

San Ace 40 9RA type

DC Fan

Features

Low Noise

Compared to our current model⁽¹⁾ noise level has been reduced by 7 dB(A).

Low Power Consumption

Power consumption has been reduced by about 56%⁽³⁾ compared to the current model.⁽²⁾

Contribution to SDGs

Made with lead-free brass, this fan complies with the RoHS Directive.⁽⁴⁾ It is also certified as an Eco Product⁽⁵⁾ for its use of environmentally friendly resources and technologies.

(1) Current model: 40 x 40 x 20 mm San Ace 40 9P type DC Fan

(2) Current model: 40 x 40 x 20 mm San Ace 40 9P type DC Fan (model: 109P0412F601)

(3) For a model 9RA0412F6001

(4) The RoHS (Restriction of Hazardous Substances) Directive restricts the use of certain hazardous substances in electrical and electronic equipment distributed within the European Union.

(5) Eco Products are eco-friendly products designed to reduce the environmental impact of the product and its packaging materials compared to our existing products or equivalent marketed products if not offered by us. Our products are assessed over the product's life cycle against our own eco-design requirements including product size, weight, power consumption, and CO₂ emissions, and those meeting our standards and higher standards qualify as Eco Products and Eco Products Plus, respectively.



40 x 40 x 20 mm

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]
9RA0405H6001	5	4.5 to 5.5	0.14	0.70	7800	0.22 7.7	78.0 0.312	26	-20 to +70	60000/60°C (90000/40°C)
9RA0405F6001			0.10	0.50	6500	0.18 6.3	54.0 0.216	21		
9RA0405M6001			0.08	0.40	5000	0.13 4.5	32.0 0.128	17		
9RA0412H6001	12	7 to 13.8	0.06	0.72	7800	0.22 7.7	78.0 0.312	26		
9RA0412F6001			0.04	0.48	6500	0.18 6.3	54.0 0.216	21		
9RA0412M6001			0.035	0.42	5000	0.13 4.5	32.0 0.128	17		
9RA0424H6001	24	12 to 27.6	0.03	0.72	7800	0.22 7.7	78.0 0.312	26		
9RA0424F6001			0.022	0.53	6500	0.18 6.3	54.0 0.216	21		
9RA0424M6001			0.018	0.44	5000	0.13 4.5	32.0 0.128	17		

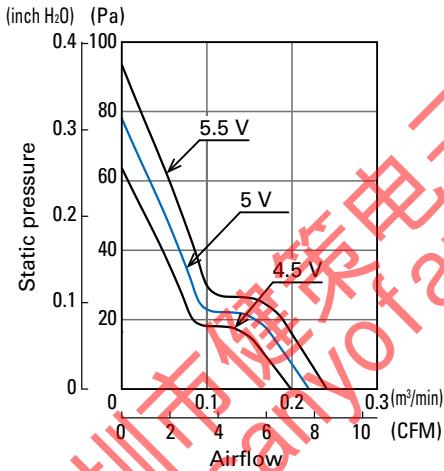
Models with the following sensor specifications are also available as options: **Without sensor** **Lock sensor**

Common Specifications

- Material Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)
- Expected life Refer to specifications
(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
- 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.
- Operating temperature Refer to specifications (Non-condensing)
- Storage temperature -30 to +70°C (Non-condensing)
- Lead wire ⊕ Red ⊖ Black (Sensor) Yellow
- Mass 36 g

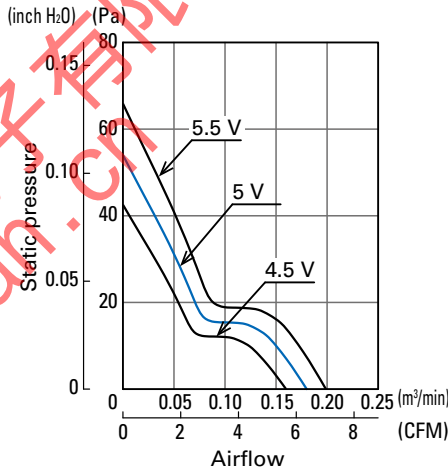
Airflow - Static Pressure Characteristics

Operating voltage range



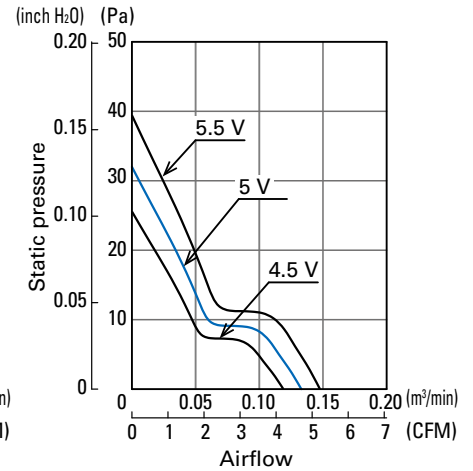
9RA0405H6001

Operating voltage range



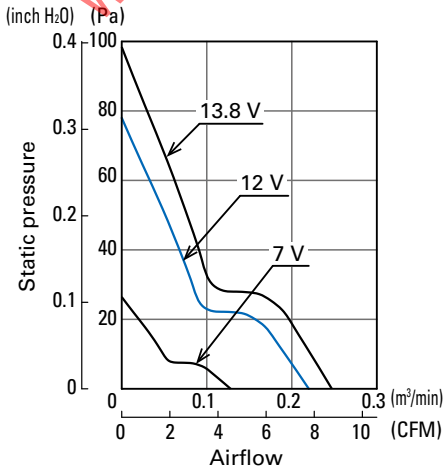
9RA0405F6001

Operating voltage range



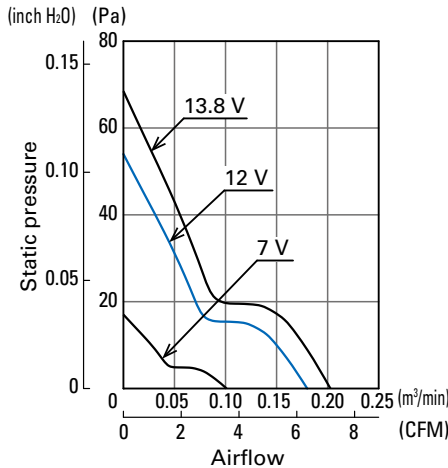
9RA0405M6001

Operating voltage range



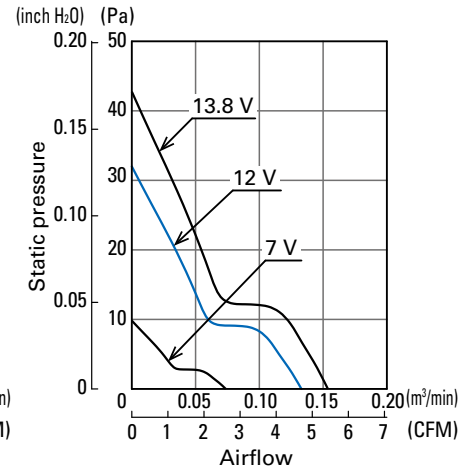
9RA0412H6001

Operating voltage range



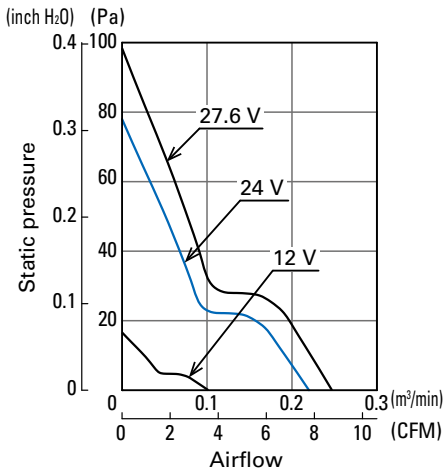
9RA0412F6001

Operating voltage range



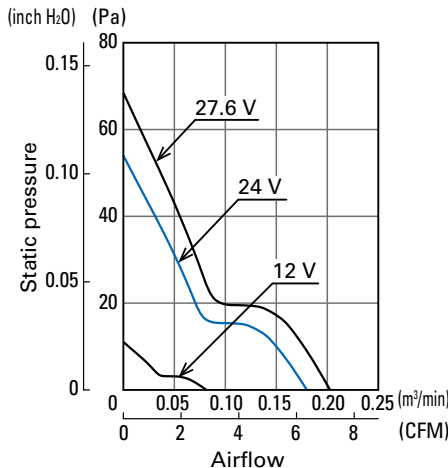
9RA0412M6001

Operating voltage range



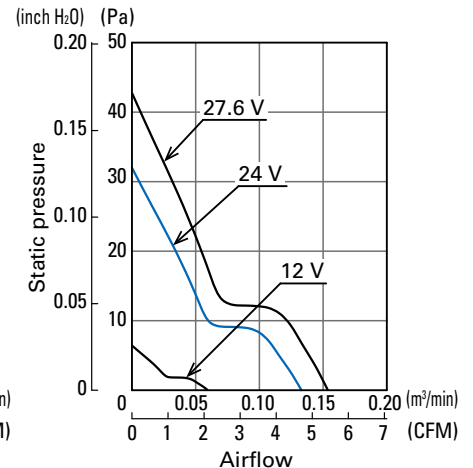
9RA0424H6001

Operating voltage range



9RA0424F6001

Operating voltage range

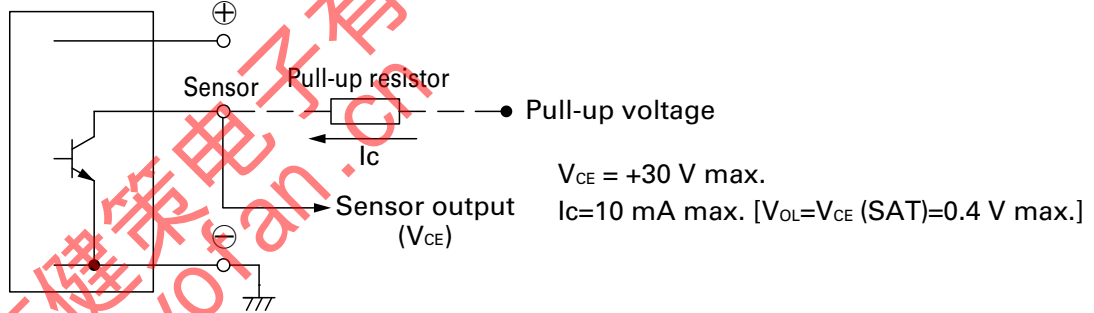


9RA0424M6001

■ Specifications for Pulse Sensors

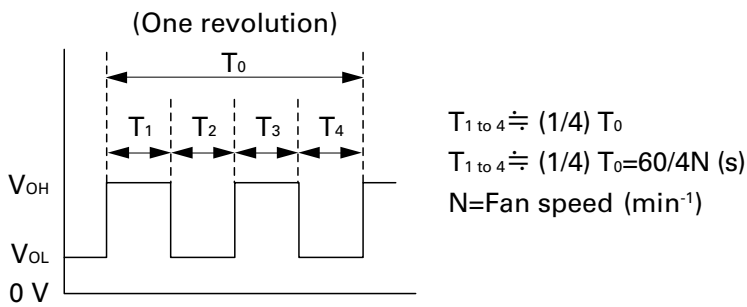
Output circuit: Open collector

Inside of DC fan

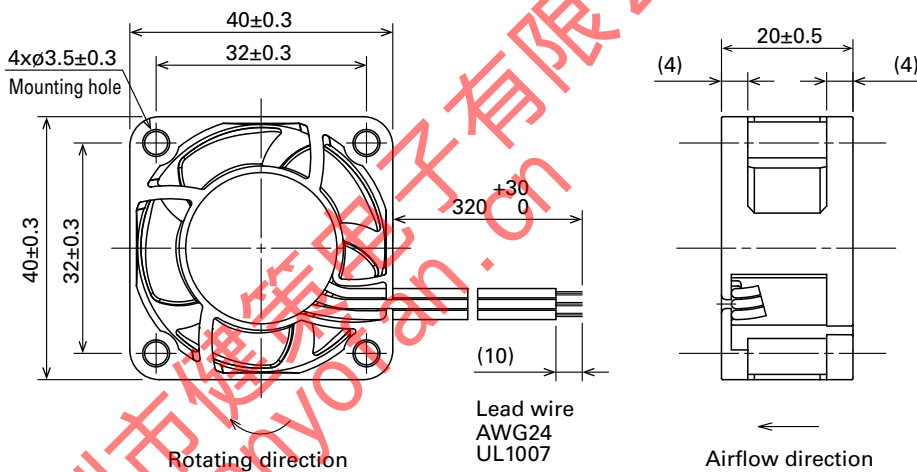


Output waveform (Need pull-up resistor)

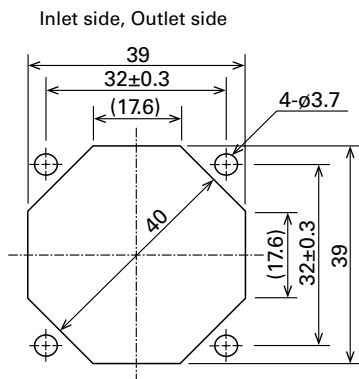
In case of steady running



Dimensions (unit: mm)



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



Options

Finger guards

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