



92x92x25 mm

San Ace 92 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 125 g

Specifications

The models listed below **have ribs and pulse sensors with PWM control function.** For models without ribs, append "1" to the end of model numbers.

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]
» 9GA0912P4J03	12	10.2 to 13.8	100	0.39	4.68	5000	2.2 77.7	105 0.42	43	-20 to +70	60000/60°C (90000/40°C)
» 9GA0912P4G03			0	0.06	0.72	1500	0.65 23.3	9.4 0.04	14		
» 9GA0912P4S03			100	0.28	3.36	4400	1.93 68.2	81 0.33	39		
» 9GA0924P4J03			0	0.06	0.72	1500	0.65 23.3	9.4 0.04	14		
» 9GA0924P4G03			100	0.2	2.4	3800	1.67 59.0	60.6 0.24	35		
» 9GA0924P4S03			0	0.06	0.72	1500	0.65 23.3	9.4 0.04	14		
» 9GA0924P4J03	24	20.4 to 27.6	100	0.2	4.8	5000	2.2 77.7	105 0.42	43		
» 9GA0924P4G03			0	0.04	0.96	1500	0.65 23.3	9.4 0.04	14		
» 9GA0924P4S03			100	0.15	3.6	4400	1.93 68.2	81 0.33	39		
» 9GA0924P4J03			0	0.04	0.96	1500	0.65 23.3	9.4 0.04	14		
» 9GA0924P4G03			100	0.12	2.88	3800	1.67 59.0	60.6 0.24	35		
» 9GA0924P4S03			0	0.04	0.96	1500	0.65 23.3	9.4 0.04	14		

* 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**

Differs according to the model. Refer to the table on pp. 604 to 605. **Lock sensor**

The models listed below **have ribs and pulse sensors.** For models without ribs, append "1" to the end of model numbers.

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]
» 9GA0912H401	12	10.2 to 13.8	0.19	2.28	3300	1.45 51.2	45.6 0.18	31	-20 to +70	60000/60°C (90000/40°C)
» 9GA0912W401		7 to 16	0.19	2.28	3300	1.45 51.2	45.6 0.18	31		
» 9GA0912F401		10.2 to 13.8	0.14	1.68	2800	1.23 43.5	32.9 0.13	28		
» 9GA0912M401			0.11	1.32	2400	1.05 37.1	24 0.096	24		
» 9GA0912L401			0.09	1.08	2000	0.87 30.7	16.7 0.067	21		
» 9GA0924H401		24	20.4 to 27.6	0.09	2.16	3300	1.45 51.2	45.6 0.18		
» 9GA0924W401	12 to 28.8		0.09	2.16	3300	1.45 51.2	45.6 0.18	31		
» 9GA0924F401	16 to 27.6		0.08	1.92	2800	1.23 43.5	32.9 0.13	28		
» 9GA0924M401	14 to 27.6		0.05	1.2	2400	1.05 37.1	24 0.096	24		
» 9GA0924L401			0.03	0.72	2000	0.87 30.7	16.7 0.067	21		

The following sensor and control options are available for selection.

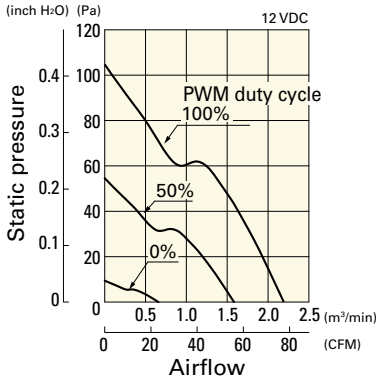
Available for all models. **Without sensor** **Lock sensor**

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

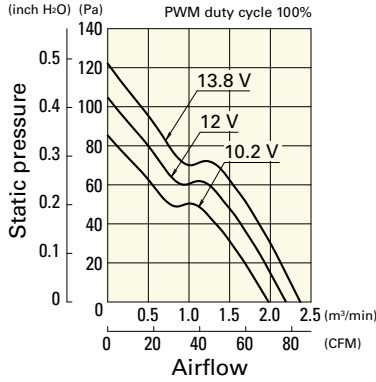
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9GA0912P4J03 With pulse sensor with PWM control function

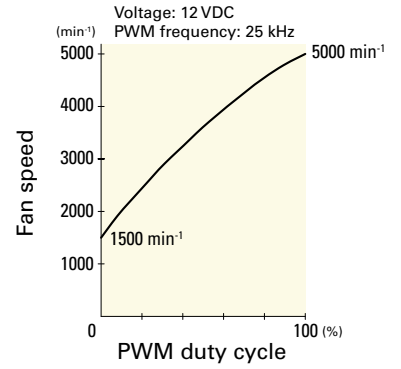
PWM duty cycle



Operating voltage range

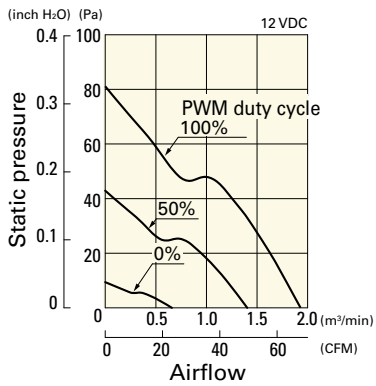


PWM duty - Speed characteristics example

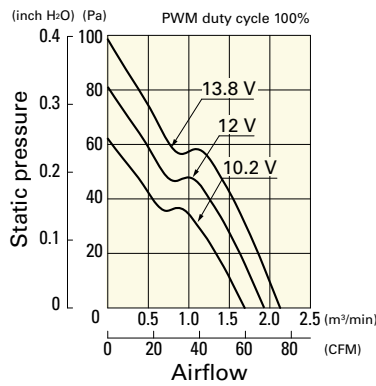


9GA0912P4G03 With pulse sensor with PWM control function

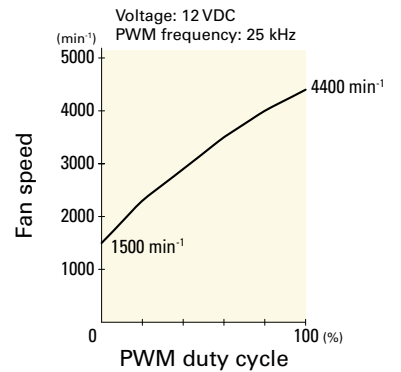
PWM duty cycle



Operating voltage range

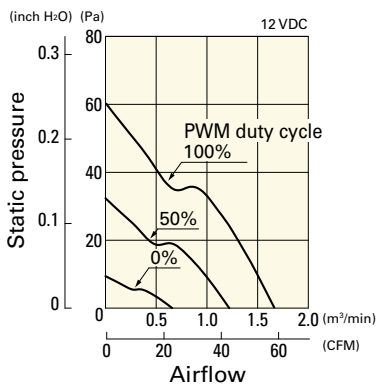


PWM duty - Speed characteristics example

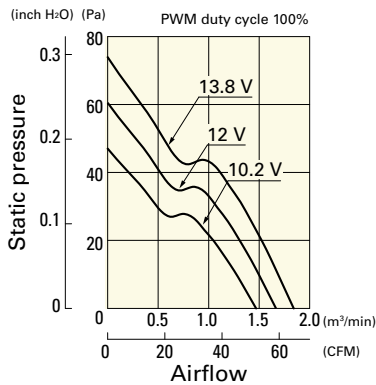


9GA0912P4S03 With pulse sensor with PWM control function

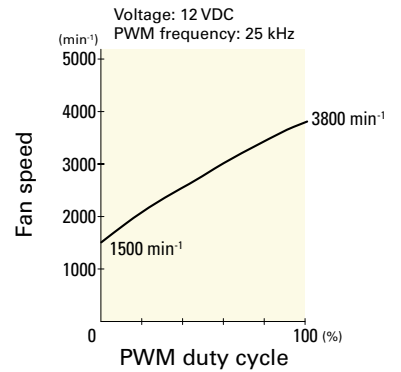
PWM duty cycle



Operating voltage range

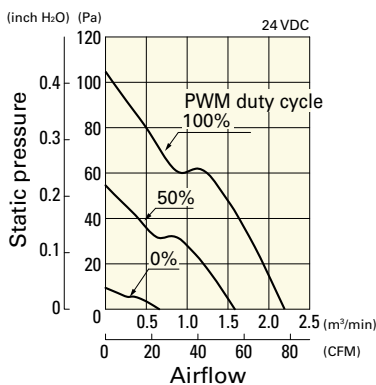


PWM duty - Speed characteristics example

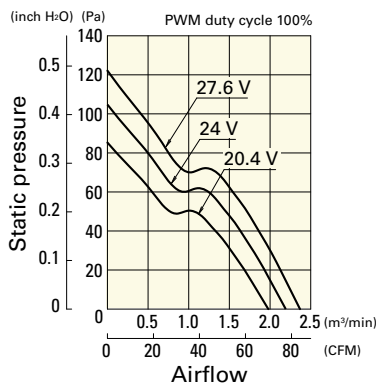


9GA0924P4J03 With pulse sensor with PWM control function

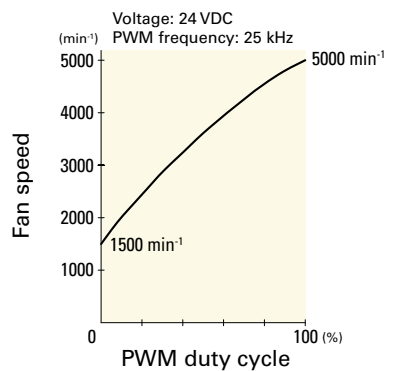
PWM duty cycle



Operating voltage range



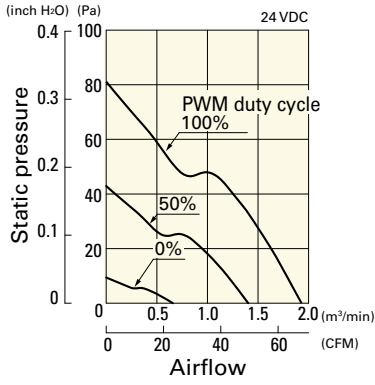
PWM duty - Speed characteristics example



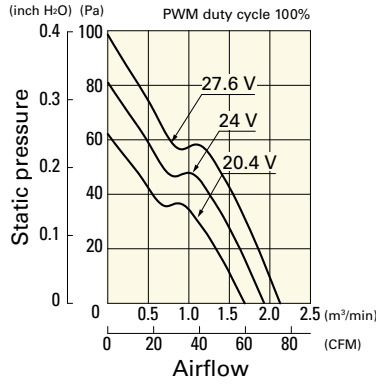
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9GA0924P4G03 With pulse sensor with PWM control function

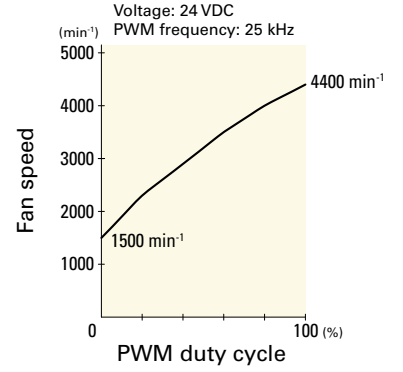
PWM duty cycle



Operating voltage range

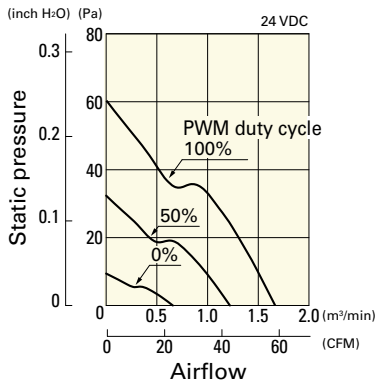


PWM duty - Speed characteristics example

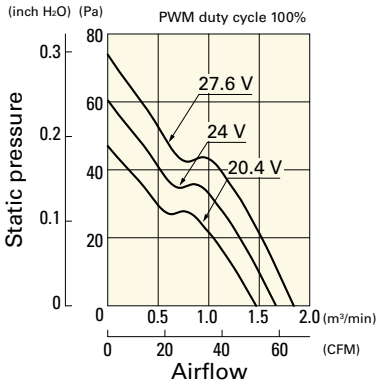


9GA0924P4S03 With pulse sensor with PWM control function

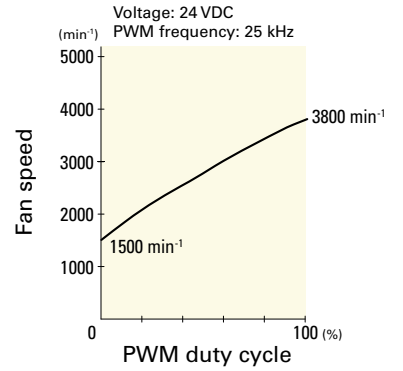
PWM duty cycle



Operating voltage range



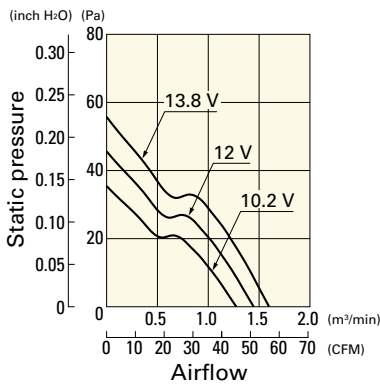
PWM duty - Speed characteristics example



Airflow - Static Pressure Characteristics

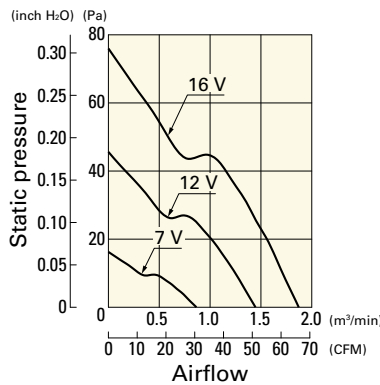
9GA0912H401 With pulse sensor

Operating voltage range



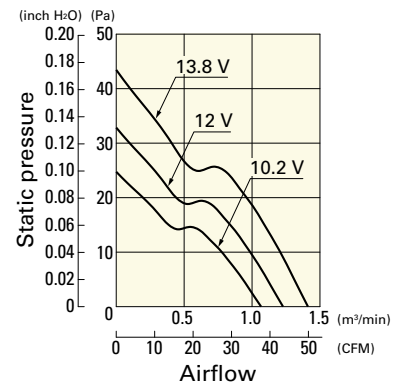
9GA0912W401 With pulse sensor

Operating voltage range



9GA0912F401 With pulse sensor

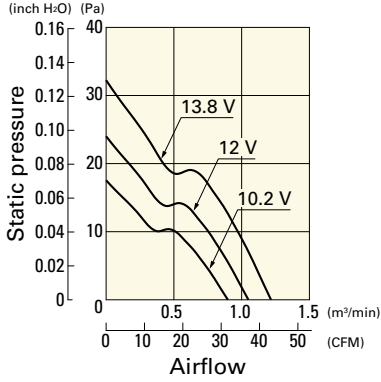
Operating voltage range



Airflow - Static Pressure Characteristics

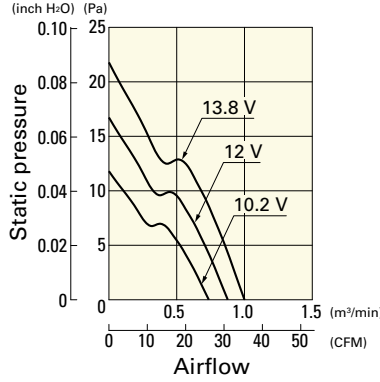
9GA0912M401 With pulse sensor

Operating voltage range



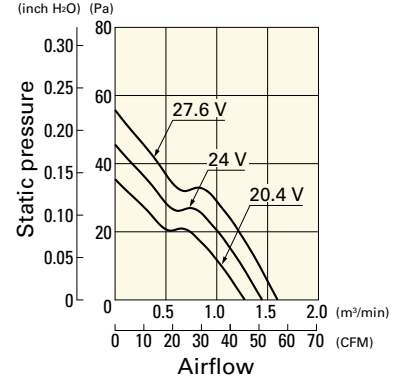
9GA0912L401 With pulse sensor

Operating voltage range



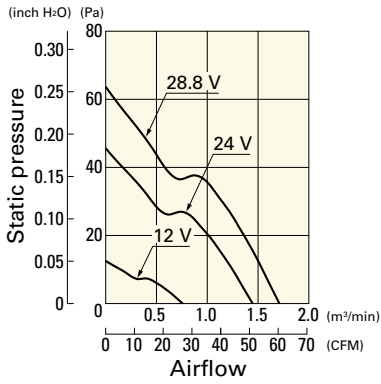
9GA0924H401 With pulse sensor

Operating voltage range



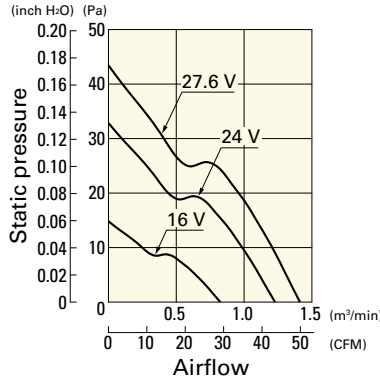
9GA0924W401 With pulse sensor

Operating voltage range



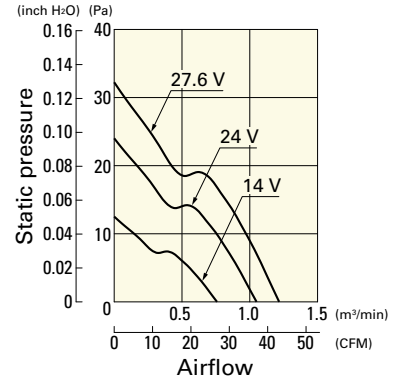
9GA0924F401 With pulse sensor

Operating voltage range



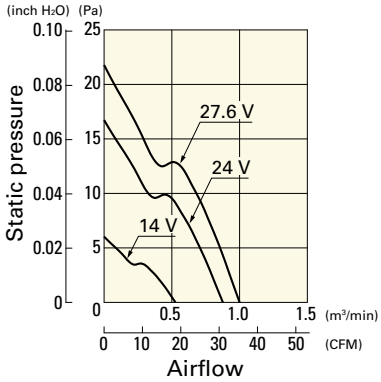
9GA0924M401 With pulse sensor

Operating voltage range

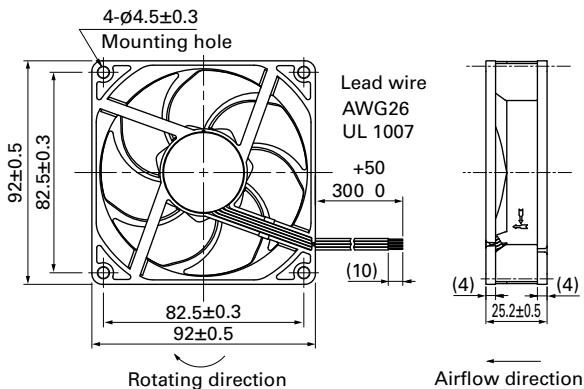


9GA0924L401 With pulse sensor

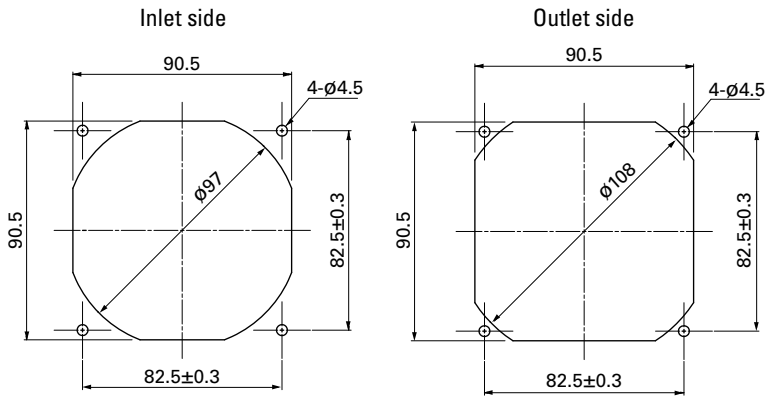
Operating voltage range



Dimensions (unit: mm) (With ribs)



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



Options

Finger guards

page: p. 558

Model no.: 109-099E, 109-099H, 109-099C

Resin finger guards

page: p. 565

Model no.: 109-1001G

Resin filter kits

page: p. 566

Model no.: 109-1001F13 (13PPI), 109-1001F20 (20PPI),
109-1001F30 (30PPI), 109-1001F40 (40PPI)

92x92x25 mm

San Ace 92 9S type Silent Fan 



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 Sensor Yellow
- Mass 100 g

Specifications

The models listed below **have ribs and pulse sensors**. For models without ribs, append "1" to the end of model numbers.

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]
➤ 9S0912F401	12	5.0 to 13.8	0.14	1.68	2650	1.26 44.5	30.0 0.12	27	-10 to +70	40000/60°C (70000/40°C)
➤ 9S0912M401			0.11	1.32	2250	1.07 37.8	21.6 0.087	22		
➤ 9S0912L401		6.0 to 13.8	0.07	0.84	1750	0.83 29.3	13.1 0.053	17		
➤ 9S0924F401	24	14 to 26.4	0.09	2.16	2650	1.26 44.5	30.0 0.12	27		
➤ 9S0924M401			0.07	1.68	2250	1.07 37.8	21.6 0.087	22		
➤ 9S0924L401			0.04	0.96	1750	0.83 29.3	13.1 0.053	17		

The following sensor and control options are available for selection.

Available for all models. **Without sensor**

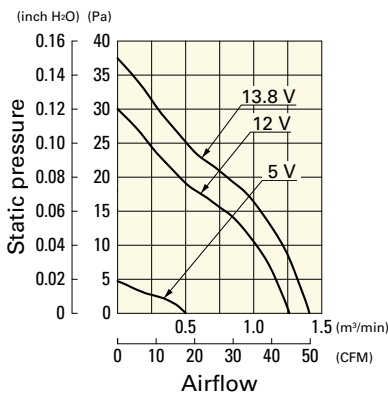
Differs according to the model. Refer to the table on pp. 609 to 610. **Lock sensor** **PWM control**

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

Airflow - Static Pressure Characteristics

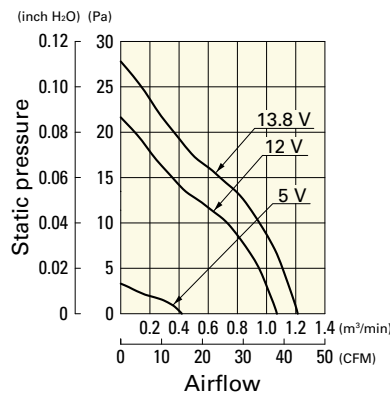
9S0912F401 With pulse sensor

Operating voltage range



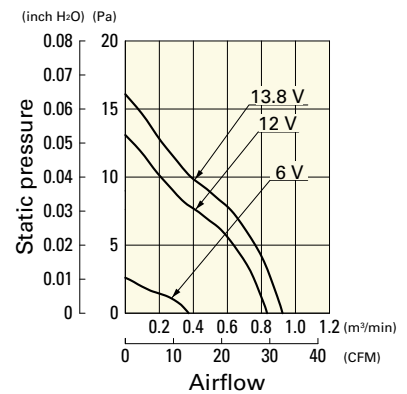
9S0912M401 With pulse sensor

Operating voltage range



9S0912L401 With pulse sensor

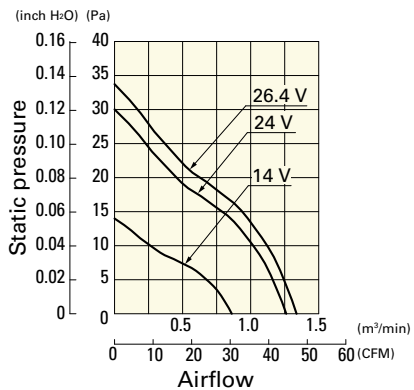
Operating voltage range



Airflow - Static Pressure Characteristics

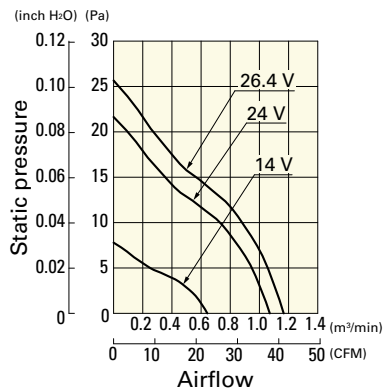
9S0924F401 With pulse sensor

Operating voltage range



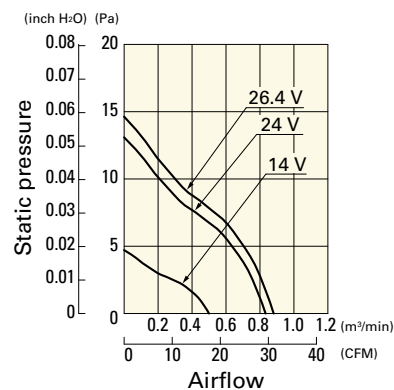
9S0924M401 With pulse sensor

Operating voltage range

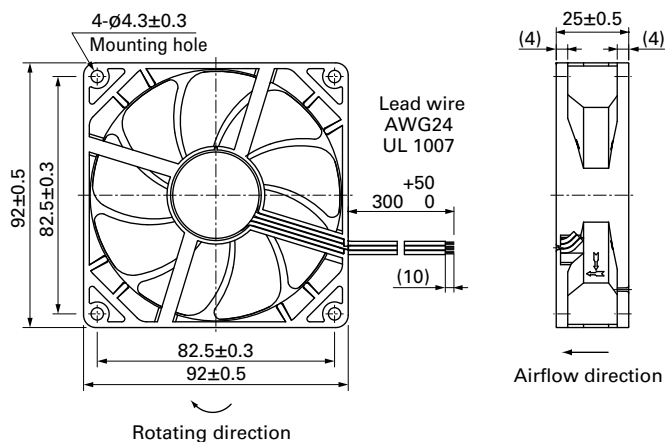


9S0924L401 With pulse sensor

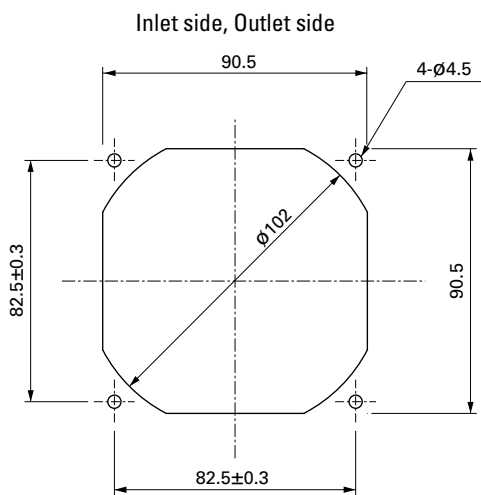
Operating voltage range



Dimensions (unit: mm) (With ribs)



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



Options

Finger guards

page: p. 558

Model no.: 109-099E, 109-099H, 109-099C

Resin finger guards

page: p. 565




Model no.: 109-1001G

Resin filter kits

page: p. 566

Model no.: 109-1001F13 (13PPI), 109-1001F20 (20PPI), 109-1001F30 (30PPI), 109-1001F40 (40PPI)

92x92x25 mm

San Cooler 92 9A 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. 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 100 g

Specifications


The models listed below **have ribs and pulse sensors**. For models without ribs, append "1" to the end of model numbers.

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]
9A0912G401	12	6 to 13.8	0.39	4.68	3900	1.76 62.1	66.5 0.267	43	-20 to +60	30000/60°C (53000/40°C)
9A0912S401			0.27	3.24	3550	1.66 58.6	56.1 0.225	39		
9A0912H401			0.21	2.52	3150	1.45 51.2	44 0.177	33		
9A0912F401			0.14	1.68	2650	1.24 43.8	32.2 0.129	30		
9A0912M401			0.12	1.44	2250	1.04 36.7	22.6 0.091	27		
9A0912L401		7 to 13.8	0.07	0.84	1750	0.8 28.2	13.4 0.054	23		
9A0924G401	24	12 to 27.6	0.19	4.56	3900	1.76 62.1	66.5 0.267	43	-20 to +60	30000/60°C (53000/40°C)
9A0924S401			0.15	3.6	3550	1.66 58.6	56.1 0.225	39		
9A0924H401			0.1	2.4	3150	1.45 51.2	44 0.177	33		
9A0924F401			0.08	1.92	2650	1.24 43.8	32.2 0.129	30		
9A0924M401			0.05	1.2	2250	1.04 36.7	22.6 0.091	27		
9A0924L401		14 to 27.6	0.04	0.96	1750	0.8 28.2	13.4 0.054	23		
9A0948S401	48	40.5 to 53	0.08	3.84	3550	1.66 58.6	56.1 0.225	39	-20 to +60	

The following sensor and control options are available for selection.

Available for all models. **Without sensor**

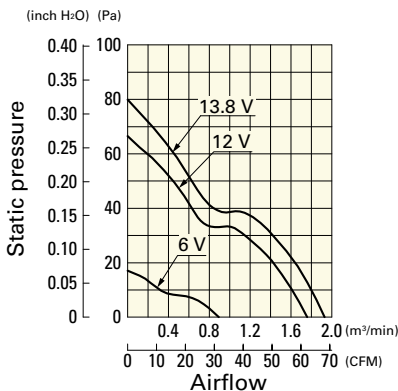
Differs according to the model. Refer to the table on p. 598. **Lock sensor** **PWM control**

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

Airflow - Static Pressure Characteristics

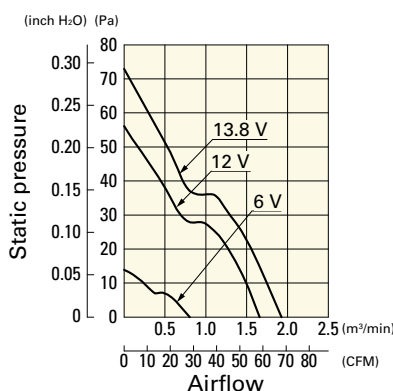
9A0912G401 With pulse sensor

Operating voltage range



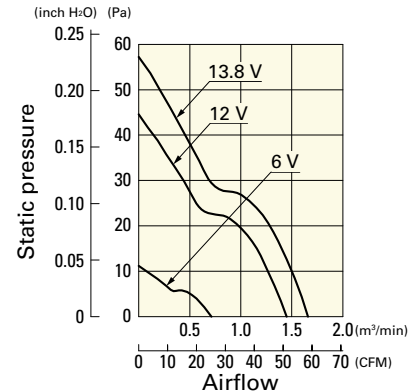
9A0912S401 With pulse sensor

Operating voltage range



9A0912H401 With pulse sensor

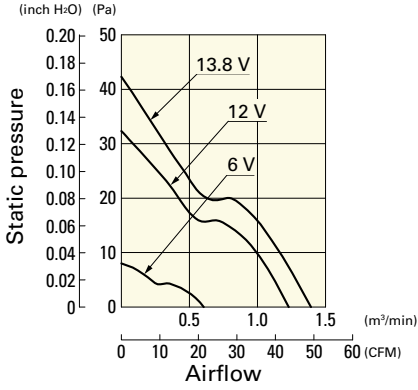
Operating voltage range



Airflow - Static Pressure Characteristics

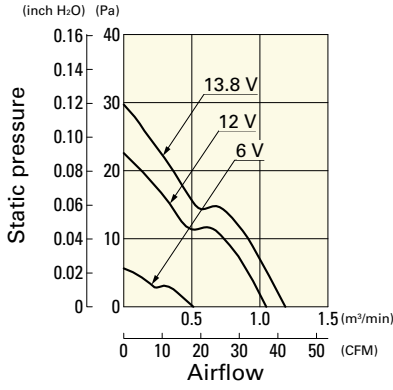
9A0912F401 With pulse sensor

Operating voltage range



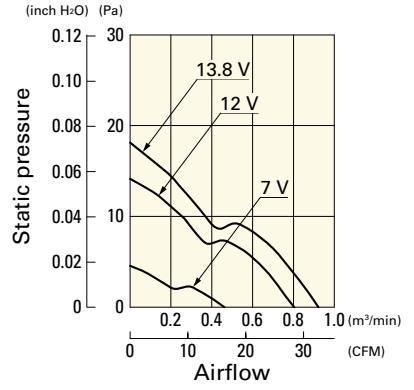
9A0912M401 With pulse sensor

Operating voltage range



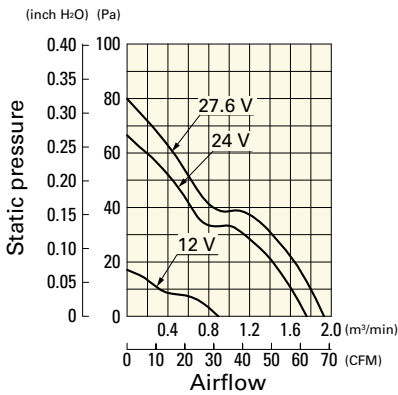
9A0912L401 With pulse sensor

Operating voltage range



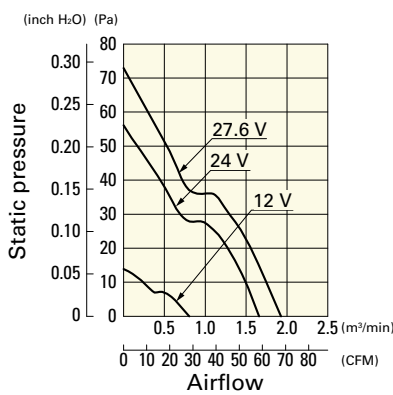
9A0924G401 With pulse sensor

Operating voltage range



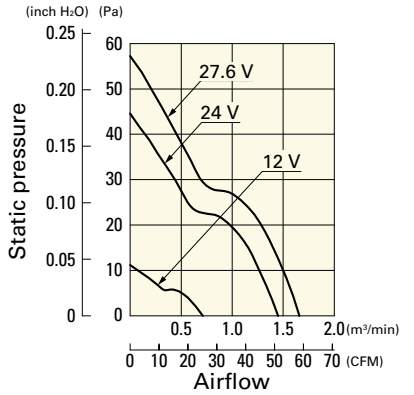
9A0924S401 With pulse sensor

Operating voltage range



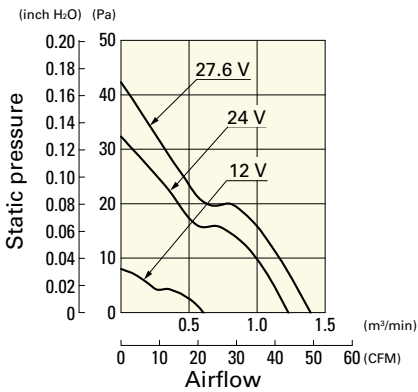
9A0924H401 With pulse sensor

Operating voltage range



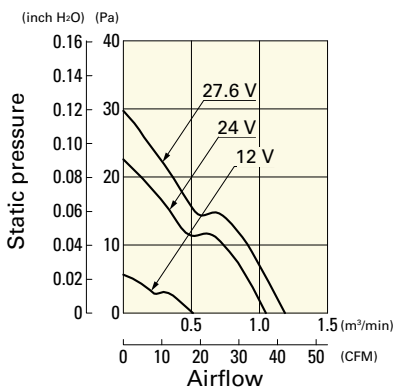
9A0924F401 With pulse sensor

Operating voltage range



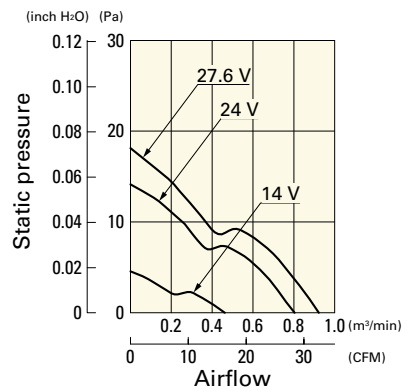
9A0924M401 With pulse sensor

Operating voltage range



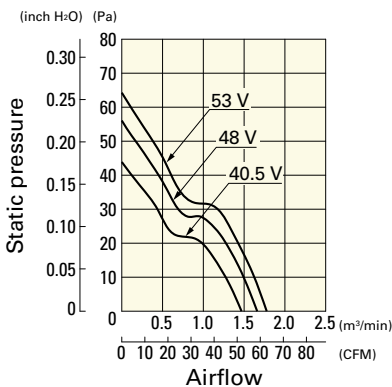
9A0924L401 With pulse sensor

Operating voltage range

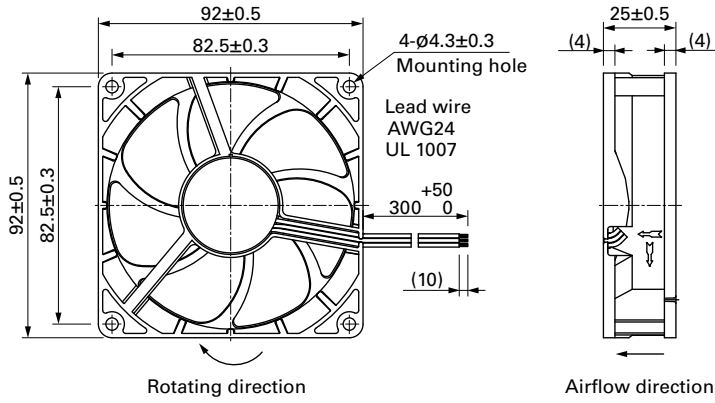


9A0948S401 With pulse sensor

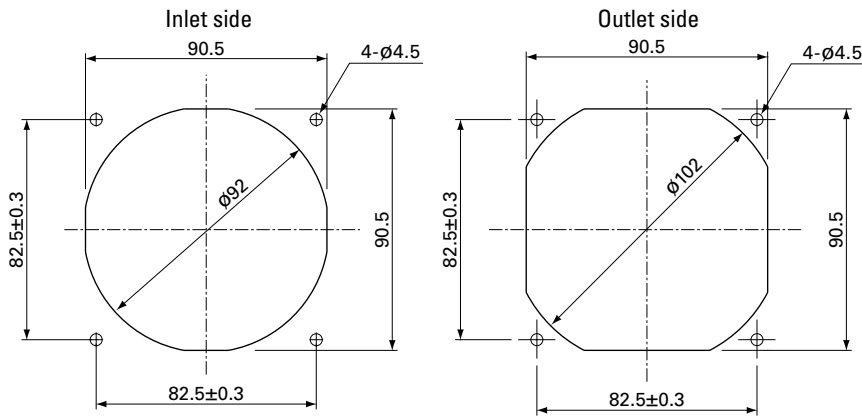
Operating voltage range



Dimensions (unit: mm) (With ribs)



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



Options

Finger guards

page: p. 558

Model no.: 109-099E, 109-099H, 109-099C

Resin finger guards

page: p. 565

Model no.: 109-1001G

Resin filter kits

page: p. 566

Model no.: 109-1001F13 (13PPI), 109-1001F20 (20PPI),
109-1001F30 (30PPI), 109-1001F40 (40PPI)