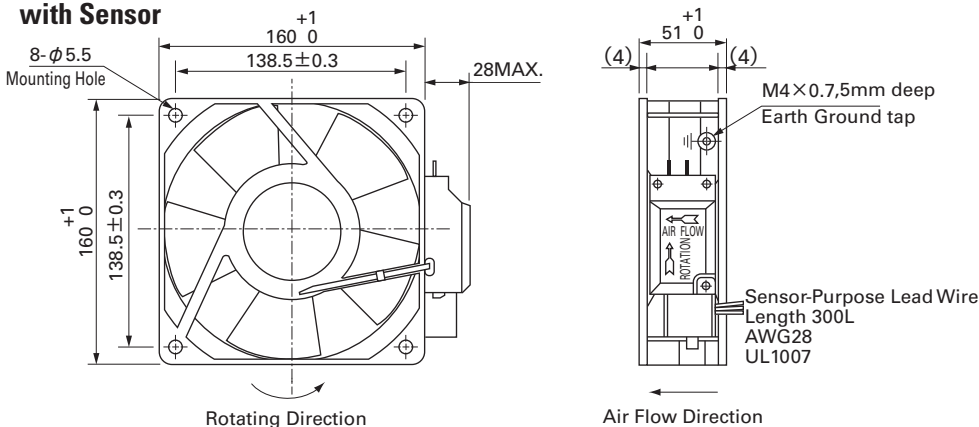
### Standard



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

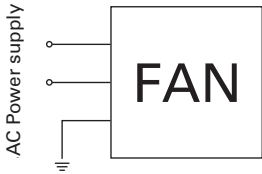


### with Sensor

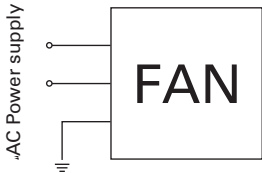


**Wiring diagram**

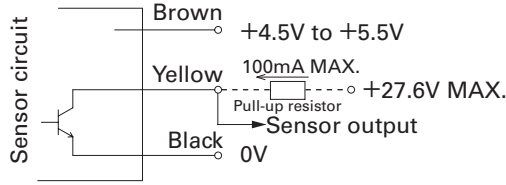
**Standard**



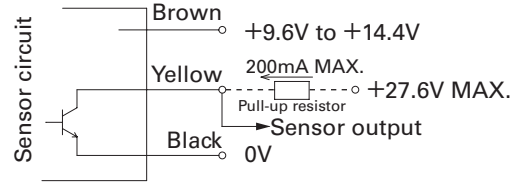
**with Sensor**  
(For fan power supply)



**5V**



**12V**

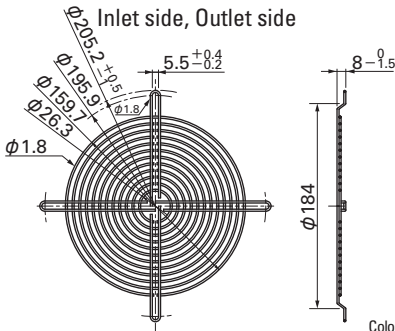


GND should be shared in case that power supply for sensor circuit and that for sensor pull-up are separated.

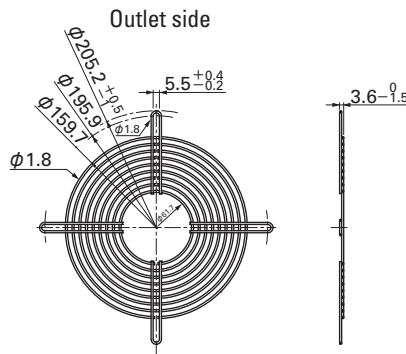
**Options (Unit : mm)**

**Finger guards**

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



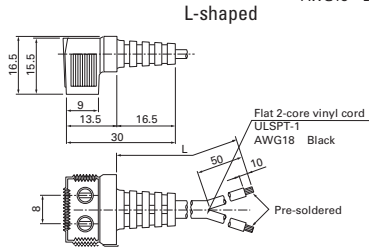
Model : 109-620 Surface treatment : Nickel-chrome plating Color (silver)



**Plug cord**

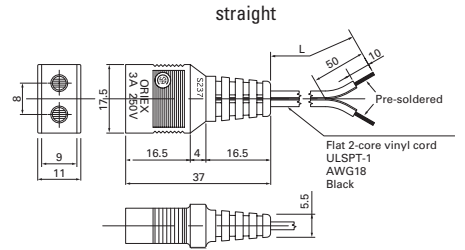
(UL/CSA CERTIFIED)  
UL FILE No.E50197 CSA FILE No.LR67048  
Model : 489-084-L10/489-084-L21

Flat 2-core vinyl cord  
ULSPT-1  
AWG18 Black

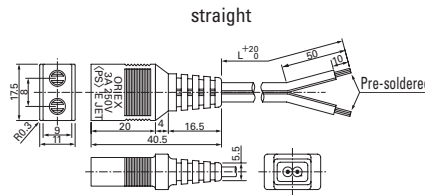


(Products compliant with Electrical Appliance and Material Safety Law)  
Model : 489-1618-L10/489-1618-L21/489-1618-L28

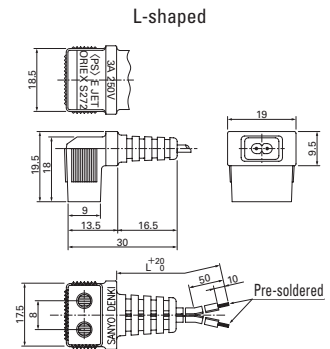
(UL/CSA CERTIFIED)  
UL FILE No.E50197 CSA FILE No.LR67048  
Model : 489-086-L10/489-086-L21



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

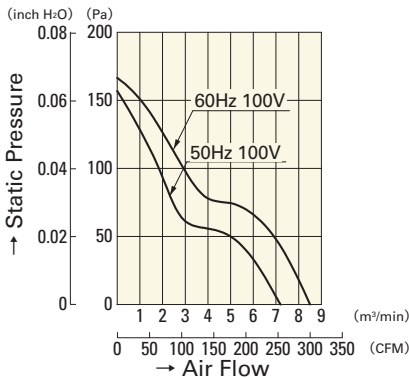


Model	Power cord length(mm)
- L10	1,000
- L21	2,100
- L28	2,800

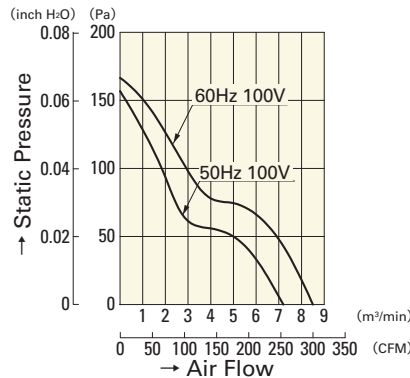


**Air Flow and Static Pressure Characteristics**

**Standard**



**with Sensor**



<b>109-601</b>	<b>109-604</b>
<b>109-602</b>	<b>109-603</b>

<b>109-641</b>	<b>109-644</b>
<b>109-642</b>	<b>109-643</b>