



∅172×150×51 mm

San Ace 172 9HV type US

Sidecut type

General Specifications

- Material Frame: Aluminum, 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 Control Brown
- Mass 800 g

Specifications

The models listed below **have 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]
▶▶ 9HV5724P5H001	24	16 to 30	100	5.0	120	8000	12.3 434	1000 4.02	77	-20 to +70	40000/60°C (70000/40°C)
			20	0.5	12.0	3000	4.6 162	175 0.7	51		
▶▶ 9HV5748P5G001	48	36 to 72	100	5.0	240	10500	16.1 568	1600 6.43	83		
			20	0.41	19.7	3700	5.6 198	250 1.01	57		

* 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.

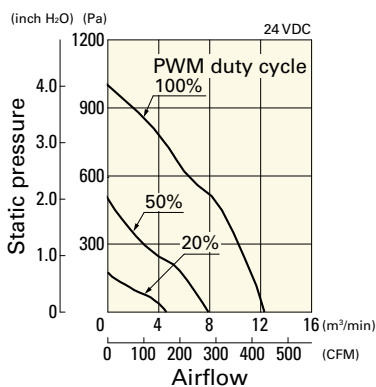
Differs according to the model. Refer to the table on p. 607. Without sensor Pulse sensor Lock sensor

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

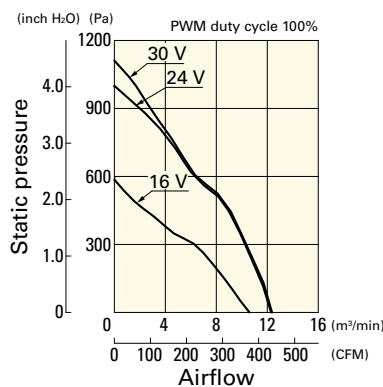
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9HV5724P5H001 With pulse sensor with PWM control function

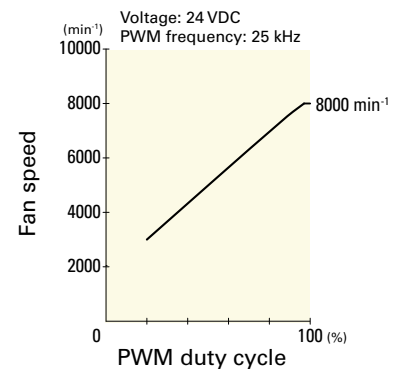
PWM duty cycle



Operating voltage range



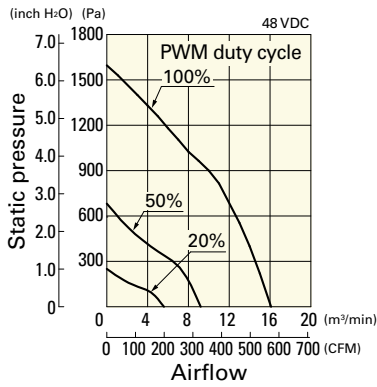
PWM duty - Speed characteristics example



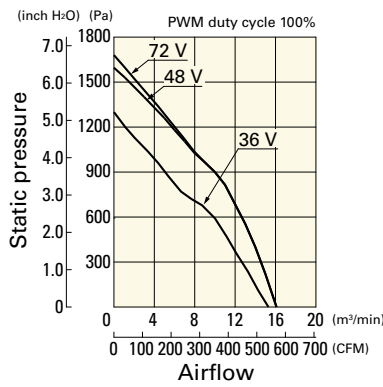
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9HV5748P5G001 With pulse sensor with PWM control function

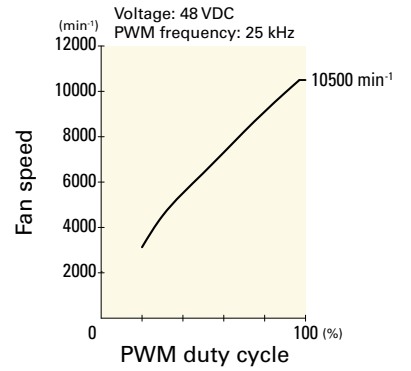
PWM duty cycle



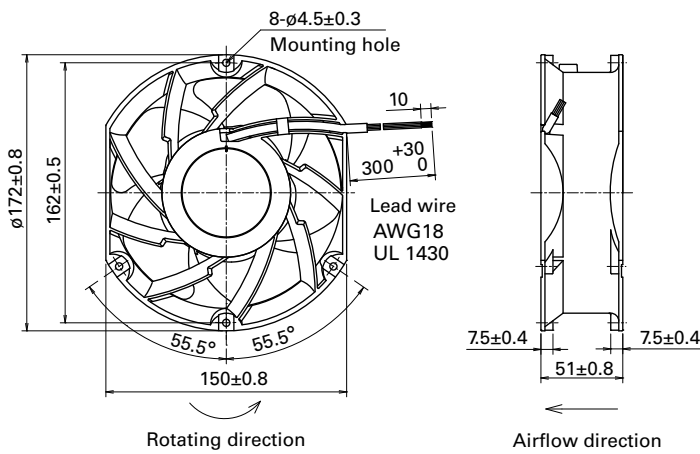
Operating voltage range



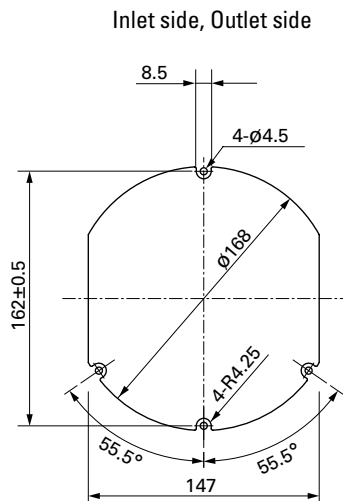
PWM duty - Speed characteristics example



Dimensions (unit: mm)



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



Options

Finger guards

page: p. 560

Model no.: 109-319J, 109-319E, 109-319H, 109-320



∅172x150x51 mm

San Ace 172 9SG type US

Sidecut type

General Specifications

- Material Frame: Aluminum, 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 Control Brown
- Mass 760 g

Specifications

The models listed below **have 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]
▶▶ 9SG5724P5H61	24	20.4 to 27.6	100	2.8	67.2	6500	11.6 410	540 2.16	71	-20 to +70	40000/60°C (70000/40°C)
▶▶ 9SG5748P5G01			0	0.18	4.32	1300	2.32 81.9	30 0.12	28		
▶▶ 9SG5748P5H01	48	36 to 72	100	2.91	140	8600	15.46 546	1000 4.02	78	-20 to +60	
▶▶ 9SG5748P5G01			0	0.21	10.1	2000	3.59 127	75.1 0.3	40		
▶▶ 9SG5748P5H01			100	1.62	78	6500	11.6 410	770 3.09	71		
			0	0.21	10.1	2000	3.59 127	75.1 0.3	40		

* 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.

Differs according to the model. Refer to the table on p. 610. **Without sensor**

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

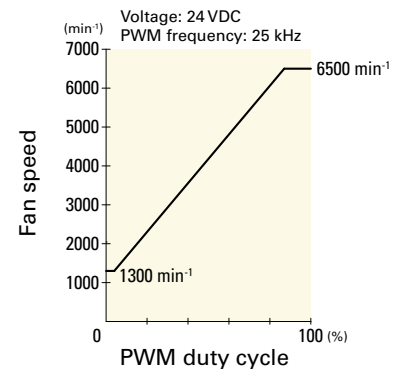
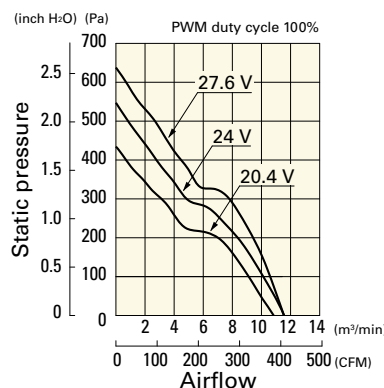
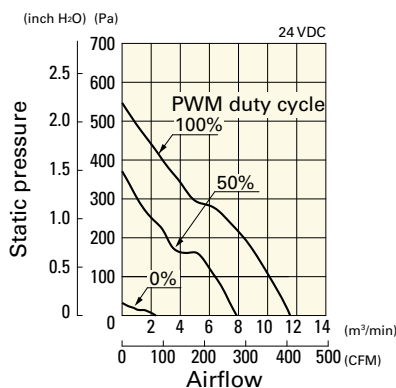
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9SG5724P5H61 With pulse sensor with PWM control function

PWM duty cycle

Operating voltage range

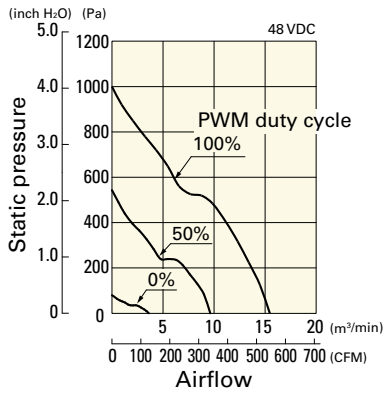
PWM duty - Speed characteristics example



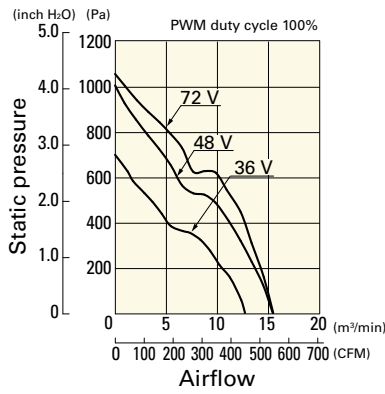
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9SG5748P5G01 With pulse sensor with PWM control function

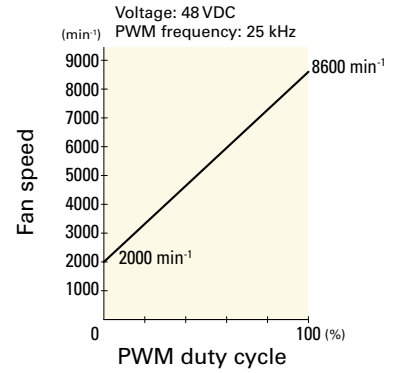
PWM duty cycle



Operating voltage range

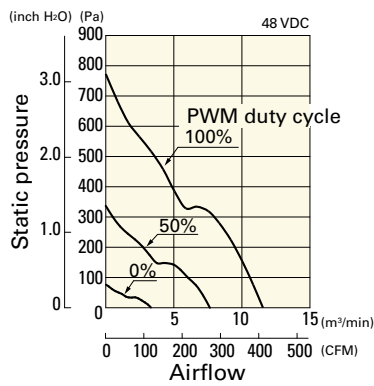


PWM duty - Speed characteristics example

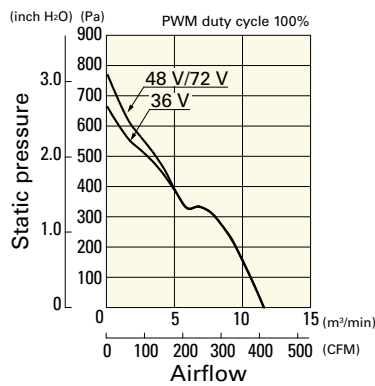


9SG5748P5H01 With pulse sensor with PWM control function

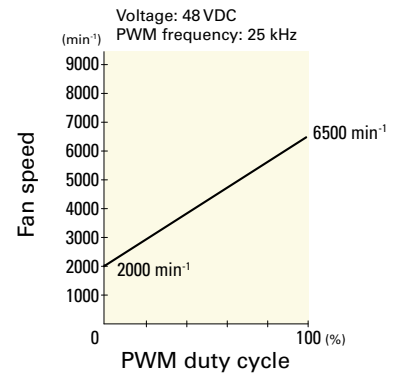
PWM duty cycle



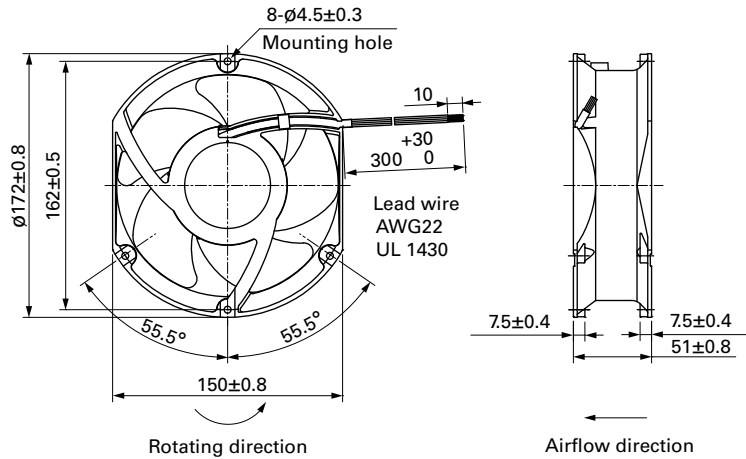
Operating voltage range

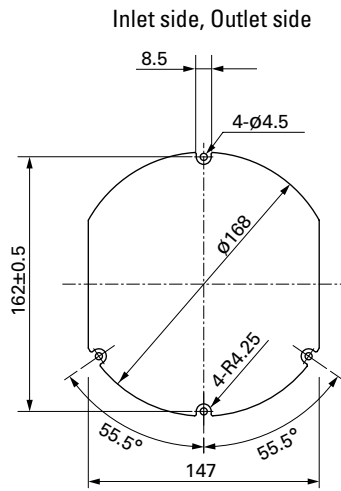


PWM duty - Speed characteristics example



Dimensions (unit: mm)



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

Finger guards

page: p. 560

Model no.: 109-319J, 109-319E, 109-319H, 109-320

DC Fan



Ø 172x150x51 mm

San Ace 172 9GV type

Sidecut type

General Specifications

- Material Frame: Aluminum, 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 800 g

Specifications

The models listed below **have 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]
9GV5724H501	24	20.4 to 27.6	4.0	96	6300	11.32 400	690 2.77	74	-20 to +70	40000/60°C (70000/40°C)
9GV5748H501	48	40.8 to 55.2	2.0	96	6300	11.32 400	690 2.77	74		

The following sensor and control options are available for selection.

Available for all models. Without sensor PWM control

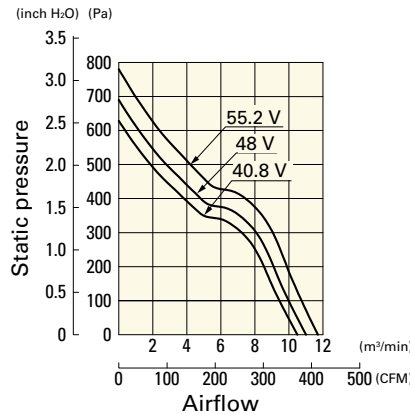
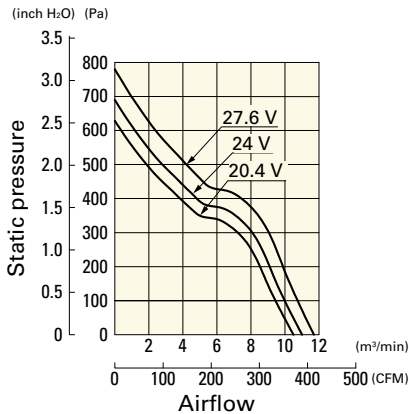
Airflow - Static Pressure Characteristics

9GV5724H501 With pulse sensor

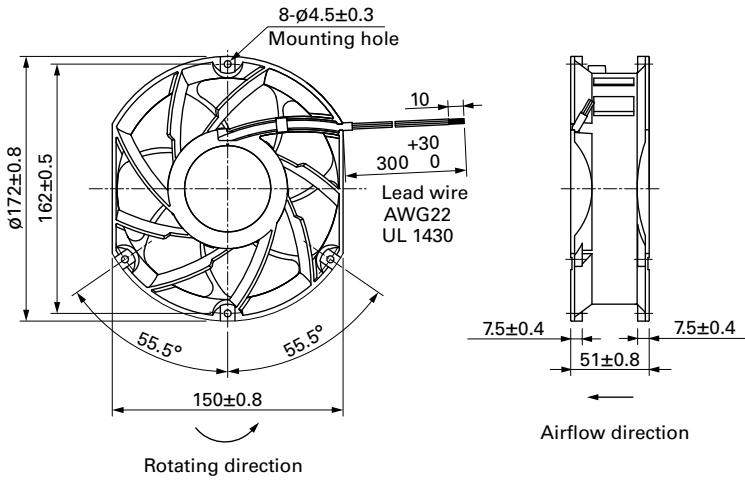
9GV5748H501 With pulse sensor

Operating voltage range

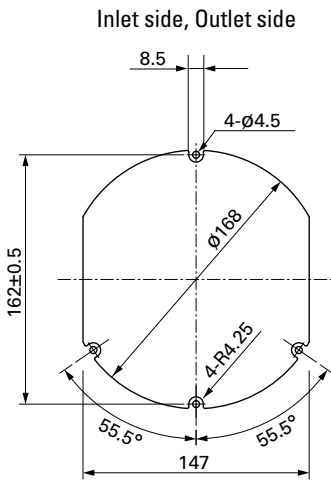
Operating voltage range



Dimensions (unit: mm)



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



Options


Finger guards

page: p. 560

Model no.: 109-319J, 109-319E, 109-319H, 109-320

DC Fan

Ø 172x150x51 mm

San Ace 172 9E type   

Sidecut type



General Specifications

- Material Frame: Aluminum, 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 760 g

Specifications

The models listed below **have 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]
» 109E5712K501	12	10.2 to 13.8	2.9	34.8	4100	8.5 300	243.0 0.976	60	-20 to +60	40000/60°C (70000/40°C)
» 109E5712Y501			2.3	27.6	3800	8 282	210 0.84	60		
» 109E5712H501			1.2	14.4	3050	6.4 226	137.2 0.551	52		
» 109E5712F501			0.68	8.16	2500	5.1 180	95 0.38	47		
» 109E5712M501			0.48	5.76	2000	4.2 148	67.6 0.271	41		
» 109E5724C501	24	20.4 to 27.6	2.3	55.2	4800	9.9 350	308.0 1.237	66	-20 to +70	
» 109E5724K501			1.3	31.2	4100	8.5 300	243.0 0.976	60		
» 109E5724H501			0.58	13.92	3050	6.4 226	137.2 0.551	52		
» 109E5724F501			0.35	8.4	2500	5.1 180	95 0.38	47		
» 109E5724M501			0.2	4.8	2000	4.2 148	67.6 0.271	41		
» 109E5748C501	48	40.8 to 55.2	1.2	57.6	4800	9.9 350	308.0 1.237	66	-20 to +60	
» 109E5748K501			0.7	33.6	4100	8.5 300	243.0 0.976	60		
» 109E5748H501			0.28	13.44	3050	6.4 226	137.2 0.551	52		
» 109E5748F501			0.19	9.12	2500	5.1 180	95 0.38	47		
» 109E5748M501			0.11	5.28	2000	4.2 148	67.6 0.271	41		

The following sensor and control options are available for selection.

Available for all models. Without sensor

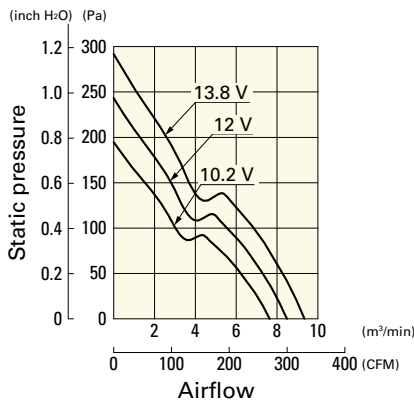
Differs according to the model. Refer to the table on p. 595. Lock sensor PWM control

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

Airflow - Static Pressure Characteristics

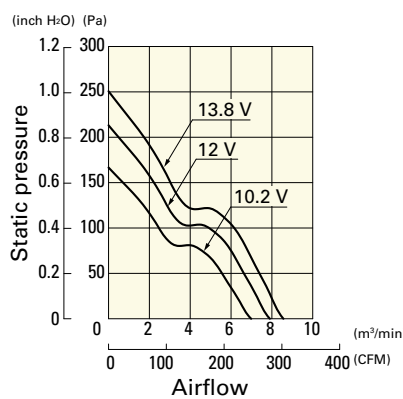
109E5712K501 With pulse sensor

Operating voltage range



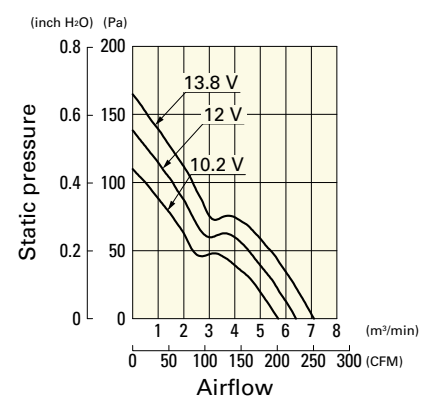
109E5712Y501 With pulse sensor

Operating voltage range



109E5712H501 With pulse sensor

Operating voltage range

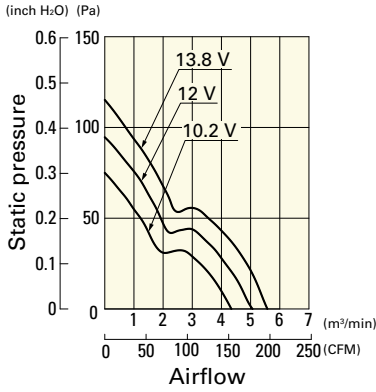


Airflow - Static Pressure Characteristics

DC Fan ø172 mm

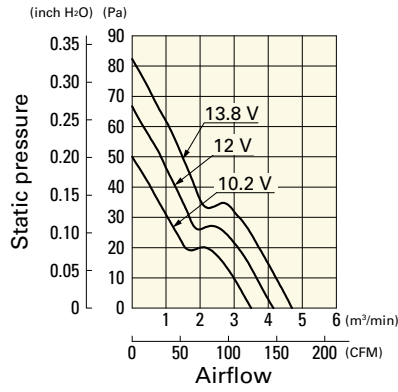
109E5712F501 With pulse sensor

Operating voltage range



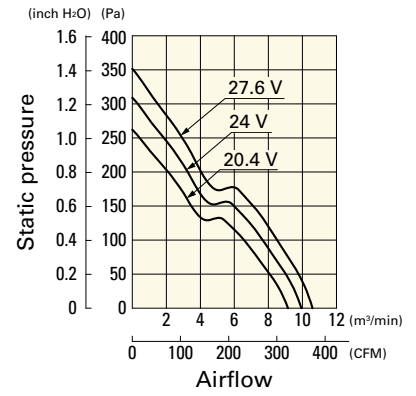
109E5712M501 With pulse sensor

Operating voltage range



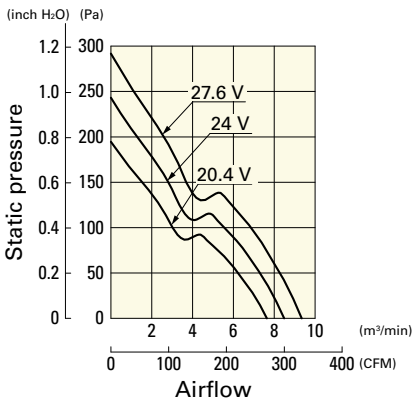
109E5724C501 With pulse sensor

Operating voltage range



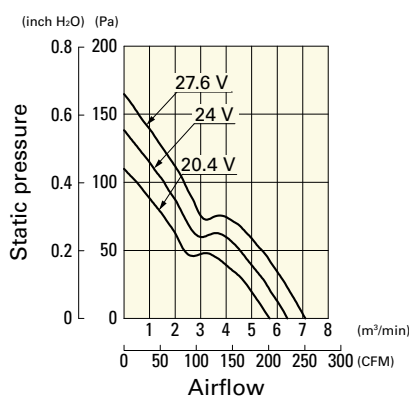
109E5724K501 With pulse sensor

Operating voltage range



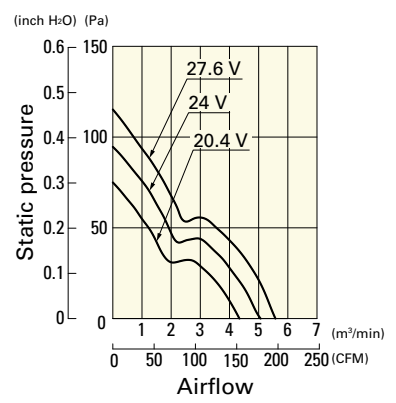
109E5724H501 With pulse sensor

Operating voltage range



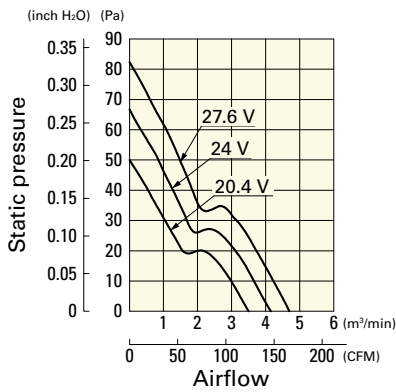
109E5724F501 With pulse sensor

Operating voltage range



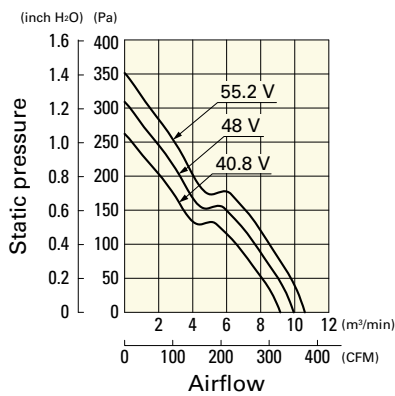
109E5724M501 With pulse sensor

Operating voltage range



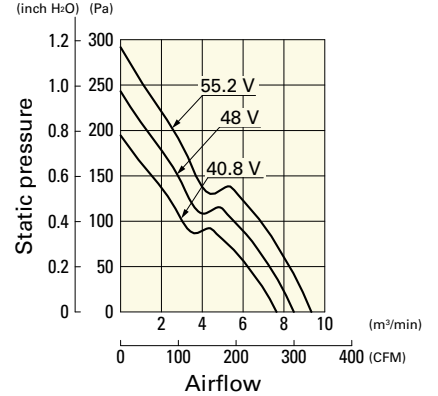
109E5748C501 With pulse sensor

Operating voltage range



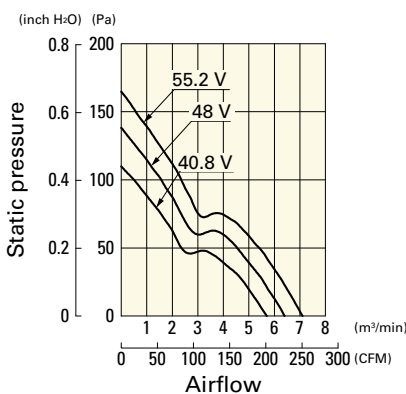
109E5748K501 With pulse sensor

Operating voltage range



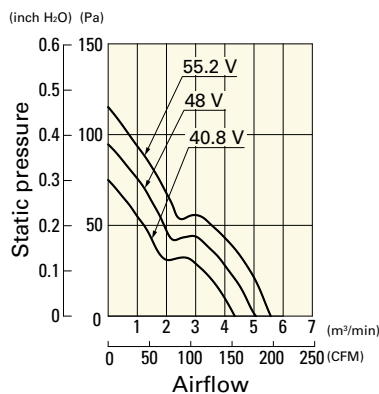
109E5748H501 With pulse sensor

Operating voltage range



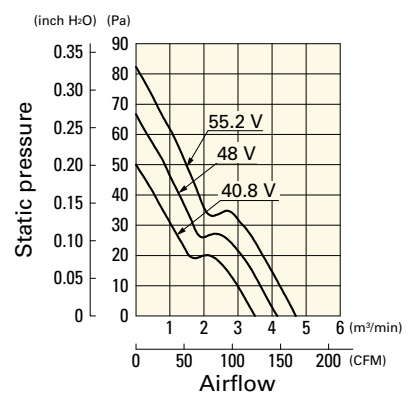
109E5748F501 With pulse sensor

Operating voltage range

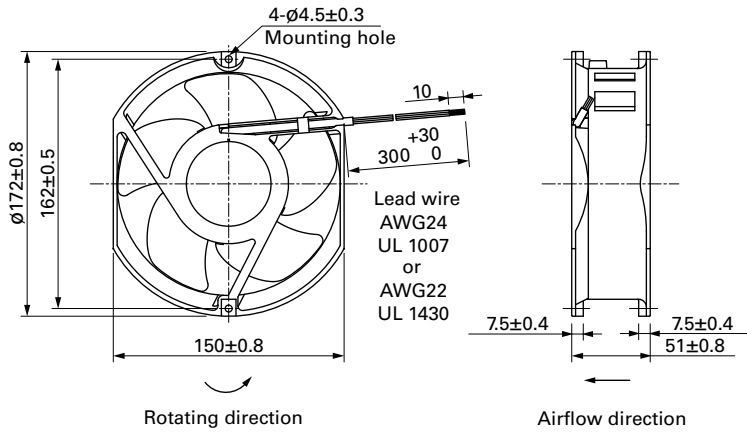


109E5748M501 With pulse sensor

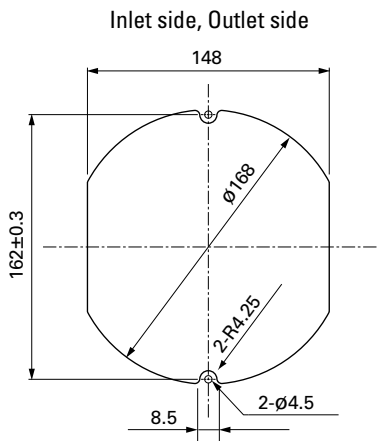
Operating voltage range



Dimensions (unit: mm)



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



Options

Finger guards

page: p. 560

Model no.: 109-319E, 109-319H, 109-320

Ø **172x51** mm

San Ace 172 9E type   

Round type



General Specifications

- Material Frame: Aluminum, 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 780 g

Specifications

The models listed below **have 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]
» 109E1712K501	12	10.2 to 13.8	2.9	34.8	4100	8.5 300	243.0 0.976	55	-20 to +60	40000/60°C (70000/40°C)
» 109E1712Y501			2.3	27.6	3800	7.8 276	210.0 0.843	53		
» 109E1712H501			1.2	14.4	3050	6.4 226	137.2 0.551	47		
» 109E1712F501			0.68	10.8	2500	5.1 180	95.0 0.382	42		
» 109E1712M501			0.48	5.76	2000	4.2 148	67.6 0.271	36		
» 109E1724C501	24	20.4 to 27.6	2.3	55.2	4800	9.9 350	308.0 1.237	60	-20 to +70	
» 109E1724K501			1.3	31.2	4100	8.5 300	243.0 0.976	55		
» 109E1724H501			0.58	13.92	3050	6.4 226	137.2 0.551	47		
» 109E1724F501			0.35	8.4	2500	5.1 180	95 0.382	42		
» 109E1724M501			0.2	4.8	2000	4.2 148	67.6 0.271	36		
» 109E1748C501	48	40.8 to 55.2	1.2	57.6	4800	9.9 350	308.0 1.237	60	-20 to +60	
» 109E1748K501			0.7	33.6	4100	8.5 300	243.0 0.976	55		
» 109E1748H501			0.28	13.44	3050	6.4 226	137.2 0.551	47		
» 109E1748F501			0.19	9.12	2500	5.1 180	95 0.382	42		
» 109E1748M501			0.11	5.28	2000	4.2 148	67.6 0.271	36		

The following sensor and control options are available for selection.

Available for all models. Without sensor

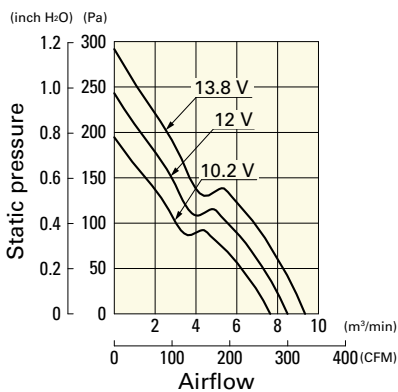
Differs according to the model. Refer to the table on p. 594. Lock sensor PWM control

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

Airflow - Static Pressure Characteristics

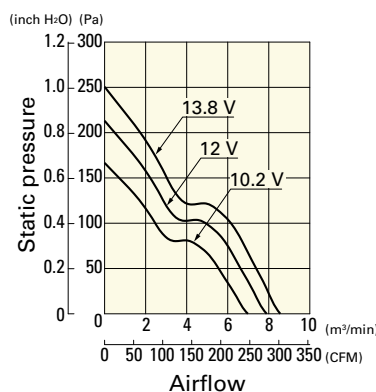
109E1712K501 With pulse sensor

Operating voltage range



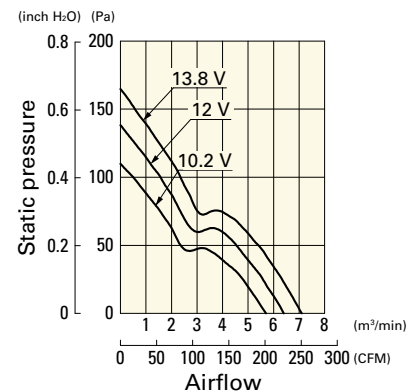
109E1712Y501 With pulse sensor

Operating voltage range



109E1712H501 With pulse sensor

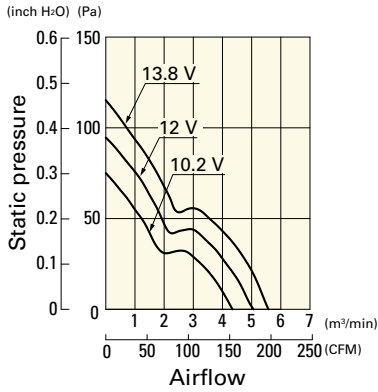
Operating voltage range



Airflow - Static Pressure Characteristics

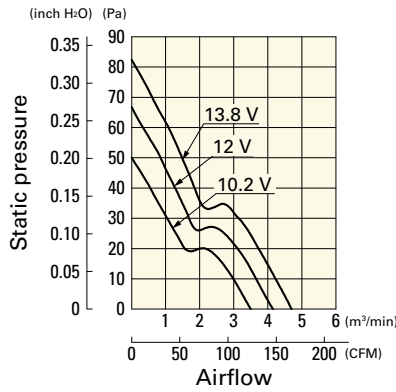
109E1712F501 With pulse sensor

Operating voltage range



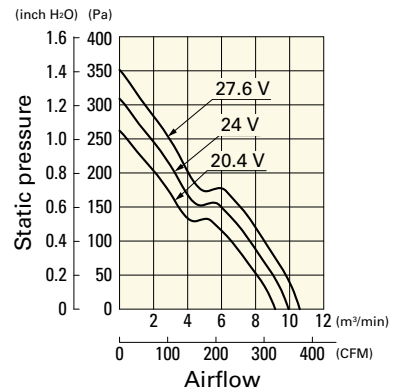
109E1712M501 With pulse sensor

Operating voltage range



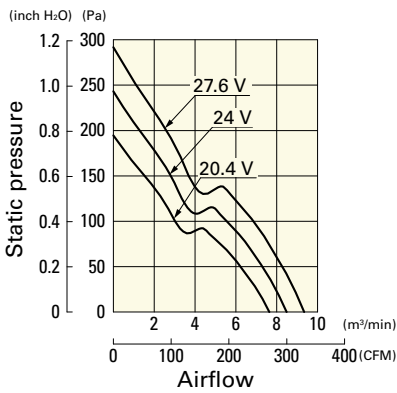
109E1724C501 With pulse sensor

Operating voltage range



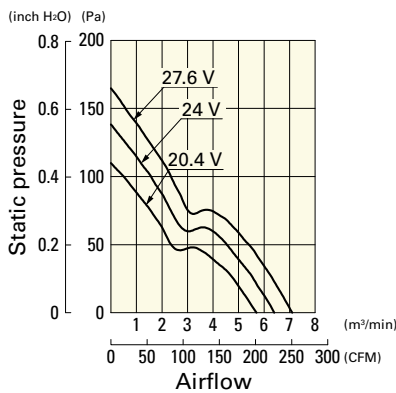
109E1724K501 With pulse sensor

Operating voltage range



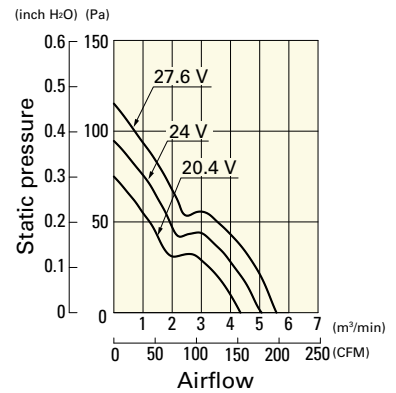
109E1724H501 With pulse sensor

Operating voltage range



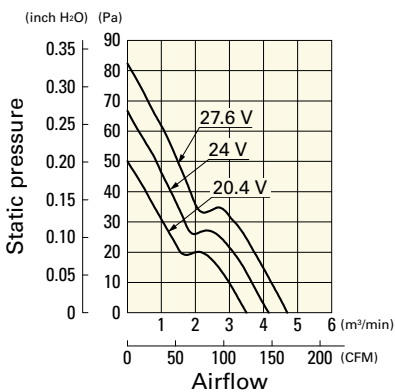
109E1724F501 With pulse sensor

Operating voltage range



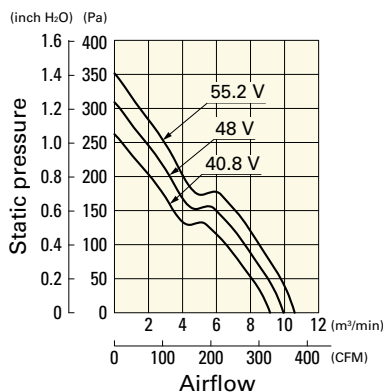
109E1724M501 With pulse sensor

Operating voltage range



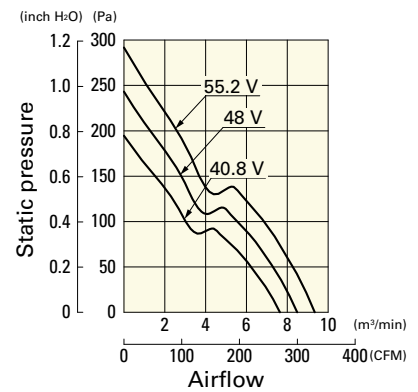
109E1748C501 With pulse sensor

Operating voltage range



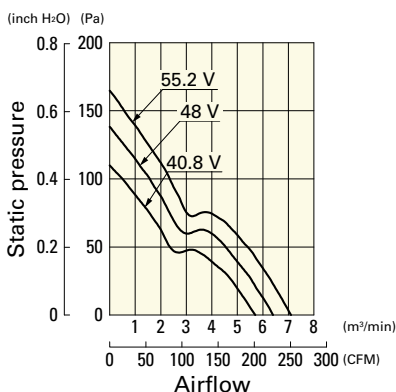
109E1748K501 With pulse sensor

Operating voltage range



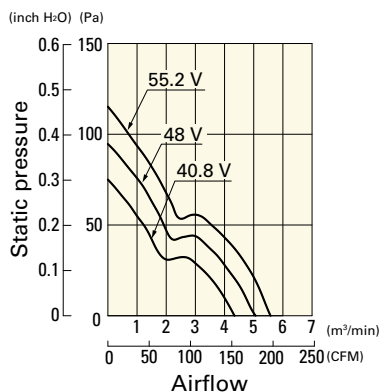
109E1748H501 With pulse sensor

Operating voltage range



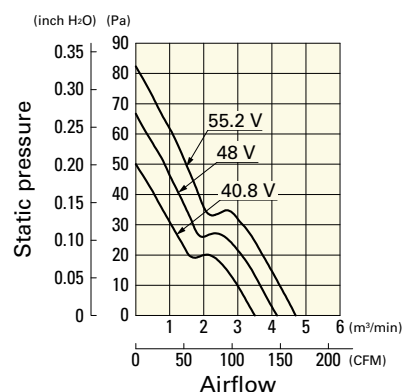
109E1748F501 With pulse sensor

Operating voltage range

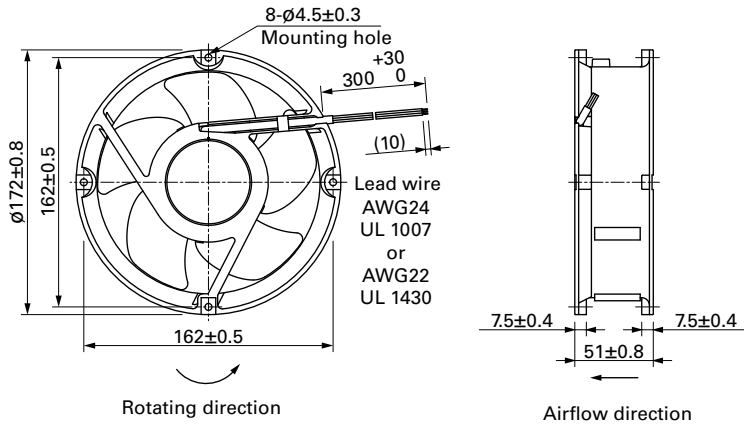


109E1748M501 With pulse sensor

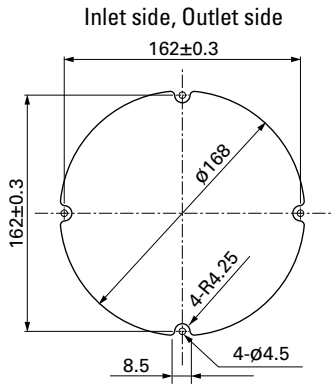
Operating voltage range



Dimensions (unit: mm)



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



Options

Finger guards

page: p. 560

Model no.: 109-1066, 109-1068, 109-319E, 109-319H, 109-320