# 40×40×15 mm

# San Ace 40WF 9WF type ( A A)



#### General Specifications

· Material	Frame: Plastic (Flammability: OL 94V-0), Impelier: Plastic (Flammability: OL 94V-0)
	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. 599.

· Dielectric strength ...... 50/60 Hz, 500 VAC, for 1 minute (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

#### Specifications -

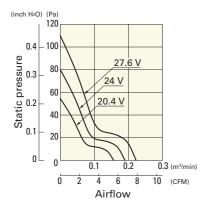
The models listed below have ribs and pulse sensors.

Model no.	Rated voltage	Operating voltage range	Rated current	Rated input	Rated speed	Max. a	irflow	Max. sta	tic pressure	SPL	Operating temperature	Expected life
Widdel IId.	[V]	[V]	[A]	[W]	[min-1]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
9WF0424H701	24	20.4 to 27.6	0.085	2.04	11300	0.195	6.9	80	0.32	38	-20 to +70	40000/60°C (70000/40°C)

Note: Sensor and control options are available for selection. Refer to the table on p. 637.

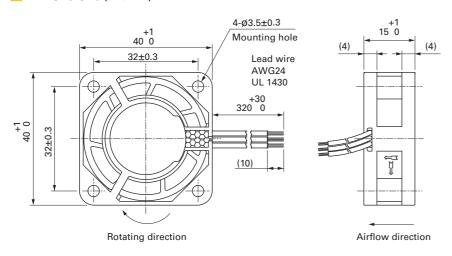
#### Airflow - Static Pressure Characteristics

# 9WF0424H701 With pulse sensor



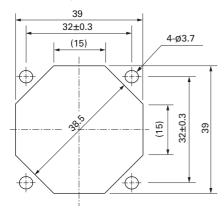
This fan can be used in environments with oil mist.\*

<sup>\*</sup> Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.



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

Inlet side, Outlet side



## Options

Finger guards

page: p. 584

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

# 40×40×20 mm

# San Ace 40WF 9WFA type 🛕 🖫 us

## General Specifications

· Material ...... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)

See the table below. (L10 life: 90% survival rate for continuous operation in free air at  $60^{\circ}$ C, rated voltage) Expected life at  $40^{\circ}$ C is for reference only.

· Motor protection function ...... Locked rotor burnout protection, Reverse polarity protection

For details, please refer to p. 599.

· Dielectric strength ...... 50/60 Hz, 500 VAC, for 1 minute (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

This fan can be used in environments with oil mist.\*

#### Specifications —

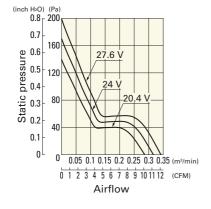
The models listed below have ribs and pulse sensors.

Model no.	Rated voltage	Operating voltage range	Rated current	Rated input	Rated speed	Max. a	irflow	Max. sta	tic pressure	SPL	Operating temperature	Expected life
Widdel IId.	[V]	[V]	[A]	[W]	[min-1]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
9WFA0424G6001	24	20.4 to 27.6	0.11	2.6	17000	0.31	10.9	170	0.68	48	-20 to +70	40000/60°C (70000/40°C)

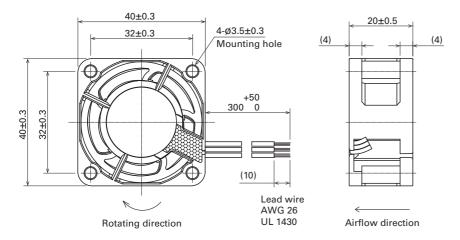
Note: Sensor and control options are available for selection. Refer to the table on p. 637.

#### Airflow - Static Pressure Characteristics

#### 9WFA0424G6001 With pulse sensor

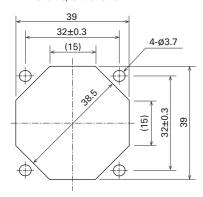


<sup>\*</sup> Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.



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

Inlet side, Outlet side



## Options

Finger guards

page: p. 584

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

# 40×40×20 mm

# San Ace 40WF 9WF type 1 A AN



#### General Specifications

· Material ...... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)

See the table below. (L10 life: 90% survival rate for continuous operation in free air at  $60^{\circ}$ C, rated voltage) Expected life at  $40^{\circ}$ C is for reference only.

Locked rotor burnout protection, Reverse polarity protection · Motor protection function .....

For details, please refer to p. 599.

· Dielectric strength ...... 50/60 Hz, 500 VAC, for 1 minute (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

This fan can be used in environments with oil mist.\*

#### Specifications —

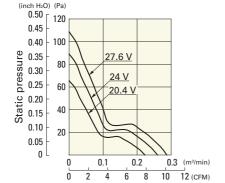
The models listed below have ribs and pulse sensors.

Model no.	Rated voltage	Operating voltage range	Rated current	Rated input	Rated speed	Max. a	irflow	Max. stat	tic pressure	SPL	Operating temperature	Expected life
Widder no.	[V]	[V]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
9WF0424H601	24	20.4 to 27.6	0.11	2.64	13100	0.26	9.2	90	0.361	42	-20 to +70	40000/60°C
9WF0424F601	24	20.4 to 27.0	0.076	1.82	11000	0.22	7.77	62.8	0.252	37	-20 10 +70	(70000/40°C)

Note: Sensor and control options are available for selection. Refer to the table on p. 637.

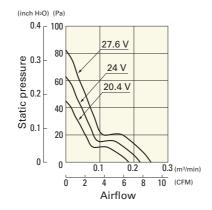
#### Airflow - Static Pressure Characteristics

# 9WF0424H601 With pulse sensor Operating voltage range



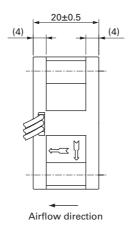
Airflow

#### 9WF0424F601 With pulse senso



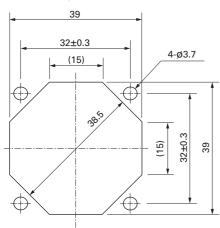
<sup>\*</sup> Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.

# +1 40 0 4-ø3.5±0.3 Mounting hole 32±0.3 +30 320 0 40 0 t $32 \pm 0.3$ (10) Lead wire AWG24 UL 1430 Rotating direction



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

Inlet side, Outlet side



# Options

Finger guards

page: p. 584

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

# 60×60×15 mm

# San Ace 60WF 9WF type 1 A AN



## General Specifications

· Material ...... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)

See the table below. (L10 life: 90% survival rate for continuous operation in free air at  $60^{\circ}$ C, rated voltage) Expected life at  $40^{\circ}$ C is for reference only.

· Motor protection function ...... Locked rotor burnout protection, Reverse polarity protection

For details, please refer to p. 599.

· Dielectric strength ...... 50/60 Hz, 500 VAC, for 1 minute (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

This fan can be used in environments with oil mist.\*

#### Specifications -

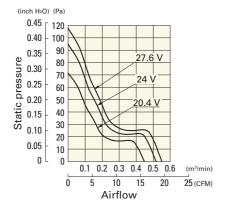
The models listed below have ribs and pulse sensors.

Model no.	Rated voltage	Operating voltage range	Rated current	Rated input	Rated speed	Max. a	airflow	Max. stat	ic pressure	SPL	Operating temperature	Expected life
Widdel IId.	[V]	[V]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
9WF0624H701	24	20.4 to 27.6	0.12	2.88	6800	0.52	18.3	95	0.38	44	-20 to +70	40000/60°C
												(70000/40°C)

Note: Sensor and control options are available for selection. Refer to the table on p. 637.

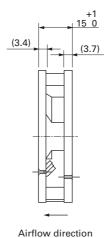
#### Airflow - Static Pressure Characteristics

#### 9WF0624H701 With pulse sensor



<sup>\*</sup> Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.

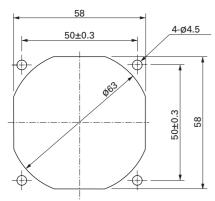
# 60±0.5 4-ø4.3±0.3 Mounting hole 50±0.3 Lead wire AWG24 UL 1430 +50 300 0 60±0.5 (10)



Rotating direction

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

Inlet side, Outlet side



## Options

Finger guards

page: p. 584

Model no.: 109-139E, 109-139H

# 60×60×20 mm



# San Ace 60WF 9WFA type

#### General Specifications

· Material Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)	· Material	Frame: Plastic (Flammability: UL 94V-0), Im	peller: Plastic (Flammability: UL 94V-0)
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See the table below. (L10 life: 90% survival rate for continuous operation in free air at  $60^{\circ}$ C, rated voltage) Expected life at  $40^{\circ}$ C is for reference only.

· Motor protection function ...... Locked rotor burnout protection, Reverse polarity protection

For details, please refer to p. 599.

· Dielectric strength ...... 50/60 Hz, 500 VAC, for 1 minute (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

This fan can be used in environments with oil mist.\* \* Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.

#### Specifications -

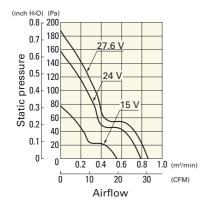
The models listed below have ribs and pulse sensors.

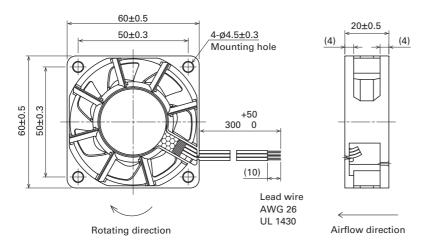
Model no.	Rated voltage	Operating voltage range	Rated current	Rated input	Rated speed	Max. a	irflow	Max. sta	tic pressure	SPL	Operating temperature	Expected life
Widdel IId.	[V]	[V]	[A]	[W]	[min-1]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
9WFA0624G6001	24	15 to 27.6	0.16	3.8	7700	0.79	27.9	158	0.63	48	-20 to +70	40000/60°C (70000/40°C)

Note: Sensor and control options are available for selection. Refer to the table on p. 637.

#### Airflow - Static Pressure Characteristics

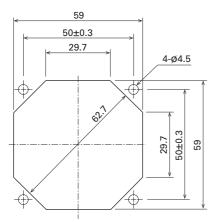
#### 9WFA0624G6001 With pulse sensor





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

Inlet side, Outlet side



## Options

Finger guards

page: p. 584

Model no.: 109-139E, 109-139H

# 60×60×20 mm





#### 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. 599.
· Dielectric strength	50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
· Insulation resistance	10 $\mbox{M}\Omega$ 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

This fan can be used in environments with oil mist.\*

#### Specifications -

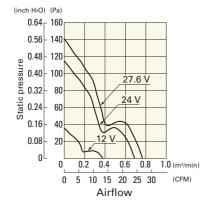
The models listed below have ribs and pulse sensors.

	Model no.	Rated voltage	Operating voltage range	Rated current	Rated input	Rated speed	Max. a	airflow	Max. stat	ic pressure	SPL	Operating temperature	Expected life
	Wiodel IIo.	[V]	[V]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
Ī	9WF0624H601	24	12 to 27.6	0.15	3.6	6600	0.69	24.3	114	0.45	42	-20 to +70	40000/60°C (70000/40°C)
													(10000/40 6)

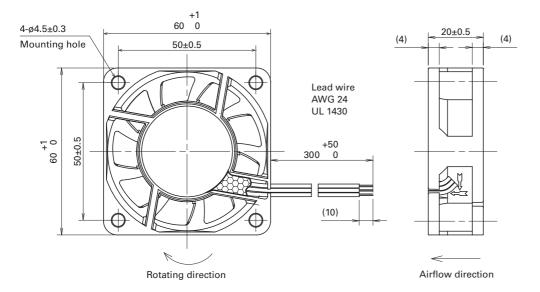
Note: Sensor and control options are available for selection. Refer to the table on p. 637.

#### Airflow - Static Pressure Characteristics

#### 9WF0624H601 With pulse sensor

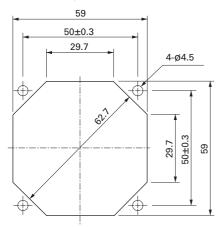


<sup>\*</sup> Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.



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

Inlet side, Outlet side



## Options

Finger guards

page: p. 584

Model no.: 109-139E, 109-139H

# 60×60×25 mm





#### 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. 599.

· Dielectric strength ...... 50/60 Hz, 500 VAC, for 1 minute (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

This fan can be used in environments with oil mist.\*

#### Specifications —

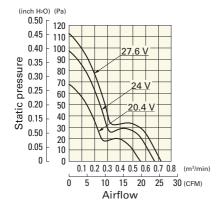
The models listed below have ribs and pulse sensors.

Model no.	Rated voltage	Operating voltage range	Rated current	Rated input	Rated speed	Max. a	irflow	Max. sta	tic pressure	SPL	Operating temperature	Expected life
	[V]	[V]	[A]	[W]	[min-1]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> O]	[dB (A)]	[°C]	[h]
9WF0624H401	24	20.4 to 27.6	0.15	3.6	6500	0.67	23.6	97	0.38	41	-20 to +70	40000/60°C (70000/40°C)

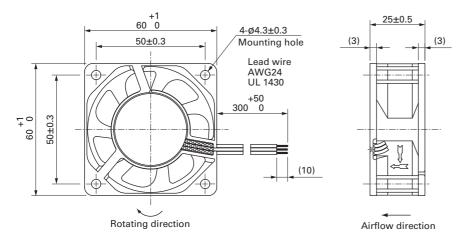
Note: Sensor and control options are available for selection. Refer to the table on p. 637.

#### Airflow - Static Pressure Characteristics

#### 9WF0624H401 With pulse sensor

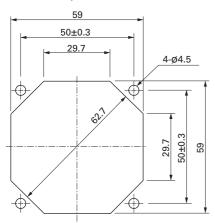


<sup>\*</sup> Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.



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

Inlet side, Outlet side



# Options

Finger guards

page: p. 584

Model no.: 109-139E, 109-139H

# 80×80×20 mm



# San Ace 80WF 9WFA type 🛕 🖫 us

## General Specifications

· Material ...... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)

See the table below. (L10 life: 90% survival rate for continuous operation in free air at  $60^{\circ}$ C, rated voltage) Expected life at  $40^{\circ}$ C is for reference only.

· Motor protection function ...... Locked rotor burnout protection, Reverse polarity protection

For details, please refer to p. 599.

· Dielectric strength ...... 50/60 Hz, 500 VAC, for 1 minute (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

This fan can be used in environments with oil mist.\*

#### Specifications —

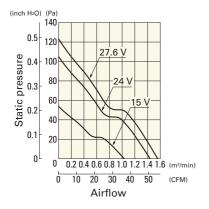
The models listed below have ribs and pulse sensors.

Model no.	Rated voltage	Operating voltage range	Rated current	Rated input	Rated speed	Max. a	irflow	Max. sta	tic pressure	SPL	Operating temperature	Expected life
Widdel IId.	[V]	[V]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
9WFA0824G6001	24	15 to 27.6	0.15	3.6	6000	1.44	50.8	105	0.42	48	-20 to +70	40000/60°C (70000/40°C)

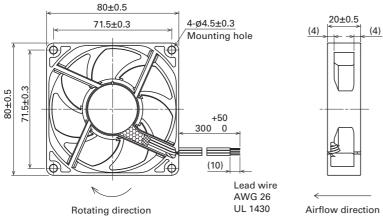
Note: Sensor and control options are available for selection. Refer to the table on p. 637.

#### Airflow - Static Pressure Characteristics

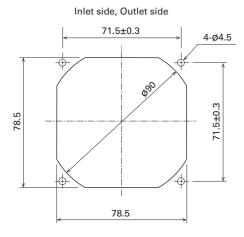
#### 9WFA0824G6001 With pulse sensor



<sup>\*</sup> Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.



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



## Options

Finger guards

page: p. 584

Model no.: 109-049E, 109-049H, 109-049C

# 80×80×25 mm

# San Ace 80WF 9WF type 1 A AN



## General Specifications

· Material ...... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)

See the table below. (L10 life: 90% survival rate for continuous operation in free air at  $60^{\circ}$ C, rated voltage) Expected life at  $40^{\circ}$ C is for reference only.

· Motor protection function ...... Locked rotor burnout protection, Reverse polarity protection

For details, please refer to p. 599.

· Dielectric strength ...... 50/60 Hz, 500 VAC, for 1 minute (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

This fan can be used in environments with oil mist.\*

#### Specifications -

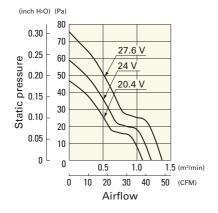
The models listed below have ribs and pulse sensors.

Model no.	Rated voltage   Operating voltage range		Rated current	Rated input	Rated speed	Max. airflow		Max. static pressure		SPL	Operating temperature	Expected life
	[V]	[V]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
9WF0824S401	24	20.4 to 27.6	0.16	3.84	4000	1.2	42.4	58	0.23	38	-20 to +70	40000/60°C (70000/40°C)

Note: Sensor and control options are available for selection. Refer to the table on p. 637.

#### Airflow - Static Pressure Characteristics

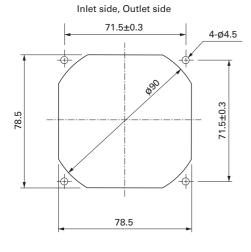
#### 9WF0824S401 With pulse sensor



<sup>\*</sup> Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.

# 4-ø4.3±0.3 80±0.5 (3) Mounting hole 71.5±0.3 Lead wire AWG24 UL 1430 +30 300 0 71.5±0.3 80±0.5 (10) Rotating direction Airflow direction

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



## Options

Finger guards

page: p. 584

Model no.: 109-049E, 109-049H, 109-049C

# 92×92×25 mm



# San Ace 92WF 9WFA type 🛕 🖫 us

## General Specifications

· Material ...... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)

See the table below. (L10 life: 90% survival rate for continuous operation in free air at  $60^{\circ}$ C, rated voltage) Expected life at  $40^{\circ}$ C is for reference only.

Locked rotor burnout protection, Reverse polarity protection · Motor protection function .....

For details, please refer to p. 599.

· Dielectric strength ...... 50/60 Hz, 500 VAC, for 1 minute (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

This fan can be used in environments with oil mist.\*

#### Specifications —

The models listed below have ribs and pulse sensors.

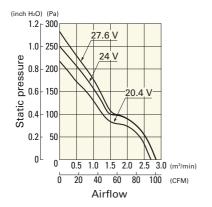
Model no.	Rated voltage   Operating voltage range		Rated current	Rated input	Rated speed	Max. airflow		Max. static pressure		SPL	Operating temperature	Expected life
	[V]	[V]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
9WFA0924G4001	- 24	20.4 to 27.6	0.45	10.8	7350	2.85	100.6	250	1.0	56	-20 to +70	40000/60°C
9WFA0924H4001	24	20.4 to 27.6	0.28	6.72	6100	2.35	83.0	171	0.69	52	-20 10 +70	(70000/40°C)

Note: Sensor and control options are available for selection. Refer to the table on p. 637.

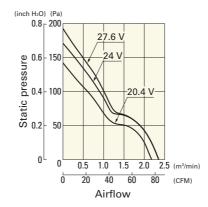
#### Airflow - Static Pressure Characteristics

# 9WFA0924G4001 With pulse sensor

#### Operating voltage range



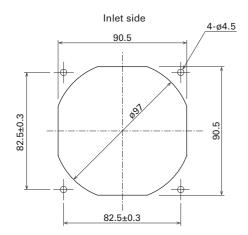
#### 9WFA0924H4001 With pulse sensor



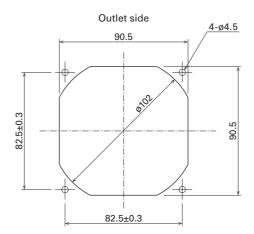
<sup>\*</sup> Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.

#### 92±0.5 82.5±0.3 4-ø4.5±0.3 (4) Mounting hole Lead wire AWG 26 82.5±0.3 UL 1430 300 +50 (10)

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



Rotating direction



#### Options

Finger guards

page: p. 584

Airflow direction

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

# 92×92×25 mm

# San Ace 92WF 9WF type 🛕 🖫 us



#### General Specifications

· Material ...... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)

See the table below. (L10 life: 90% survival rate for continuous operation in free air at  $60^{\circ}$ C, rated voltage) Expected life at  $40^{\circ}$ C is for reference only.

· Motor protection function ...... Locked rotor burnout protection, Reverse polarity protection

For details, please refer to p. 599.

· Dielectric strength ...... 50/60 Hz, 500 VAC, for 1 minute (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

This fan can be used in environments with oil mist.\*

#### Specifications —

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

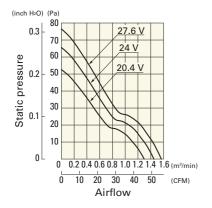
	Model no.	Rated voltage   Operating voltage range		Rated current	Rated input	Rated speed	Max. airflow		Max. static pressure		SPL	Operating temperature	Expected life
	Model IIO.	[V]	[V]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
9W	NF0924H401	24	20.4 to 27.6	0.13	3.12	3900	1.45	51.2	66	0.26	42.5	-20 to +70	40000/60°C
	WF0324F140T	24	20.4 to 27.0	0.13	3.12	3300	1.43	31.2	00	0.20	42.3	-20 10 +70	(70000/40°C)

Note: Sensor and control options are available for selection. Refer to the table on p. 637.

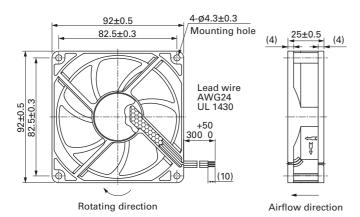
#### Airflow - Static Pressure Characteristics

#### 9WF0924H401 With pulse sensor

#### Operating voltage range

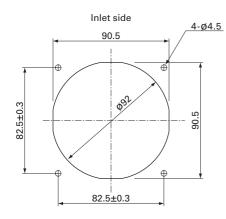


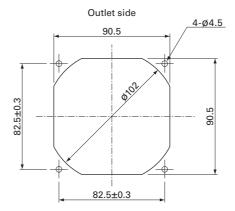
#### Dimensions (unit: mm) (With ribs)



<sup>\*</sup> Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.

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





# Options

Finger guards

page: p. 584

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

# 92×92×32 mm



# San Ace 92WF 9WFA type 🛕 🖫 us

## General Specifications

· Material ...... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)

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. 599.

· Dielectric strength ...... 50/60 Hz, 500 VAC, for 1 minute (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

This fan can be used in environments with oil mist.\*

#### Specifications —

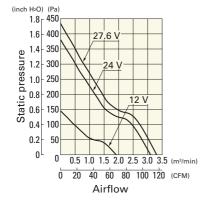
The models listed below have ribs and pulse sensors.

Model no.	Rated voltage	Operating voltage range	Rated current	Rated input	Rated speed	Max. airflow		Max. static pressure		SPL	Operating temperature	Expected life
Model IIo.	[V]	[V]	[A]	[W]	[min-1]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
9WFA0924G2001	24	12 to 27.6	0.58	13.9	9600	3.1	109.5	380	1.53	63	-20 to +70	40000/60°C (70000/40°C)
												(10000/40 0)

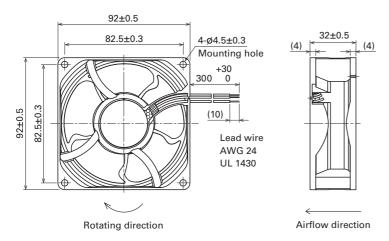
Note: Sensor and control options are available for selection. Refer to the table on p. 637.

#### Airflow - Static Pressure Characteristics

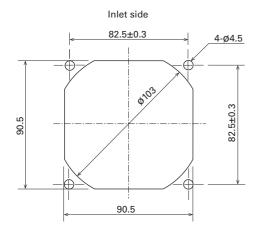
#### 9WFA0924G2001 With pulse sensor

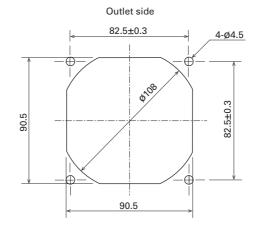


<sup>\*</sup> Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.



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





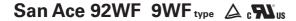
# Options

Finger guards

page: p. 584

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

# 92×92×32 mm





#### General Specifications

· Material ...... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)

See the table below. (L10 life: 90% survival rate for continuous operation in free air at  $60^{\circ}$ C, rated voltage) Expected life at  $40^{\circ}$ C is for reference only.

Locked rotor burnout protection, Reverse polarity protection · Motor protection function .....

For details, please refer to p. 599.

· Dielectric strength ...... 50/60 Hz, 500 VAC, for 1 minute (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

This fan can be used in environments with oil mist.\*

#### Specifications —

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

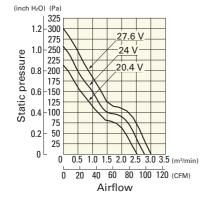
Model no.	Rated voltage	Operating voltage range	Rated current	Rated input	Rated speed	Max. a	irflow	Max. stat	tic pressure	SPL	Operating temperature	Expected life
woder no.	[V]	[V]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
9WF0924S201	- 24	20.4 to 27.6	0.5	12	7300	2.8	98.9	255	1.02	58	-20 to +70	40000/60°C
9WF0924H201	24	20.4 to 27.6	0.35	8.4	6500	2.45	86.5	200	0.8	56	-20 (0 +/0	(70000/40°C)

Note: Sensor and control options are available for selection. Refer to the table on p. 637.

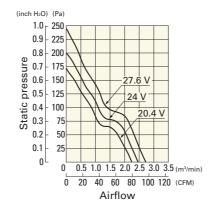
#### Airflow - Static Pressure Characteristics

# 9WF0924S201 With pulse sensor

#### Operating voltage range



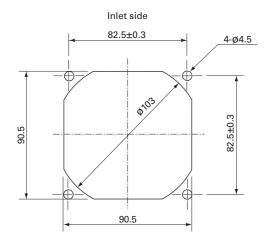
#### 9WF0924H201 With pulse sensor



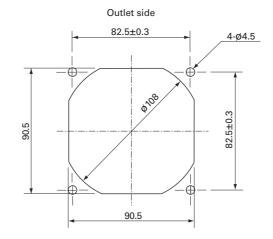
<sup>\*</sup> Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.

# 92±0.5 Mounting hole 82.5±0.3 32±0.5 (4) (4) Lead wire AWG24 UL 1430 +30 300 0 92±0.5 82.5±0.3 (10)

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



Rotating direction



## Options

Finger guards

page: p. 584

Airflow direction

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

# 120×120×38 mm



# San Ace 120WF 9WF type @ A N

## General Specifications

· Material ...... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)

See the table below. (L10 life: 90% survival rate for continuous operation in free air at  $60^{\circ}$ C, rated voltage) Expected life at  $40^{\circ}$ C is for reference only.

· Motor protection function ...... Locked rotor burnout protection, Reverse polarity protection

For details, please refer to p. 599.

· Dielectric strength ...... 50/60 Hz, 500 VAC, for 1 minute (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

This fan can be used in environments with oil mist.\*

#### Specifications —

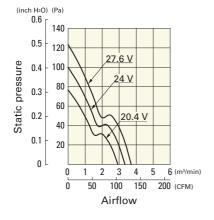
The models listed below have ribs and pulse sensors.

Model no.	Rated voltage   Operating voltage range		Rated current	Rated input	Rated speed	Max. airflow		Max. static pressure		SPL	Operating temperature	Expected life
Model IIO.	[V]	[V]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
9WF1224H101	24	20.4 to 27.6	0.32	7.68	3100	3.34	118	100	0.4	46	-20 to +70	40000/60°C (70000/40°C)
												(10000/40 6)

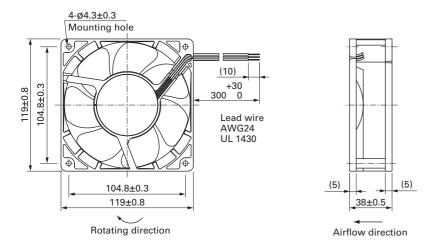
Note: Sensor and control options are available for selection. Refer to the table on p. 637.

#### Airflow - Static Pressure Characteristics

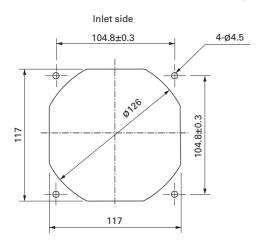
#### 9WF1224H101 With pulse sensor

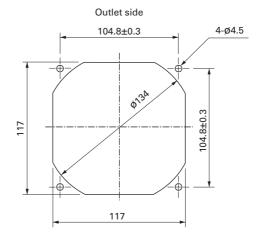


<sup>\*</sup> Environment where cutting oil creates oil mist. Conduct a product evaluation with the type of oil to be used.



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





## Options

Finger guards

page: p. 585

Model no.: 109-019E, 109-019K, 109-019C, 109-019H