

120mm sq.**San Ace 120**

Certifications vary by model no.
Please refer to pp. 514 to 515.

General Specifications

- Material..... Frame: Aluminum,
Impeller: Plastics (Flammability: UL94V-1)
- Expected Life Refer to specifications (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
- Storage Temperature -30°C to +70°C (Non-condensing)
- Operating Voltage Range... Voltage of each model ±10%

120×120×38mm [Mass : 550g / 580g (with Sensor)]**Specifications Standard**

Model No.	Rated Voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked Rotor Current [A]	Rated Speed [min ⁻¹]	Max. Airflow [m³/min] [CFM]	Max. Static Pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating Temperature [°C]	Expected Life [h]
109S075UL	100	50/60	18/16	0.24/0.21	0.32/0.28	2,700/3,100	2.5 /2.9 88.3/102.5	57.9/68.7 0.233/0.276	42/45	−30 to +60	25,000/60℃
109S074UL	115			0.21/0.18	0.27/0.24						
109S078UL	200			0.12/0.1	0.16/0.14						
109S072UL	230			0.11/0.09	0.14/0.13						
109S005	100		14/12	0.18/0.16	0.25/0.22	2,700/3,100	2.35/2.7 83 / 95.4	55.9/65.7 0.224/0.264	40/43		
109S005UL											
109S024	120			0.16/0.14	0.21/0.18						
109S024UL	115										
109S008	200			0.09/0.08	0.13/0.11						
109S008UL											
109S025	230			0.08/0.07	0.11/0.09						
109S025UL											
109S029UL	100		14/12	0.18/0.16	0.23/0.21	2,450/2,700	2.15/2.35 76 / 83	44.1/49.0 0.177/0.197	38/40		
109S013			13/11	0.16/0.14	0.16/0.15	1,800/2,000	1.55/1.75 54.8/ 60.8	23.5/26.4 0.094/0.106	30/32		
109S013UL		7/7	0.1 / 0.09	0.1 /0.09	1,650/1,700	1.45/1.5 51.2/ 53	17.6/17.6 0.071/0.071	28/28			
109S006											
109S006UL	115	10/10	0.13/0.11	0.13/0.11	1,800/1,900	1.56/1.64 55 / 57.9	20 /20.6 0.080/0.083	30/31			
109S010	200	7/7	0.05/0.04	0.05/0.04	1,650/1,700	1.45/1.5 51.2/ 53	17.6/17.6 0.071/0.071	28/28			
109S010UL	240	11/11	0.06/0.05	0.06/0.05	1,800/1,950	1.58/1.68 55.8/ 59.3	20.6/21.6 0.083/0.087	30/32			

with Sensor

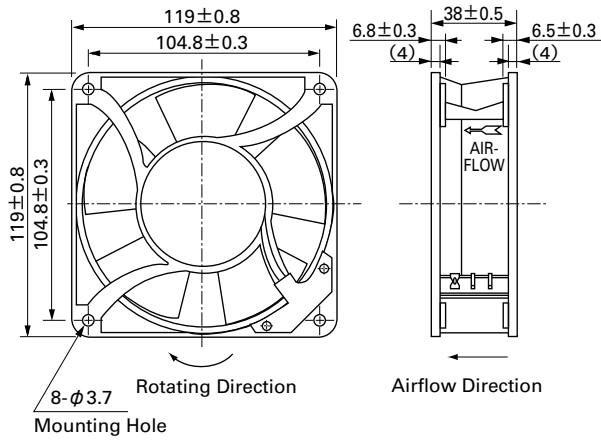
Model No.	Rated Voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked Rotor Current [A]	Rated Speed [min ⁻¹]	Max. Airflow [m³/min] [CFM]	Max. Static Pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating Temperature [°C]	Expected Life [h]
109S405UL	100	50/60	14/12	0.18/0.16	0.25/0.22	2,700/3,100	2.35/2.7 83/95.4	55.9/65.7 0.224/0.264	40/43	-10 to +60	25,000/60℃
109S424UL	115			0.16/0.14	0.21/0.18						
109S408UL	200			0.09/0.08	0.13/0.11						
109S425UL	230			0.08/0.07	0.11/0.09						
109S429UL	100			0.18/0.16	0.23/0.21						
109S406UL			7/6	0.09/0.08	0.1 /0.09	1,650/1,700	1.45/1.5 51/53	17.7/17.7 0.071/0.071	28/28		
109S475UL	100		18/16	0.24/0.21	0.32/0.28	2,700/3,100	2.5 /2.9 88.3/102.4	57.9/68.7 0.233/0.276	42/45		
109S474UL	115			0.21/0.18	0.27/0.24						
109S478UL	200			0.12/0.1	0.16/0.14						
109S472UL	230			0.11/0.09	0.14/0.13						

Two types of power supplies, 5V (ITEM-20) and 12V (ITEM-30), are available in fans with sensor attached.

- Set Models** Fan, finger guard, plug cord, screws, etc. can be purchased in one package.
For details, please refer to pp. 453 to 456.

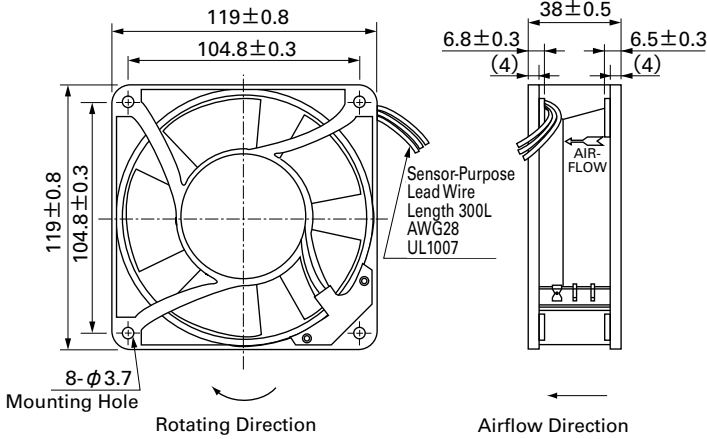
■ Dimensions (unit: mm)

Standard



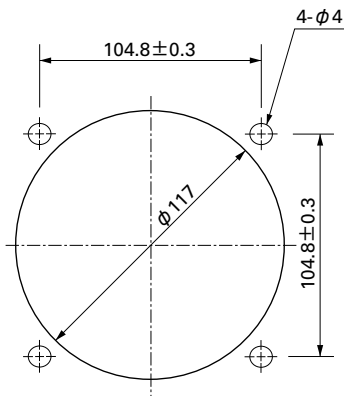
with Sensor

When mounting the model with a sensor, please screw-mount through both flanges as it has a sensor box.

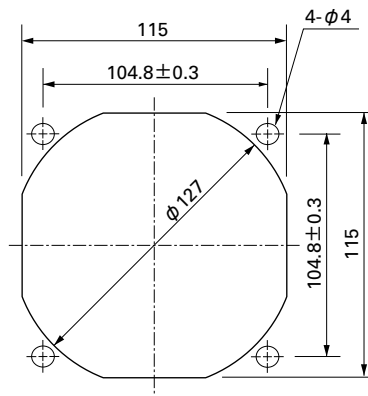


■ Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)

Inlet side

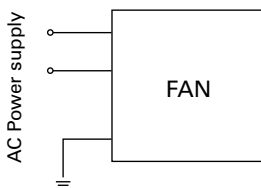


Outlet side



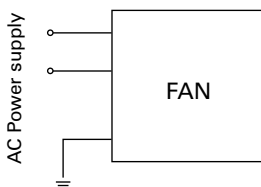
■ Wiring Diagram

Standard

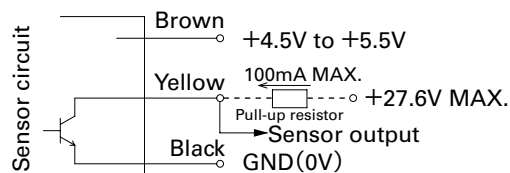


with Sensor

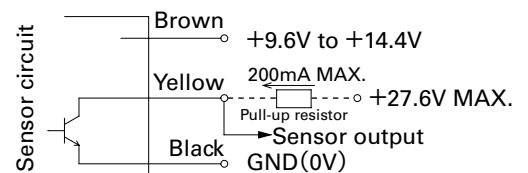
(For fan power supply)



5V (ITEM-20)



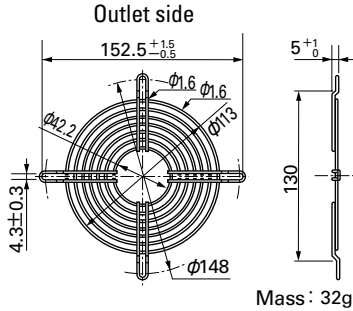
12V (ITEM-30)



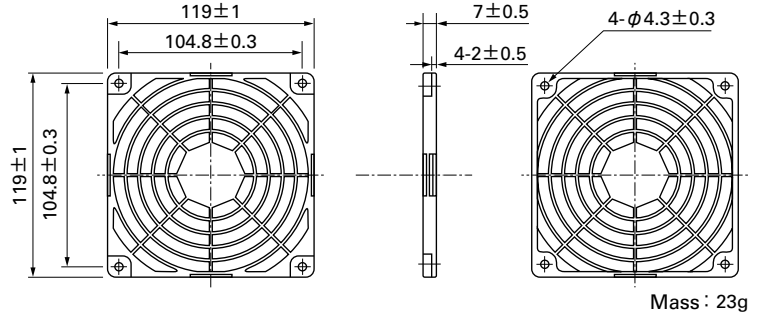
GND (Black) should be shared in case that power supply for sensor circuit (Brown) and that for sensor pull-up (Yellow) are separated.

120mm sq.**San Ace 120****120×120×38mm** [Mass : 550g / 580g (with Sensor)]**Options (unit: mm)****Finger Guards**

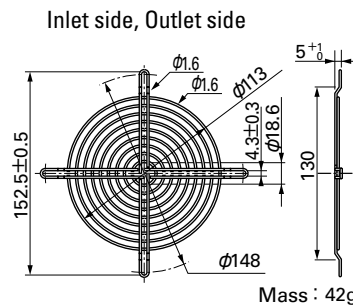
Model : 109-019C Surface treatment : Nickel-chrome plating (silver)
 : 109-019H : Cation electropainting (black)

**Resin Finger Guards**

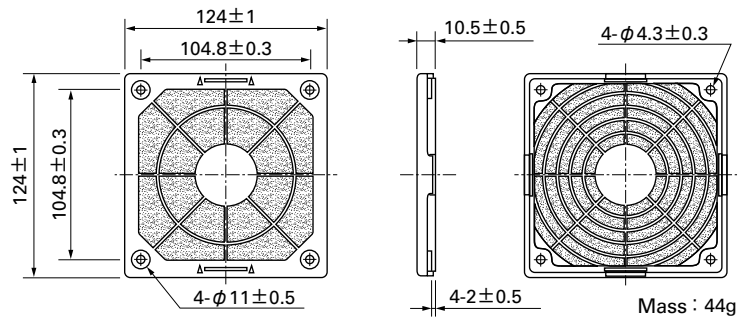
Model : 109-1000G



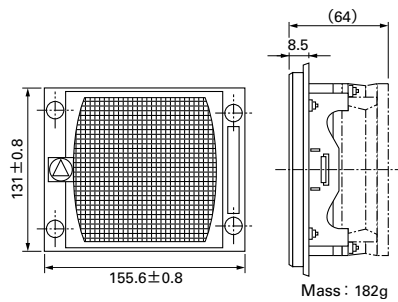
Model : 109-019E Surface treatment : Nickel-chrome plating (silver)
 : 109-019K : Cation electropainting (black)

**Resin Filter Kits**

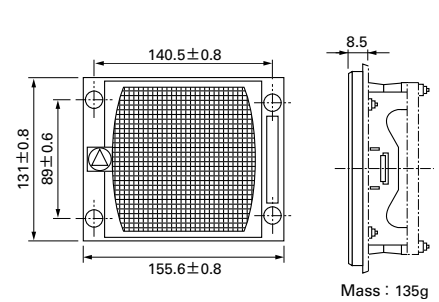
Model : 109-1000F13 (13PPI), 109-1000F20 (20PPI), 109-1000F30 (30PPI), 109-1000F40 (40PPI)

**Filter Kits**

Model : 109-018 Applicable models : AC Fan 120×120×38mm

**Screen Kits**

Model : 109-020 Applicable models : AC Fan 120×120×38mm

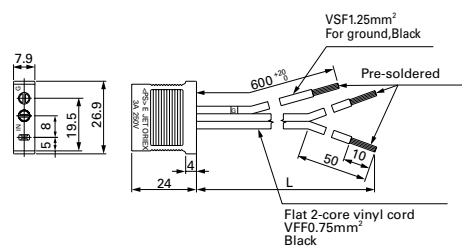


Neither filterkit nor screenkit can be installed on fans with sensor.

Plug Cord

Exclusive for fans without UL at the end of the model number.

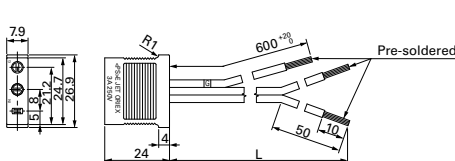
(Products compliant with Electrical Appliance and Material Safety Law)
 Model : 489-006-L10/489-006-L21/489-006-L35



Model	Power cord length (L) [mm]	Mass [g]
489-006-L10	1,000	47
489-006-L21	2,100	76
489-006-L35	3,500	114

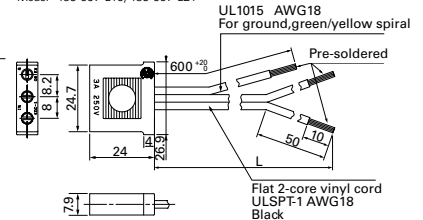
Exclusive for fans with UL at the end of the model number.

(Products compliant with Electrical Appliance and Material Safety Law)
 Model : 489-037-L10/489-037-L21/489-037-L35



(UL/CSA CERTIFIED)

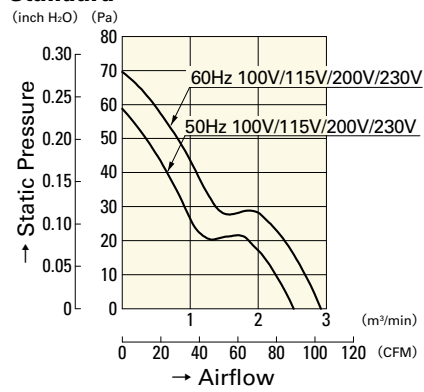
UL FILE No.E50197 CSA FILE No.LR67048
 Model : 489-007-L10/489-007-L21



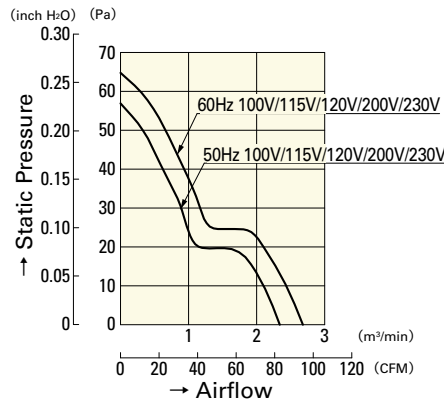
Model	Power cord length (L) [mm]	Mass [g]
489-037-L10	1,000	46
489-037-L21	2,100	76
489-037-L35	3,500	114
489-007-L10	1,000	48
489-007-L21	2,100	80

Airflow - Static Pressure Characteristics

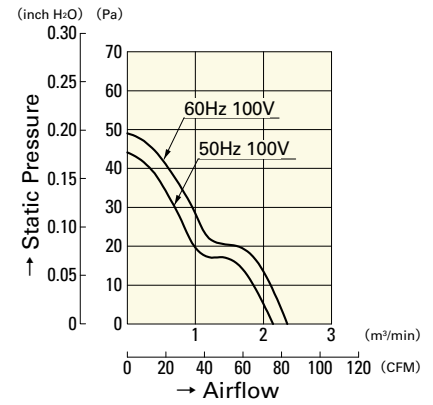
Standard



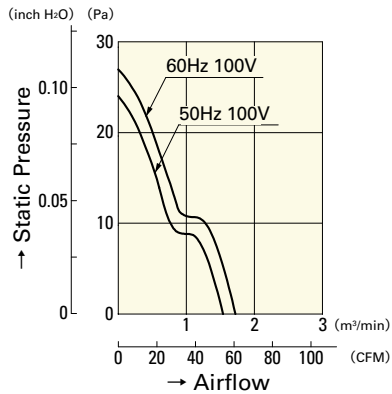
109S075UL **109S074UL**
109S078UL **109S072UL**



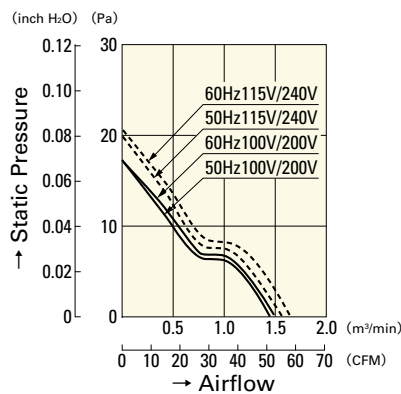
109S005 **109S005UL**
109S024 **109S024UL**
109S008 **109S008UL**
109S025 **109S025UL**



109S029UL

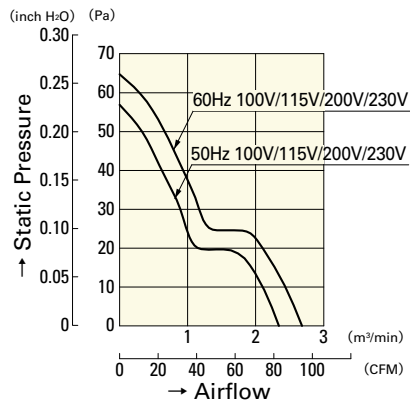


109S013
109S013UL

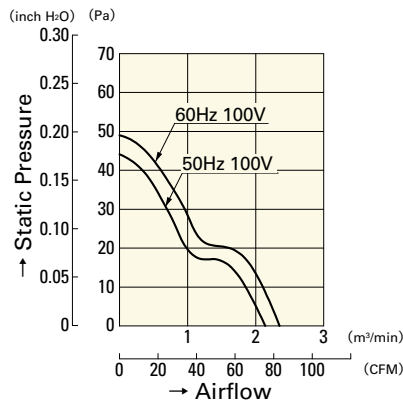


109S006 **109S006UL**
109S010 **109S010UL**

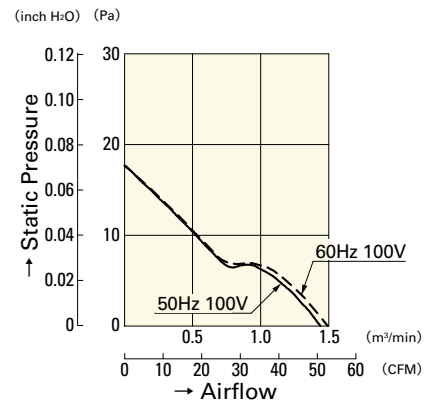
with Sensor



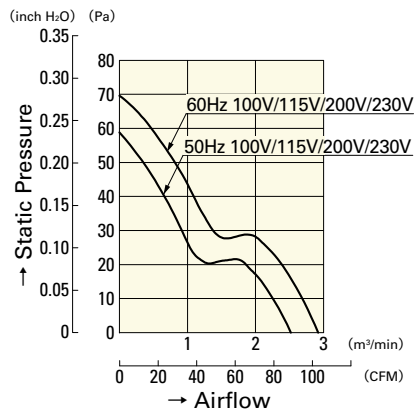
109S405UL **109S424UL**
109S408UL **109S425UL**



109S429UL



109S406UL



109S475UL **109S474UL**
109S478UL **109S472UL**