

Oil Proof Fan

Cooling fan capable of operating in an oil-mist environment.
Related product: Splash Proof Fan p. 361, Splash Proof Blower p. 421, Splash Proof Centrifugal Fan p. 425

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

9WF	12	24	H	1	01	
Type name	Frame size	Voltage	Speed code	Frame thickness	Sensor specifications	Frame form

Type name	9WF 9WFA				
Frame size (mm)	04	06	08	09	12
	40×40	60×60	80×80	92×92	120×120
Voltage (V)	24				
	24				
Speed code	H				
Frame thickness (mm)	1	2	4	6	7
	38	32	25	20	15
Sensor specifications	01, 001		02, 002		D01, D001
	With a pulse sensor		Without a sensor		With a lock sensor
Frame form	Nil				
	Ribbed frame				

How to Read Specifications (DC fan) The following is a sample. See respective product pages for detailed information.

Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	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]
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 airflow at 0 Pa static pressure when the fan is operating at rated voltage. (Measured using the double chamber method)
- Max. static pressure The static pressure at 0 m³/min airflow when the fan is operating at rated voltage. (Measured using the double chamber method)
- SPL A-weighted sound pressure level (SPL) when the fan operates at the rated speed.
For the measurement method, see the Technical Materials section in the catalog.
- 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.

40×40×15 mm

San Ace 40WF 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)
Expected life at 40°C is for reference only.
- Motor protection function Locked rotor burnout protection, Reverse polarity protection
For details, please refer to p. 616.
- Dielectric strength 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
- Insulation resistance 10 MΩ min. at 500 VDC (between lead wire conductors and frame)
- Sound pressure level (SPL) A-weighted 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 35 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 a pulse sensor.**

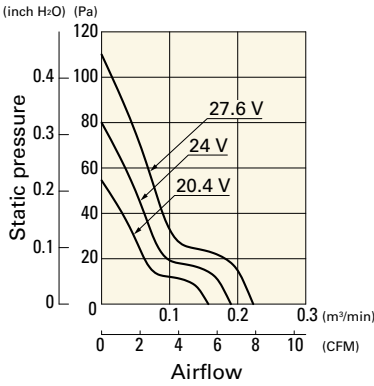
Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9WF0424H701	24	20.4 to 27.6	0.085	2.04	11300	0.195 6.9	80 0.32	38	-20 to +70	40000/60°C (70000/40°C)

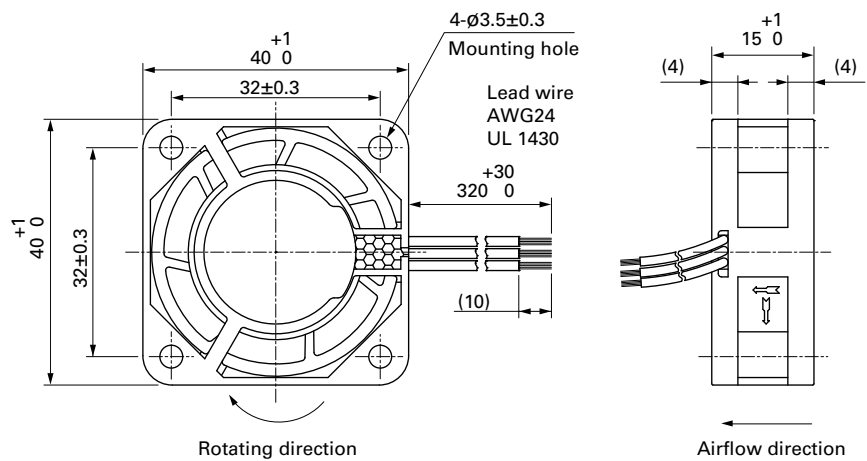
Note: Sensor and control options are available for selection. Refer to the table on p. 660.

Airflow - Static Pressure Characteristics

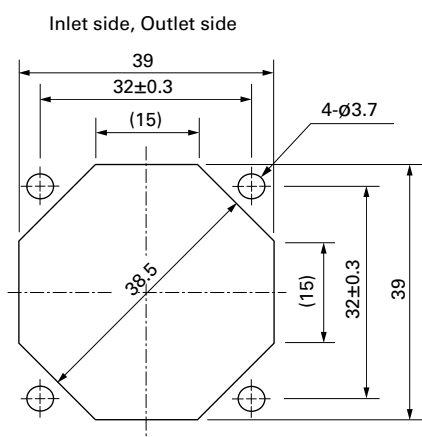
9WF0424H701 With pulse sensor

Operating voltage range





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



Options

Finger guards page: p. 598

Model no.: 109-059, 109-059H

Oil Proof Fan 40 mm sq. DC

40×40×20 mm

San Ace 40WF 9WFA 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)
Expected life at 40°C is for reference only.
- Motor protection function Locked rotor burnout protection, Reverse polarity protection
For details, please refer to p. 616.
- Dielectric strength 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
- Insulation resistance 10 MΩ min. at 500 VDC (between lead wire conductors and frame)
- Sound pressure level (SPL) A-weighted 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 45 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 a pulse sensor.**

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]
9WFA0424G6001	24	20.4 to 27.6	0.11	2.6	17000	0.31 10.9	170 0.68	48	-20 to +70	40000/60°C (70000/40°C)

Note: Sensor and control options are available for selection. Refer to the table on p. 660.

Airflow - Static Pressure Characteristics

9WFA0424G6001 With pulse sensor

Operating voltage range

