



120×120×38 mm

San Ace 120WF 9WF type   

General Specifications

- Material Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)
- Expected life See the table below. (L10 life: 90% survival rate for continuous operation in free air at 60°C, rated voltage)
- Motor protection function Locked rotor burnout protection, Reverse polarity protection
For details, please refer to p. 529.
- Dielectric strength 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
- Insulation resistance 10 MΩ or more with a 500 VDC megger (between lead wire conductors and frame)
- Sound pressure level (SPL) At 1 m away from the air inlet
- Storage temperature -30 to +70°C (Non-condensing)
- Lead wire ⊕Red ⊖Black (Sensor) Yellow
- Mass 355 g

This fan can be used in environments with oil mist.*

* Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.

Specifications

The models listed below **have ribs and pulse sensors.**

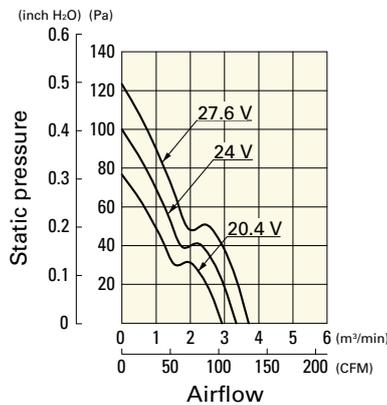
Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9WF1224H101	24	20.4 to 27.6	0.32	7.68	3100	3.34 118	100 0.4	46	-20 to +70	40000/60°C

Other sensor specifications are available as options. Refer to the index (p. 558).

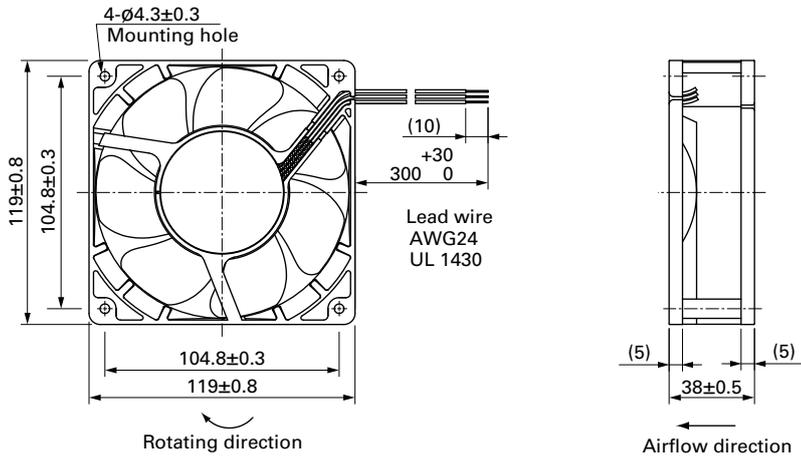
Airflow - Static Pressure Characteristics

9WF1224H101 With pulse sensor

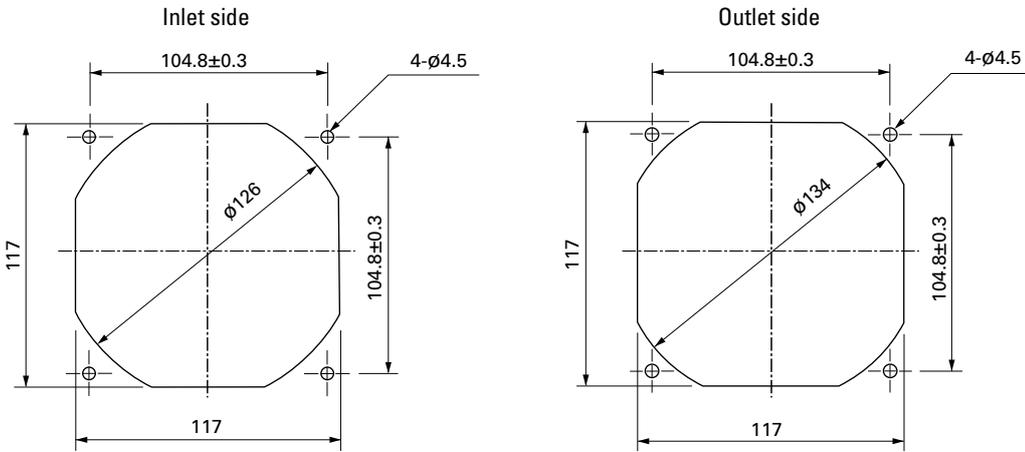
Operating voltage range



Dimensions (unit: mm)



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



Options

Finger guards

page: p. 514

Model no.: 109-019C, 109-019H, 109-019E, 109-019K

Long Life Fan

Cooling fan with Max. 200,000 hours of expected life.

Related product: Splash Proof Fan pp. 268, 271, 277, 286

Model Numbering System Not every combination of the following codes or characters is available. Contact us for an available combination.

109L	06	12	H	4	01
Type name	Frame size	Voltage	Speed code	Frame thickness	Sensor specifications

Fans with PWM control function

9LG	06	12	P	4	S	001
Type name	Frame size	Voltage	PWM control function	Frame thickness	Speed code	Individual customer's spec (2 to 3 digits)

Type name	109L	9CRL	9GL	9L	9LB	9LG			
Frame size (mm)	04	06	08	09	12	14	17	57	
	40×40	60×60	80×80	92×92	120×120	140×140	∅172	∅172×150 (sidecut)	
Voltage (V)	12	24	48						
	12	24	48	etc.					
Speed code	E	F	G	H	J	L	M	S	etc.
Frame thickness (mm)	0	1	3	4	5	8			
	76	38	28	25	51	80			
Sensor specifications	01			02			D01		
	With a pulse sensor			Without a sensor			With a lock sensor		

How to Read Specifications (DC fan)

Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	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]
9GA0412G7001	12	7 to 13.8	0.17	2.04	13100	0.36 12.7	192 0.77	42	-20 to +70	40000/60°C (70000/40°C)

- Rated voltage** This is the necessary voltage to drive the fan. E.g.) 12 VDC, 24 VDC, 48 VDC
- Operating voltage range** The voltage range over which fan operation is guaranteed.
- Rated current** The current when the fan is operating at rated voltage (at free air).
- Rated input** The power value when the fan is operating at rated voltage (at free air).
- Rated speed** The speed when the fan is operating at rated voltage (at free air).
- Max. airflow** The maximum airflow that the fan can generate during rated operation (measured with our double chamber measuring device). Airflow is the volume of air generated by the fan per unit of time.
- Max. static pressure** The maximum static pressure value that the fan can produce during rated operation (measured with our double chamber measuring device). Static pressure indicates a fan's ability to move air against resistance due to the internal structure of the device to which the fan is installed.
- SPL** SPL stands for Sound Pressure Level. The noise level during the fan's rated operation. Please refer to the technical material section for the measurement method.
- Operating temperature** The temperature range over which fan operation is guaranteed (Non- condensing).
- Expected life** Service life hours that 90% of bearings will survive without failing when continuously operated at the rated voltage and 60°C temperature. Expected life at 40°C is for reference only. For more information, please refer to the technical material section.