



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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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 [m ³ /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°C
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	100			0.16/0.14	0.21/0.18						
109S024	120			0.09/0.08	0.13/0.11						
109S024UL	115			0.08/0.07	0.11/0.09						
109S008	200		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		
109S008UL	200			0.16/0.14	0.16/0.15						
109S025	230			0.09/0.08	0.13/0.11						
109S025UL	230			0.08/0.07	0.11/0.09						
109S029UL	100		14/12	0.18/0.16	0.23/0.21	1,800/2,000	1.55/1.75 54.8/ 60.8	23.5/26.4 0.094/0.106	30/32		
109S013	100			0.16/0.14	0.16/0.15						
109S013UL	100			0.1 / 0.09	0.1 / 0.09						
109S006	115			0.13/0.11	0.13/0.11						
109S006UL	115	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			
109S010	200		0.13/0.11	0.13/0.11							
109S010	200		0.05/0.04	0.05/0.04							
109S010UL	240		0.06/0.05	0.06/0.05							
109S010UL	240	11/11	0.18/0.16	0.23/0.21	1,800/1,950	1.58/1.68 55.8/ 59.3	20.6/21.6 0.083/0.087	30/32			
109S013	100		0.16/0.14	0.16/0.15							
109S013UL	100		0.1 / 0.09	0.1 / 0.09							
109S006	115		0.13/0.11	0.13/0.11							

with Sensor

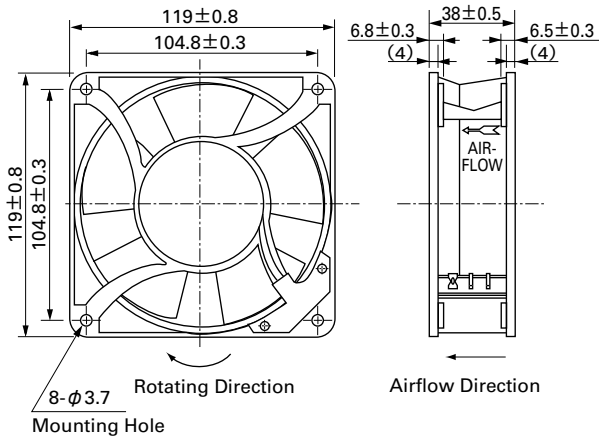
Model No.	Rated Voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked Rotor Current [A]	Rated Speed [min ⁻¹]	Max. Airflow [m ³ /min] [CFM]	Max. Static Pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating Temperature [°C]	Expected Life [h]
109S405UL	100	50/60	14/12	0.18/0.16	0.25/0.22	2,700/3,100	2.35/2.7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

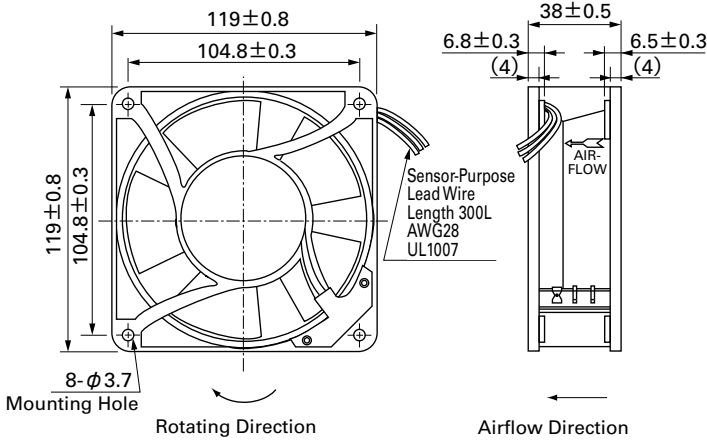
Dimensions (unit: mm)

Standard

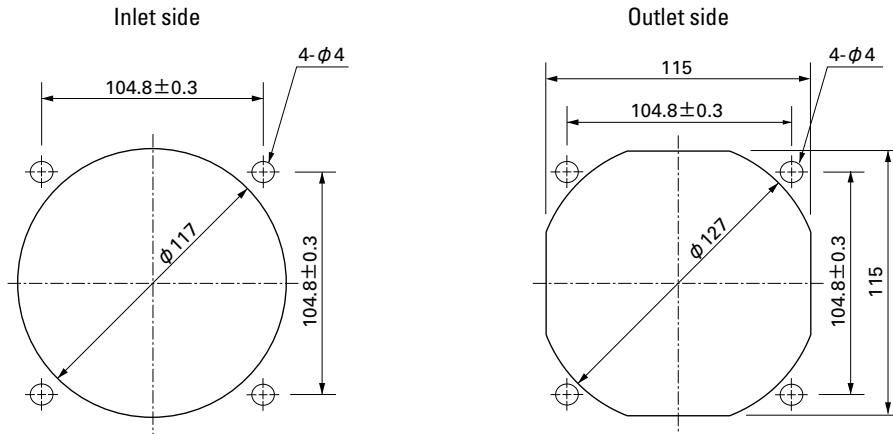


with Sensor

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

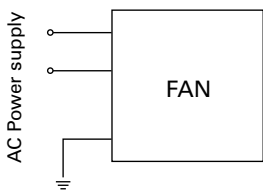


Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)



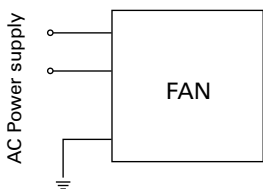
Wiring Diagram

Standard

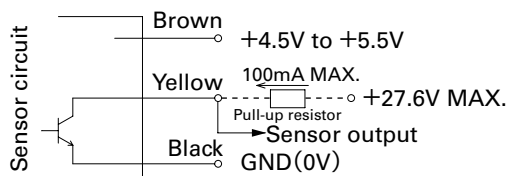


with Sensor

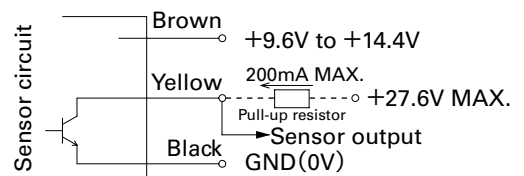
(For fan power supply)



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.

120 mm sq.

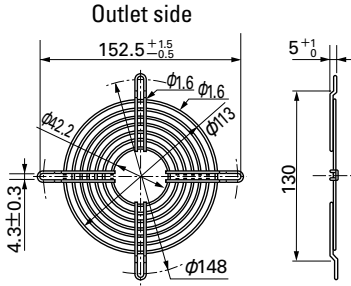
San Ace 120

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

Options (unit: mm)

Finger Guards

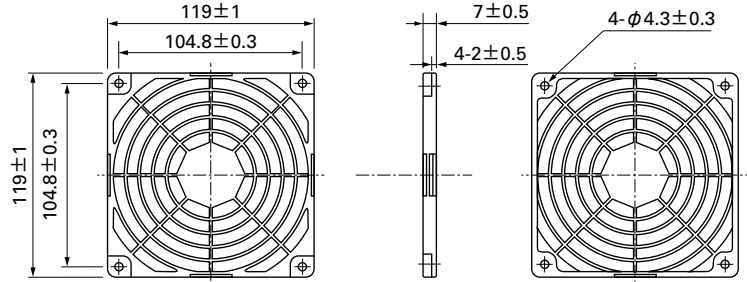
Model : 109-019C Surface treatment : Nickel-chrome plating (silver) Color
: 109-019H : Cation electropainting (black)



Mass : 32g

Resin Finger Guards

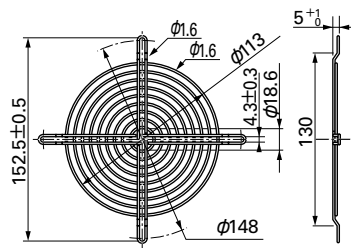
Model : 109-1000G



Mass : 23g

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

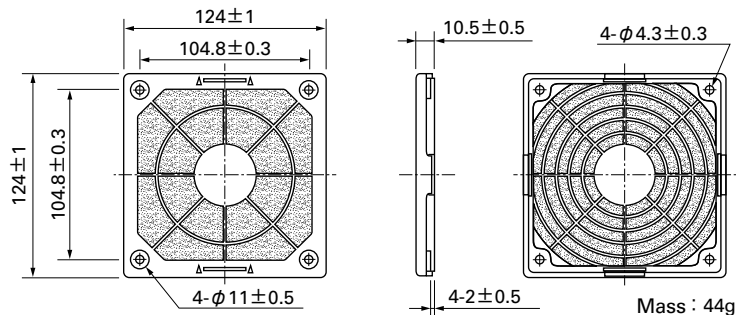
Inlet side, Outlet side



Mass : 42g

Resin Filter Kits

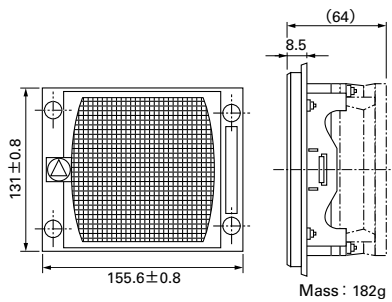
Model : 109-1000F13 (13PPI), 109-1000F20 (20PPI), 109-1000F30 (30PPI), 109-1000F40 (40PPI)



Mass : 44g

Filter Kits

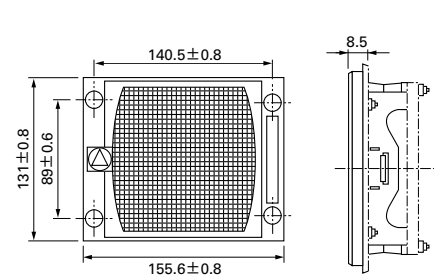
Model : 109-018 Applicable models : AC Fan 120×120×38mm



Mass : 182g

Screen Kits

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



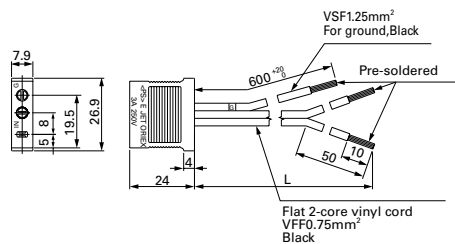
Mass : 135g

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.

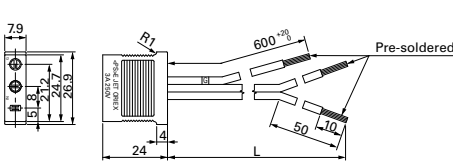
(Products compliant with Electrical Appliance and Material Safety Law)
Model : 489-006-L10/489-006-L21/489-006-L35



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

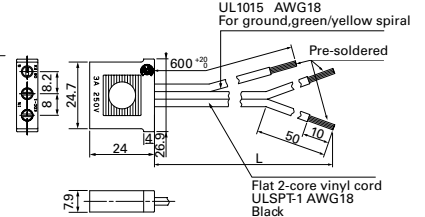
Exclusive for fans with UL at the end of the model number.

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



(UL/CSA CERTIFIED)

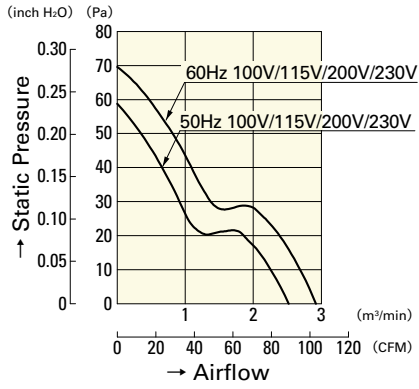
UL FILE No.E50197 CSA FILE No.LR67048
Model : 489-007-L10/489-007-L21



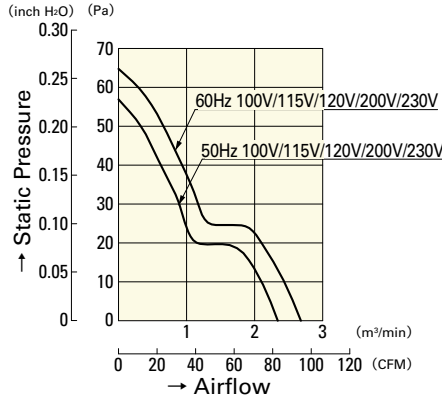
Model	Power cord length (L) [mm]	Mass [g]
489-037-L10	1,000	46
489-037-L21	2,100	76
489-037-L35	3,500	114
489-007-L10	1,000	48
489-007-L21	2,100	80

Airflow - Static Pressure Characteristics

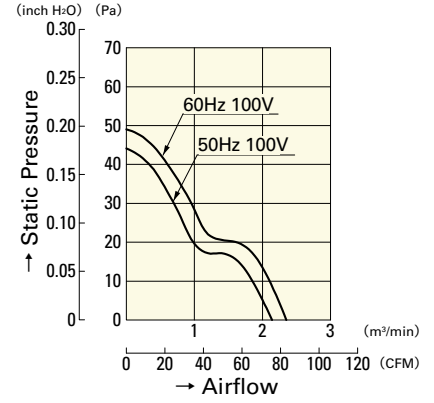
Standard



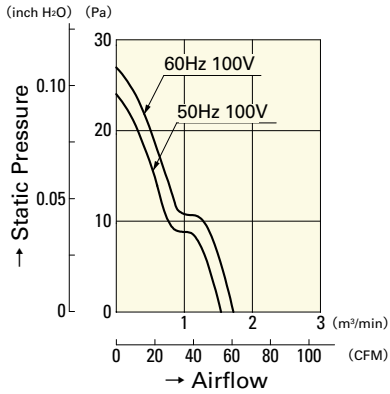
109S075UL **109S074UL**
109S078UL **109S072UL**



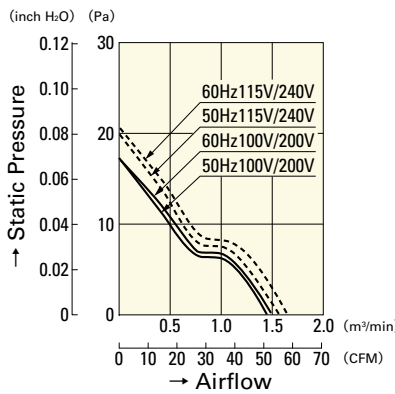
109S005 **109S005UL**
109S024 **109S024UL**
109S008 **109S008UL**
109S025 **109S025UL**



109S029UL

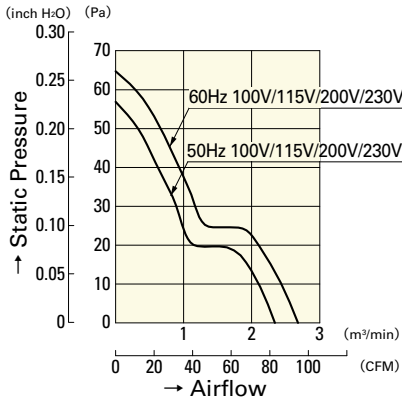


109S013
109S013UL

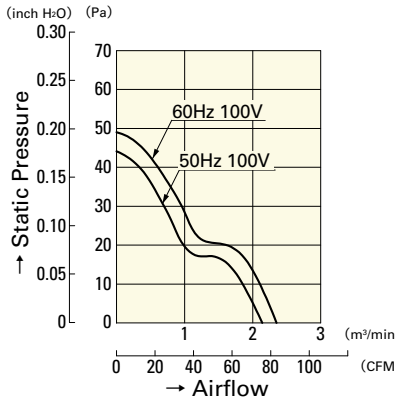


109S006 **109S006UL**
109S010 **109S010UL**

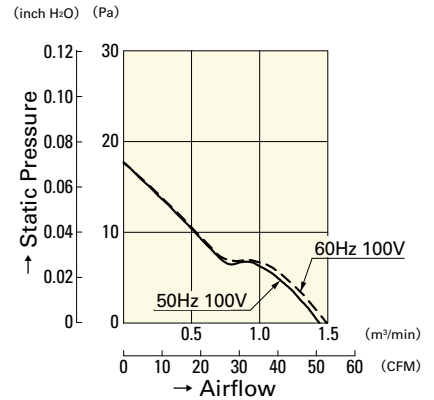
with Sensor



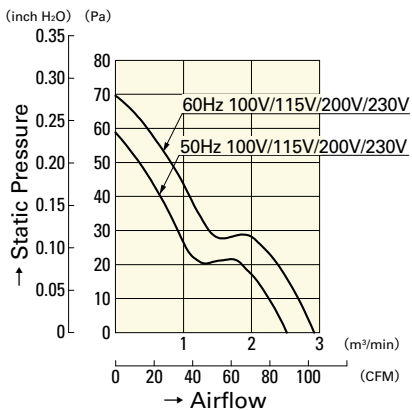
109S405UL **109S424UL**
109S408UL **109S425UL**



109S429UL



109S406UL



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