

MDS Series

φ172 mm – 51 mm Thick  
(φ6.77 in. – 2.01 in. Thick)



Lead Wire Type

Operating Voltage Range: ±15%  
Materials  
Frame: Die Cast Aluminum  
Blades: Polycarbonate (Flammability grade V-0)  
Overheat Protection: Built-in Overheat Protection Circuit  
Bearings: Ball Bearings



Specifications (RoHS)

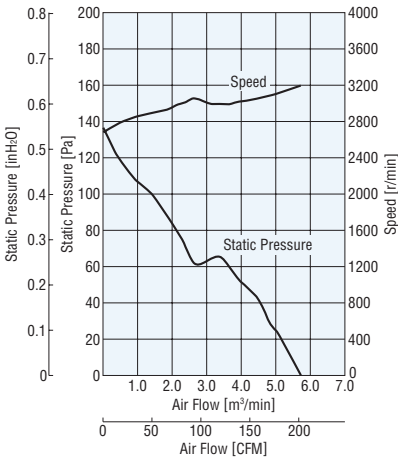
Function	Model		Voltage VDC	Current A	Speed r/min	Max. Air Flow		Max. Static Pressure		Noise Level dB (A)
	Connector Type	Lead Wire Type				m³/min	CFM	Pa	inH <sub>2</sub> O	
Low-Speed Alarm, Contact Alarm Type (Alarm specifications: ⑧)	MDS1751-24BH	MDS1751-24B	24	0.7	3200	6	212	137	0.549	47
Pulse Sensor Type (Alarm specifications: ⑨)	MDS1751-24SH	MDS1751-24S								
Standard Type	MDS1751-24H	MDS1751-24								

- Only standard type lead wire model is DEMKO certified.
- Alarm specifications ⑧, ⑨ → Page F-22 ● Details of safety standards → Page H-2

The following items are included in each product.

- Connector Type  
Fan, Cable with Connector, Operating Manual
- Lead Wire Type  
Fan, Operating Manual

Air Flow – Static Pressure Characteristics

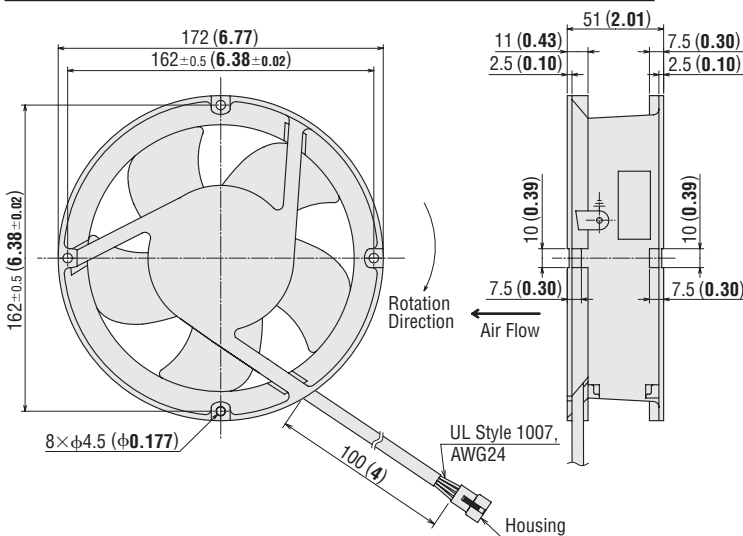


Dimensions Unit = mm (in.)

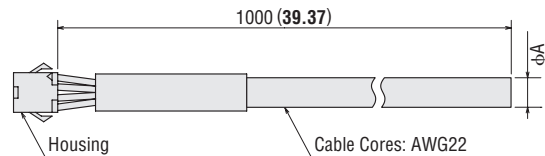
Connector Type

◇ Fan

Type	Housing P/N	Mass kg (lb.)	DXF
Low-Speed Alarm, Contact Alarm Type	SMR-04V-N (J.S.T.)	0.9 (2.0)	E115
Pulse Sensor Type / Standard Type	SMR-03V-N (J.S.T.)		E116



◇ Cable with Connector (Included)

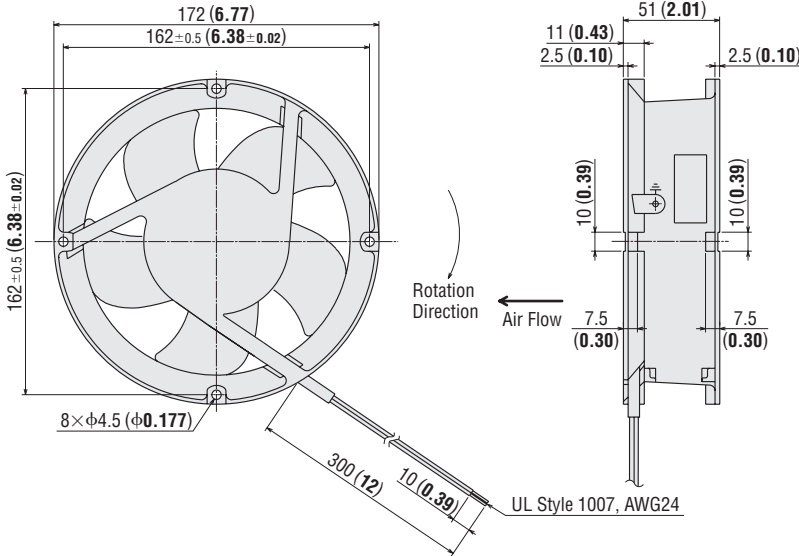


Type	φA	Housing P/N
Low-Speed Alarm, Contact Alarm Type	φ5.1 (φ0.20)	SMP-04V-NC (J.S.T.)
Pulse Sensor Type	φ4.8 (φ0.19)	SMP-03V-NC (J.S.T.)
Standard Type	φ4.5 (φ0.18)	

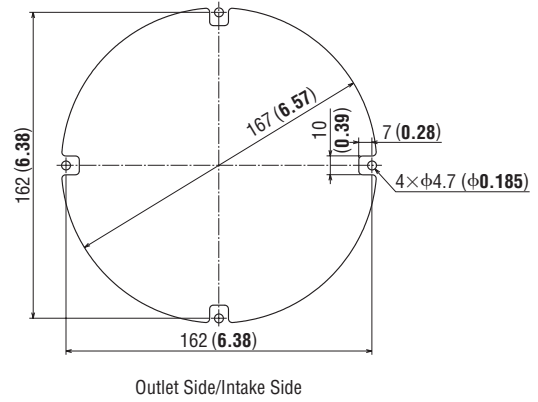
## ● Lead Wire Type

Mass: 0.9 kg (2.0 lb.)

**DXF** E016



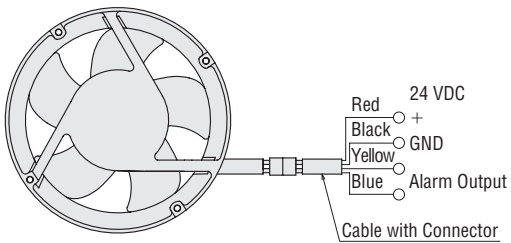
## ■ Panel Cut-Out Unit = mm (in.)



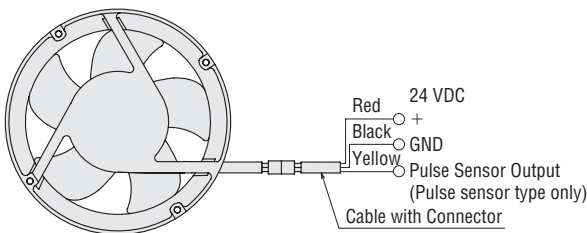
## ■ Connection Diagrams

### ● Connector Type

#### ◇ Low-Speed Alarm, Contact Alarm Type

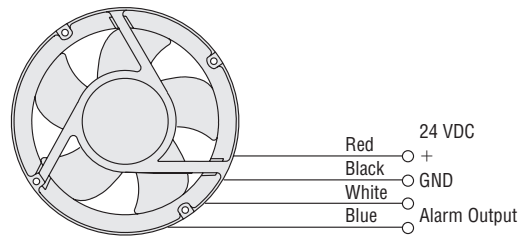


#### ◇ Pulse Sensor Type, Standard Type

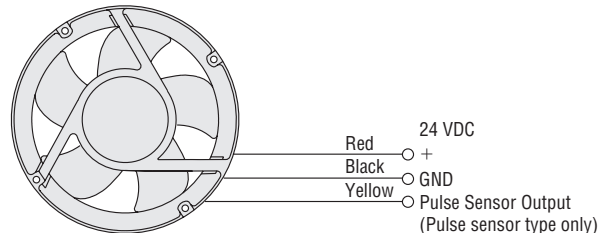


### ● Lead Wire Type

#### ◇ Low-Speed Alarm, Contact Alarm Type



#### ◇ Pulse Sensor Type, Standard Type



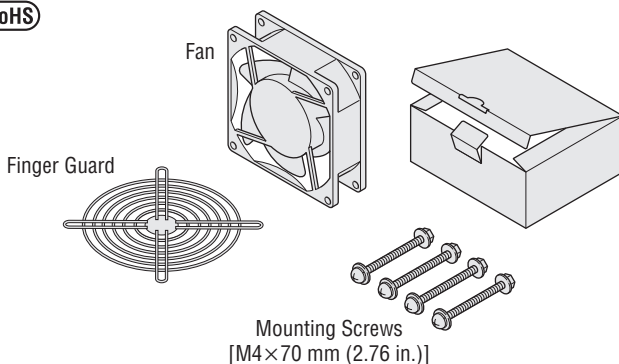
## ■ Accessories

Product	Model	Page
Finger Guard	<b>FG17D</b>	F-118

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

**RoHS**



### ● Product Line

#### ◇ Connector Type

Fan Kit Model
<b>T-MDS1751-24BHG</b>
<b>T-MDS1751-24SHG</b>
<b>T-MDS1751-24HG</b>

#### ◇ Lead Wire Type

Fan Kit Model
<b>T-MDS1751-24B-G</b>
<b>T-MDS1751-24S-G</b>
<b>T-MDS1751-24-G</b>

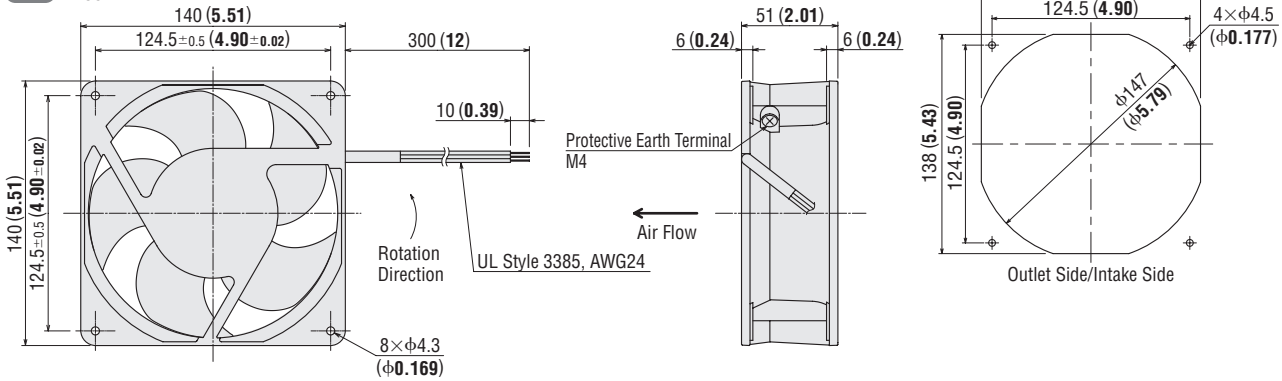
● See page F-56 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.



## ● Lead Wire Type

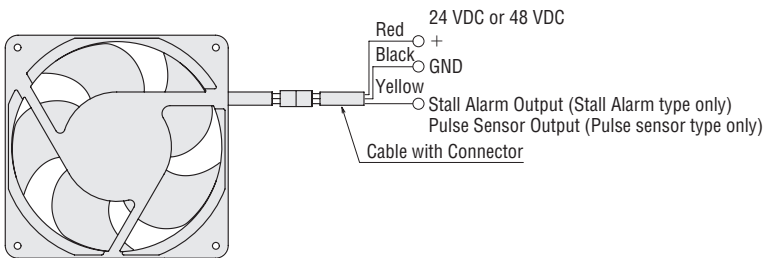
Mass: 0.65 kg (1.43 lb.)

**DXF** E109

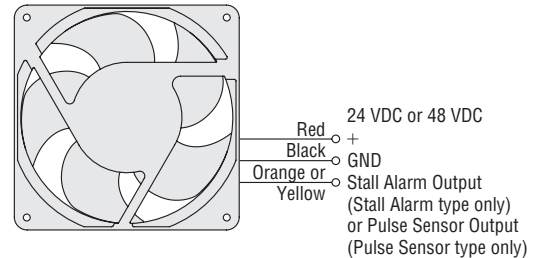


## ■ Connection Diagrams

### ● Connector Type



### ● Lead Wire Type



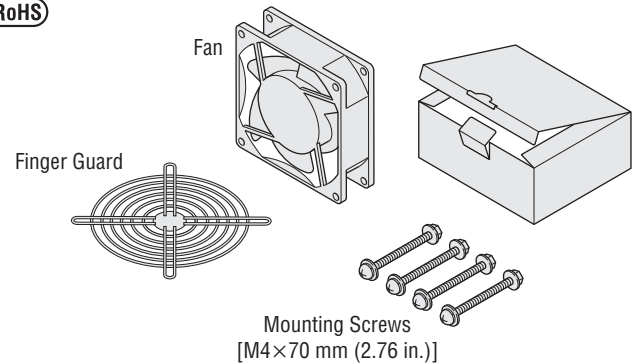
## ■ Accessories

Product	Model	Page
Finger Guard	<b>FG14D</b>	F-118
Filter	<b>FL14</b>	F-120

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

**RoHS**



Mounting Screws  
[M4×70 mm (2.76 in.)]

### ● Product Line

#### ◇ Connector Type

Fan Kit Model	
<b>T-MDS1451-24LHG</b>	<b>T-MDS1451-48LHG</b>
<b>T-MDS1451-24SHG</b>	<b>T-MDS1451-48SHG</b>
<b>T-MDS1451-24HG</b>	<b>T-MDS1451-48HG</b>

#### ◇ Lead Wire Type

Fan Kit Model	
<b>T-MDS1451-24L-G</b>	<b>T-MDS1451-48L-G</b>
<b>T-MDS1451-24S-G</b>	<b>T-MDS1451-48S-G</b>
<b>T-MDS1451-24-G</b>	<b>T-MDS1451-48-G</b>

● See page F-58 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

## DC Axial Flow Fans with Low-Speed Alarm

### MDA Series **NEW**

The **MDA** Series is similar to the **MDS** Series and available with a low-speed alarm function. An alarm is output when the fan speed drops to approximately 70% of the rated level. For more details on the **MDA** Series, please visit [www.orientalmotor.com](http://www.orientalmotor.com).



MDS Series

□ 119 mm – 25.4 mm Thick  
 (□ 4.69 in. – 1.00 in. Thick)



Operating Voltage Range: ±15%  
**(MDS1225-12M, -24M: ±10%)**  
 Materials  
 Frame: Die Cast Aluminum  
 Blades: Polycarbonate (Flammability grade V-0)  
 Overheat Protection: Built-in Overheat Protection Circuit  
 Bearings: Ball Bearings

Lead Wire Type



Specifications (RoHS)

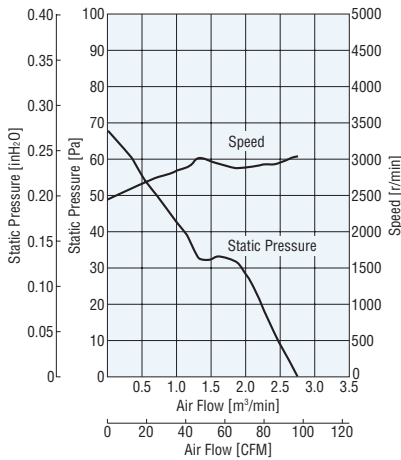
Speed Type	Function	Model		Voltage VDC	Current A	Speed r/min	Max. Air Flow m <sup>3</sup> /min CFM	Max. Static Pressure Pa	inH <sub>2</sub> O	Noise Level dB (A)	
		Connector Type	Lead Wire Type								
Standard Speed	Low-Speed Alarm, Electronic Alarm Type (Alarm specifications: ④)	MDS1225-12MH	MDS1225-12M	12	0.63	3000	2.7	95.3	70	0.281	46
		MDS1225-24MH	MDS1225-24M	24	0.34						
	Standard Type	MDS1225-12H	MDS1225-12	12	0.58						
		MDS1225-24H	MDS1225-24	24	0.30						

- Only lead wire type is DEMKO certified.
- Alarm specifications ④ → Page F-21 ● Details of safety standards → Page H-2

The following items are included in each product.

- Connector Type  
Fan, Cable with Connector, Operating Manual
- Lead Wire Type  
Fan, Operating Manual

Air Flow – Static Pressure Characteristics

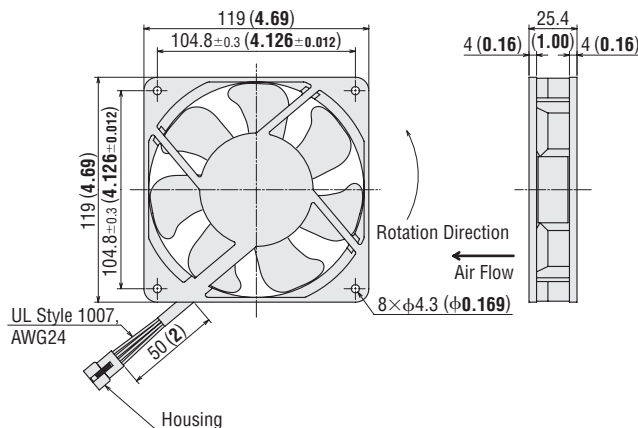


Dimensions Unit = mm (in.)

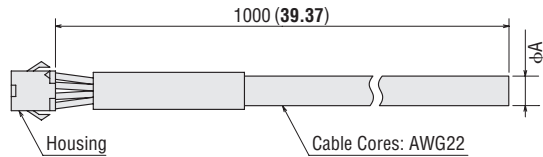
● Connector Type

◇ Fan

Type	Housing P/N	Mass kg (lb.)	DXF
Low-Speed Alarm, Electronic Alarm Type	SMR-04V-N (J.S.T.)	0.3 (0.66)	E118
Standard Type	SMR-03V-N (J.S.T.)		E119



◇ Cable with Connector (Included)

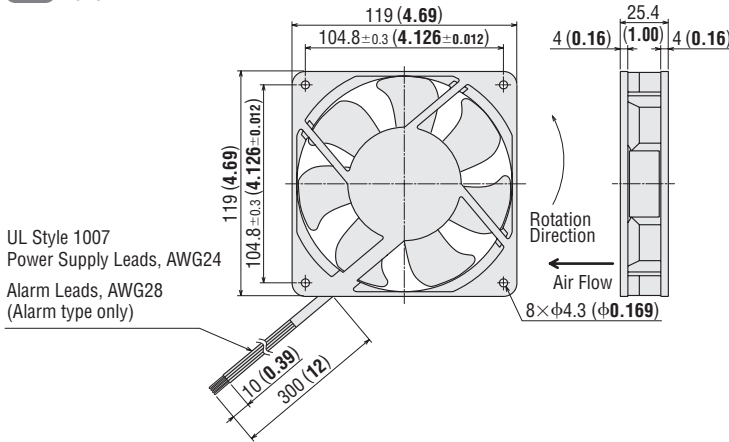


Type	φA	Housing P/N
Low-Speed Alarm, Electronic Alarm Type	φ5.1 (φ0.20)	SMP-04V-NC (J.S.T.)
Standard Type	φ4.5 (φ0.18)	SMP-03V-NC (J.S.T.)

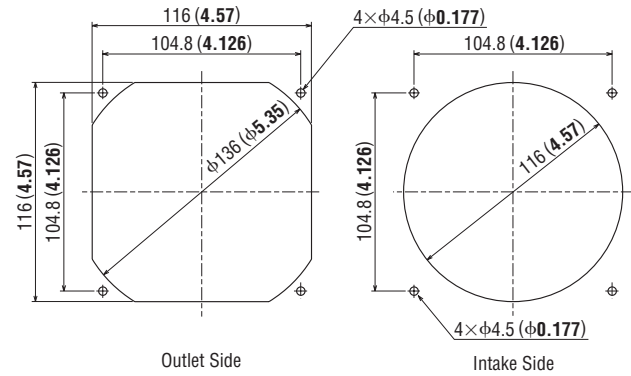
## Lead Wire Type

Mass: : 0.3 kg (0.66 lb.)

**DXF** E020

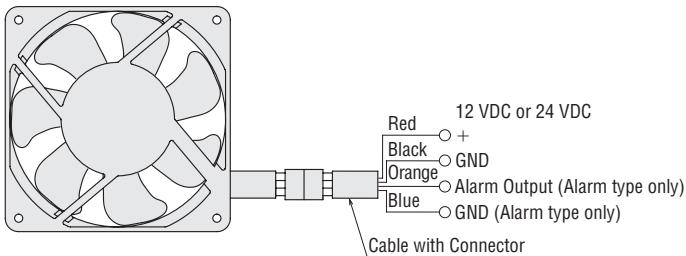


## Panel Cut-Out Unit = mm (in.)

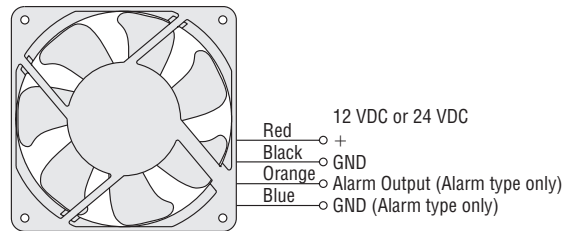


## Connection Diagrams

### Connector Type



### Lead Wire Type



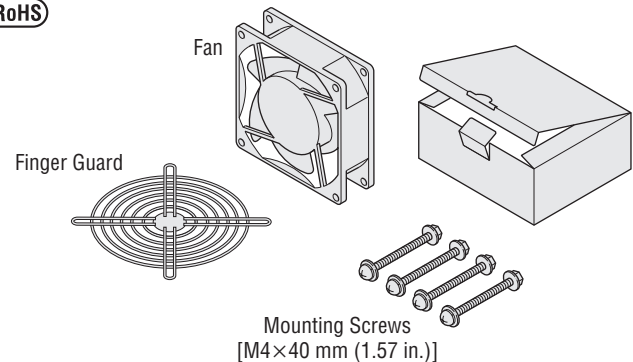
## Accessories

Product	Model	Page
Finger Guard	<b>FG12D</b>	F-118
Filter	<b>FL12</b>	F-120
Screen	<b>FS12S</b>	F-123

## Fan Kit

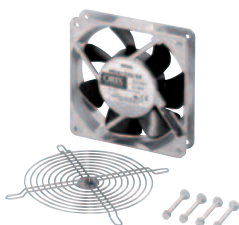
The lineup includes a product configuration containing all necessary accessories in one package.

**RoHS**



## DC Axial Flow Fans with Low-Speed Alarm MDA Series NEW

The **MDA** Series is similar to the **MDS** Series and available with a low-speed alarm function. An alarm is output when the fan speed drops to approximately 70% of the rated level. For more details on the **MDA** Series, please visit [www.orientalmotor.com](http://www.orientalmotor.com).



### Product Line

#### Connector Type

Fan Kit Model

**T-MDS1225-12MHG**

**T-MDS1225-24MHG**

**T-MDS1225-12HG**

**T-MDS1225-24HG**

#### Lead Wire Type

Fan Kit Model

**T-MDS1225-12M-G**

**T-MDS1225-24M-G**

**T-MDS1225-12-G**

**T-MDS1225-24-G**

● See page F-60 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

MD Series

**119 mm – 25.4 mm Thick**  
**(4.69 in. – 1.00 in. Thick)**



Lead Wire Type

Operating Voltage Range: ±15%  
 Materials  
 Frame: Die Cast Aluminum  
 Blades: Polycarbonate (Flammability grade V-0)  
 Overheat Protection: Built-in Overheat Protection Circuit  
 Bearings: Ball Bearings

Specifications **RoHS**



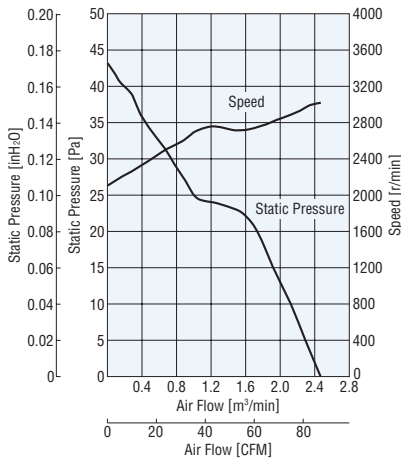
Speed Type	Model		Voltage VDC	Current A	Speed r/min	Max. Air Flow		Max. Static Pressure		Noise Level dB (A)
	Connector Type	Lead Wire Type				m <sup>3</sup> /min	CFM	Pa	inH <sub>2</sub> O	
Standard Speed	<b>MD1225-12H</b>	<b>MD1225-12</b>	12	0.47	3100	2.5	88.3	43	0.172	45
	<b>MD1225-24H</b>	<b>MD1225-24</b>	24	0.26						

- Only lead wire model is DEMKO certified.
- Details of safety standards → Page H-2

The following items are included in each product.

- Connector Type  
Fan, Cable with Connector, Operating Manual
- Lead Wire Type  
Fan, Operating Manual

Air Flow – Static Pressure Characteristics



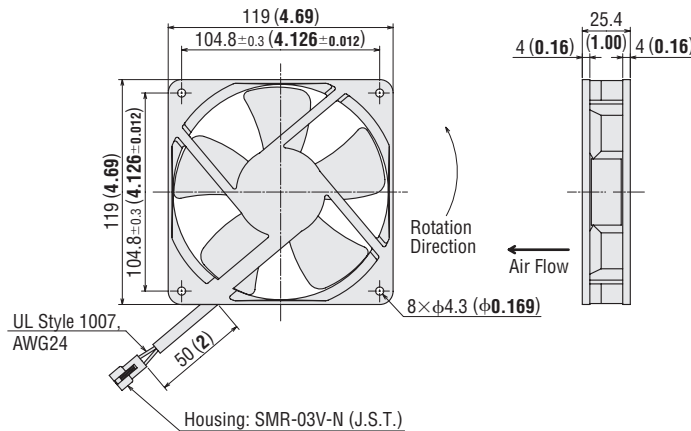
Dimensions Unit = mm (in.)

Connector Type

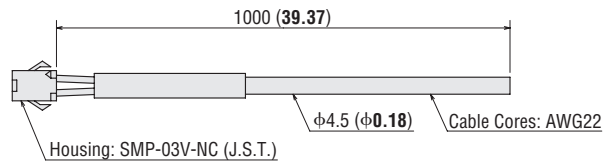
◇ Fan

Mass: 0.19 kg (0.42 lb.)

**DXF** E120



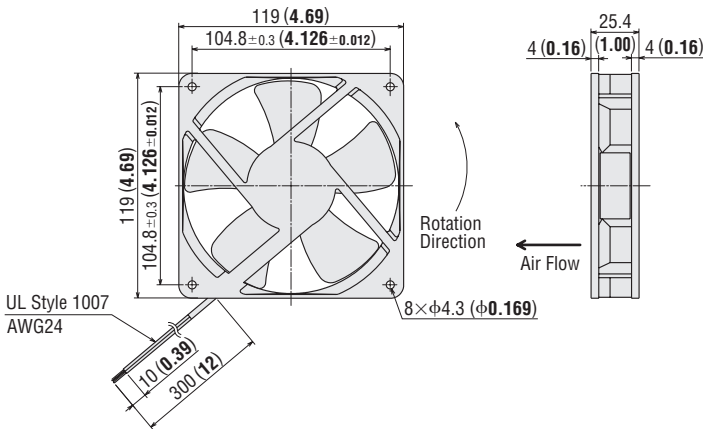
◇ Cable with Connector (Included)



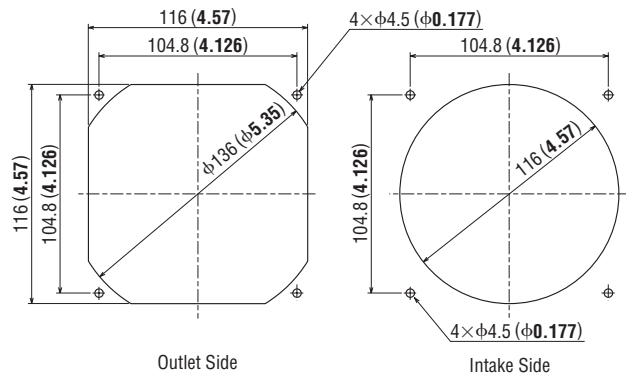
## ● Lead Wire Type

Mass: 0.19 kg (0.42 lb.)

**DXF** E021

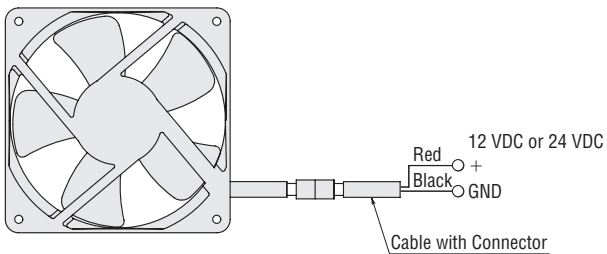


## ■ Panel Cut-Out Unit = mm (in.)

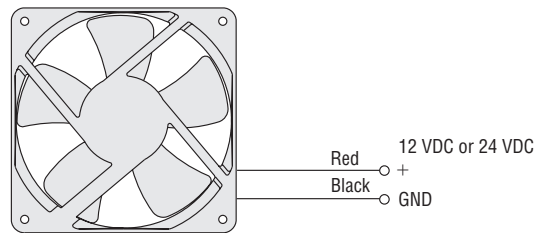


## ■ Connection Diagrams

### ● Connector Type



### ● Lead Wire Type



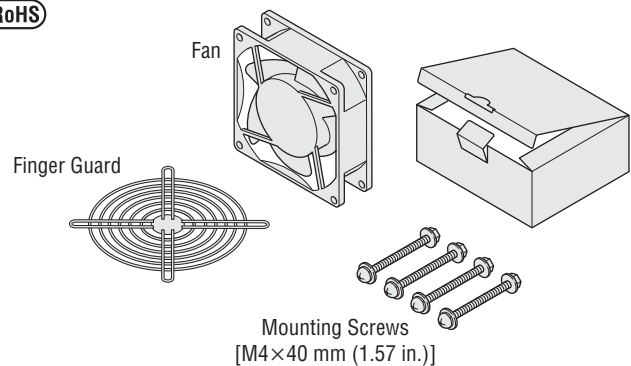
## ■ Accessories

Product	Model	Page
Finger Guard	<b>FG12D</b>	F-118
Filter	<b>FL12</b>	F-120
Screen	<b>FS12S</b>	F-123

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

**RoHS**



### ● Product Line

#### ◇ Connector Type

Fan Kit Model

**T-MD1225-12HG**

**T-MD1225-24HG**

#### ◇ Lead Wire Type

Fan Kit Model

**T-MD1225-12-G**

**T-MD1225-24-G**

● See page F-62 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.



MD Series

92 mm – 25.4 mm Thick  
 (3.62 in. – 1.00 in. Thick)



Lead Wire Type

Operating Voltage Range: ±15%  
 Materials  
 Frame: Polycarbonate (Flammability grade: V-0)  
 Blades: Polycarbonate (Flammability grade V-0)  
 Overheat Protection: Built-in Overheat Protection Circuit  
 Bearings: Ball Bearings



Specifications (RoHS)

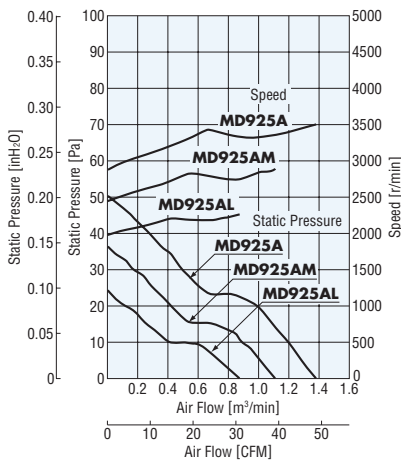
Speed Type	Function	Model		Voltage VDC	Current A	Speed r/min	Max. Air Flow m³/min	Max. Static Pressure Pa	Noise Level dB (A)		
		Connector Type	Lead Wire Type								
Standard Speed	Stall Alarm, Electronic Alarm Type (Alarm specifications: ①)	MD925A-12LH	MD925A-12L	12	0.24	3400	1.30	45.9	49	0.196	36
		MD925A-24LH	MD925A-24L	24	0.12						
	Pulse Sensor Type (Alarm specifications: ②)	MD925A-12SH	MD925A-12S	12	0.24						
		MD925A-24SH	MD925A-24S	24	0.12						
Standard Type	Standard Type	MD925A-12H	MD925A-12	12	0.24						
		MD925A-24H	MD925A-24	24	0.12						
Middle Speed	Standard Type	-	MD925AM-12	12	0.15	2800	1.10	38.8	34	0.137	31
		-	MD925AM-24	24	0.09						
Low Speed	Standard Type	-	MD925AL-12	12	0.10	2200	0.90	31.8	22	0.0882	25
		-	MD925AL-24	24	0.07						

● For detailed product safety standard information including standards, file number and certification body, please visit www.orientalmotor.com.

● Alarm specifications ①, ② → Page F-21 ● Details of safety standards → Page H-2

- The following items are included in each product.
- Connector Type  
Fan, Cable with Connector, Operating Manual
  - Lead Wire Type  
Fan, Operating Manual

Air Flow – Static Pressure Characteristics



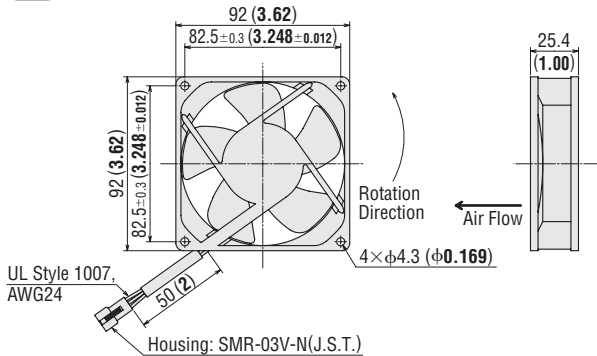
Dimensions Unit = mm (in.)

Connector Type

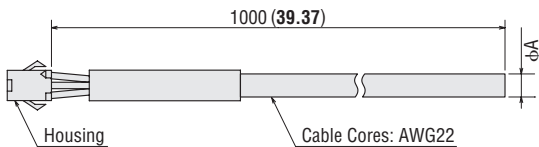
Fan

Mass: 0.12 kg (0.26 lb.)

DXF E121



Cable with Connector (Included)

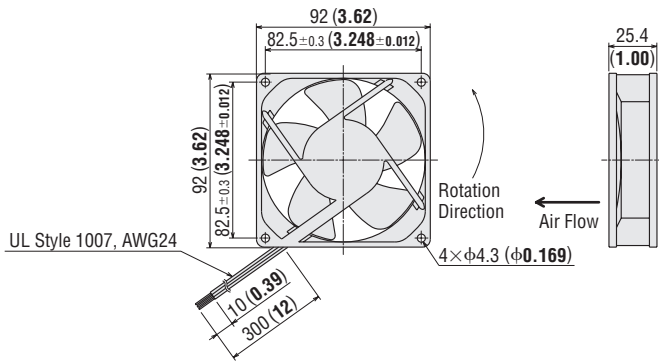


Type	φA	Housing P/N
Stall Alarm, Electronic Alarm Type	φ4.8 (φ0.19)	SMP-03V-NC (J.S.T.)
Pulse Sensor Type		
Standard Type	φ4.5 (φ0.18)	

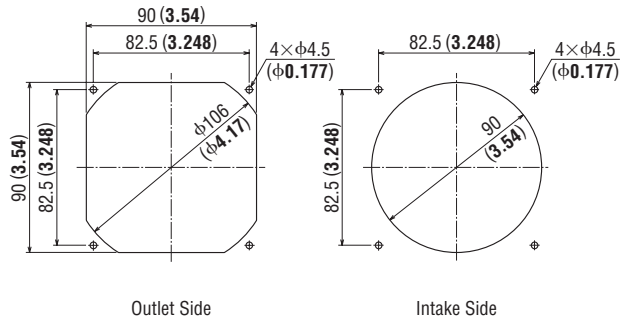
## ● Lead Wire Type

Mass: 0.12 kg (0.26 lb.)

**DXF** E022

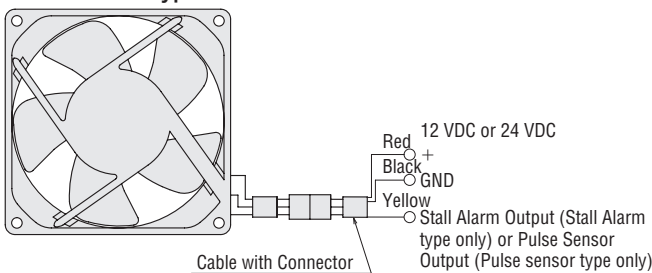


## ■ Panel Cut-Out Unit = mm (in.)

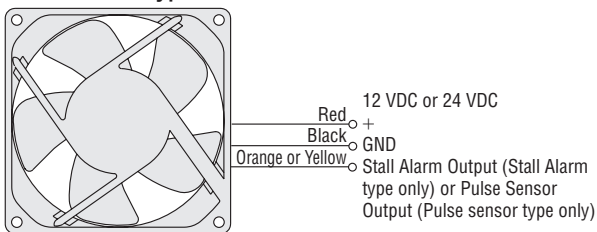


## ■ Connection Diagrams

### ● Connector Type



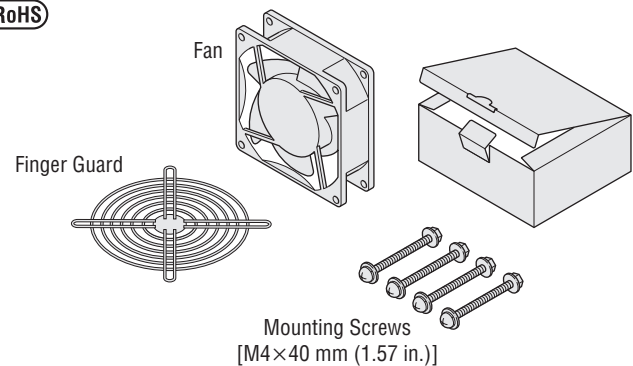
### ● Lead Wire Type



## ■ Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

**RoHS**



### ● Product Line

#### ◇ Connector Type

Fan Kit Model	
<b>T-MD925A-12LHG</b>	<b>T-MD925A-24LHG</b>
<b>T-MD925A-12SHG</b>	<b>T-MD925A-24SHG</b>
<b>T-MD925A-12HG</b>	<b>T-MD925A-24HG</b>

#### ◇ Lead Wire Type

Fan Kit Model	
<b>T-MD925A-12L-G</b>	<b>T-MD925A-24L-G</b>
<b>T-MD925A-12S-G</b>	<b>T-MD925A-24S-G</b>
<b>T-MD925A-12-G</b>	<b>T-MD925A-24-G</b>
<b>T-MD925AM-12-G</b>	<b>T-MD925AM-24-G</b>
<b>T-MD925AL-12-G</b>	<b>T-MD925AL-24-G</b>

● See page F-64 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

## ■ Accessories

Product	Model	Page
Finger Guard	<b>FG9D</b>	F-118
Filter	<b>FL9</b>	F-120
Screen	<b>FS9S</b>	F-123

● Use M3 screws to install the **FL9S** filter to the fan frame.

## DC Axial Flow Fans with Low-Speed Alarm

### MDA Series NEW

The **MDA** Series is similar to the **MD** Series and available with a low-speed alarm function. An alarm is output when the fan speed drops to approximately 70% of the rated level. For more details on the **MDA** Series, please visit [www.orientalmotor.com](http://www.orientalmotor.com).



MD Series

80 mm – 25.4 mm Thick  
 (3.15 in. – 1.00 in. Thick)



Lead Wire Type

Operating Voltage Range: ±15%  
 Materials  
 Frame: Polycarbonate (Flammability grade: V-0)  
 Blades: Polycarbonate (Flammability grade V-0)  
 Overheat Protection: Built-in Overheat Protection Circuit  
 Bearings: Ball Bearings



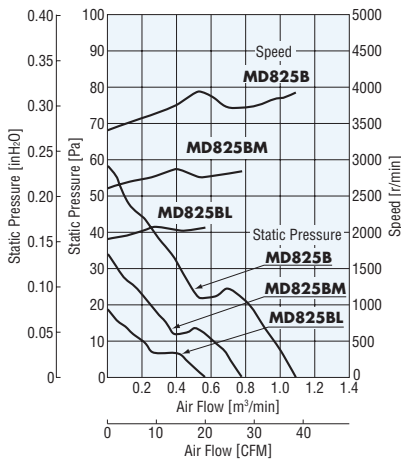
Specifications (RoHS)

Speed Type	Function	Model		Voltage VDC	Current A	Speed r/min	Max. Air Flow m <sup>3</sup> /min CFM	Max. Static Pressure		Noise Level dB (A)	
		Connector Type	Lead Wire Type					Pa	inH <sub>2</sub> O		
Standard Speed	Stall Alarm, Electronic Alarm Type (Alarm specifications: ①)	MD825B-12LH	MD825B-12L	12	0.25	3800	1.00	35.3	49	0.196	35
		MD825B-24LH	MD825B-24L	24	0.14						
	Pulse Sensor Type (Alarm specifications: ②)	MD825B-12SH	MD825B-12S	12	0.25						
		MD825B-24SH	MD825B-24S	24	0.14						
Middle Speed	Standard Type	MD825B-12H	MD825B-12	12	0.25	2850	0.73	25.8	29	0.116	26
		MD825B-24H	MD825B-24	24	0.14						
Low Speed	Standard Type	-	MD825BM-12	12	0.15	2100	0.55	19.4	16	0.0642	18
		-	MD825BM-24	24	0.09						

● For detailed product safety standard information including standards, file number and certification body, please visit [www.orientalmotor.com](http://www.orientalmotor.com).  
 ● Alarm specifications ①, ② → Page F-21 ● Details of safety standards → Page H-2

The following items are included in each product.  
 ● Connector Type  
 Fan, Cable with Connector, Operating Manual  
 ● Lead Wire Type  
 Fan, Operating Manual

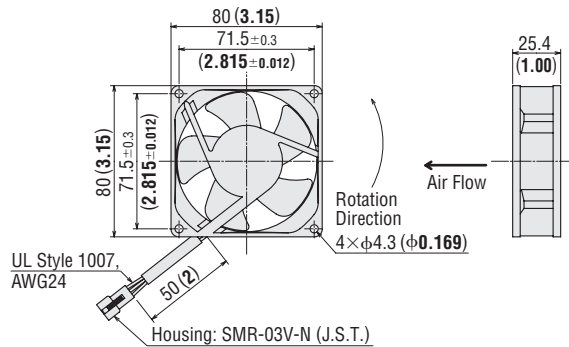
Air Flow – Static Pressure Characteristics



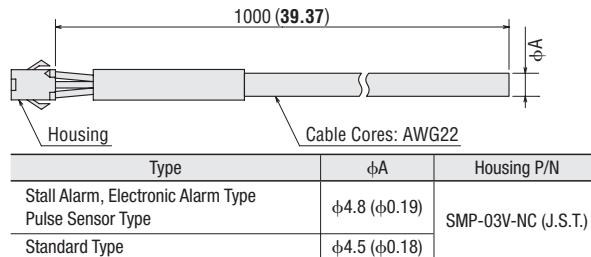
Dimensions Unit = mm (in.)

Connector Type

◇ Fan  
 Mass: 0.11 kg (0.24 lb.)  
 DXF E122



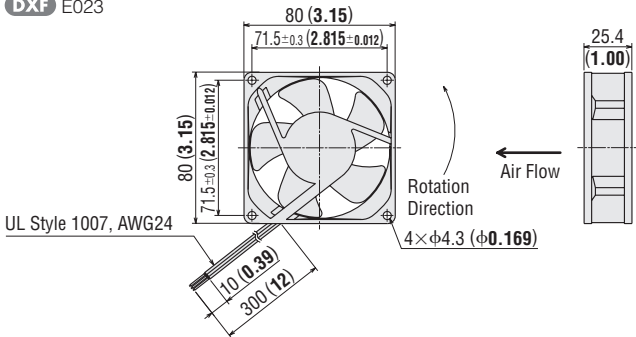
Cable with Connector (Included)



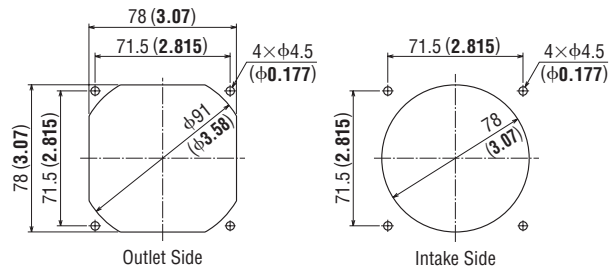
## ● Lead Wire Type

Mass: 0.11 kg (0.24 lb.)

**DXF** E023

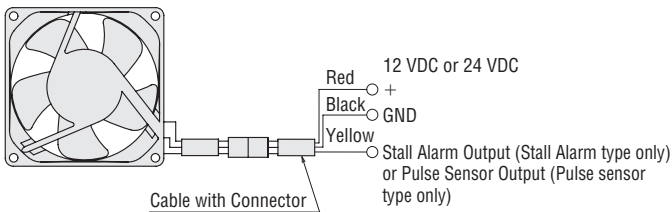


## ■ Panel Cut-Out Unit = mm (in.)

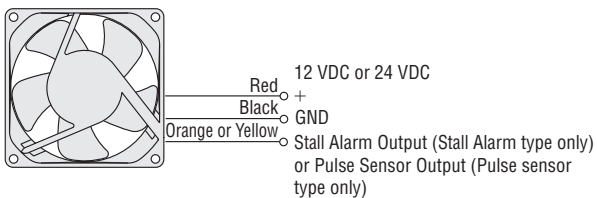


## ■ Connection Diagrams

### ● Connector Type



### ● Lead Wire Type



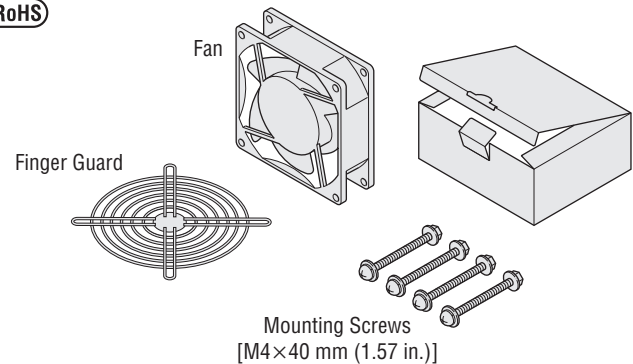
## ■ Accessories

Product	Model	Page
Finger Guard	<b>FG8D</b>	F-118
Filter	<b>FL8</b>	F-120
Screen	<b>FS8S</b>	F-123

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

**RoHS**



### ● Product Line

#### ◇ Connector Type

Fan Kit Model	
<b>T-MD825B-12LHG</b>	<b>T-MD825B-24LHG</b>
<b>T-MD825B-12SHG</b>	<b>T-MD825B-24SHG</b>
<b>T-MD825B-12HG</b>	<b>T-MD825B-24HG</b>

#### ◇ Lead Wire Type

Fan Kit Model	
<b>T-MD825B-12L-G</b>	<b>T-MD825B-24L-G</b>
<b>T-MD825B-12S-G</b>	<b>T-MD825B-24S-G</b>
<b>T-MD825B-12-G</b>	<b>T-MD825B-24-G</b>
<b>T-MD825BM-12-G</b>	<b>T-MD825BM-24-G</b>
<b>T-MD825BL-12-G</b>	-

● See page F-66 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

## DC Axial Flow Fans with Low-Speed Alarm

### MDA Series **NEW**

The **MDA Series** is similar to the **MD Series** and available with a low-speed alarm function. An alarm is output when the fan speed drops to approximately 70% of the rated level. For more details on the **MDA Series**, please visit [www.orientalmotor.com](http://www.orientalmotor.com).



MD Series

62 mm – 25.4 mm Thick  
(2.44 in. – 1.00 in. Thick)



Lead Wire Type

Operating Voltage Range: ±15%  
Materials  
Frame: Polycarbonate (Flammability grade: V-0)  
Blades: Polycarbonate (Flammability grade V-0)  
Overheat Protection: Built-in Overheat Protection Circuit  
Bearings: Ball Bearings



Specifications (RoHS)

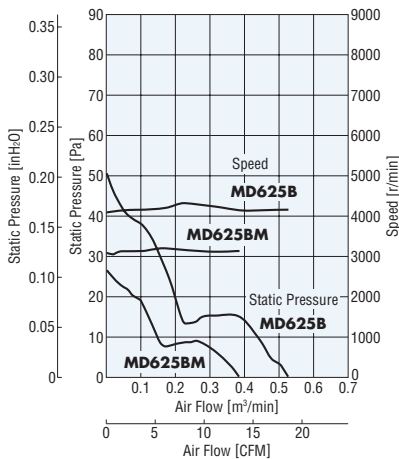
Speed Type	Function	Model		Voltage VDC	Current A	Speed r/min	Max. Air Flow m³/min	Max. Static Pressure Pa	Noise Level dB (A)		
		Connector Type	Lead Wire Type								
Standard Speed	Stall Alarm, Electronic Alarm Type (Alarm specifications: ①)	MD625B-12LH	MD625B-12L	12	0.16	4000	0.50	17.7	49	0.196	30
		MD625B-24LH	MD625B-24L	24	0.10						
	Pulse Sensor Type (Alarm specifications: ②)	MD625B-12SH	MD625B-12S	12	0.16						
		MD625B-24SH	MD625B-24S	24	0.10						
	Standard Type	MD625B-12H	MD625B-12	12	0.16						
MD625B-24H		MD625B-24	24	0.10							
Middle Speed	Standard Type	-	MD625BM-12	12	0.10	3000	0.37	13.1	27	0.109	20
		-	MD625BM-24	24	0.07						

● For detailed product safety standard information including standards, file number and certification body, please visit [www.orientalmotor.com](http://www.orientalmotor.com).

● Alarm specifications ①, ② → Page F-21 ● Details of safety standards → Page H-2

- The following items are included in each product.
- Connector Type  
Fan, Cable with Connector, Operating Manual
  - Lead Wire Type  
Fan, Operating Manual

Air Flow – Static Pressure Characteristics



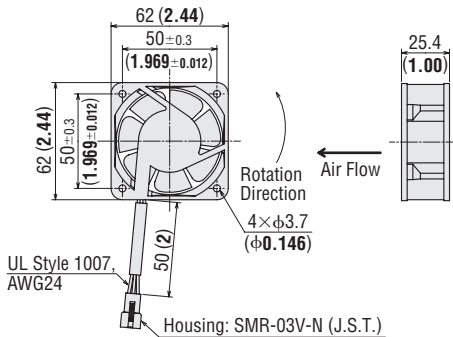
Dimensions Unit = mm (in.)

Connector Type

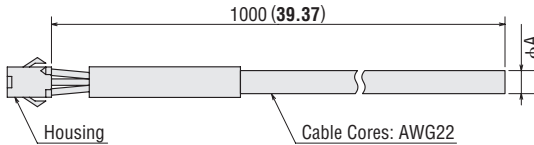
◇ Fan

Mass: 0.1 kg (0.22 lb.)

DXF E123



Cable with Connector (Included)



Type	φA	Housing P/N
Stall Alarm, Electronic Alarm Type	φ4.8 (φ0.19)	SMP-03V-NC (J.S.T.)
Pulse Sensor Type	φ4.8 (φ0.19)	
Standard Type	φ4.5 (φ0.18)	

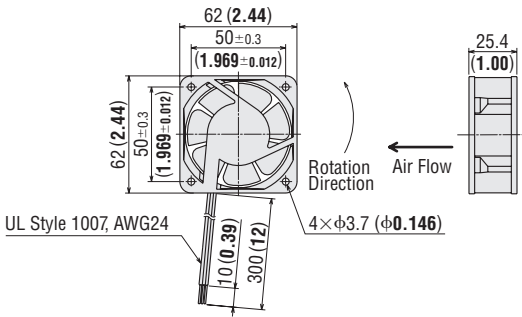
φ172 mm (φ6.77 in.)  
□40 mm (□1.57 in.)  
□119 mm (□4.69 in.)  
□92 mm (□3.62 in.)  
□80 mm (□3.15 in.)  
□62 mm (□2.44 in.)  
□52 mm (□2.05 in.)  
□42 mm (□1.65 in.)

DC Input

## ● Lead Wire Type

Mass: 0.1 kg (0.22 lb.)

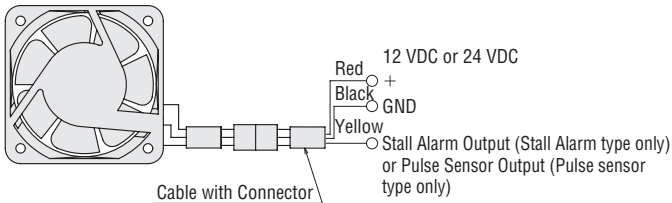
**DXF** E024



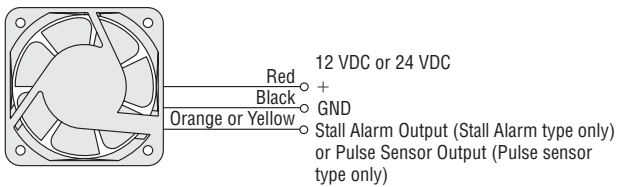
UL Style 1007, AWG24

## ■ Connection Diagrams

### ● Connector Type



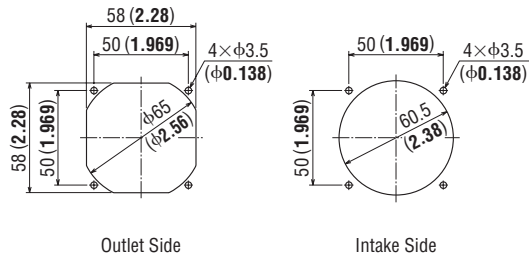
### ● Lead Wire Type



## ■ Accessories

Product	Model	Page
Finger Guard	<b>FG6D</b>	F-118
Filter	<b>FL6</b>	F-120
Screen	<b>FS6S</b>	F-123

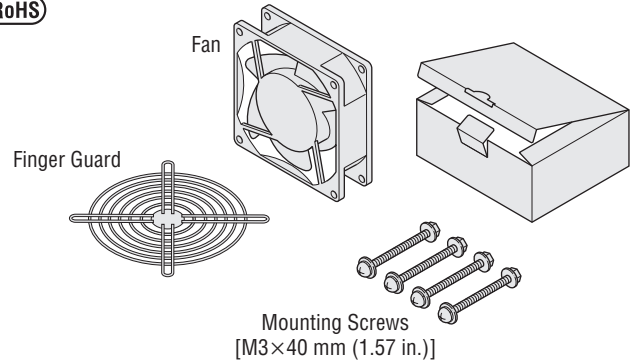
## ■ Panel Cut-Out Unit = mm (in.)



## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

**RoHS**



### ● Product Line

#### ◇ Connector Type

Fan Kit Model	
<b>T-MD625B-12LHG</b>	<b>T-MD625B-24LHG</b>
<b>T-MD625B-12SHG</b>	<b>T-MD625B-24SHG</b>
<b>T-MD625B-12HG</b>	<b>T-MD625B-24HG</b>

#### ◇ Lead Wire Type

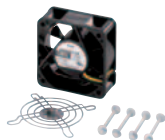
Fan Kit Model	
<b>T-MD625B-12L-G</b>	<b>T-MD625B-24L-G</b>
<b>T-MD625B-12S-G</b>	<b>T-MD625B-24S-G</b>
<b>T-MD625B-12-G</b>	<b>T-MD625B-24-G</b>
<b>T-MD625BM-12-G</b>	<b>T-MD625BM-24-G</b>

● See page F-68 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

## DC Axial Flow Fans with Low-Speed Alarm

### MDA Series **NEW**

The **MDA Series** is similar to the **MD Series** and available with a low-speed alarm function. An alarm is output when the fan speed drops to approximately 70% of the rated level. For more details on the **MDA Series**, please visit [www.orientalmotor.com](http://www.orientalmotor.com).



**MDS Series**

**52 mm – 10 mm Thick**  
**(2.05 in. – 0.39 in. Thick)**



Lead Wire Type

Operating Voltage Range: ±10%  
 Materials  
 Frame: Polycarbonate (Flammability grade: V-0)  
 Blades: PBT (Flammability grade: V-0)  
 Overheat Protection: Built-in Overheat Protection Circuit  
 Bearings: Ball Bearings



**Specifications (RoHS)**

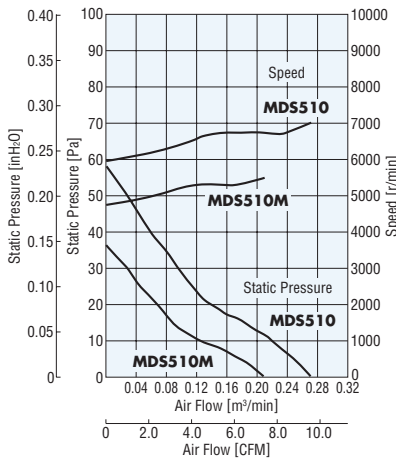
Speed Type	Function	Model		Voltage VDC	Current A	Speed r/min	Max. Air Flow m <sup>3</sup> /min CFM	Max. Static Pressure Pa	Noise Level dB (A)		
		Connector Type	Lead Wire Type								
Standard Speed	Stall Alarm, Electronic Alarm Type (Alarm specifications: ①)	MDS510-12LH	MDS510-12L	12	0.14	7000	0.27	9.53	54	0.217	36
		MDS510-24LH	MDS510-24L	24	0.08						
	Standard Type	MDS510-12H	MDS510-12	12	0.14						
		MDS510-24H	MDS510-24	24	0.08						
Middle Speed	Standard Type	MDS510M-5H	MDS510M-5	5	0.20	5500	0.20	7.06	32	0.129	30
		-	MDS510M-12	12	0.12						
		-	MDS510M-24	24	0.06						

- Only lead wire type is DEMKO certified.
- Alarm specifications ① → Page F-21 ● Details of safety standards → Page H-2

The following items are included in each product.

- Connector Type  
Fan, Cable with Connector, Operating Manual
- Lead Wire Type  
Fan, Operating Manual

**Air Flow – Static Pressure Characteristics**



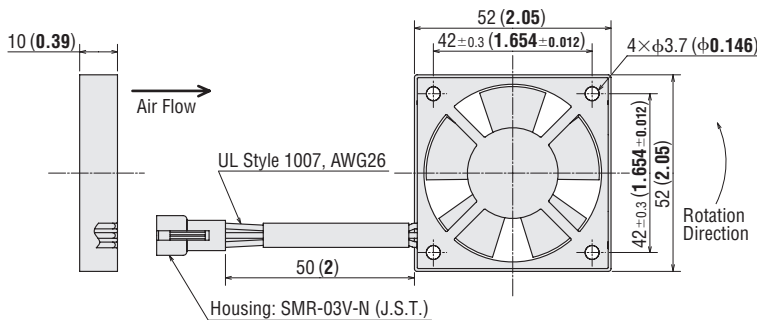
**Dimensions Unit = mm (in.)**

● Connector Type

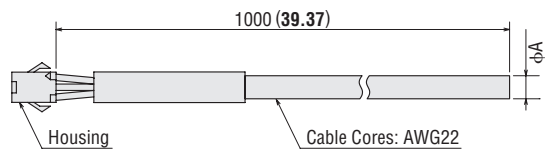
◇ Fan

Mass: 30 g (1.06 oz.)

DXF E124



◇ Cable with Connector (Included)

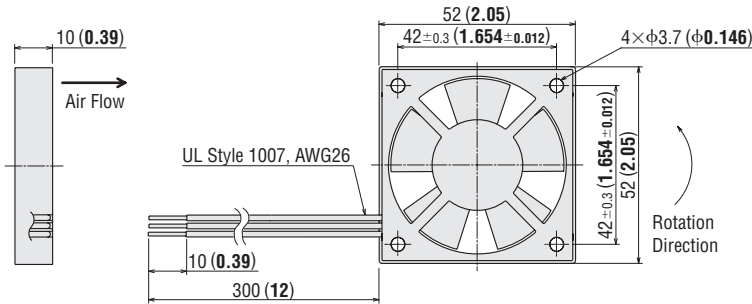


Type	φA	Housing P/N
Stall Alarm, Electronic Alarm Type	φ4.8 (φ0.19)	SMP-03V-NC (J.S.T.)
Standard Type, Standard Speed	φ4.5 (φ0.18)	
Standard Type, Middle Speed		

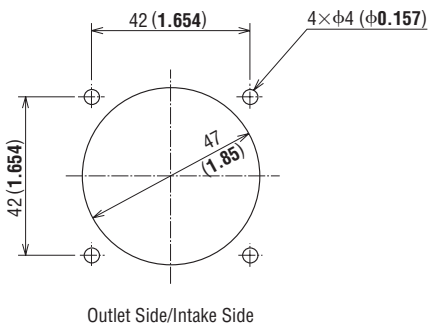
## ● Lead Wire Type

Mass: 30 g (1.06 oz.)

**DXF** E018

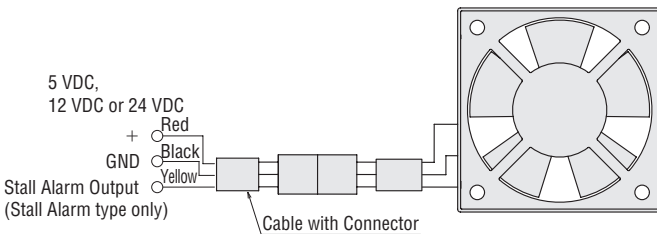


## ■ Panel Cut-Out Unit = mm (in.)

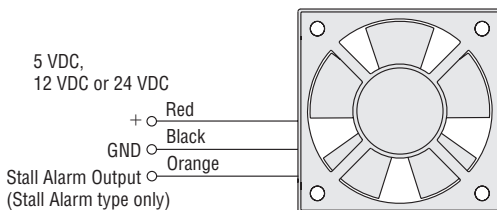


## ■ Connection Diagrams

### ● Connector Type



### ● Lead Wire Type



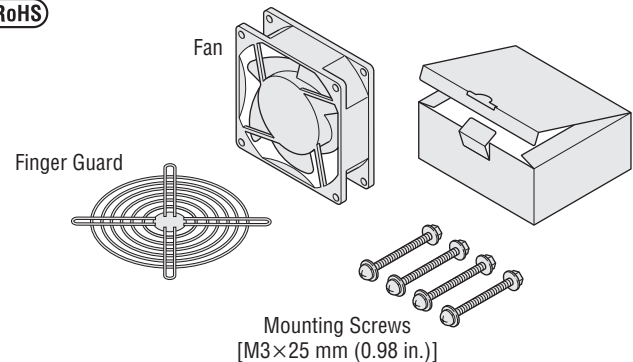
## ■ Accessories

Product	Model	Page
Finger Guard	<b>FG5D</b>	F-118

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

**RoHS**



Mounting Screws  
[M3×25 mm (0.98 in.)]

### ● Product Line

#### ◇ Connector Type

Fan Kit Model	
<b>T-MDS510-12LHG</b>	<b>T-MDS510-24LHG</b>
<b>T-MDS510-12HG</b>	<b>T-MDS510-24HG</b>
<b>T-MDS510M-5HG</b>	-

#### ◇ Lead Wire Type

Fan Kit Model	
<b>T-MDS510-12L-G</b>	<b>T-MDS510-24L-G</b>
<b>T-MDS510-12-G</b>	<b>T-MDS510-24-G</b>
<b>T-MDS510M-5-G</b>	-
<b>T-MDS510M-12-G</b>	<b>T-MDS510M-24-G</b>

● See page F-70 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.



**MDS Series**

**42 mm – 10 mm Thick**  
**(1.65 in. – 0.39 in. Thick)**



Lead Wire Type

Operating Voltage Range: ±10%  
 Materials  
 Frame: Polycarbonate (Flammability grade: V-0)  
 Blades: PBT (Flammability grade: V-0)  
 Overheat Protection: Built-in Overheat Protection Circuit  
 Bearings: Ball Bearings



**Specifications (RoHS)**

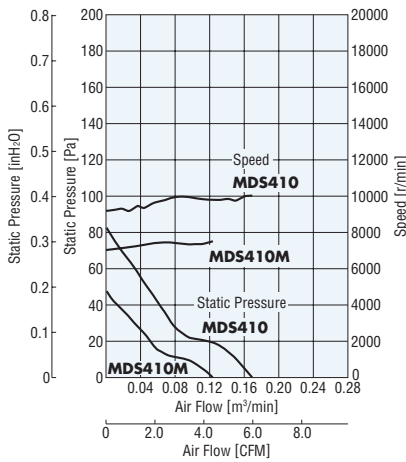
Speed Type	Function	Model		Voltage VDC	Current A	Speed r/min	Max. Air Flow m <sup>3</sup> /min CFM	Max. Static Pressure		Noise Level dB (A)	
		Connector Type	Lead Wire Type					Pa	inH <sub>2</sub> O		
Standard Speed	Stall Alarm, Electronic Alarm Type (Alarm specifications: ①)	MDS410-12LH	MDS410-12L	12	0.16	10000	0.18	6.35	86	0.345	34
		MDS410-24LH	MDS410-24L	24	0.09						
	Standard Type	MDS410-12H	MDS410-12	12	0.16						
		MDS410-24H	MDS410-24	24	0.09						
Middle Speed	Standard Type	MDS410M-5H	MDS410M-5	5	0.20	7500	0.13	4.59	47	0.188	25

- Only lead wire type is DEMKO certified.
- Alarm specifications ① → Page F-21 ● Details of safety standards → Page H-2

The following items are included in each product.

- Connector Type  
Fan, Cable with Connector, Operating Manual
- Lead Wire Type  
Fan, Operating Manual

**Air Flow – Static Pressure Characteristics**



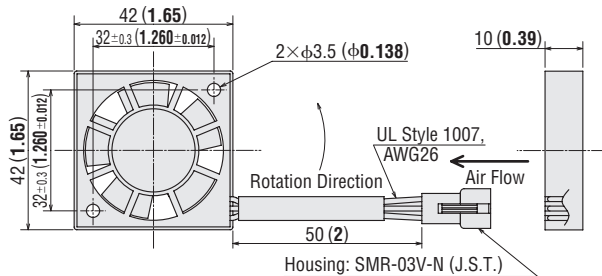
**Dimensions Unit = mm (in.)**

● Connector Type

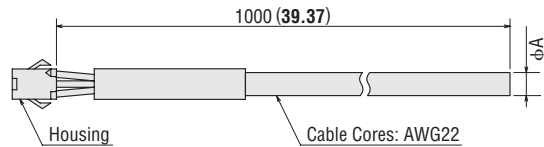
◇ Fan

Mass: 25 g (0.88 oz.)

DXF E125



◇ Cable with Connector (Included)

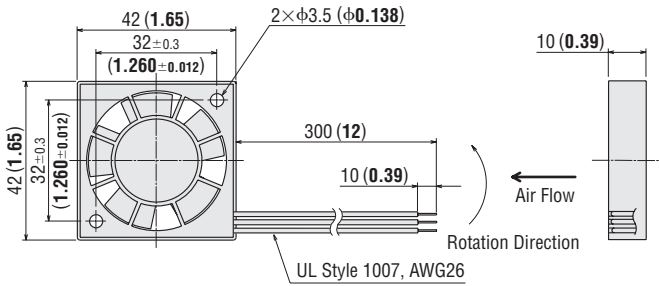


Type	φA	Housing P/N
Stall Alarm, Electronic Alarm Type	φ4.8 (φ0.19)	SMP-03V-NC (J.S.T.)
Standard Type, Standard Speed	φ4.5 (φ0.18)	
Standard Type, Middle Speed		

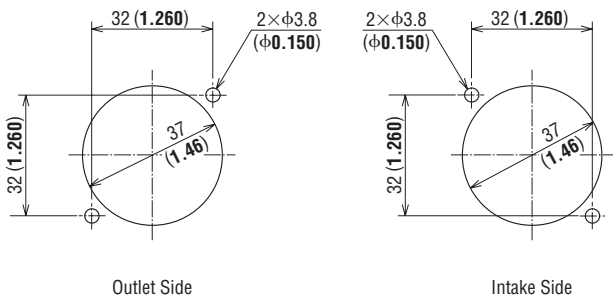
## ● Lead Wire Type

Mass: 25 g (0.88 oz.)

**DXF** E019

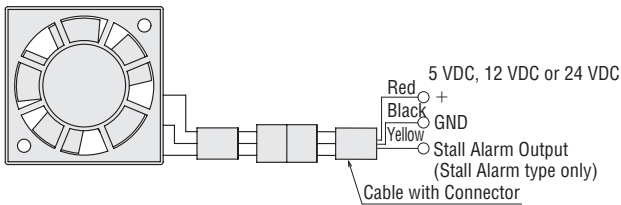


## ■ Panel Cut-Out Unit = mm (in.)

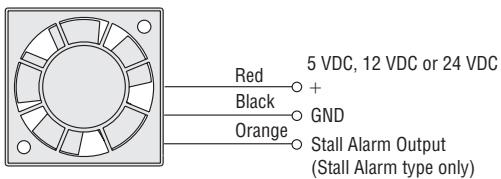


## ■ Connection Diagrams

### ● Connector Type



### ● Lead Wire Type



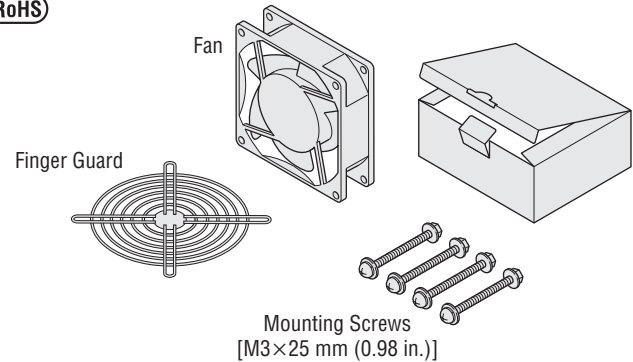
## ■ Accessories

Product	Model	Page
Finger Guard	<b>FG4D</b>	F-118

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

**RoHS**



### ● Product Line

#### ◇ Connector Type

Fan Kit Model	
<b>T-MDS410-12LHG</b>	<b>T-MDS410-24LHG</b>
<b>T-MDS410-12HG</b>	<b>T-MDS410-24HG</b>
<b>T-MDS410M-5HG</b>	—

#### ◇ Lead Wire Type

Fan Kit Model	
<b>T-MDS410-12L-G</b>	<b>T-MDS410-24L-G</b>
<b>T-MDS410-12-G</b>	<b>T-MDS410-24-G</b>
<b>T-MDS410M-5-G</b>	—

● See page F-72 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

## Long-Life Fans MDE Series

**140 mm – 51 mm Thick**  
**(5.51 in. – 2.01 in. Thick)**



Operating Voltage Range:  $\pm 15\%$   
Materials  
Frame: Die Cast Aluminum  
Blades: Polycarbonate (Flammability grade V-0)  
Overheat Protection: Built-in Overheat Protection Circuit  
Bearings: Ball Bearings

The 100,000 hours of expected life indicates that more than 90% of fans will satisfy the following criteria when used at an ambient temperature of 60°C (140°F).

Criteria: Speed (at rated voltage): Greater than 70% of rated speed  
Input Current (at rated voltage): Less than 130% of rated current

### Specifications **(RoHS)**

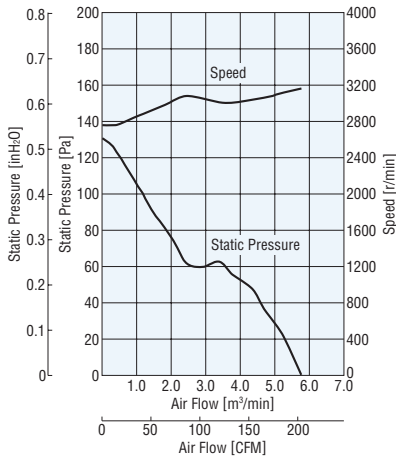


Speed Type	Function	Model	Voltage VDC	Current A	Speed r/min	Max. Air Flow m <sup>3</sup> /min	Max. Air Flow CFM	Max. Static Pressure Pa	Max. Static Pressure inH <sub>2</sub> O	Noise Level dB (A)
Standard Speed	Stall Alarm, Electronic Alarm Type (Alarm specifications: ①)	<b>MDE1451-24L2</b>	24	0.7	3150	5.8	205	130	0.521	49
		<b>MDE1451-48L2</b>	48	0.35						

● Alarm specifications ① → Page F-21 ● Details of safety standards → Page H-2

The following items are included in each product.  
Fan, Operating Manual

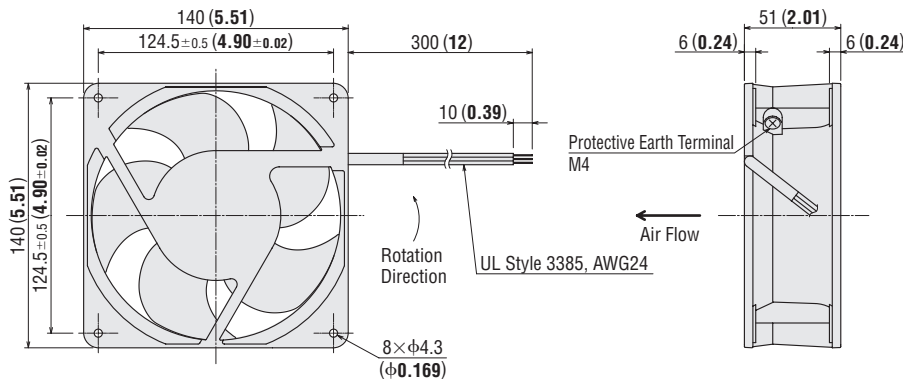
### Air Flow – Static Pressure Characteristics



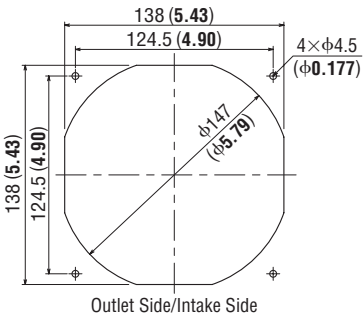
### Dimensions Unit = mm (in.)

Mass: 0.65 kg (1.43 lb.)

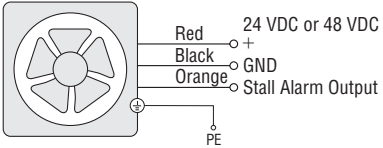
**DXF** E109



## Panel Cut-Out Unit = mm (in.)



## Connection Diagram



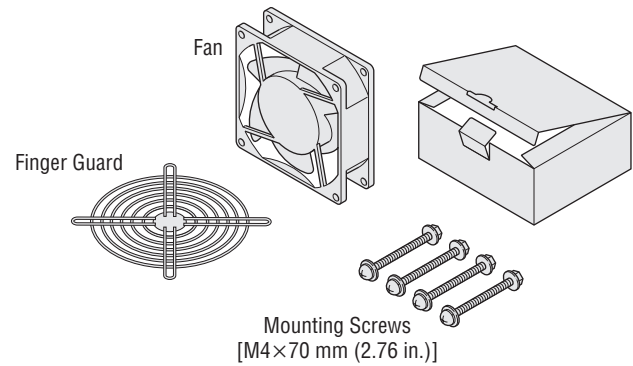
## Accessories

Product	Model	Page
Finger Guard	<b>FG14D</b>	F-118
Filter	<b>FL14</b>	F-120

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

**RoHS**



## Product Line

Fan Kit Model
<b>T-MDE1451-24L2G</b>
<b>T-MDE1451-48L2G</b>

● See page F-74 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

Introduction

MRS

AC Input  
Variable Flow  
MRS

Axial Flow Fans

MU

MDS/MD

DC Input  
Long-Life  
MDE

MB

Centrifugal Blowers  
AC Input

MBD

DC Input

MF

Cross Flow Fans  
AC Input

MFD

DC Input

FM

Cooling  
Module

Thermostats

Accessories

Installation

## Long-Life Fans MDE Series

**119 mm – 25.4 mm Thick**  
**(4.69 in. – 1.00 in. Thick)**



Operating Voltage Range:  $\pm 15\%$   
Materials  
Frame: Die Cast Aluminum  
Blades: Polycarbonate (Flammability grade V-0)  
Overheat Protection: Built-in Overheat Protection Circuit  
Bearings: Ball Bearings

The 100,000 hours of expected life indicates that more than 90% of fans will satisfy the following criteria when used at an ambient temperature of 60°C (140°F).

Criteria: Speed (at rated voltage): Greater than 70% of rated speed  
Input Current (at rated voltage): Less than 130% of rated current

### Specifications **(RoHS)**

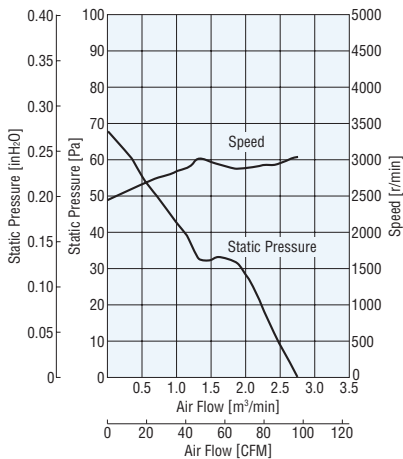


Speed Type	Function	Model	Voltage VDC	Current A	Speed r/min	Max. Air Flow m <sup>3</sup> /min	Max. Air Flow CFM	Max. Static Pressure Pa	Max. Static Pressure inH <sub>2</sub> O	Noise Level dB (A)
Standard Speed	Stall Alarm, Electronic Alarm Type (Alarm specifications: ①)	<b>MDE1225-12L</b>	12	0.58	3000	2.7	95.3	70	0.281	46
		<b>MDE1225-24L</b>	24	0.30						

● Alarm specifications ① → Page F-21 ● Details of safety standards → Page H-2

The following items are included in each product.  
Fan, Operating Manual

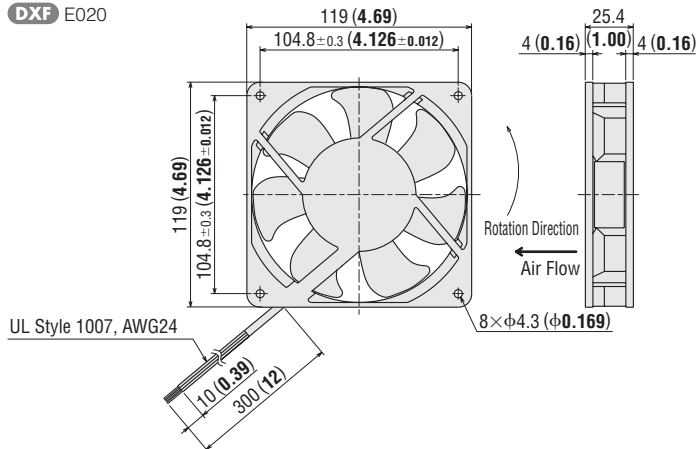
### Air Flow – Static Pressure Characteristics



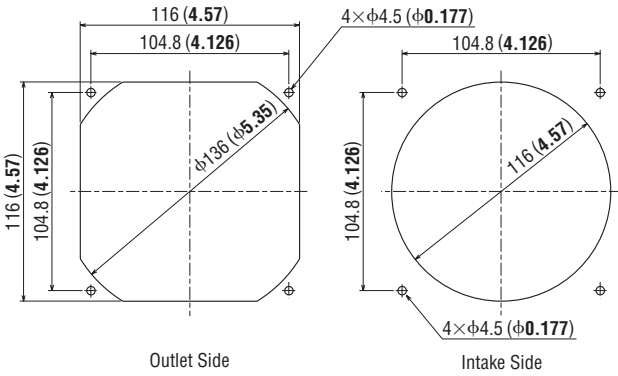
### Dimensions Unit = mm (in.)

Mass: 0.3 kg (0.66 lb.)

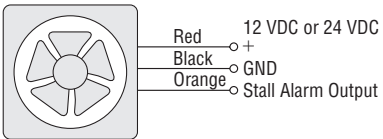
**DXF** E020



## Panel Cut-Out Unit = mm (in.)



## Connection Diagram



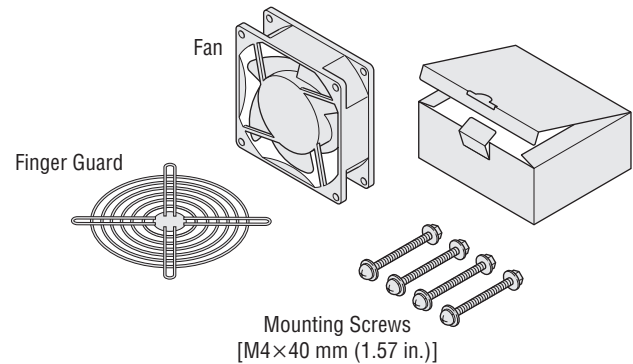
## Accessories

Product	Model	Page
Finger Guard	<b>FG12D</b>	F-118
Filter	<b>FL12</b>	F-120
Screen	<b>FS12S</b>	F-123

## Fan Kit

The lineup includes a product configuration containing all necessary accessories in one package.

RoHS



## Product Line

Fan Kit Model
<b>T-MDE1225-12L-G</b>
<b>T-MDE1225-24L-G</b>

● See page F-76 to determine base fan required (Voltage/Alarm) and page F-30 for fan kits product number code.

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