

# 60×60×25 mm

**San Ace 60 9R** 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 ..... 90 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 <sup>-1</sup> ]	Max. airflow		Max. static pressure		SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
						[m <sup>3</sup> /min]	[CFM]	[Pa]	[inchH <sub>2</sub> O]			
» 109R0605H401	5	4.5 to 5.5	0.34	1.7	3800	0.53	18.7	40.2	0.161	28	-20 to +70	60000/60°C (90000/40°C)
» 109R0605F401			0.2	1.0	3200	0.44	15.5	29.4	0.118	24	-20 to +60	
» 109R0605M401			0.13	0.65	2600	0.36	12.7	19.6	0.079	20	-20 to +70	
» 109R0612J401	12	10.8 to 13.2	0.47	5.64	7600	1.06	37.1	155.0	0.622	44	-20 to +60	40000/60°C (70000/40°C)
» 109R0612G401			0.24	2.88	5600	0.78	27.5	87.3	0.351	39	-20 to +70	
» 109R0612D401		10.2 to 13.8	0.21	2.52	5150	0.72	25.4	73.5	0.295	37		
» 109R0612S401		6 to 13.8	0.17	2.04	4600	0.65	23.0	56.8	0.228	33		
» 109R0612H401			0.11	1.32	3800	0.53	18.7	40.1	0.161	28		
» 109R0612F401			0.09	1.08	3200	0.44	15.5	29.4	0.118	24		
» 109R0612M401		7 to 13.8	0.06	0.72	2600	0.36	12.7	19.6	0.079	20		
» 109R0624J401		24	21.6 to 26.4	0.24	5.76	7600	1.06	37.1	155.0	0.622	44	-20 to +60
» 109R0624G401	20.4 to 27.6		0.13	3.12	5600	0.78	27.5	87.3	0.351	39	-20 to +70	
» 109R0624D401	12 to 27.6		0.12	2.88	5150	0.72	25.4	73.5	0.295	37		
» 109R0624S401			0.08	1.92	4600	0.65	23.0	56.8	0.228	33		
» 109R0624H401			0.06	1.44	3800	0.53	18.7	40.2	0.161	28		
» 109R0624F401	0.05		1.2	3200	0.44	15.5	29.4	0.118	24			
» 109R0624M401	14 to 27.6		0.04	0.96	2600	0.36	12.7	19.6	0.079	20		
» 109R0648J401	48		43.2 to 52.8	0.12	5.76	7600	1.06	37.1	155.0	0.622	44	-20 to +60
» 109R0648G401		43 to 53	0.07	3.36	5600	0.78	27.5	87.3	0.351	39	-20 to +70	
» 109R0648H401		40 to 53	0.04	1.92	3800	0.53	18.7	40.2	0.161	28		

The following sensor and control options are available for selection.

Available for all models. Without sensor

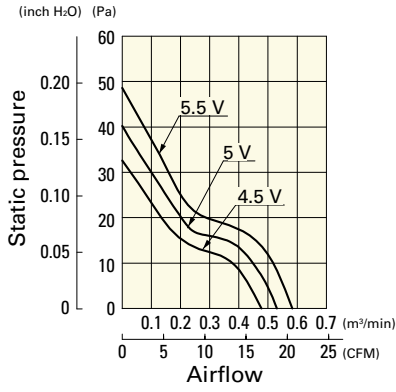
Differs according to the model. Refer to the table on pp. 596 to 597. Lock sensor PWM control

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

**Airflow - Static Pressure Characteristics**

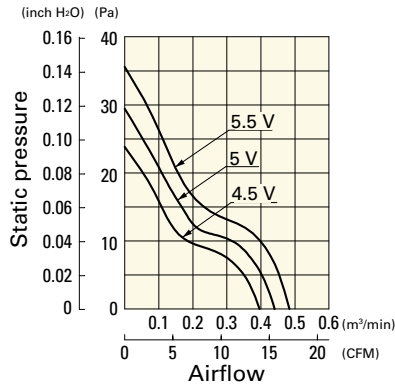
**109R0605H401** With pulse sensor

Operating voltage range



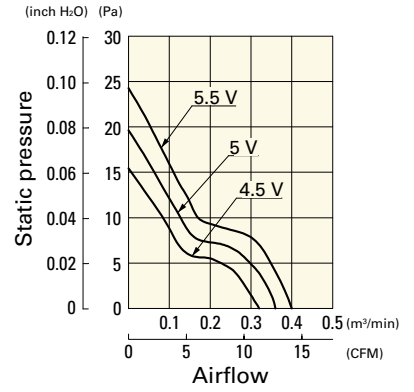
**109R0605F401** With pulse sensor

Operating voltage range



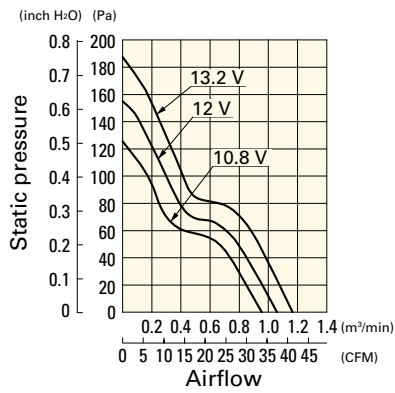
**109R0605M401** With pulse sensor

Operating voltage range



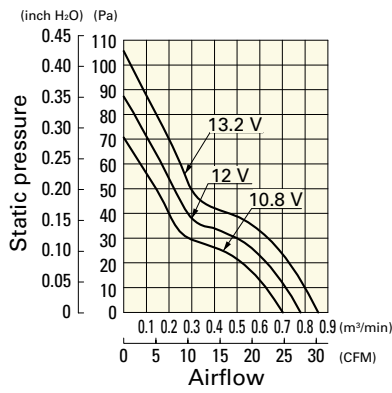
**109R0612J401** With pulse sensor

Operating voltage range



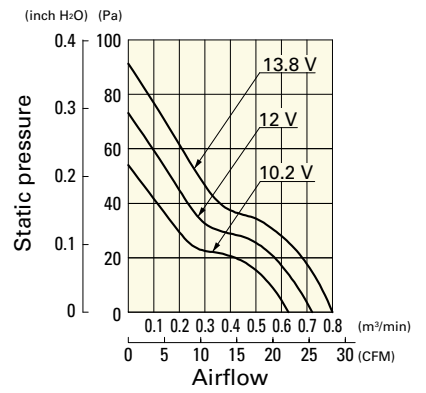
**109R0612G401** With pulse sensor

Operating voltage range



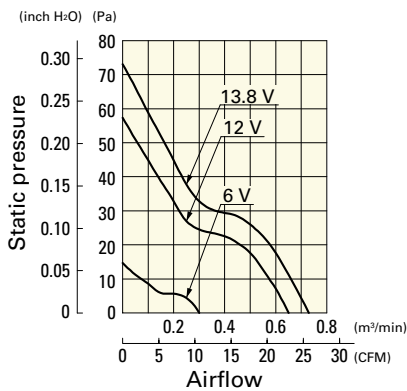
**109R0612D401** With pulse sensor

Operating voltage range



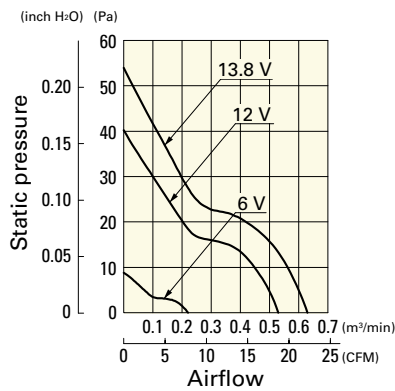
**109R0612S401** With pulse sensor

Operating voltage range



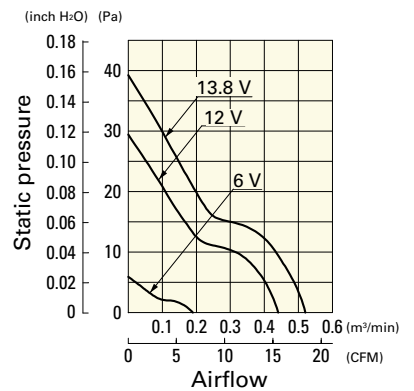
**109R0612H401** With pulse sensor

Operating voltage range



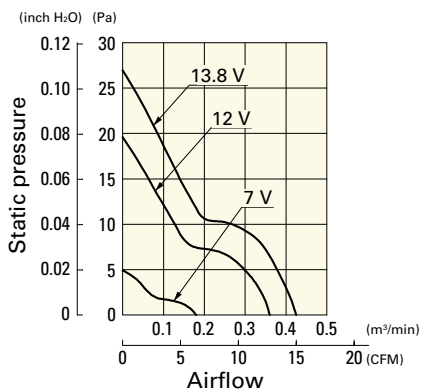
**109R0612F401** With pulse sensor

Operating voltage range



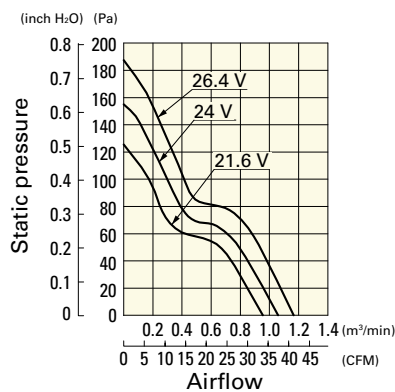
**109R0612M401** With pulse sensor

Operating voltage range



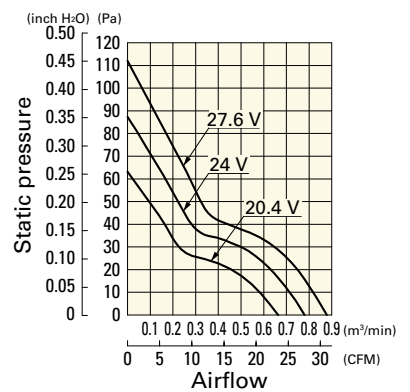
**109R0624J401** With pulse sensor

Operating voltage range



**109R0624G401** With pulse sensor

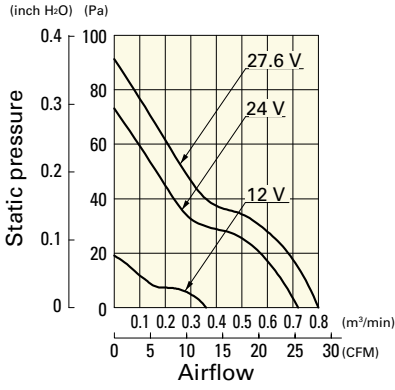
Operating voltage range



**Airflow - Static Pressure Characteristics**

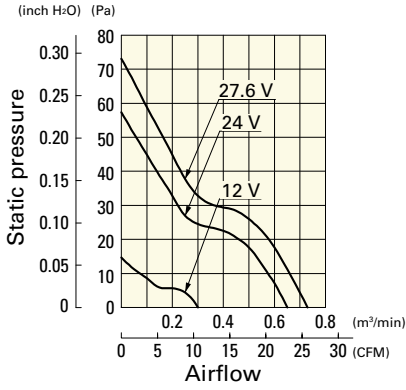
**109R0624D401** With pulse sensor

Operating voltage range



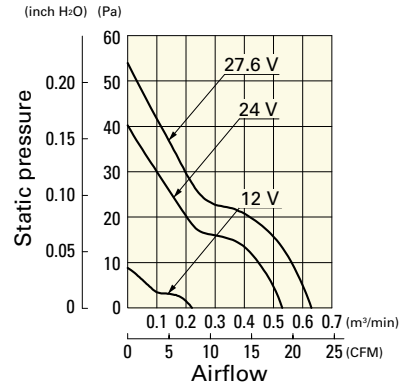
**109R0624S401** With pulse sensor

Operating voltage range



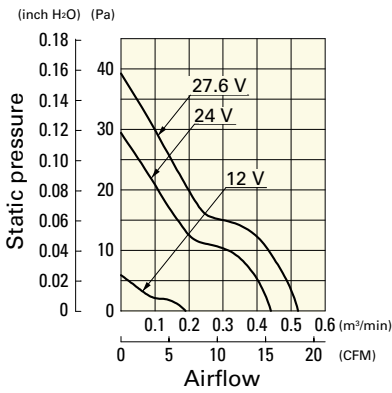
**109R0624H401** With pulse sensor

Operating voltage range



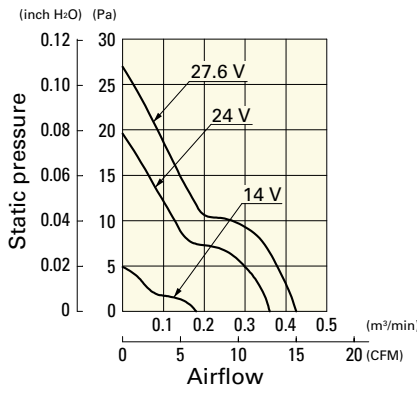
**109R0624F401** With pulse sensor

Operating voltage range



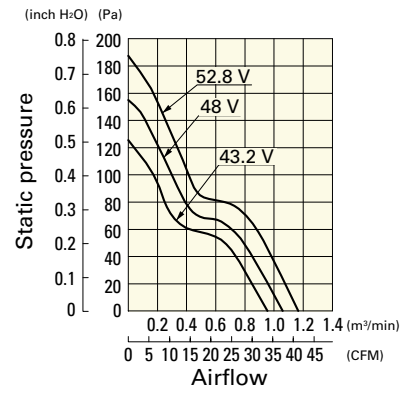
**109R0624M401** With pulse sensor

Operating voltage range



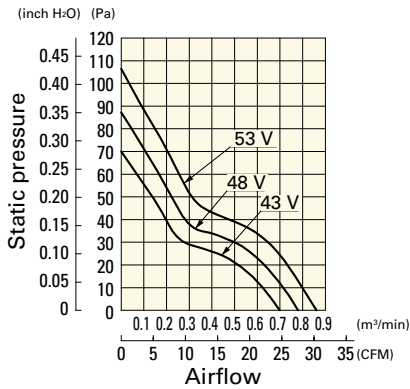
**109R0648J401** With pulse sensor

Operating voltage range



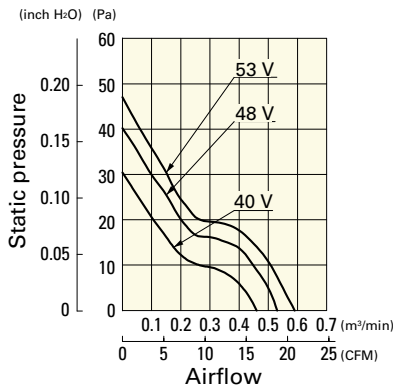
**109R0648G401** With pulse sensor

Operating voltage range

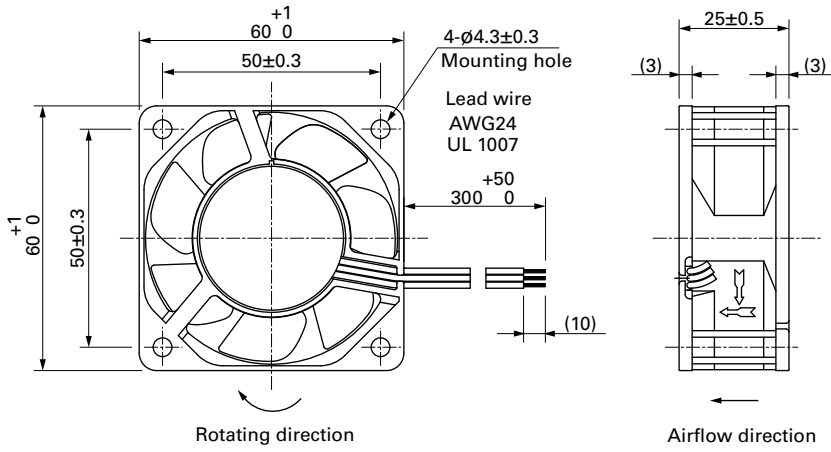


**109R0648H401** With pulse sensor

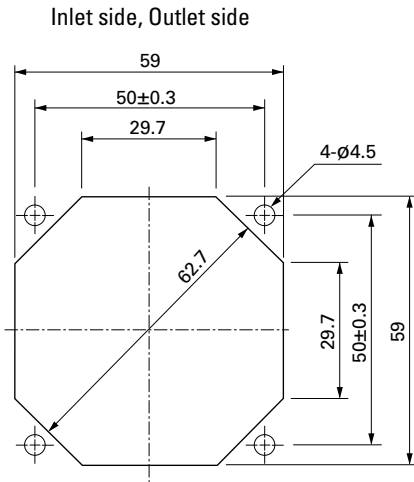
Operating voltage range



**Dimensions (unit: mm)** (With ribs)



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



**Options**

**Finger guards** page: p. 558  
 Model no.: 109-139E, 109-139H

**Resin finger guards** page: p. 565  
 Model no.: 109-1003G

**Resin filter kits** page: p. 566  
 Model no.: 109-1003F13 (13PPI), 109-1003F20 (20PPI),  
 109-1003F30 (30PPI), 109-1003F40 (40PPI)