



40x40x15 mm

San Ace 40 9GA type Low Power Consumption Fan

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. 573.
- 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 (Control) Brown
(For models without PWM control function, there is no speed control wiring.)
- Mass 28 g

Specifications

The models listed below **have ribs and pulse sensors with PWM control function.**

Model no.	Rated voltage [V]	Operating voltage range [V]	PWM duty cycle [%]	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]
9GA0412P7G001	12	10.2 to 13.8	100	0.17	2.04	13100	0.36 12.7	192 0.77	42	-20 to +70	40000/60°C (70000/40°C)

* PWM input frequency is 25 kHz; models without specifications at 0% PWM duty cycle have zero fan speed at 0%.

The following sensor and control options are available for selection.

Available for all models. **Without sensor** **Pulse sensor** **Lock sensor**

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]
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)
9GA0412H7001			0.06	0.72	7300	0.2 7.1	59.6 0.24	28		

The following sensor and control options are available for selection.

Available for all models. **Without sensor** **Lock sensor**

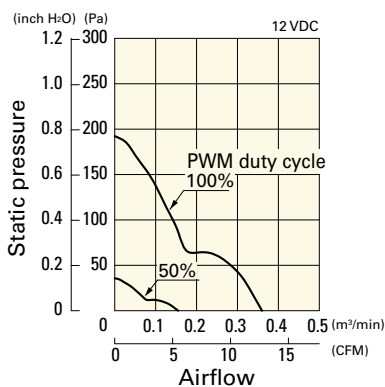
Differs according to the model. Refer to the table on p. 602. **PWM control**

The mark indicates Short LeadTime Service applicable models. See p. 626 for details.

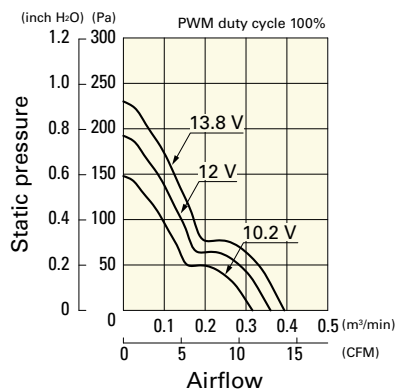
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9GA0412P7G001 With pulse sensor with PWM control function

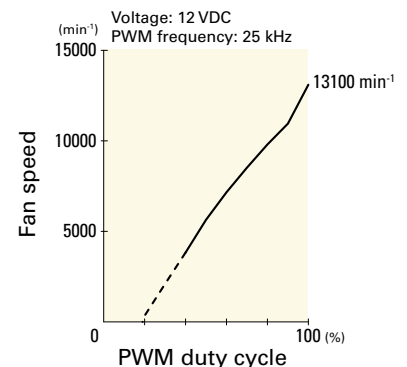
PWM duty cycle



Operating voltage range



PWM duty - Speed characteristics example



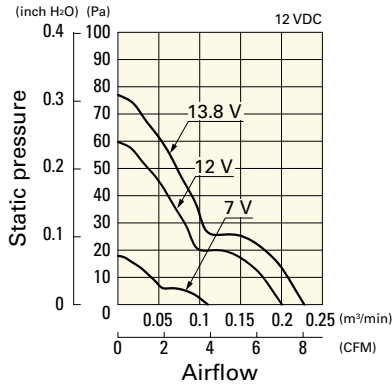
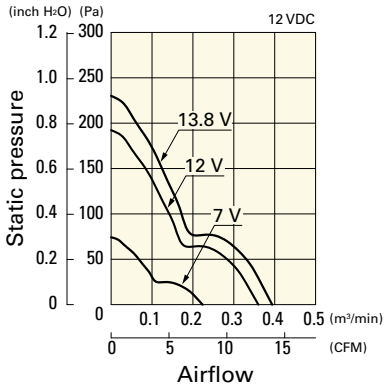
Airflow - Static Pressure Characteristics

9GA0412G7001 With pulse sensor

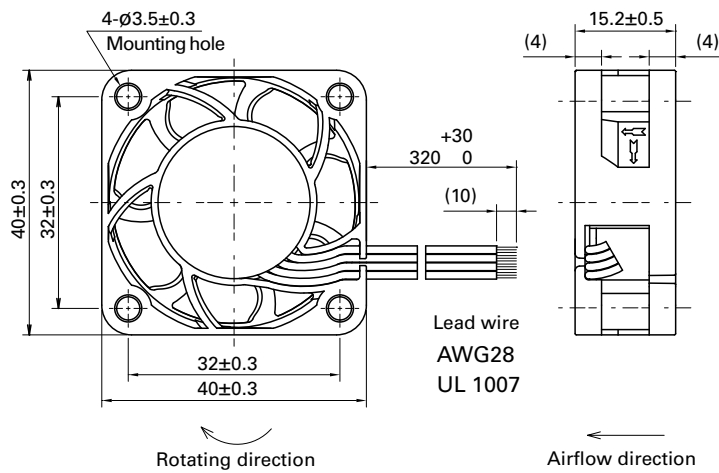
9GA0412H7001 With pulse sensor

Operating voltage range

Operating voltage range

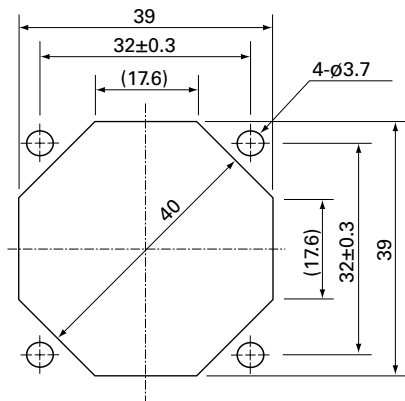


Dimensions (unit: mm) (With pulse sensor with PWM control function)



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

Inlet side, Outlet side



Options

Finger guards

page: p. 558

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



40x40x15 mm

San Ace 40 9P_{type}

General Specifications

- Material Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-1)
- 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. 573.
- 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 or Blue Sensor Yellow
- Mass 32 g

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]		
» 109P0405H701	5	4.5 to 5.5	0.28	1.4	7700	0.18 6.4	75.5 0.303	28	-20 to +60	60000/60°C (90000/40°C)		
» 109P0405M701			0.21	1.05	6500	0.15 5.3	52.9 0.213	24				
» 109P0412R701	12	7 to 13.8	0.13	1.56	9700	0.227 8.0	111.9 0.449	34			-20 to +70	40000/60°C (70000/40°C)
» 109P0412S701			0.18	2.16	8600	0.2 7.06	92.1 0.369	32				
» 109P0412H701		10.2 to 13.8	0.13	1.56	7700	0.18 6.4	75.5 0.303	28				
» 109P0412M701			0.095	1.14	6500	0.15 5.3	52.9 0.213	24				
» 109P0424H701	24	20.4 to 27.6	0.08	1.92	7700	0.18 6.4	75.5 0.303	28		60000/60°C (90000/40°C)		

The following sensor and control options are available for selection.

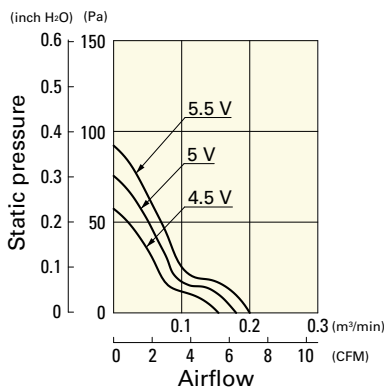
Available for all models. Without sensor Lock sensor

The » mark indicates Short Lead Time Service applicable models. See p. 626 for details.

Airflow - Static Pressure Characteristics

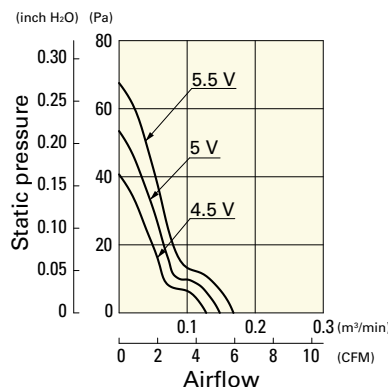
109P0405H701 With pulse sensor

Operating voltage range



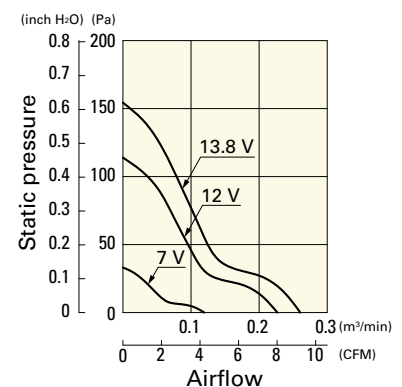
109P0405M701 With pulse sensor

Operating voltage range



109P0412R701 With pulse sensor

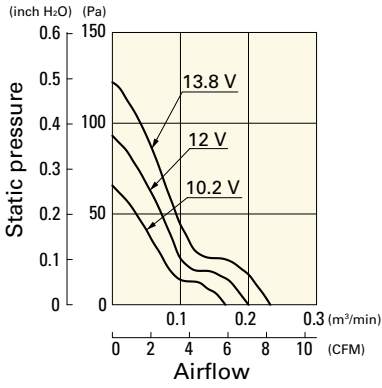
Operating voltage range



Airflow - Static Pressure Characteristics

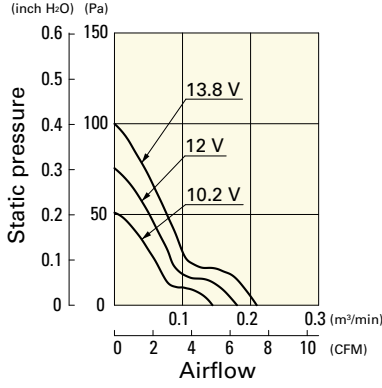
109P0412S701 With pulse sensor

Operating voltage range



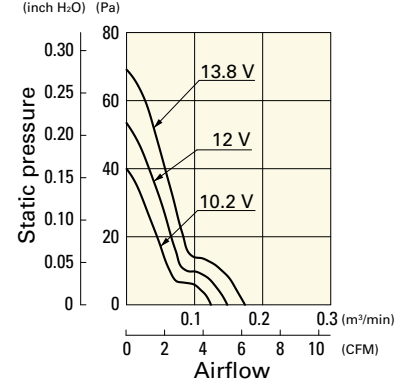
109P0412H701 With pulse sensor

Operating voltage range



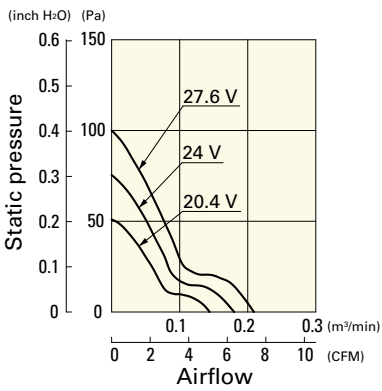
109P0412M701 With pulse sensor

Operating voltage range

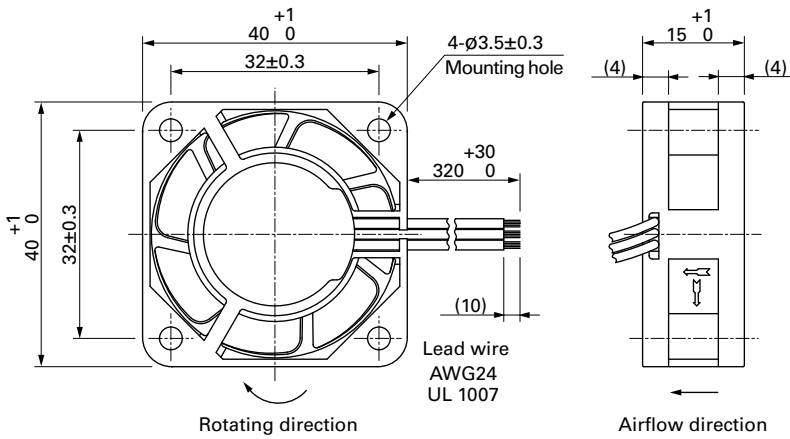


109P0424H701 With pulse sensor

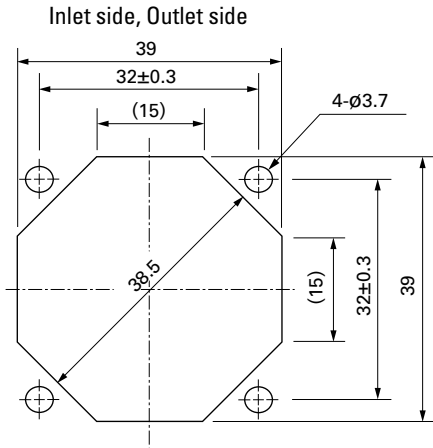
Operating voltage range



Dimensions (unit: mm)



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



Options

Finger guards page: p. 558

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