MDS Series

High-Performance Models

6.77 in. dia.×2.01 in. thic (172 mm dia.×51 mm thic)

SAFETY STD. DC INPUT

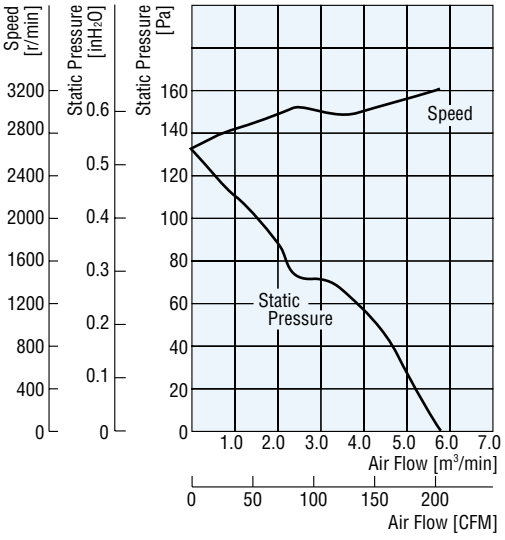
Materials
Frame: Die Cast Aluminum
Blades: Resin
Flammability Grade: V-O

Specifications

Speed Type	Model	Rated Voltage	Rated Current	Rated Speed	Max. Air Flow		Max. Static Pressure		Noise Level
		DC V	A	r/min	CFM	m^3/min	in H_2O	Pa	dB(A)
Standard-Speed	**MDS1751-24**	24	0.70	3200	212	6.0	0.55	137	47

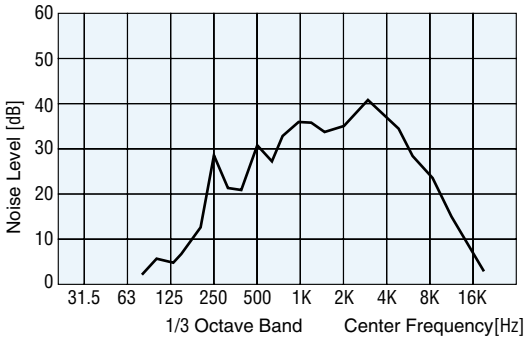
- Values for maximum air flow and maximum static pressure are measured by the double-chamber method.
- Noise level is measured in the A range, at a distance of 3.3 feet from the fan intake side.
- Operating Voltage Range: +10%, −40% of the rated voltage
- An overheat protection function is installed.
- All products are for use in the class Ⅱ (for EN60950), low voltage, limited energy circuit (for UL/CSA standard) or in the safety extra low voltage range (for EN60950).
- Do not touch the fan blades when the fan is in operation. The use of the optional finger guard is recommended to ensure protection.
- Standards specifications are listed on page D-2.

Air Flow — Static Pressure Characteristics



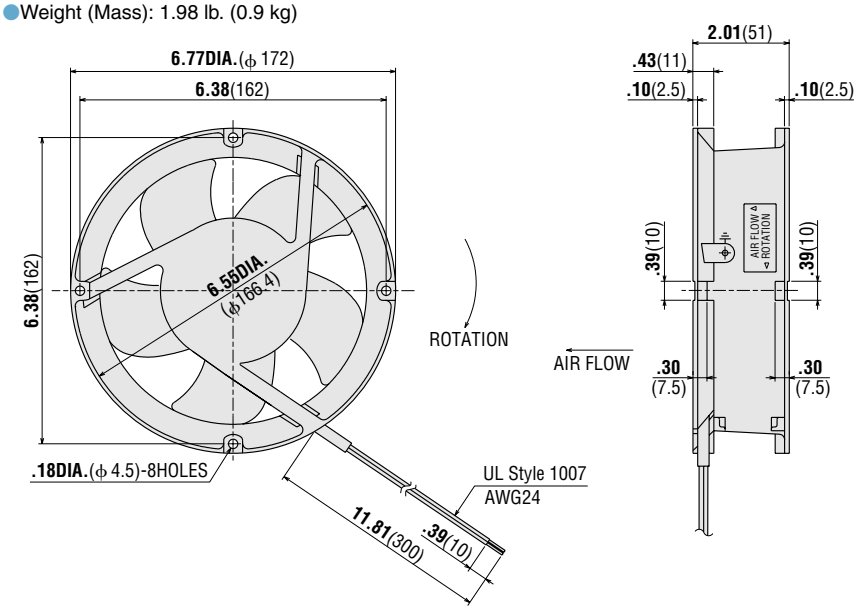
Audible Noise Frequency Analysis

Measured at a distance of 3.3 feet from the fan intake side

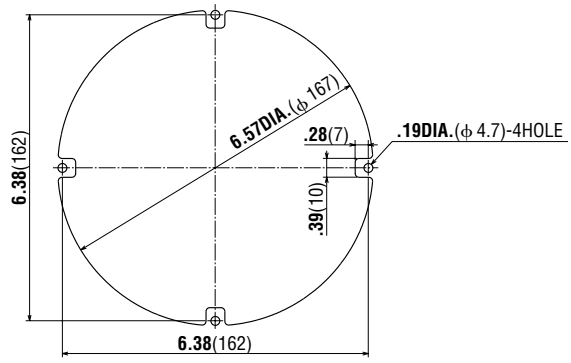


Dimensions Scale 1/4, Unit = inch (mm)

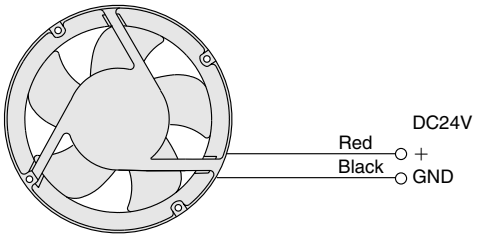
●Weight (Mass): 1.98 lb. (0.9 kg)



Panel Cut-Out Scale 1/4, Unit = inch (mm)



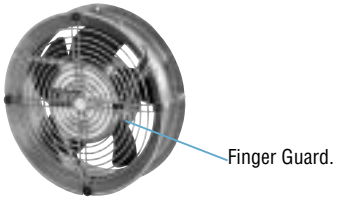
Wiring Diagram



Accessories (Sold separately)

Item	Model	Safety Standards	Page
Finger Guard	**FG17D**	✻	C-100

✻ These products have been designed to pass tests set forth under the UL and CSA standards for equipment used in fans. They conform to the standards only when used on an ORIX.FAN .



MDS Series

High-Performance Models

4.69 in. sq.×1.00 in. thic (119 mm sq.×25.4 mm thic)

SAFETY STD. DC INPUT

Materials
Frame: Die Cast Aluminum
Blades: Resin
Flammability Grade: V-O

■ Specifications

Speed Type		Model	Rated Voltage DC V	Rated Current A	Rated Speed r/min	Max. Air Flow CFM	Max. Air Flow m^3/min	Max. Static Pressure in H_2O	Max. Static Pressure Pa	Noise Level dB(A)
Standard-Speed	Low speed alarm type	**MDS1225-12M**	12	0.63	3000	95	2.7	0.279	70	46
	Standard type	**MDS1225-12**	12	0.58						
	Low speed alarm type	**MDS1225-24M**	24	0.34						
	Standard type	**MDS1225-24**	24	0.30						

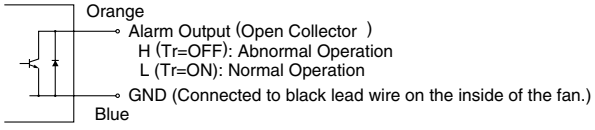
- Values for maximum air flow and maximum static pressure are measured by the double-chamber method.
- Noise level is measured in the A range, at a distance of 3.3 feet from the fan intake side.
- Operating Voltage Range: ±10% of the rated voltage
- An overheat protection function is installed.
- All products are for use in the class Ⅱ (for EN60950), low voltage, limited energy circuit (for UL/CSA standard) or in the safety extra low voltage range (for EN60950).
- Do not touch the fan blades when the fan is in operation. The use of the optional finger guard is recommended to ensure protection.
- Standards specifications are listed on page D-2.

■ Alarm Specifications

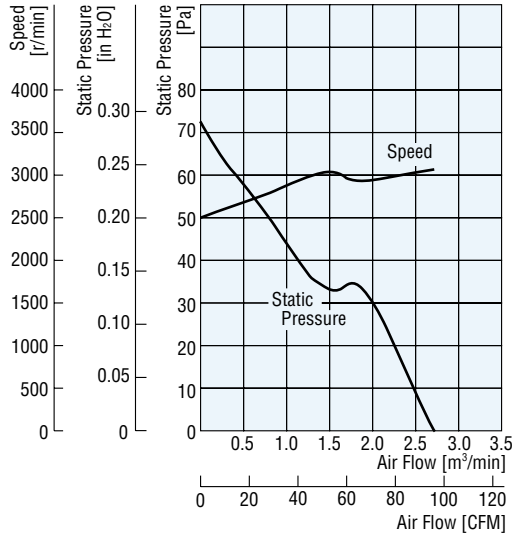
	Speed	Open Collector Output	Internal Transistor
Normal Operation	2500 r/min Min.	Low Level	ON
Abnormal Operation	1700 r/min Max.	High Level	OFF

Maximum Voltage : V_{out} = 30V DC max.
Maximum Current : I_{out} = 15mA max.

■ Alarm Circuit

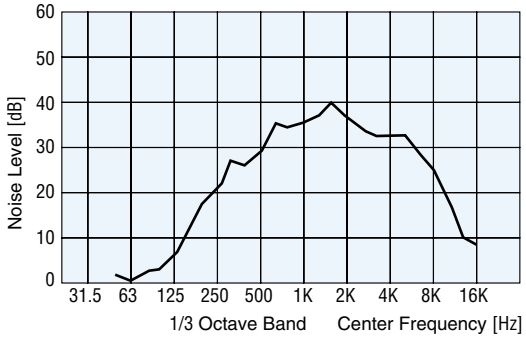


■ Air Flow — Static Pressure Characteristics



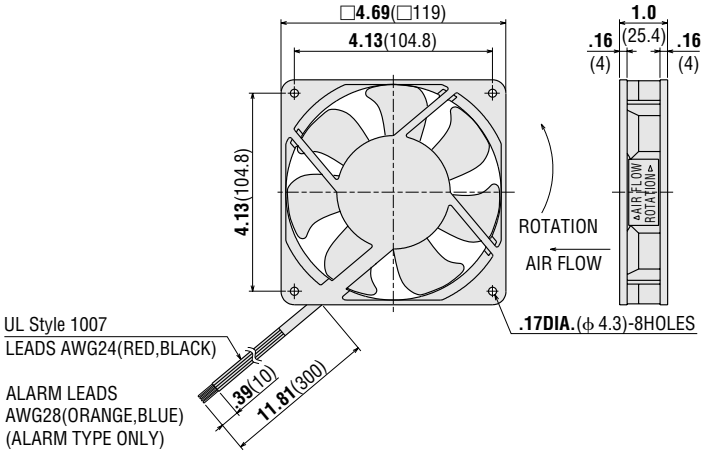
■ Audible Noise Frequency Analysis

Measured at a distance of 3.3 feet from the fan intake side

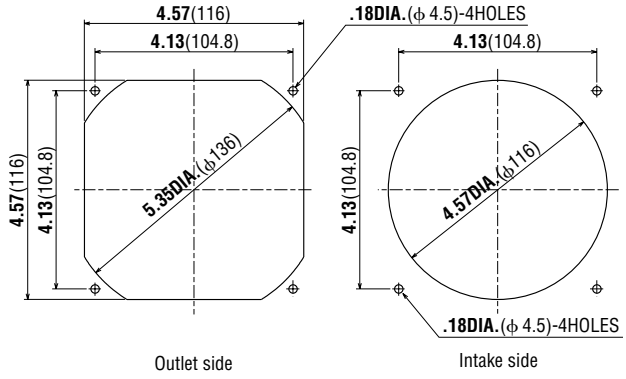


Dimensions Scale 1/4, Unit = inch (mm)

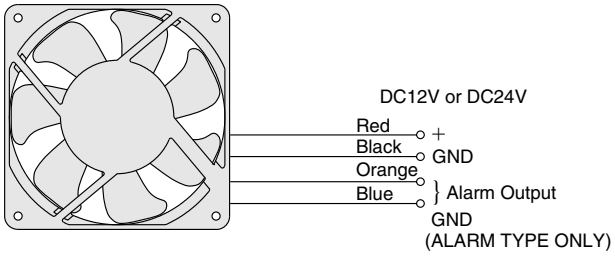
●Weight (Mass): 0.66 lb. (0.3 kg)



Panel Cut-Out Scale 1/4, Unit = inch (mm)



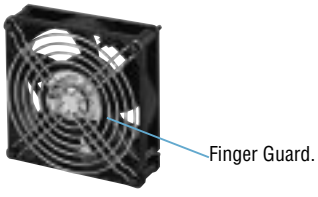
Wiring Diagram



Accessories (Sold separately)

Item	Model	Safety Standards	Page
Finger Guard	**FG12D**	✻	C-100
Filter	**FL12**	—	C-103
Screen	**FS12**	—	C-106

✻ These products have been designed to pass tests set forth under the UL and CSA standards for equipment used in fans. They conform to the standards only when used on an ORIX.FAN.



● A filter or screen can be installed in place of the finger guard.

MD Series

4.69 in. sq.×1.00 in. thic
(119 mm sq.×25.4 mm thic)

SAFETY STD. DC INPUT

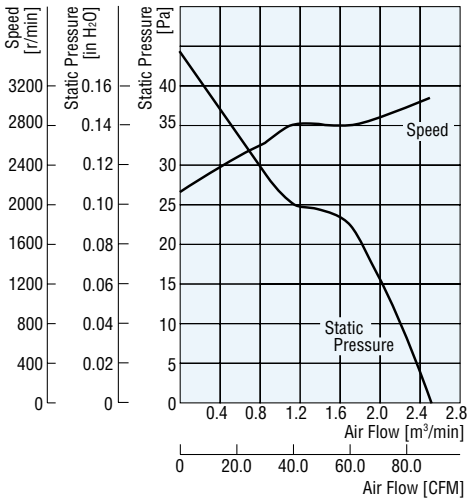
Materials
Frame: Die Cast Aluminum
Blades: Resin
Flammability Grade: V-O

Specifications

Speed Type	Model	Rated Voltage DC V	Rated Current A	Rated Speed r/min	Max. Air Flow CFM	Max. Air Flow m^3/min	Max. Static Pressure in H_2O	Max. Static Pressure Pa	Noise Level dB(A)
Standard-Speed	**MD1225-12**	12	0.47	3100	88.3	2.5	0.17	43	45
	MD1225-24	24	0.26						

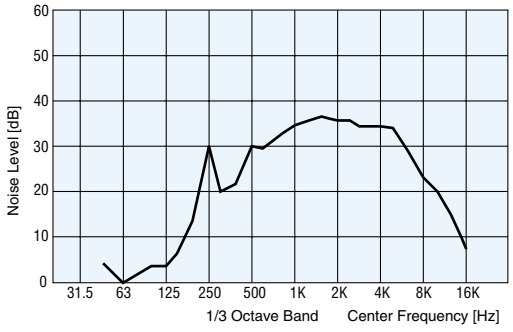
- Values for maximum air flow and maximum static pressure are measured by the double-chamber method.
- Noise level is measured in the A range, at a distance of 3.3 feet from the fan intake side.
- An overheat protection function is installed.
- All products are for use in the class Ⅱ (for EN60950), low voltage, limited energy circuit (for UL/CSA standard) or in the safety extra low voltage range (for EN60950).
- Do not touch the fan blades when the fan is in operation. The use of the optional finger guard is recommended to ensure protection.
- Standards specifications are listed on page D-2.

Air Flow — Static Pressure Characteristics



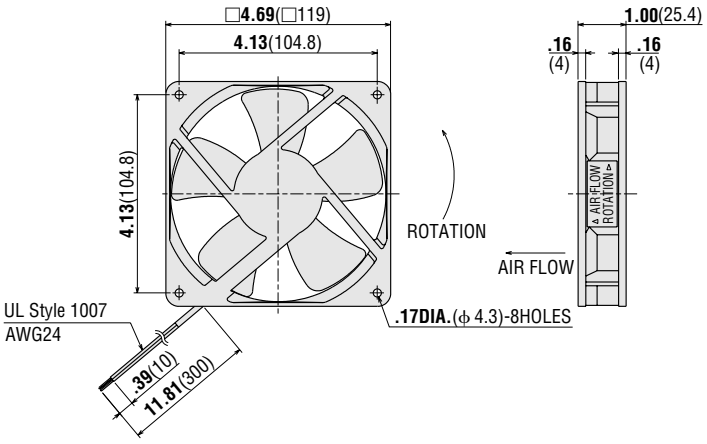
Audible Frequency Analysis

Measured at a distance of 3.3 feet from the fan intake side

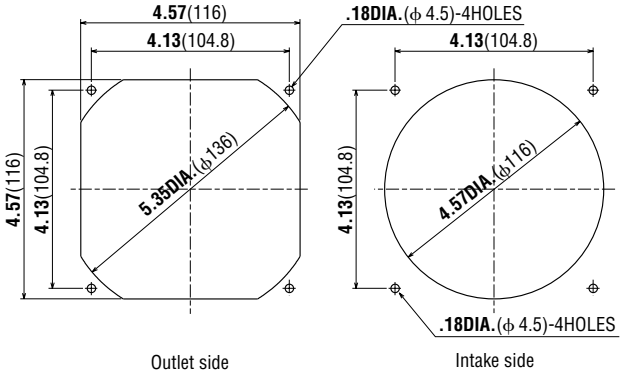


Dimensions Scale 1/4, Unit = inch (mm)

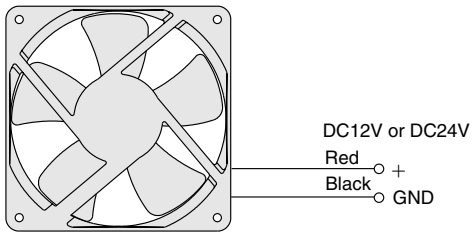
● Weight (Mass): 0.42 lb. (0.19 kg)



Panel Cut-Out Scale 1/4, Unit = inch (mm)



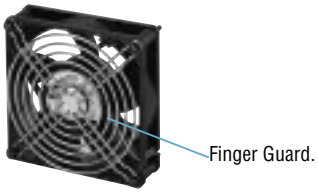
Wiring Diagram



Accessories (Sold separately)

Item	Model	Safety Standards	Page
Finger Guard	**FG12D**	✻	C-100
Filter	**FL12**	—	C-103
Screen	**FS12**	—	C-106

✻ These products have been designed to pass tests set forth under the UL and CSA standards for equipment used in fans. They conform to the standards only when used on an ORIX.FAN.



● A filter or screen can be installed in place of the finger guard.

MD Series

3.62 in. sq.×1.00 in. thic
(92 mm sq.×25.4 mm thic)

SAFETY STD. DC INPUT

Materials
Frame: Resin
Flammability Grade: V-O
Blades: Resin
Flammability Grade: V-O

Specifications

Speed Type	Model		Rated Voltage	Rated Current	Rated Speed	Max. Air Flow		Max. Static Pressure		Noise Level
	Stall alarm type	Standard type	DC V	A	r/min	CFM	m^3/min	in H_2O	Pa	dB(A)
Standard-Speed	**MD925A-12L**	**MD925A-12**	12	0.24	3400	45.9	1.30	0.20	49	36
	MD925A-24L	**MD925A-24**	24	0.12						
Middle-Speed	—	**MD925AM-12**	12	0.15	2800	38.8	1.10	0.14	34	31
	—	**MD925AM-24**	24	0.09						
Low-Speed	—	**MD925AL-12**	12	0.10	2200	31.8	0.90	0.09	22	28
	—	**MD925AL-24**	24	0.07						

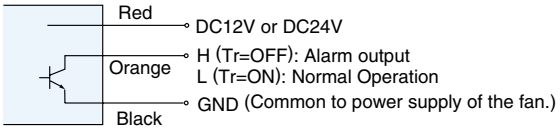
- Values for maximum air flow and maximum static pressure are measured by the double-chamber method.
- Noise level is measured in the A range, at a distance of 3.3 feet from the fan intake side.
- An overheat protection function is installed.
- All products are for use in the class Ⅱ (for EN60950), low voltage, limited energy circuit (for UL/CSA standard) or in the safety extra low voltage range (for EN60950).
- Do not touch the fan blades when the fan is in operation. The use of the optional finger guard is recommended to ensure protection.
- Standards specifications are listed on page D-2.

Alarm Specifications

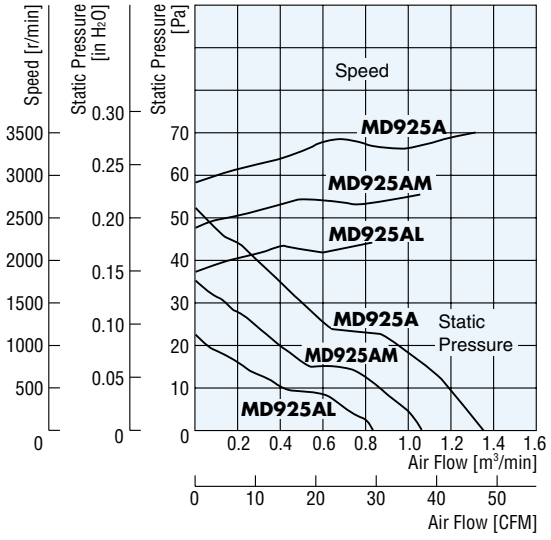
	Open Collector Output	Internal Transistor
Normal Operation	Low Level	ON
When locked	High Level	OFF

Maximum Voltage : V_{out} = 30V DC max.
Maximum Current : I_{out} = 5mA max.

Alarm Circuit

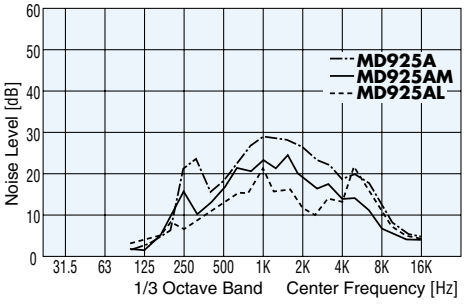


Air Flow — Static Pressure Characteristics



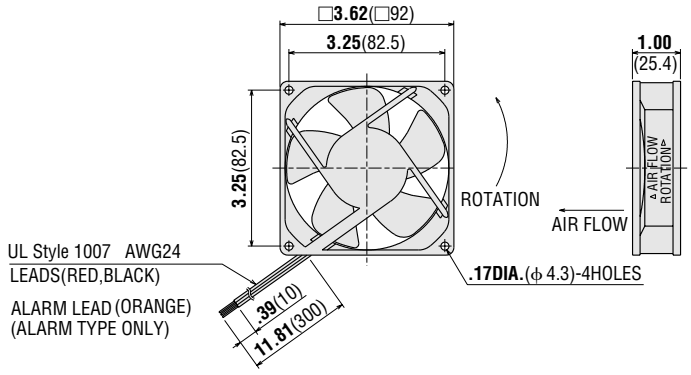
Audible Noise Frequency Analysis

Measured at a distance of 3.3 feet from the fan intake side

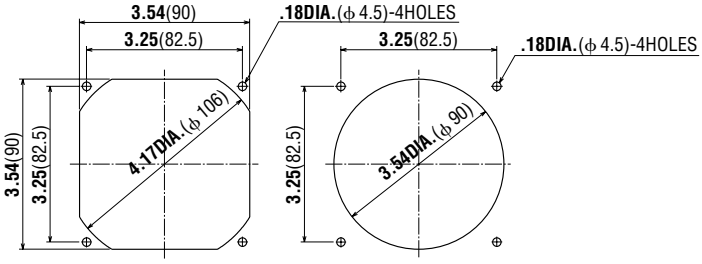


Dimensions Scale 1/4, Unit = inch (mm)

●Weight (Mass): 0.26 lb. (0.12 kg)

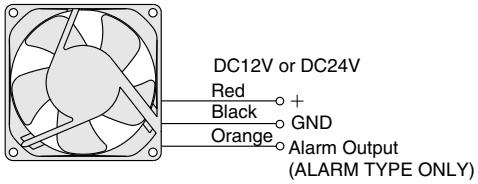


Panel Cut-Out Scale 1/4, Unit = inch (mm)



Outlet side Intake side

Wiring Diagram

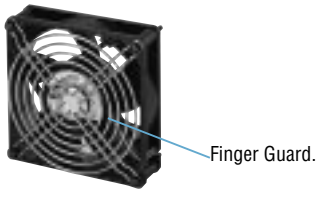


Accessories (Sold separately)

Item	Model	Safety Standards	Page
Finger Guard	**FG9D**	✻1	C-100
✻2 Filter	**FL9**	—	C-103
Screen	**FS9**	—	C-106

✻1 These products have been designed to pass tests set forth under the UL and CSA standards for equipment used in fans. They conform to the standards only when used on an ORIX.FAN.

✻2 Use M3 metric size screws to attach the filter to the fan frame.



● A filter or screen can be installed in place of the finger guard.

MD Series

3.15 in. sq.×1.00 in. thic
(80 mm sq.×25.4 mm thic)

SAFETY STD. DC INPUT

Materials
Frame: Resin
Flammability Grade: V-O
Blades: Resin
Flammability Grade: V-O

Specifications

Speed Type	Model		Rated Voltage	Rated Current	Rated Speed	Max. Air Flow		Max. Static Pressure		Noise Level
	Stall alarm type	Standard type	DC V	A	r/min	CFM	m^3/min	in H_2O	Pa	dB(A)
Standard-Speed	**MD825B-12L**	**MD825B-12**	12	0.25	3800	35.3	1.00	0.20	49	35
	MD825B-24L	**MD825B-24**	24	0.14						
Middle-Speed	—	**MD825BM-12**	12	0.15	2850	25.8	0.73	0.12	29	29
	—	**MD825BM-24**	24	0.09						
Low-Speed	—	**MD825BL-12**	12	0.07	2100	19.4	0.55	0.06	16	25

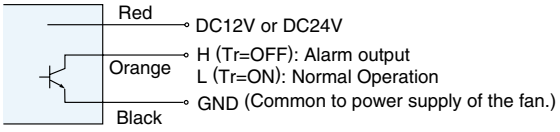
- Values for maximum air flow and maximum static pressure are measured by the double-chamber method.
- Noise level is measured in the A range, at a distance of 3.3 feet from the fan intake side.
- An overheat protection function is installed.
- All products are for use in the class Ⅱ (for EN60950), low voltage, limited energy circuit (for UL/CSA standard) or in the safety extra low voltage range (for EN60950).
- Do not touch the fan blades when the fan is in operation. The use of the optional finger guard is recommended to ensure protection.
- Standards specifications are listed on page D-2.

Alarm Specifications

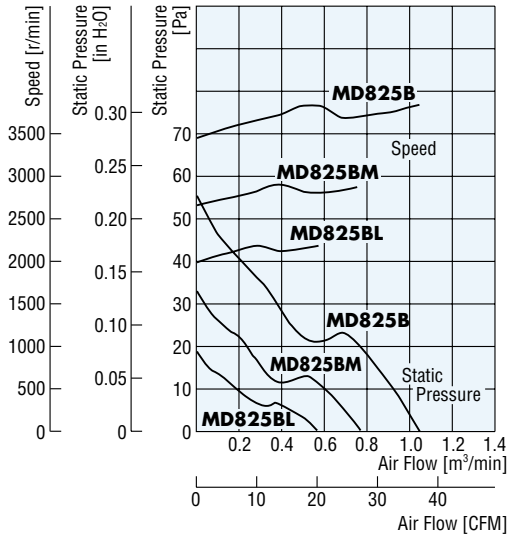
	Open Collector Output	Internal Transistor
Normal Operation	Low Level	ON
When locked	High Level	OFF

Maximum Voltage : V_{out} = 30V DC max.
Maximum Current : I_{out} = 5mA max.

Alarm Circuit

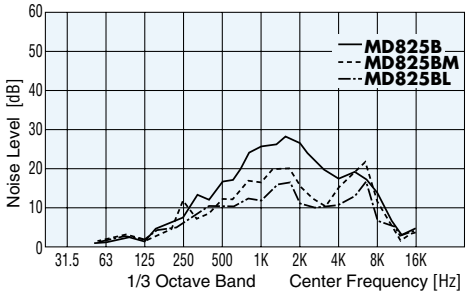


Air Flow — Static Pressure Characteristics



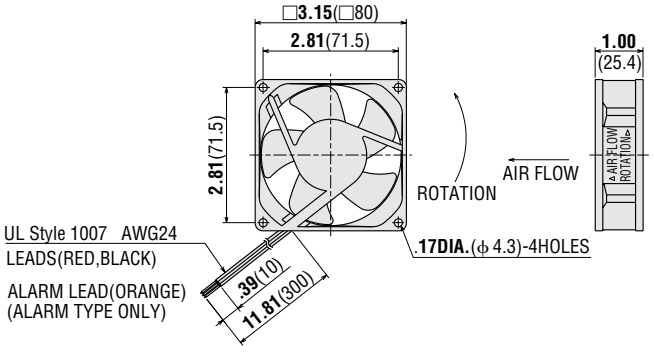
Audible Noise Frequency Analysis

Measured at a distance of 3.3 feet from the fan intake side

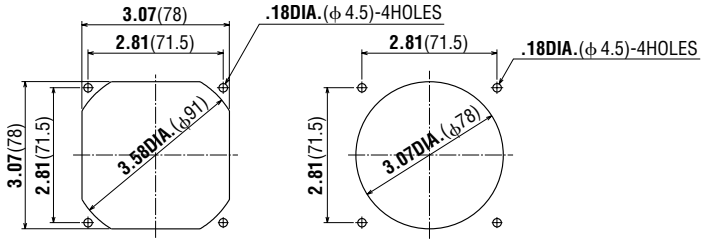


Dimensions Scale 1/4, Unit = inch (mm)

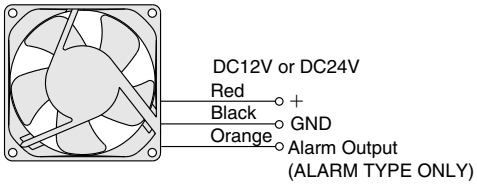
●Weight (Mass): 0.24 lb. (0.11 kg)



Panel Cut-Out Scale 1/4, Unit = inch (mm)



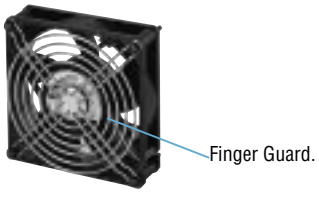
Wiring Diagram



Accessories (Sold separately)

Item	Model	Safety Standards	Page
Finger Guard	**FG8D**	✻	C-100
Filter	**FL8**	—	C-103
Screen	**FS8**	—	C-106

✻ These products have been designed to pass tests set forth under the UL and CSA standards for equipment used in fans. They conform to the standards only when used on an ORIX.FAN.



● A filter or screen can be installed in place of the finger guard.

MD Series

2.44 in. sq.×1.00 in. thic (62 mm sq.×25.4 mm thic)

SAFETY STD. DC INPUT

Materials
Frame: Resin
Flammability Grade: V-O
Blades: Resin
Flammability Grade: V-O

Specifications

Speed Type	Model: Stall alarm type	Model: Standard type	Rated Voltage DC V	Rated Current A	Rated Speed r/min	Max. Air Flow CFM	Max. Air Flow m^3/min	Max. Static Pressure in H_2O	Max. Static Pressure Pa	Noise Level dB(A)
Standard-Speed	**MD625B-12L**	**MD625B-12**	12	0.16	4000	18	0.50	0.20	49	30
	MD625B-24L	**MD625B-24**	24	0.10						
Middle-Speed	—	**MD625BM-12**	12	0.10	3000	13	0.37	0.1	27	25
	—	**MD625BM-24**	24	0.07						

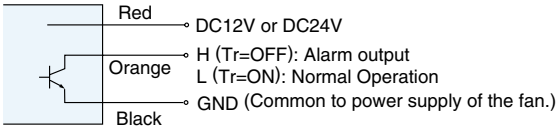
- Values for maximum air flow and maximum static pressure are measured by the double-chamber method.
- Noise level is measured in the A range, at a distance of 3.3 feet from the fan intake side.
- Operating Voltage Range: **MD625B□-12**: +15%, −33% of the rated voltage
  MD625B□-24: +15%, −50% of the rated voltage
- An overheat protection function is installed.
- All products are for use in the class Ⅱ (for EN60950), low voltage, limited energy circuit (for UL/CSA standard) or in the safety extra low voltage range (for EN60950).
- Do not touch the fan blades when the fan is in operation. The use of the optional finger guard is recommended to ensure protection.
- Standards specifications are listed on page D-2.

Alarm Specifications

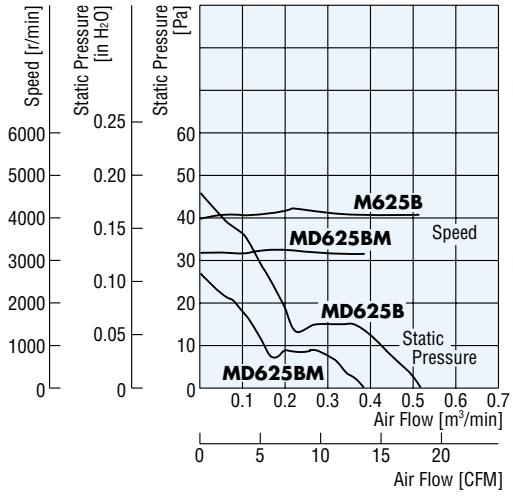
	Open Collector Output	Internal Transistor
Normal Operation	Low Level	ON
When locked	High Level	OFF

Maximum Voltage : V_{out} = 30V DC max.
Maximum Current : I_{out} = 5mA max.

Alarm Circuit

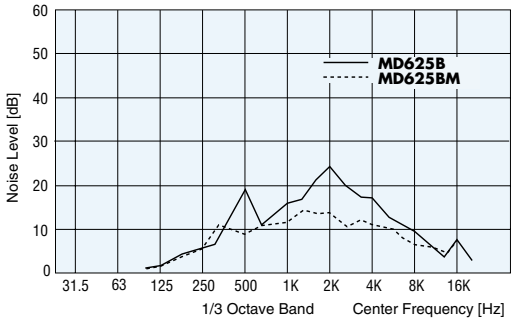


Air Flow — Static Pressure Characteristics



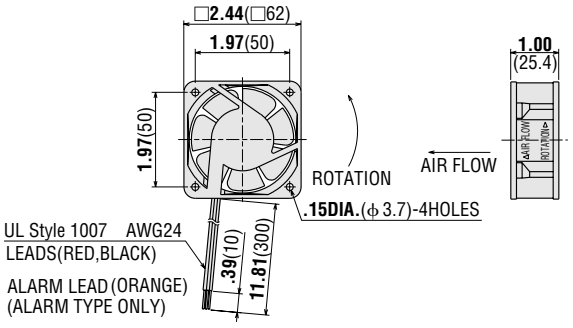
Audible Noise Frequency Analysis

Measured at a distance of 3.3 feet from the fan intake side

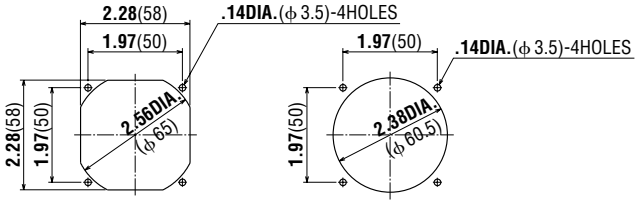


Dimensions Scale 1/4, Unit = inch (mm)

●Weight (Mass): 0.22lb. (0.1 kg)

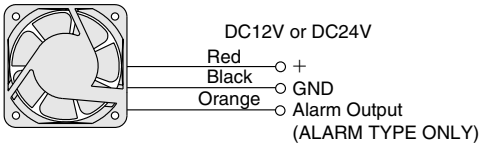


Panel Cut-Out Scale 1/4, Unit = inch (mm)



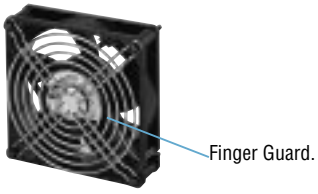
Outlet side Intake side

Wiring Diagram



Accessories (Sold separately)

Item	Model	Page
Finger Guard	**FG6B**	C-100
Filter	**FL6**	C-103



● A filter can be installed in place of the finger guard.

MDS Series

High-Performance Models

2.05 in. sq.×.39 in. thic (52 mm sq.×10 mm thic)

SAFETY STD. DC INPUT

Materials
Frame: Resin
Flammability Grade: V-O
Blades: Resin
Flammability Grade: V-O

Specifications

Speed Type	Model		Rated Voltage	Rated Current	Rated Speed	Max. Air Flow		Max. Static Pressure		Noise Level
	Stall alarm type	Standard type	DC V	A	r/min	CFM	m^3/min	in H_2O	Pa	dB(A)
Standard-Speed	**MDS510-12L**	**MDS510-12**	12	0.14	7000	9.5	0.27	0.216	54	36
	MDS510-24L	**MDS510-24**	24	0.08						
Middle-Speed	—	**MDS510M-5**	5	0.2	5500	7.1	0.2	0.129	32	30
	—	**MDS510M-12**	12	0.12						
	—	**MDS510M-24**	24	0.06						

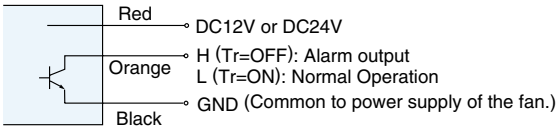
- Values for maximum air flow and maximum static pressure are measured by the double-chamber method.
- Noise level is measured in the A range, at a distance of 3.3 feet from the fan intake side.
- Operating Voltage Range: ±10% of the rated voltage
- An overheat protection function is installed.
- All products are for use in the class Ⅱ (for EN60950), low voltage, limited energy circuit (for UL/CSA standard) or in the safety extra low voltage range (for EN60950).
- Do not touch the fan blades when the fan is in operation. The use of the optional finger guard is recommended to ensure protection.
- Standards specifications are listed on page D-2.

Alarm Specifications

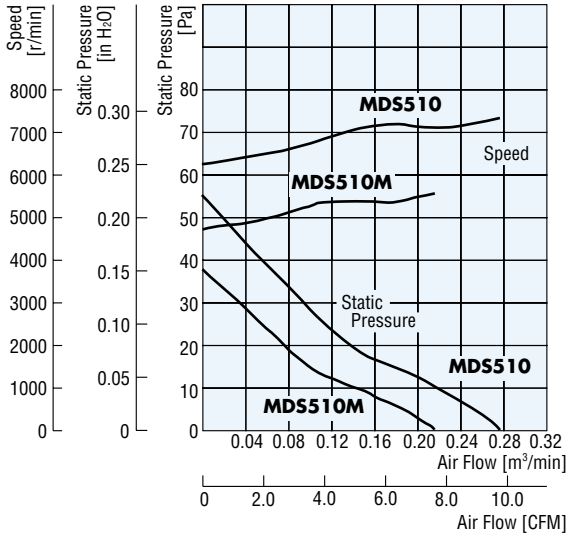
	Open Collector Output	Internal Transistor
Normal Operation	Low Level	ON
When locked	High Level	OFF

Maximum Voltage : V_{out} = 30V DC max.
Maximum Current : I_{out} = 5mA max.

Alarm Circuit

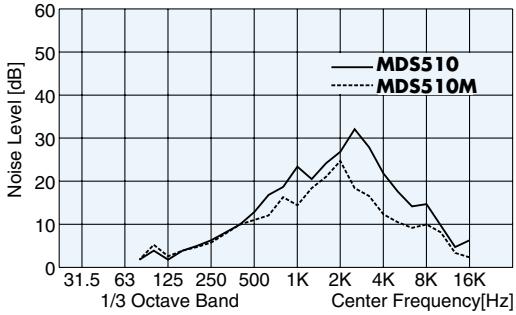


Air Flow — Static Pressure Characteristics



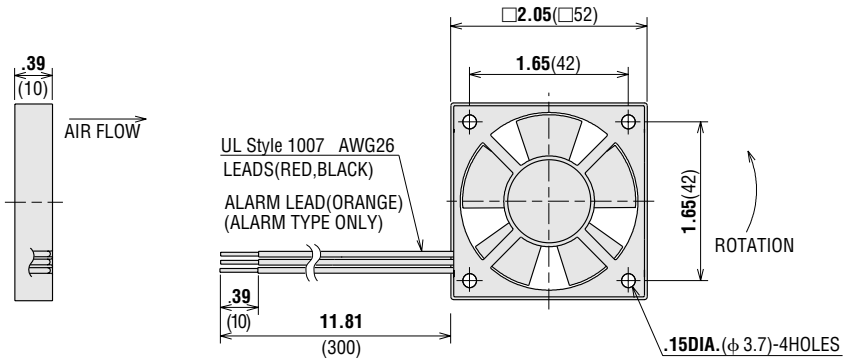
Audible Noise Frequency Analysis

Measured at a distance of 3.3 feet from the fan intake side

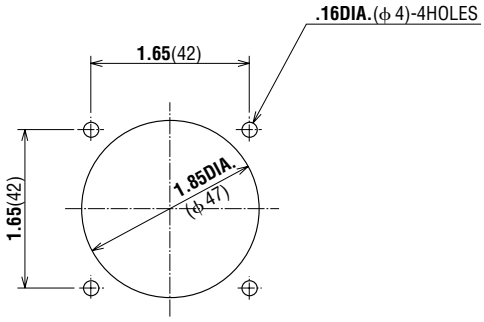


Dimensions Scale 1/2, Unit = inch (mm)

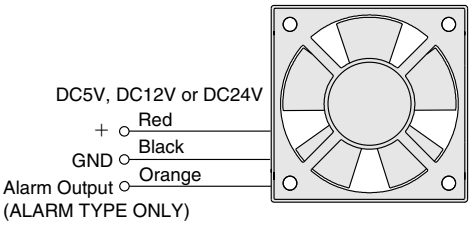
●Weight (Mass): 0.07 lb. (30 g)



Panel Cut-Out Scale 1/2, Unit = inch (mm)

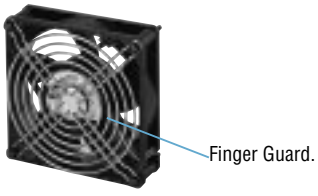


Wiring Diagram



Accessories (Sold separately)

Item	Model	Page
Finger Guard	**FG5B**	C-100



MDS Series

High-Performance Models

1.65 in. sq.×.39 in. thic (42 mm sq.×10 mm thic)

SAFETY STD. DC INPUT

Materials
Frame: Resin
Flammability Grade: V-O
Blades: Resin
Flammability Grade: V-O

Specifications

Speed Type	Model		Rated Voltage	Rated Current	Rated Speed	Max. Air Flow		Max. Static Pressure		Noise Level
	Stall alarm type	Standard type	DC V	A	r/min	CFM	m^3/min	in H_2O	Pa	dB(A)
Standard-Speed	**MDS410-12L**	**MDS410-12**	12	0.16	10000	6.4	0.18	0.346	86	34
	MDS410-24L	**MDS410-24**	24	0.09						
Middle-Speed	—	**MDS410M-5**	5	0.2	7500	4.59	0.13	0.188	47	29

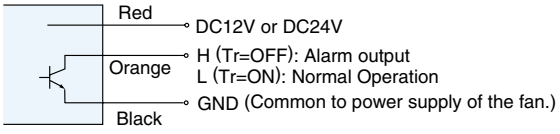
- Values for maximum air flow and maximum static pressure are measured by the double-chamber method.
- Noise level is measured in the A range, at a distance of 3.3 feet from the fan intake side.
- Operating Voltage Range: ±10% of the rated voltage
- An overheat protection function is installed.
- All products are for use in the class Ⅱ (for EN60950), low voltage, limited energy circuit (for UL/CSA standard) or in the safety extra low voltage range (for EN60950).
- Do not touch the fan blades when the fan is in operation. The use of the optional finger guard is recommended to ensure protection.
- Standards specifications are listed on page D-2.

Alarm Specifications

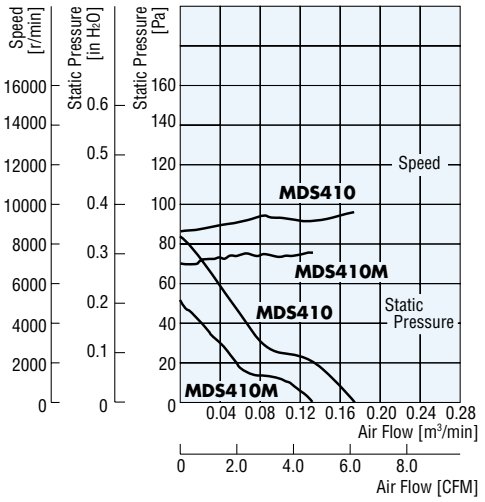
	Open Collector Output	Internal Transistor
Normal Operation	Low Level	ON
When locked	High Level	OFF

Maximum Voltage : V_{out} = 30V DC max.
Maximum Current : I_{out} = 15mA max.

Alarm Circuit

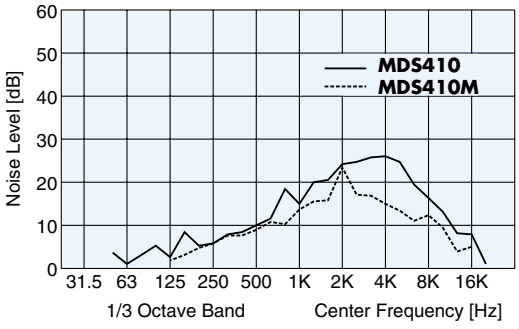


Air Flow — Static Pressure Characteristics



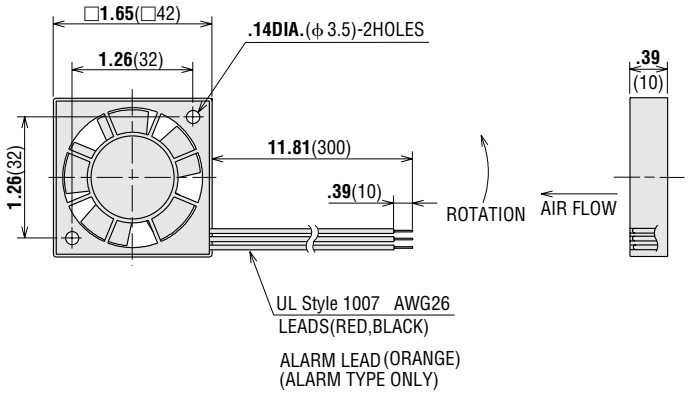
Audible Noise Frequency Analysis

Measured at a distance of 3.3 feet from the fan intake side

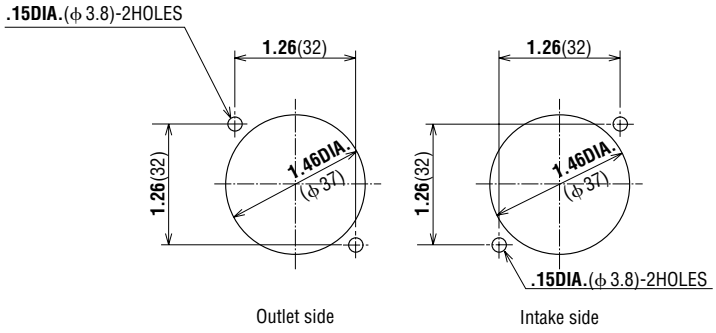


Dimensions Scale 1/2, Unit = inch (mm)

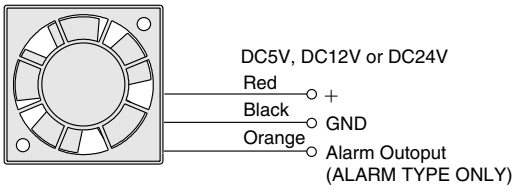
●Weight (Mass): 0.07 lb. (30 g)



Panel Cut-Out Scale 1/2, Unit = inch (mm)



Wiring Diagram



Accessories (Sold separately)

Item	Model	Page
Finger Guard	**FG4B**	C-100