

## AC Axial Fan

**CU**

□ 120 × 25 (□ 4.7" × 1.0")

Max. airflow: 1.9 m³/min (50 Hz)  
2.2 m³/min (60 Hz)Max. static pressure:  
53 Pa (50 Hz) 56 Pa (60 Hz)

Mass: 360 g

## Fan model code

CU115B5

CU2B3

CU2B5

CU47F3

CU47F5

CU55B3

CU55B5

CUJ47F5

CUJ55B5

## Standard specification

(\*1: Rated values appear on name plate)

| Max. Airflow<br>m³/min | CFM       | Max. Static Pressure |               | Noise<br>dB | Speed<br>min⁻¹ | Rated Vol.<br>V (±10 %) | Freq.<br>Hz | Input<br>W *1 | Current<br>mA*1 | Lock<br>Current mA | Model Code     |       |               |       |
|------------------------|-----------|----------------------|---------------|-------------|----------------|-------------------------|-------------|---------------|-----------------|--------------------|----------------|-------|---------------|-------|
|                        |           | Pa                   | inH₂O         |             |                |                         |             |               |                 |                    | Lead Wire Type | Std*2 | Terminal Type | Std*2 |
| 1.9/<br>2.2            | 67/<br>78 | 53/<br>56            | 0.21/<br>0.23 | 40/<br>45   | 2550/<br>3000  | 100                     | 50/<br>60   | 16/14.5       | 190/140         | 200/170            | CU55B5         | UC    | CU55B3        | UCP   |
|                        |           |                      |               |             |                | 100                     |             | 12/11         | 190/140         | 200/170            | CUJ55B5        | P     |               |       |
|                        |           |                      |               |             |                | 115                     |             | 11/10         | 160/130         | 180/160            | CU2B5          | UC    | CU2B3         | UCP   |
|                        |           |                      |               |             |                | 115                     |             | 11/9          | 140/110         | 150/120            | CU115B5        | UTV   |               |       |
| 1.2/<br>1.4            | 42/<br>49 | 19/<br>24            | 0.07/<br>0.10 | 27/<br>34   | 1500/<br>1900  | 100-120                 | 50/<br>60   | 14/11         | 170/130         | 170/130            | CU47F5         | UCT   | CU47F3        | UCP   |
|                        |           |                      |               |             |                | 100-120                 |             | 14/10.5       | 170/130         | 170/130            | CUJ47F5        | P     |               |       |

● Figures in the table are average measured values. Please request the product delivery specification when preparing a purchase specification.

● \*2: The symbols in the standards column denote that they are registered in the following standards files, U: UL E48889, C: CSA LR49399, LR108118, T: TUV R60229-60302.

V: VDE 3019UG

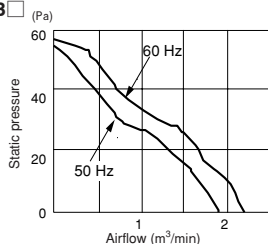
● \*2: Products conforming to the specifications of the Electrical Appliance and Material Safety Law (Japan) can be used in case the products are assembled in electric appliances used in Japan. (Products marked with the (PS)E mark)

## General specification

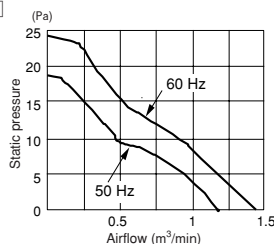
|                       |                                                                                                                                               |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Materials Used        | Venturi: Aluminum alloy die casting<br>Propeller: Glass fiber reinforced polycarbonate resin<br>Bearing: Double - sided shielded ball bearing |
| Motor                 | Shaded pole induction motor<br>Protection type: Impedance protection                                                                          |
| Common Elec. Spec.    | See page G-12.                                                                                                                                |
| Usage Range           | Rated voltage ±10 %                                                                                                                           |
| Operating Temp. Range | -20 °C ~ +60 °C ( -20 °C ~ +55 °C in TUV standard )<br>( -20 °C ~ +40 °C in VDE standard )                                                    |
| Standard Carton       | 30 to a carton of (450 x 380 x 160) mm, mass 12 kg                                                                                            |

## Standard airflow and static pressure characteristics (At rated voltage)

CU□□B□

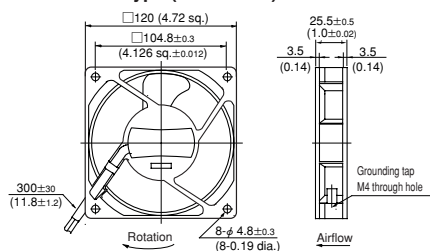


CU□□F□



## External dimensions in mm (inches)

## ● Lead wire type (CU□□□5)



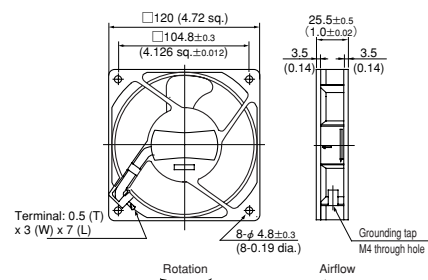
Lead wire specification

CUJ series: Heat resistant PVC 0.75 mm² (30 conductors, 0.18 dia.)

CU series: AWG22 UL1015

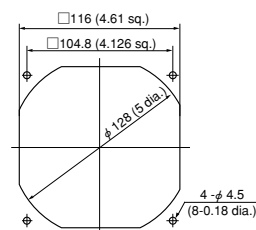
## ● Terminal type

[2 terminals: with grounding tap](CU□□□3)

Mounting hole dimensions in mm (inches)  
[Recommendation]

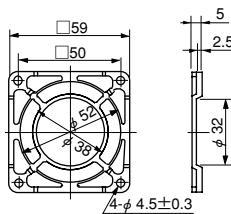
## Options (sold separately)

- Guard: F120UL guard
- Filter: F120 filter
- Power code: T2P1 code, D2P1 code, UL2P1 code



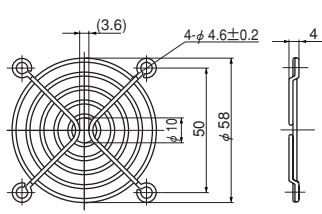
Identical for the intake and outlet sides

F60P Guard (Mass 4 g)



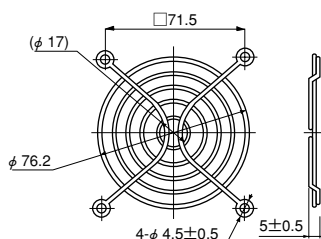
Material: Polycarbonate (black)  
UL94V-2

F60UL Guard (Mass 12 g)



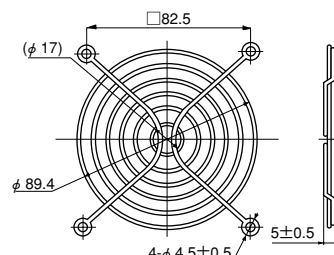
Material: Mild steel wire 1.6 dia.  
Surface treatment:  
Nickel chromium plating

F80UL Guard (Mass 14 g)



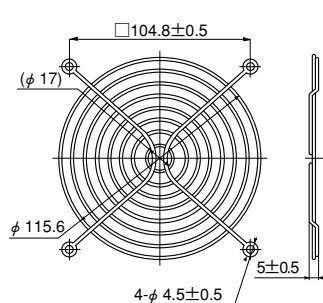
Material: Mild steel wire 1.6 dia.  
Surface treatment:  
Nickel chromium plating

F92UL Guard (Mass 16 g)



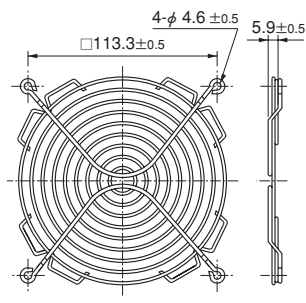
Material: Mild steel wire 1.6 dia.  
Surface treatment:  
Nickel chromium plating

F120UL Guard (Mass 29 g)



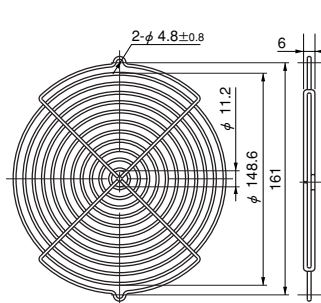
Material: Mild steel wire 1.6 dia.  
Surface treatment:  
Nickel chromium plating

F127UL Guard



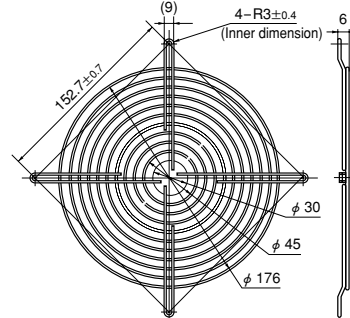
Material: Mild steel wire 1.6 dia.  
Surface treatment:  
Nickel chromium plating

GUARD 172



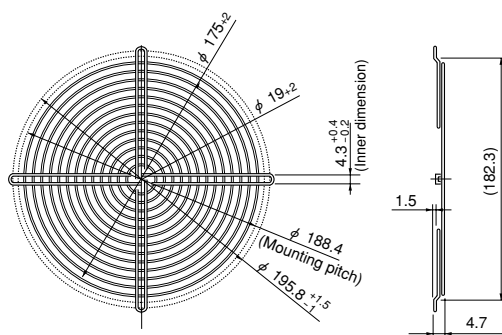
Material: Mild steel wire 2 dia.  
Surface treatment:  
Nickel chromium plating

F180UL Guard



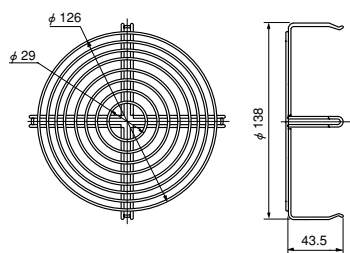
Material: Mild steel wire 1.6 dia.  
Surface treatment:  
Nickel chromium plating

F200UL Guard (Mass 82 g)



Material: Mild steel wire 1.6 dia.  
Surface treatment:  
Nickel chromium plating

SCN Guard (Mass 55 g)



Material: Mild steel wire 1.6 dia.  
Surface treatment:  
Nickel chromium plating

- Guard special for intake side of SCN (metal venturi) fans.

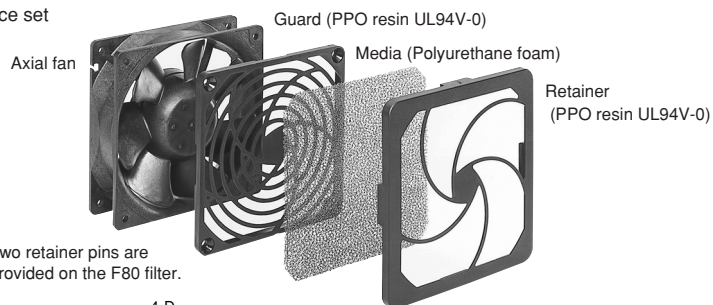
## List of mating fan series

| Guard         | F60P | F60UL | F80UL | F92UL | F120UL | F127UL | GUARD 172 | F180UL | F200UL | SCN |
|---------------|------|-------|-------|-------|--------|--------|-----------|--------|--------|-----|
| AC Axial Fans |      |       |       |       |        |        |           |        |        |     |
| SCN           |      |       |       |       | ○*1    |        |           |        |        | ○*2 |
| VE            |      |       | ○     |       |        |        |           |        |        |     |
| WE            |      |       |       | ○     |        |        |           |        |        |     |
| KA            |      |       |       | ○     |        |        |           |        |        |     |
| CU            |      |       |       |       | ○      |        |           |        |        |     |
| CN            |      |       |       |       | ○      |        |           |        |        |     |
| MA            |      |       |       |       |        |        | ○         |        |        |     |
| PA            |      |       |       |       |        |        | ○         |        |        |     |
| TUDC          | ○    | ○     |       |       |        |        |           |        |        |     |
| PUDC          |      |       | ○     |       |        |        |           |        |        |     |
| KUDC          |      |       |       | ○     |        |        |           |        |        |     |
| DO925C        |      |       |       | ○     |        |        |           |        |        |     |
| KLDC          |      |       |       | ○     |        |        |           |        |        |     |
| CUDC          |      |       |       |       | ○      |        |           |        |        |     |
| D1225C        |      |       |       |       | ○      |        |           |        |        |     |
| CNDC          |      |       |       |       | ○      |        |           |        |        |     |
| D1238T        |      |       |       |       | ○      |        |           |        |        |     |
| D1238B        |      |       |       |       | ○      |        |           |        |        |     |
| D1338B        |      |       |       |       |        | ○      |           |        |        |     |
| D1338S        |      |       |       |       |        | ○      |           |        |        |     |
| D1751M        |      |       |       |       |        |        | ○         |        |        |     |
| D1751S        |      |       |       |       |        |        | ○         |        |        |     |
| G0638D        |      | ○     |       |       |        |        |           |        |        |     |
| G0838C        |      |       | ○     |       |        |        |           |        |        |     |
| G0938B        |      |       |       | ○     |        |        |           |        |        |     |
| G1238B        |      |       |       |       | ○      |        |           |        |        |     |
| G1751M        |      |       |       |       |        |        | ○         |        |        |     |
| DC Axial Fans |      |       |       |       |        |        |           |        |        |     |

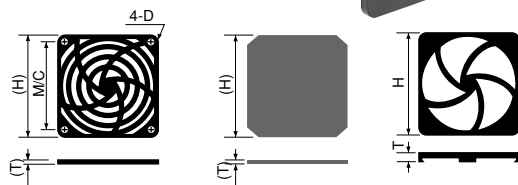
\*1: Can be installed only on outlet side. \*2: Can be installed only on intake side.  
All guards conform to the UL standard when combined with NIDEC SERVO fans.  
The installation of a filter, guard and other accessories will constitute a ventilating load, reducing the airflow. Select a suitable guard, taking into consideration the increase in air resistance. (See Figs. 12 and 13 on page G-7.)

## Filter

3-piece set



Note: Two retainer pins are provided on the F80 filter.



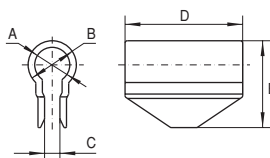
## List of mating fan series

| Filter | F80 | F92 | F120 |
|--------|-----|-----|------|
| PUDC   | ○   |     |      |
| KUDC   |     | ○   |      |
| D0925C |     | ○   |      |
| KLDC   |     | ○   |      |
| CUDC   |     |     | ○    |
| D1225C |     |     | ○    |
| CNDC   |     |     | ○    |
| D1238T |     |     | ○    |
| D1238B |     |     | ○    |
| G0838C | ○   |     |      |
| G0938B |     | ○   |      |
| G1238B |     |     | ○    |

| Filter | F80 | F92 | F120 |
|--------|-----|-----|------|
| VE     | ○   |     |      |
| WE     |     | ○   |      |
| KA     |     | ○   |      |
| CU     |     |     | ○    |
| CN     |     |     | ○    |

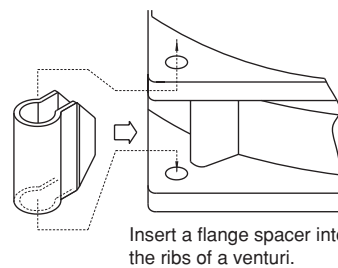
| Component (Model Code) | H     | T    | M/C   | D     |
|------------------------|-------|------|-------|-------|
| <b>F80 Filter</b>      | 83.6  | 10   | 71.5  | φ 3.8 |
| <b>F92 Filter</b>      | 96.5  | 10   | 82.5  | φ 3.8 |
| <b>F120 Filter</b>     | 123.7 | 10.7 | 104.8 | φ 4.6 |

## Flange spacer



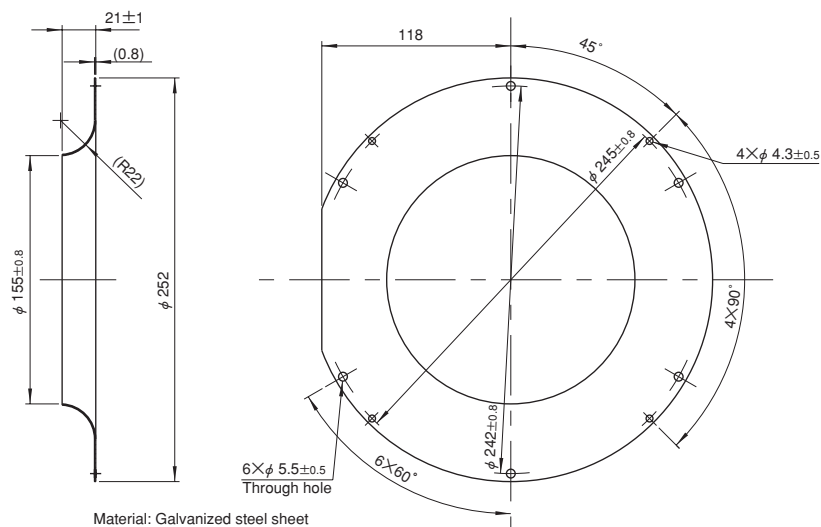
| Component (Model Code) | A mm | B mm | C mm | D mm | E mm | Mating Model Code |
|------------------------|------|------|------|------|------|-------------------|
| Flange Spacer PUDC (※) | 5    | 8    | 2    | 17   | 14.5 | KUDC, PUDC        |
| Flange Spacer CUDC (※) | 8    | 11   | 3.5  | 15   | 19.8 | CUDC              |
| Flange Spacer CNDC     | 8    | 11   | 3.5  | 28   | 19.8 | CNDC              |

※Ribbed venturis (PUDC-R, CUDC-R) are available for PUDC and CUDC.



(Installing a flange spacer)

## Inlet ring



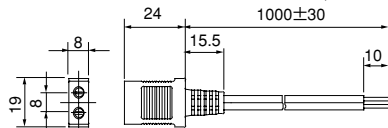
| Component (Model Code) | Mating Model Code |
|------------------------|-------------------|
| E2271 Inlet ring       | E2271Z            |

## Plug cords for AC fans

(Common specification: Rated 3 A, voltage 250 V, dielectric strength 1 minute at 1500 V 50 Hz)

### D2P1 cord (Mass 35 g)

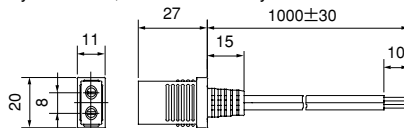
Certified under the Electrical Appliance and Material Safety Law (Japan) (<PS>E mark approved)  
Cord 0.18 dia. 30 conductors Black, heat resistant vinyl



\* D2P2 cord with 2m length also available.

### UL2P1 cord (Mass 41 g)

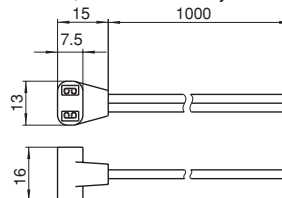
UL standard product (UL file No. E78112)  
Cord 0.16 dia. 41 conductors Black, heat resistant vinyl



\* UL2P2 cord with 2m length also available.

### T2P1 cord

For wiring inside equipment  
Cord 0.18 dia. 30 conductors Black, heat resistant vinyl

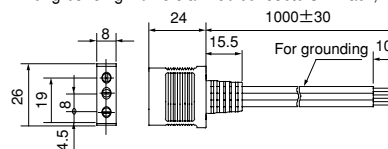


\* T2P2 cord with 2m length also available.

### D3P1 cord (Mass 59 g)

Certified under the Electrical Appliance and Material Safety Law (Japan) (<PS>E mark approved)  
Cord:

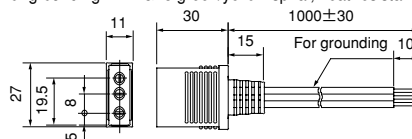
For power feeding 0.18 dia. 30 conductors Black, heat resistant vinyl  
For grounding 0.18 dia. 50 conductors Black, heat resistant vinyl



### UL3P1 cord (Mass 60 g)

UL standard product (UL file No. E78112)  
Cord:

For power feeding 0.16 dia. 41 conductors Black, heat resistant vinyl  
For grounding AWG18 green/yellow spiral, heat resistant vinyl



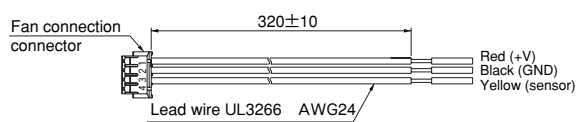
\* UL3P2 cord with 2 m length also available.

## List of mating fan series

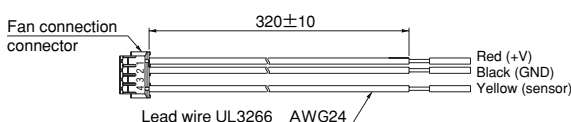
| Cord             | T2P1 | T2P2 | D2P1 | D2P2 | D3P1 | UL2P1 | UL2P2 | UL3P1 | PL3P2 |
|------------------|------|------|------|------|------|-------|-------|-------|-------|
| WE               | ○    | ○    | ○    | ○    |      | ○     | ○     |       |       |
| KA               | ○    | ○    | ○    | ○    |      | ○     | ○     |       |       |
| CU               | ○    | ○    | ○    | ○    |      | ○     | ○     |       |       |
| CN (2 terminals) | ○    | ○    | ○    | ○    |      | ○     | ○     |       |       |
| CN (3 terminals) |      |      |      |      | ○    |       |       | ○     | ○     |
| MA               | ○    | ○    | ○    | ○    |      | ○     | ○     |       |       |
| PA               | ○    | ○    | ○    | ○    |      | ○     | ○     |       |       |

## Plug cords for DC fans

### DCLD030ST-ZZ01 (S sensor output cord)



### DCLD030PT-ZZ01 (P sensor output cord)



\* Lead wire ends are sheathed to protect conductors. (Sheath peeling dimension 10±5)

| Component (Model Code) | Mating Model Code |
|------------------------|-------------------|
| DCLD030ST-ZZ01         | E1033H□□B□AM-04   |
| DCLD030PT-ZZ01         |                   |