



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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



92mm sq.

San Ace 92



Only standard fans (without sensors) have acquired CSA certification.

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%

92×92×25mm (Mass : 290g / 310g (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]
109S091	100	50/60	8/7	0.1 /0.09	0.13/0.12	2,700/3,100	0.95/1.1 33.6/38.9	39.2/49.0 0.157/0.197	35/38	-30 to +60	25,000/60°C
109S093	115			0.09/0.08	0.11/0.1						
109S092	200			11/10	0.07/0.06						
109S094	230		10/9	0.06/0.05	0.07/0.07						
109S095	100		8/7	0.1 /0.09	0.11/0.1	2,400/2,800	0.84/0.98 29.7/34.6	31.4/40.2 0.126/0.161	32/35		
109S096	100		7/6	0.09/0.08	0.09/0.08	1,500/1,700	0.55/0.65 19.4/23	12.5/16.3 0.050/0.065	24/27		
109S193	115			0.08/0.07	0.08/0.07						
109S192	200		8/7	0.06/0.05	0.06/0.05						
109S194	230			0.05/0.04	0.05/0.04						

with Sensor

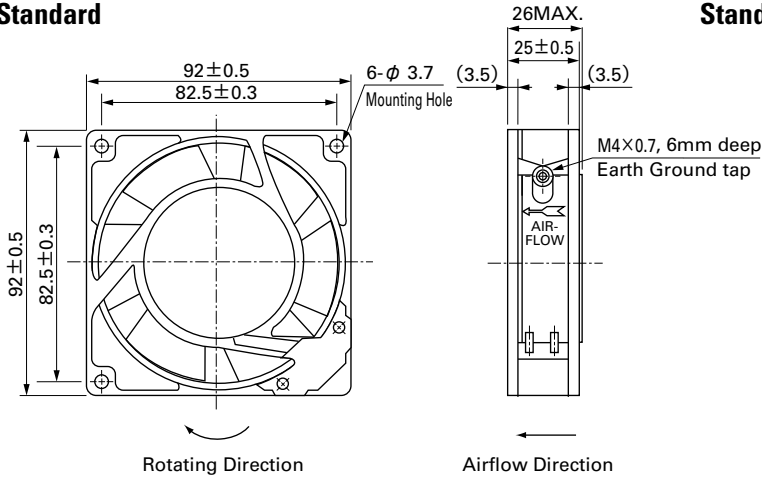
Model No.	Rated Voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked Rotor Current [A]	Rated Speed [min ⁻¹]	Max. Airflow [m ³ /min] [CFM]	Max. Static Pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating Temperature [°C]	Expected Life [h]
109S491	100	50/60	8/7	0.1 /0.09	0.13/0.12	2,700/3,100	0.95/1.1 33.6/38.9	39.2/49.0 0.157/0.197	35/38	-10 to +60	25,000/60°C
109S493	115			0.09/0.08	0.11/0.1						
109S492	200			11/10	0.07/0.06						
109S494	230		10/9	0.06/0.05	0.07/0.07						
109S495	100		8/7	0.1 /0.09	0.11/0.1	2,400/2,800	0.84/0.98 29.7/34.6	31.4/40.2 0.126/0.161	32/35		
109S496			7/6	0.09/0.08	0.09/0.08	1,500/1,700	0.55/0.65 19.4/23	12.5/16.3 0.050/0.065	24/27		

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.

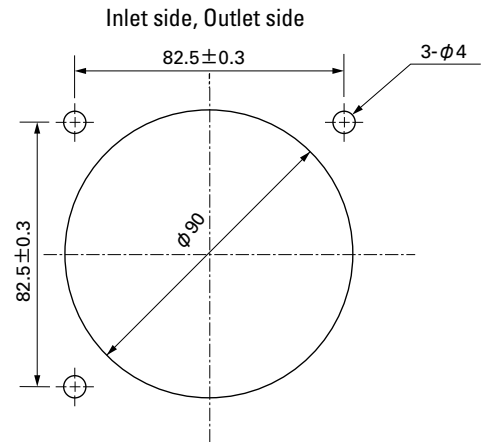
Dimensions (unit: mm)

Standard

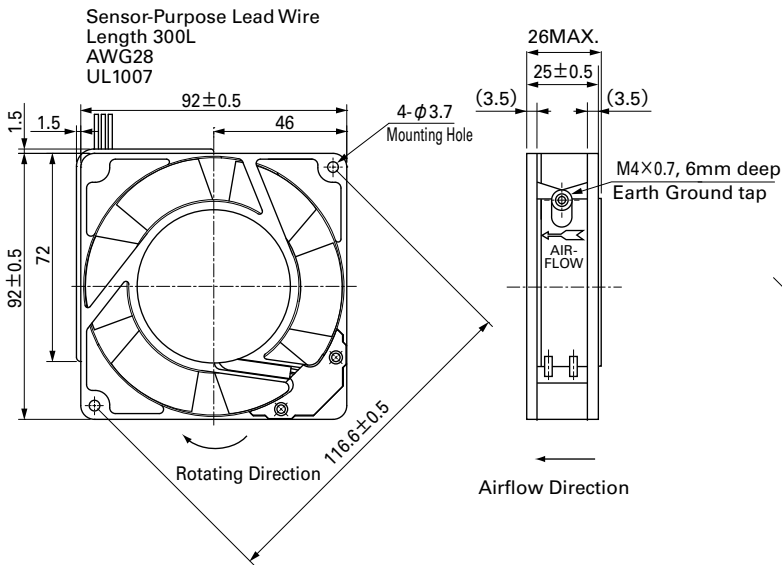


Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)

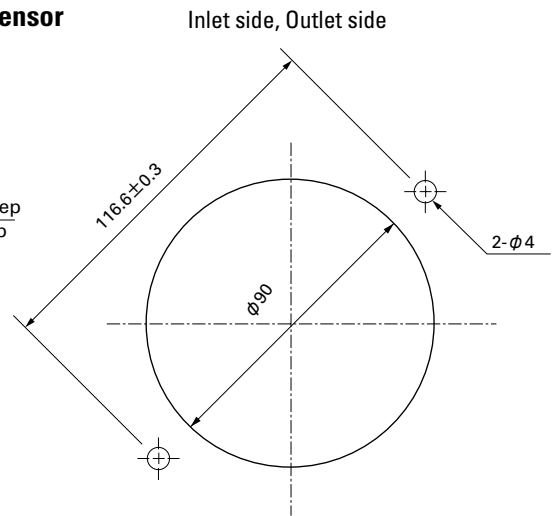
Standard



with Sensor

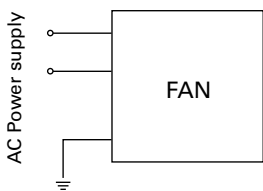


with Sensor



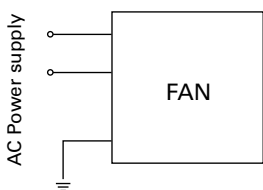
Wiring Diagram

Standard

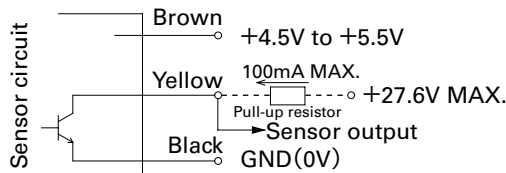


with Sensor

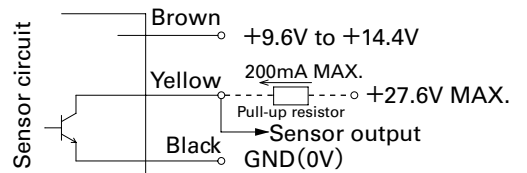
(For fan power supply)



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.

92mm sq.

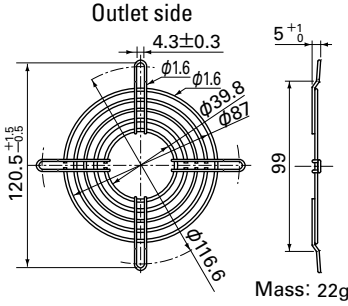
San Ace 92

92×92×25mm [Mass : 290g / 310g (with Sensor)]

Options (unit: mm)

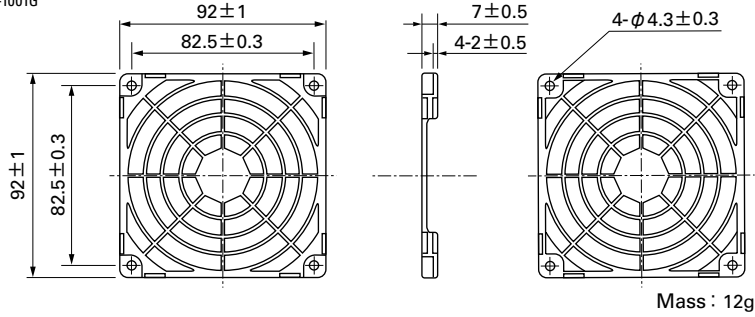
Finger Guards

Model : 109-099C Surface treatment : Nickel-chrome plating (silver) Color



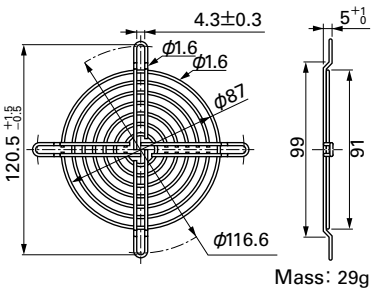
Resin Finger Guards

Model : 109-1001G



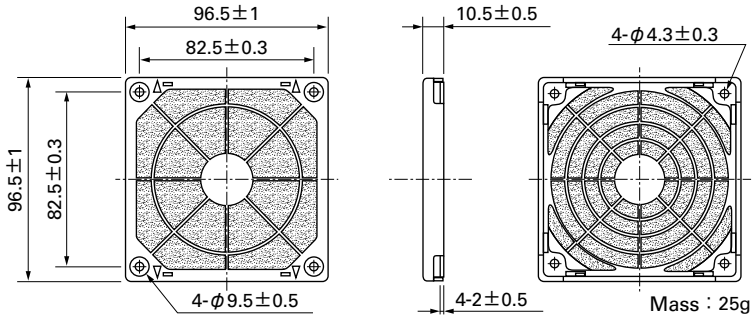
Model : 109-099E Surface treatment : Nickel-chrome plating (silver) Color
: 109-099H : Cation electroplating (black)

Inlet side, Outlet side



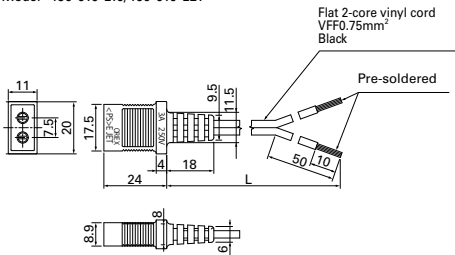
Resin Filter Kits

Model : 109-1001F13 (13PPI), 109-1001F20 (20PPI)
: 109-1001F30 (30PPI), 109-1001F40 (40PPI)

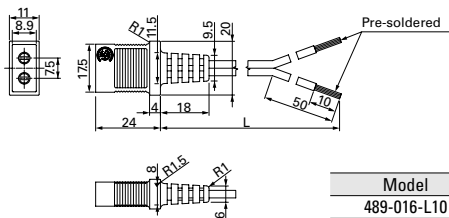


Plug Cord

(Products compliant with Electrical Appliance and Material Safety Law)
Model : 489-016-L10/489-016-L21



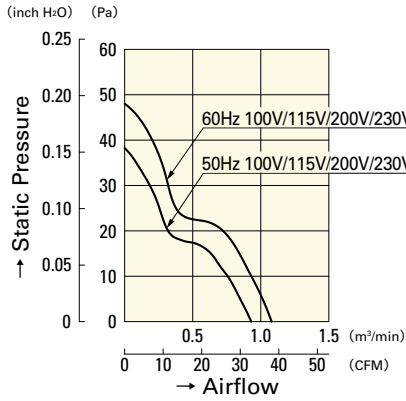
(UL/CSA CERTIFIED)
UL FILE No.E50197 CSA FILE No.LR67048
Model : 489-047-L10/489-047-L21



Model	Power cord length (L) [mm]	Mass [g]
489-016-L10	1,000	34
489-016-L21	2,100	64
489-047-L10	1,000	38
489-047-L21	2,100	71

Airflow - Static Pressure Characteristics

Standard

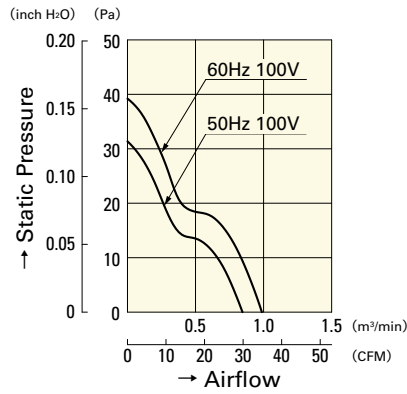


109S091

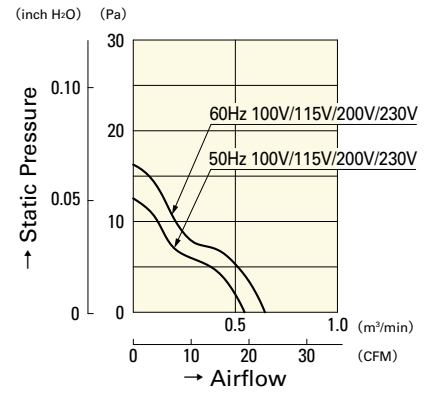
109S093

109S092

109S094



109S095



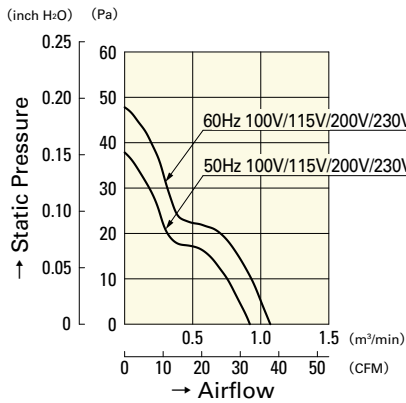
109S096

109S193

109S192

109S194

with Sensor

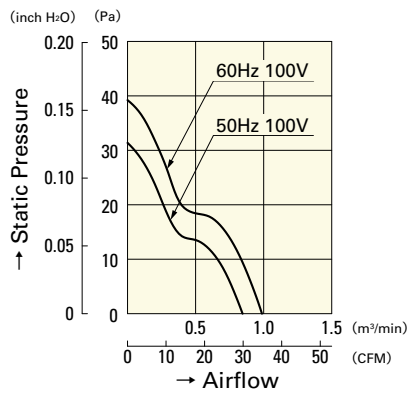


109S491

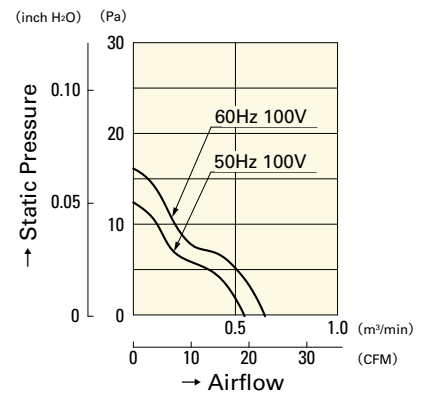
109S493

109S492

109S494



109S495



109S496