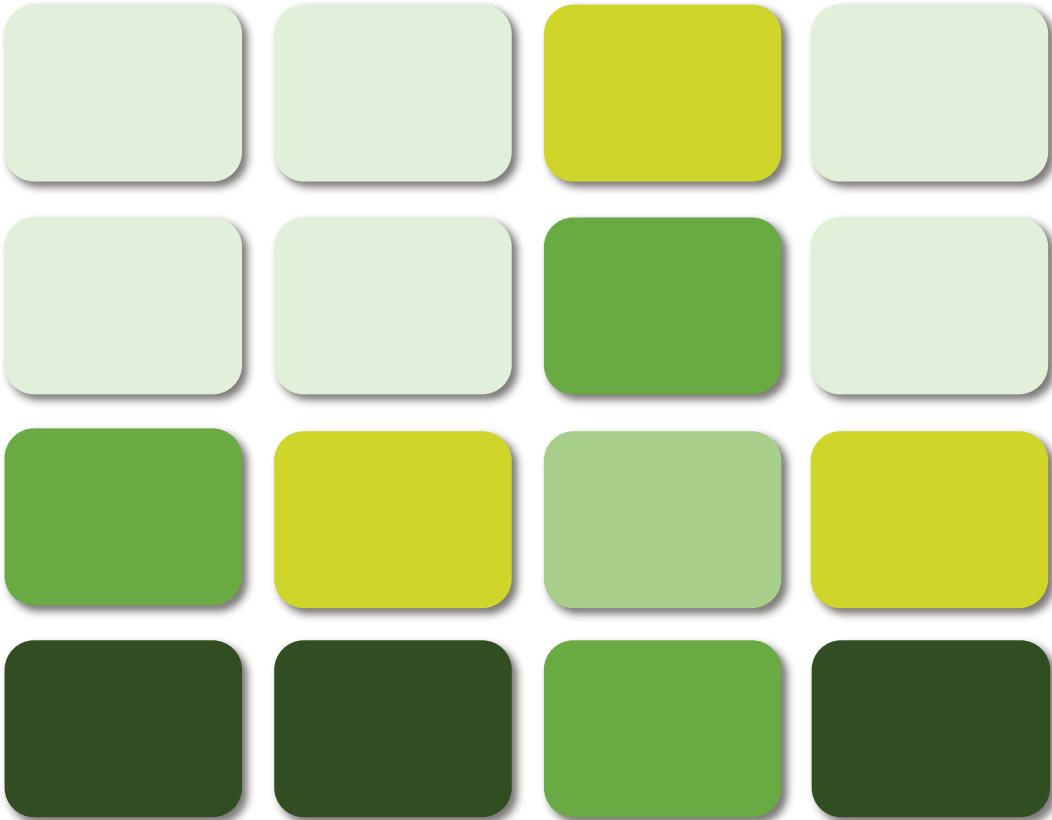




Catalogue 2024

Compact Fans for DC



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ASTRO

# DC FAN

## CD2010 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing (B) 60,000hrs (40°C)  
Sleeve Bearing (S) 20,000hrs (40°C)

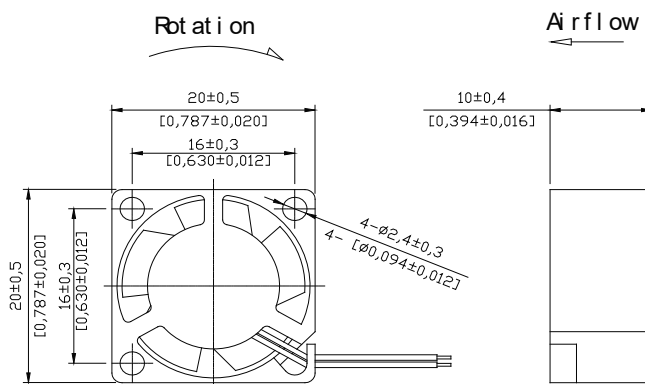
#### Lead Wire

+red -black or blue Sensor yellow

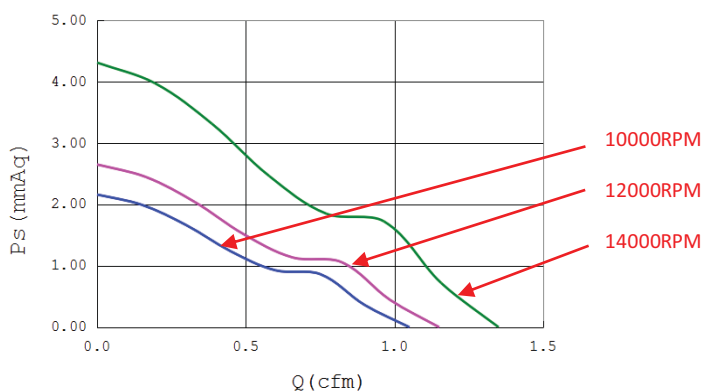
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           |                         |               |                   |             | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O |             |
| CD2010L05X | 5             | 4~5.5                   | 0.06          | 0.30              | 10000       | 1.05     | 0.030               | 2.16            | 0.085    | 18.8        |
| CD2010M05X |               | 4~5.5                   | 0.08          | 0.40              | 12000       | 1.15     | 0.032               | 2.65            | 0.104    | 21.3        |
| CD2010H05X |               | 4~5.5                   | 0.13          | 0.65              | 14000       | 1.35     | 0.038               | 4.31            | 0.170    | 24.2        |
| CD2010L12X | 12            | 7~13.8                  | 0.03          | 0.36              | 10000       | 1.05     | 0.030               | 2.16            | 0.085    | 18.8        |
| CD2010M12X |               | 7~13.8                  | 0.05          | 0.60              | 12000       | 1.15     | 0.032               | 2.65            | 0.104    | 21.3        |
| CD2010H12X |               | 7~13.8                  | 0.08          | 0.96              | 14000       | 1.35     | 0.038               | 4.31            | 0.170    | 24.2        |

# DC FAN

## CD2510 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing (B) 60,000hrs (40°C)  
Sleeve Bearing (S) 20,000hrs (40°C)

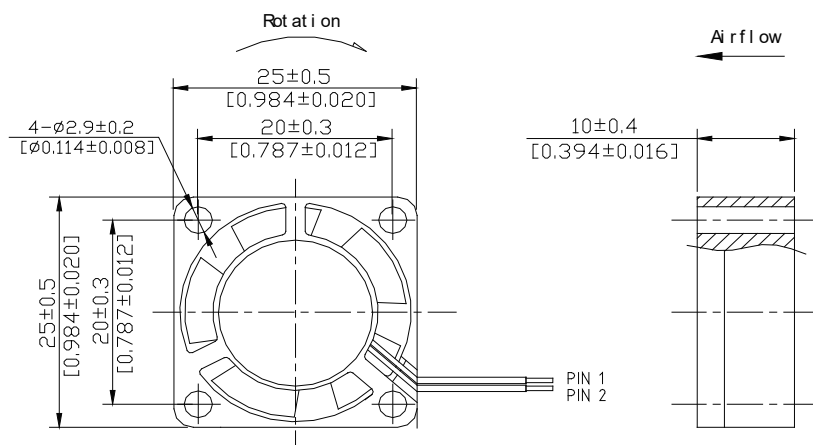
#### Lead Wire

+red -black or blue Sensor yellow

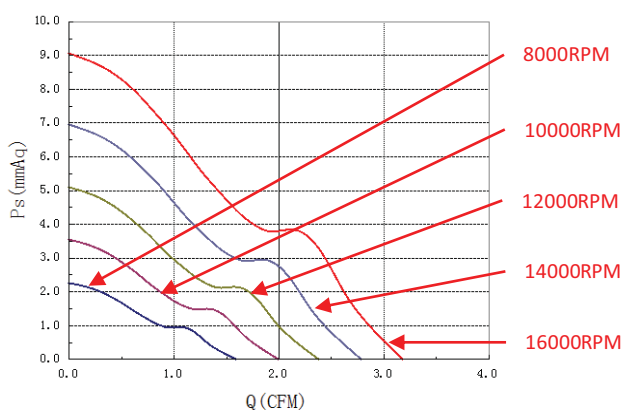
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage (V) | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |                     | Static Pressure |          | Sound level |
|------------|-------------------|-----------------------------|---------------------|-----------------------|-------------------|----------|---------------------|-----------------|----------|-------------|
|            |                   |                             |                     |                       |                   | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD2510E05X | 5                 | 4~5.5                       | 0.12                | 0.60                  | 8000              | 1.59     | 0.045               | 2.27            | 0.089    | 15.20       |
| CD2510L05X |                   | 4~5.5                       | 0.15                | 0.75                  | 10000             | 1.99     | 0.056               | 3.55            | 0.122    | 20.10       |
| CD2510M05X |                   | 4~5.5                       | 0.18                | 0.90                  | 12000             | 2.38     | 0.067               | 5.11            | 0.200    | 24.10       |
| CD2510H05X |                   | 4~5.5                       | 0.22                | 1.10                  | 14000             | 2.78     | 0.079               | 6.97            | 0.273    | 28.90       |
| CD2510E12X | 12                | 7~13.8                      | 0.09                | 1.08                  | 8000              | 1.59     | 0.045               | 2.27            | 0.089    | 15.20       |
| CD2510L12X |                   | 7~13.8                      | 0.11                | 1.32                  | 10000             | 1.99     | 0.056               | 3.55            | 0.122    | 20.10       |
| CD2510M12X |                   | 7~13.8                      | 0.14                | 1.72                  | 12000             | 2.38     | 0.067               | 5.11            | 0.200    | 24.10       |
| CD2510H12X |                   | 7~13.8                      | 0.17                | 2.00                  | 14000             | 2.78     | 0.079               | 6.97            | 0.273    | 28.90       |
| CD2510X12X |                   | 7~13.8                      | 0.19                | 2.32                  | 16000             | 3.18     | 0.090               | 9.08            | 0.357    | 30.30       |

# DC FAN

## CD3010 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

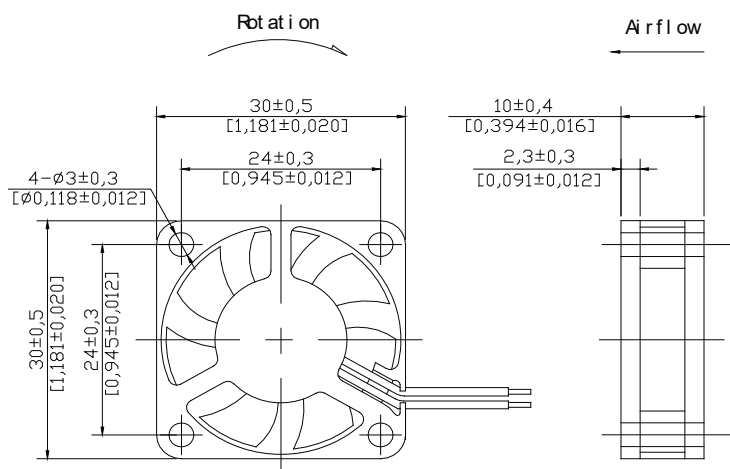
#### Lead Wire

+red -black or blue Sensor yellow

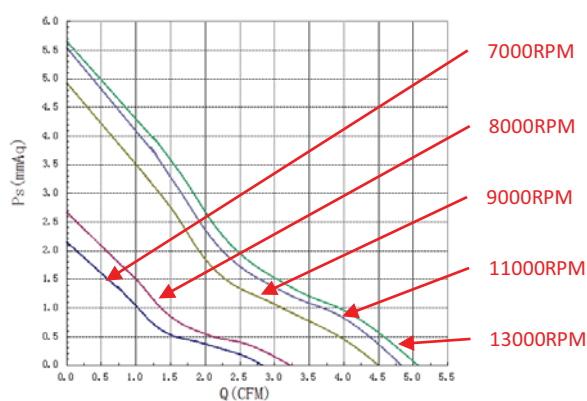
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           |                         |               |                   |             | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O |             |
| CD3010L05X | 5             | 4~5.5                   | 0.900         | 4.50              | 7000        | 2.83     | 0.080               | 2.15            | 0.085    | 19.30       |
| CD3010M05X |               | 4~5.5                   | 0.110         | 0.55              | 8000        | 3.28     | 0.093               | 2.64            | 0.110    | 20.10       |
| CD3010H05X |               | 4~5.5                   | 0.140         | 0.70              | 9000        | 0.127    | 0.191               | 4.93            | 0.194    | 22.40       |
| CD3010E12X | 12            | 7~13.8                  | 0.052         | 0.62              | 7000        | 2.83     | 0.080               | 2.15            | 0.085    | 19.30       |
| CD3010L12X |               | 7~13.8                  | 0.600         | 7.20              | 8000        | 3.28     | 0.093               | 2.64            | 0.110    | 20.10       |
| CD3010M12X |               | 7~13.8                  | 0.070         | 0.84              | 9000        | 0.127    | 0.191               | 4.93            | 0.194    | 22.40       |
| CD3010H12X |               | 7~13.8                  | 0.093         | 1.12              | 11000       | 4.96     | 0.140               | 5.54            | 0.220    | 28.40       |
| CD3010X12X |               | 7~13.8                  | 0.120         | 1.44              | 13000       | 5.09     | 0.144               | 5.65            | 0.222    | 43.80       |

# DC FAN

## CD3510 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

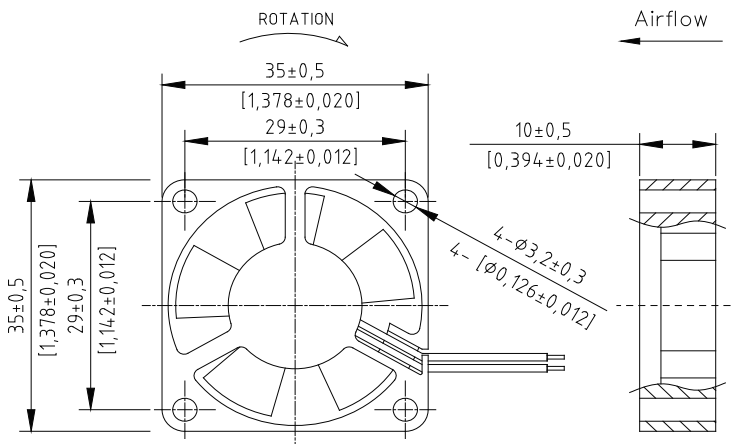
#### Lead Wire

+red -black or blue Sensor yellow

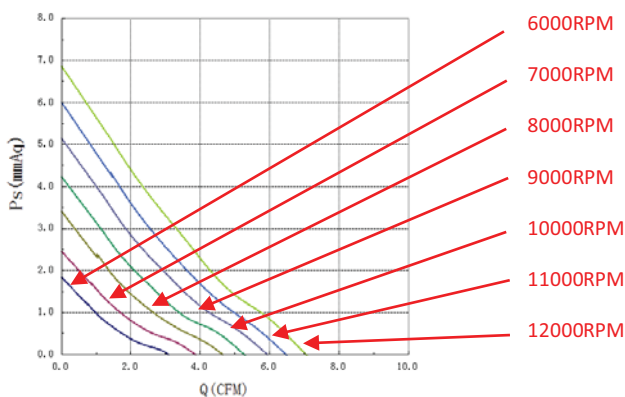
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD3510E05X | 5             | 5~5.5                   | 0.16          | 0.80              | 6000        | 3.07     | 0.087               | 1.84            | 0.072    | 19.4        |
| CD3510L05X |               | 5~5.5                   | 0.18          | 0.90              | 7000        | 3.86     | 0.109               | 2.46            | 0.097    | 22.2        |
| CD3510M05X |               | 5~5.5                   | 0.20          | 1.00              | 8000        | 4.65     | 0.132               | 3.40            | 0.134    | 27.6        |
| CD3510H05X |               | 5~5.5                   | 0.22          | 1.10              | 9000        | 5.29     | 0.150               | 4.23            | 0.167    | 32.2        |
| CD3510L12X | 12            | 7~13.8                  | 0.07          | 0.84              | 9000        | 5.29     | 0.150               | 4.23            | 0.167    | 32.2        |
| CD3510M12X |               | 7~13.8                  | 0.09          | 1.08              | 10000       | 5.93     | 0.168               | 5.14            | 0.202    | 35.3        |
| CD3510H12X |               | 7~13.8                  | 0.10          | 1.20              | 11000       | 6.48     | 0.183               | 5.99            | 0.236    | 37.9        |
| CD3510X12X |               | 7~13.8                  | 0.11          | 1.32              | 12000       | 7.06     | 0.200               | 6.85            | 0.270    | 40.3        |

# DC FAN

## CD4010 series A

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

#### Lead Wire

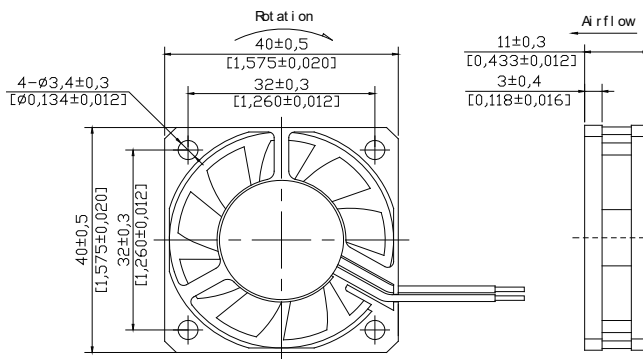
+red -black or blue Sensor yellow

#### Temperature Range

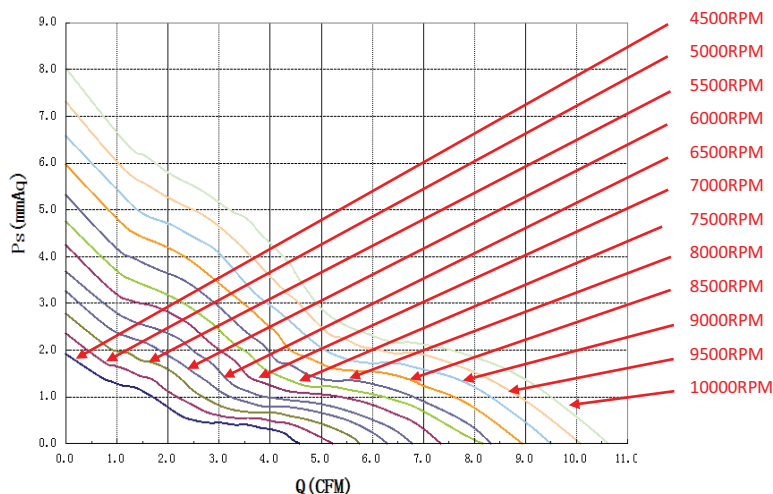
Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

**SIZE: 40X40X10 mm**

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage (V) | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |                     | Static Pressure |          | Sound level |
|------------|-------------------|-----------------------------|---------------------|-----------------------|-------------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)               | (V)                         | (Amp)               | (W)                   | (rpm)             | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD4010E05X | 5                 | 4~5.5                       | 0.15                | 0.75                  | 4500              | 4.57     | 0.129               | 1.91            | 0.075    | 22.40       |
| CD4010L05X |                   | 4~5.5                       | 0.20                | 1.00                  | 5500              | 5.75     | 0.163               | 2.78            | 0.110    | 26.80       |
| CD4010M05X |                   | 4~5.5                       | 0.25                | 1.25                  | 6500              | 6.77     | 0.191               | 3.69            | 0.145    | 30.40       |
| CD4010H05X |                   | 4~5.5                       | 0.32                | 1.60                  | 7500              | 8.16     | 0.231               | 4.75            | 0.187    | 33.50       |
| CD4010E12X | 12                | 7~13.8                      | 0.06                | 0.72                  | 5000              | 5.22     | 0.148               | 2.35            | 0.090    | 24.70       |
| CD4010L12X |                   | 7~13.8                      | 0.07                | 0.84                  | 6000              | 6.29     | 0.178               | 3.27            | 0.128    | 28.70       |
| CD4010M12X |                   | 7~13.8                      | 0.10                | 1.20                  | 7000              | 7.34     | 0.208               | 4.25            | 0.167    | 32.00       |
| CD4010H12X |                   | 7~13.8                      | 0.13                | 1.56                  | 8000              | 8.32     | 0.235               | 5.32            | 0.209    | 34.90       |
| CD4010X12X | 24                | 7~13.8                      | 0.15                | 1.80                  | 9000              | 9.49     | 0.269               | 6.58            | 0.259    | 37.50       |
| CD4010E24X |                   | 12~25.6                     | 0.09                | 2.16                  | 7500              | 8.16     | 0.231               | 4.75            | 0.187    | 33.50       |
| CD4010L24X |                   | 12~25.6                     | 0.11                | 2.64                  | 8500              | 8.93     | 0.253               | 5.98            | 0.235    | 36.20       |
| CD4010M24X |                   | 12~25.6                     | 0.13                | 3.12                  | 9500              | 10.07    | 0.285               | 7.32            | 0.288    | 38.70       |
| CD4010H24X |                   | 12~25.6                     | 0.15                | 3.60                  | 10000             | 10.62    | 0.300               | 8.04            | 0.317    | 39.70       |



# DC FAN

## CD4010 series B

**SIZE: 40X40X10 mm**

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

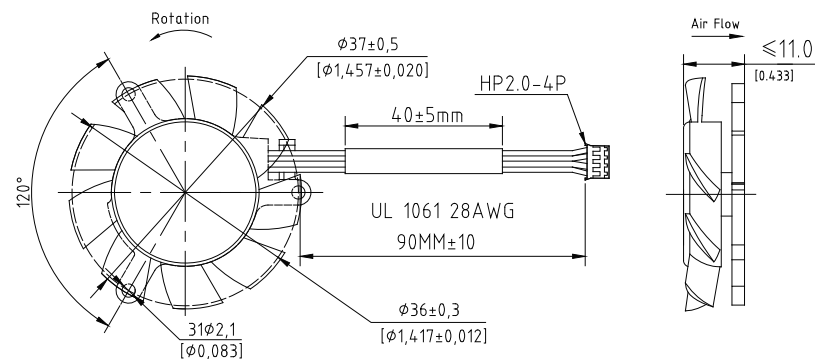
#### Lead Wire

+red -black or blue Sensor yellow

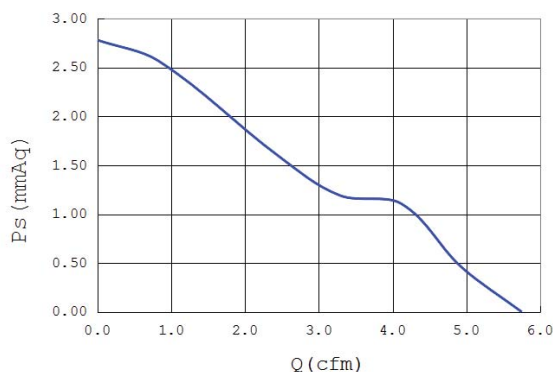
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure      |                       | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|----------------------|-----------------------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH <sub>2</sub> O) | inch-H <sub>2</sub> O | dB(A)       |
| CD4010H12X | 12            | 7~13.8                  | 0.13          | 1.56              | 5500        | 5.75     | 0.163               | 2.78                 | 0.110                 | 26.80       |

## General Specifications

### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

### Lead Wire

+red -black or blue Sensor yellow

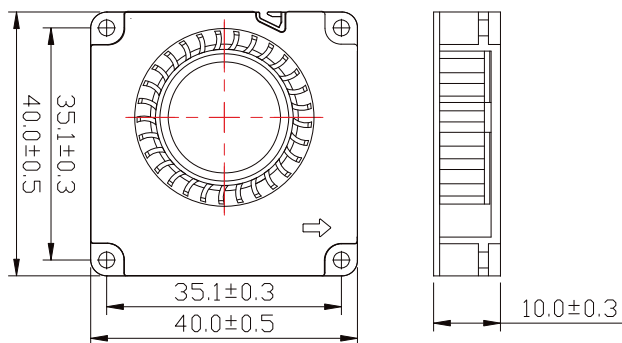
### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

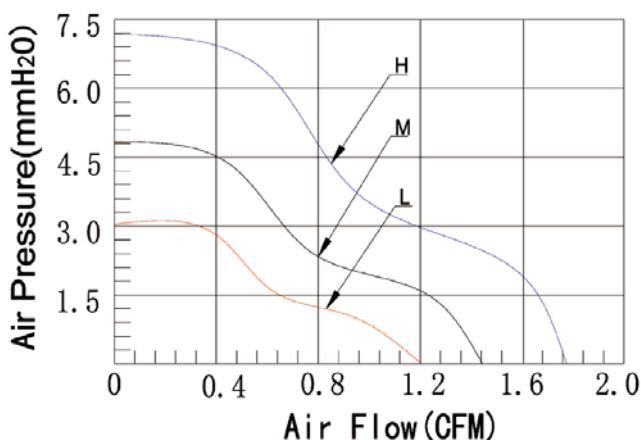
# BLOWER FAN CD4010 series

**SIZE: 40X40X10 mm**

## Dimensions(Unit : mm)



## P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |                     | Static Pressure      |                       | Sound level (dB(A)) |
|------------|---------------|-----------------------------|---------------------|-----------------------|-------------------|----------|---------------------|----------------------|-----------------------|---------------------|
|            | (V)           |                             |                     |                       |                   | (CFM)    | m <sup>3</sup> /min | (mmH <sub>2</sub> O) | inch-H <sub>2</sub> O |                     |
| CD4010L05X | 5             | 4.5~5.5                     | 0.15                | 0.75                  | 5000              | 1.21     | 0.034               | 3.04                 | 0.12                  | 21.40               |
| CD4010M05X |               | 4.5~5.5                     | 0.20                | 1.00                  | 6000              | 1.45     | 0.041               | 4.81                 | 0.19                  | 24.30               |
| CD4010H05X |               | 4.5~5.5                     | 0.25                | 1.25                  | 7000              | 1.77     | 0.050               | 7.17                 | 0.28                  | 27.50               |
| CD4010L12X | 12            | 7~13.8                      | 0.07                | 0.84                  | 5000              | 1.21     | 0.034               | 3.04                 | 0.12                  | 21.40               |
| CD4010M12X |               | 7~13.8                      | 0.10                | 1.20                  | 6000              | 1.45     | 0.041               | 4.81                 | 0.19                  | 24.30               |
| CD4010H12X |               | 7~13.8                      | 0.13                | 1.56                  | 7000              | 1.77     | 0.050               | 7.17                 | 0.28                  | 27.50               |

# DC FAN

## CD4020 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

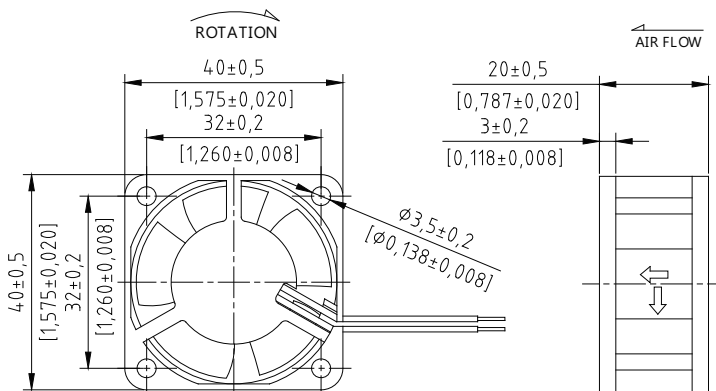
#### Lead Wire

+red -black or blue Sensor yellow

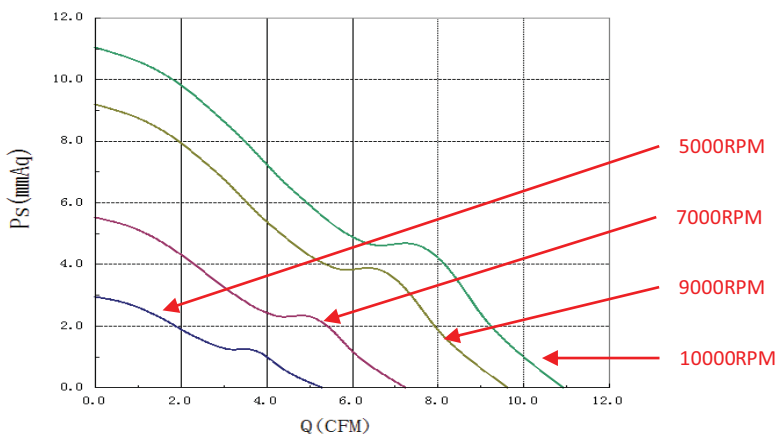
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD4020L12X | 12            | 7~13.8                  | 0.09          | 1.08              | 5000        | 5.28     | 0.150               | 2.96            | 0.117    | 21.90       |
| CD4020M12X |               | 7~13.8                  | 0.13          | 1.56              | 7000        | 7.24     | 0.205               | 5.52            | 0.217    | 32.20       |
| CD4020H12X |               | 7~13.8                  | 0.18          | 2.16              | 9000        | 9.61     | 0.272               | 9.19            | 0.362    | 38.40       |
| CD4020X12X |               | 7~13.8                  | 0.22          | 2.64              | 10000       | 10.91    | 0.309               | 11.05           | 0.435    | 41.60       |
| CD4020L24X | 24            | 12~25.6                 | 0.07          | 1.68              | 5000        | 5.28     | 0.150               | 2.96            | 0.117    | 21.90       |
| CD4020M24X |               | 12~25.7                 | 0.11          | 2.64              | 7000        | 7.24     | 0.205               | 5.52            | 0.217    | 32.20       |
| CD4020H24X |               | 12~25.8                 | 0.14          | 3.36              | 9000        | 9.61     | 0.272               | 9.19            | 0.362    | 38.40       |
| CD4020X24X |               | 12~25.9                 | 0.16          | 3.84              | 10000       | 10.91    | 0.309               | 11.05           | 0.435    | 41.60       |

# DC FAN

## CD4028 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)

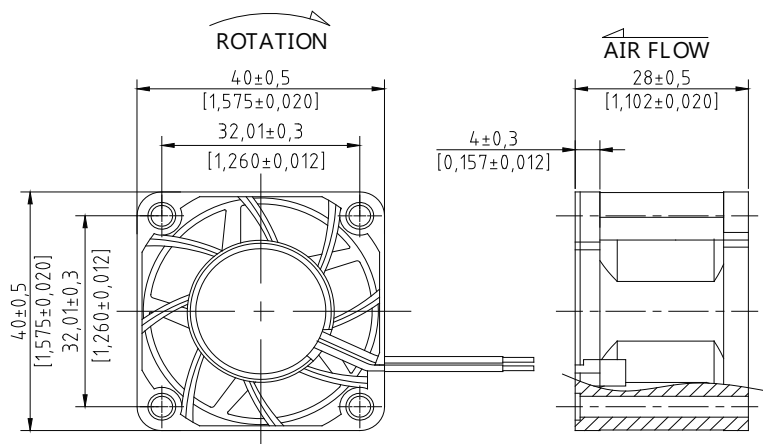
#### Lead Wire

+red -black or blue Sensor yellow

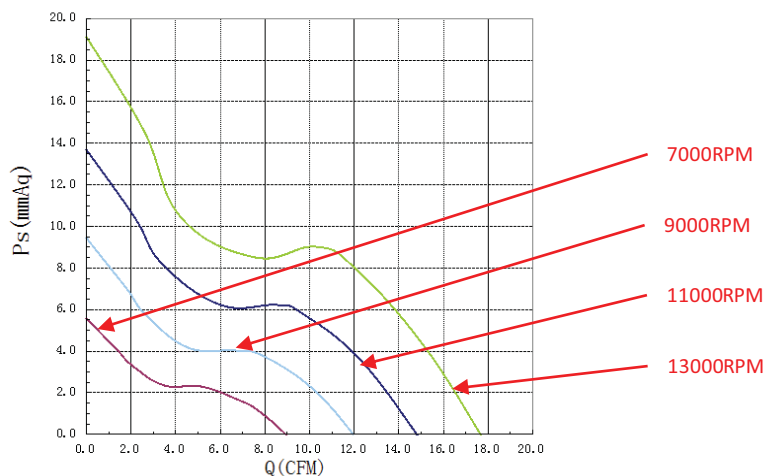
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD4028E12X | 12            | 7~13.8                  | 0.07          | 0.840             | 7000        | 9.54     | 0.270               | 5.57            | 0.219    | 28.50       |
| CD4028L12X |               | 7~13.8                  | 0.143         | 1.716             | 9000        | 11.96    | 0.339               | 9.43            | 0.371    | 36.90       |
| CD4028M12X |               | 7~13.8                  | 0.193         | 2.316             | 11000       | 14.83    | 0.420               | 13.70           | 0.540    | 42.00       |
| CD4028H12X |               | 7~13.8                  | 0.213         | 2.556             | 13000       | 17.70    | 0.501               | 19.10           | 0.752    | 46.20       |

# DC FAN

## CD4510 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

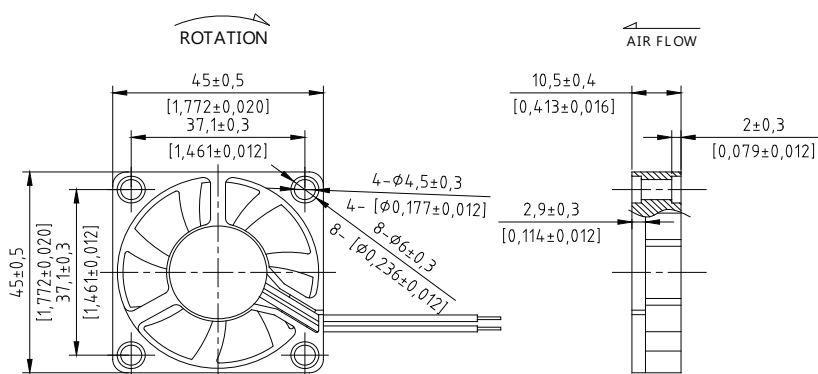
#### Lead Wire

+red -black or blue Sensor yellow

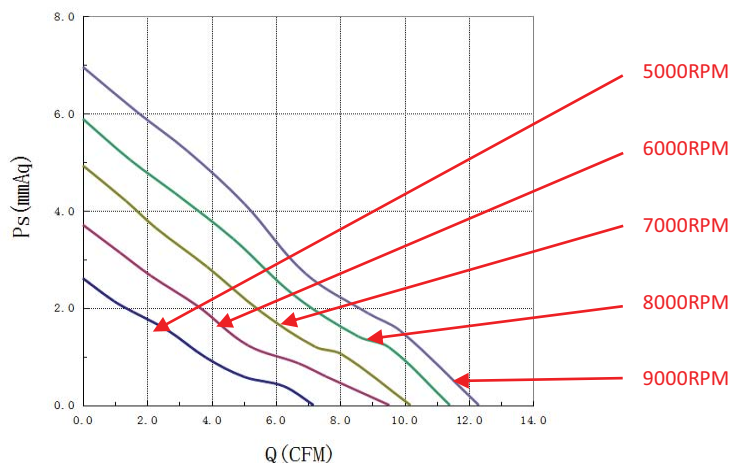
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage<br>(V) | Operating Voltage Range<br>(V) | Rated Current<br>(Amp) | Rated Input Power<br>(W) | Rated Speed<br>(rpm) | Air Flow<br>(CFM) | m <sup>3</sup> /min | Static Pressure<br>(mmH2O) | inch-H2O | Sound level<br>dB(A) |
|------------|----------------------|--------------------------------|------------------------|--------------------------|----------------------|-------------------|---------------------|----------------------------|----------|----------------------|
| CD4510L05X | 5                    | 5~5.5                          | 0.17                   | 0.85                     | 5000                 | 7.17              | 0.203               | 2.61                       | 0.103    | 29.10                |
| CD4510M05X |                      | 5~5.5                          | 0.20                   | 1.00                     | 6000                 | 9.25              | 0.262               | 3.71                       | 0.146    | 34.10                |
| CD4510H05X |                      | 5~5.5                          | 0.26                   | 1.30                     | 7000                 | 10.18             | 0.288               | 4.93                       | 0.194    | 38.70                |
| CD4510L12X | 12                   | 7~13.8                         | 0.10                   | 1.20                     | 6000                 | 9.25              | 0.262               | 3.71                       | 0.146    | 34.10                |
| CD4510M12X |                      | 7~13.8                         | 0.12                   | 1.44                     | 7000                 | 10.18             | 0.288               | 4.93                       | 0.194    | 38.70                |
| CD4510H12X |                      | 7~13.8                         | 0.15                   | 1.80                     | 8000                 | 11.40             | 0.323               | 5.89                       | 0.232    | 42.20                |
| CD4510L24X | 24                   | 12~25.7                        | 0.10                   | 2.40                     | 7000                 | 10.18             | 0.288               | 4.93                       | 0.194    | 38.70                |
| CD4510M24X |                      | 12~25.8                        | 0.11                   | 2.64                     | 8000                 | 11.40             | 0.323               | 5.89                       | 0.232    | 42.20                |
| CD4510H24X |                      | 12~25.9                        | 0.12                   | 2.88                     | 9000                 | 12.30             | 0.348               | 6.96                       | 0.274    | 44.50                |

# DC FAN

## CD5010 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

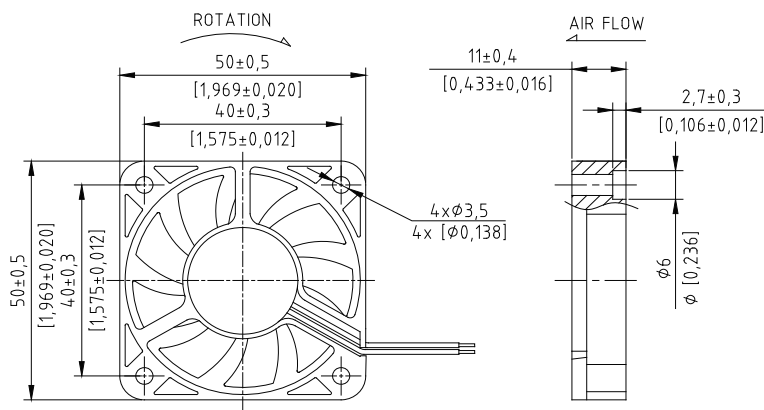
#### Lead Wire

+red -black or blue Sensor yellow

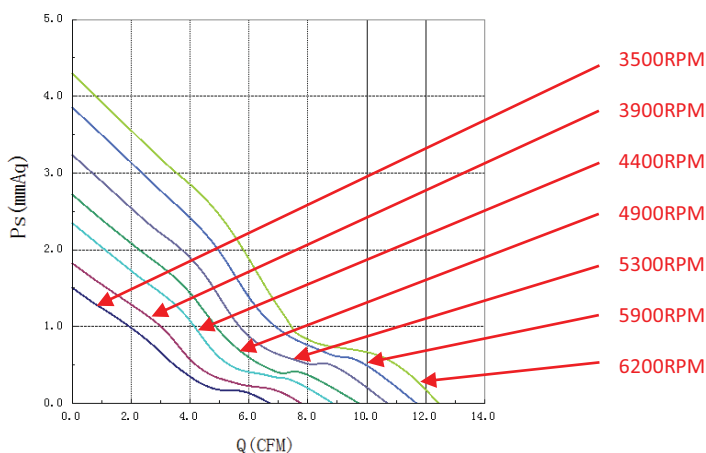
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage (V) | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |                     | Static Pressure |          | Sound level |
|------------|-------------------|-----------------------------|---------------------|-----------------------|-------------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)               | (V)                         | (Amp)               | (W)                   | (rpm)             | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD5010E05X | 5                 | 5~5.5                       | 0.11                | 0.55                  | 3500              | 6.70     | 0.190               | 15.10           | 0.594    | 22.2        |
| CD5010L05X |                   | 5~5.5                       | 0.15                | 0.75                  | 3900              | 7.77     | 0.220               | 1.82            | 0.072    | 23.1        |
| CD5010M05X |                   | 5~5.5                       | 0.18                | 0.90                  | 4400              | 9.43     | 0.267               | 2.34            | 0.092    | 27.2        |
| CD5010H05X |                   | 5~5.5                       | 0.23                | 1.15                  | 4900              | 9.74     | 0.276               | 2.72            | 0.107    | 29.1        |
| CD5010L12X | 12                | 7~13.8                      | 0.09                | 1.08                  | 4400              | 9.43     | 0.267               | 2.34            | 0.092    | 27.2        |
| CD5010M12X |                   | 7~13.8                      | 0.11                | 1.32                  | 4900              | 9.74     | 0.276               | 2.72            | 0.107    | 29.1        |
| CD5010H12X |                   | 7~13.8                      | 0.13                | 1.56                  | 5300              | 10.71    | 0.303               | 3.23            | 0.127    | 32.1        |
| CD5010X12X |                   | 7~13.8                      | 0.15                | 1.80                  | 5900              | 11.75    | 0.333               | 3.85            | 0.152    | 34.5        |
| CD5010L24X | 24                | 12~25.6                     | 0.07                | 1.68                  | 4900              | 9.74     | 0.276               | 2.72            | 0.107    | 29.1        |
| CD5010M24X |                   | 12~25.6                     | 0.09                | 2.16                  | 5300              | 10.71    | 0.303               | 3.23            | 0.127    | 32.1        |
| CD5010H24X |                   | 12~25.6                     | 0.11                | 2.64                  | 5900              | 11.75    | 0.333               | 3.85            | 0.152    | 34.5        |
| CD5010X24X |                   | 12~25.6                     | 0.13                | 3.12                  | 6200              | 12.43    | 0.352               | 4.3             | 0.169    | 35.8        |

# DC FAN

## CD5015 series

**SIZE: 50X50X15 mm**

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

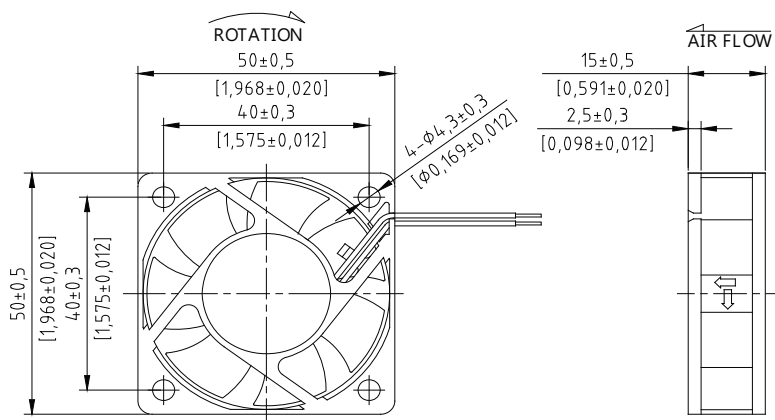
#### Lead Wire

+red -black or blue Sensor yellow

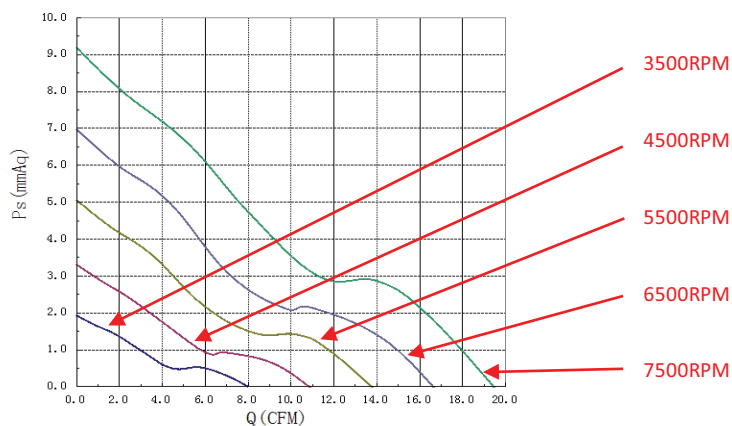
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |                     | Static Pressure      |                       | Sound level dB(A) |
|------------|---------------|-----------------------------|---------------------|-----------------------|-------------------|----------|---------------------|----------------------|-----------------------|-------------------|
|            | (V)           |                             |                     |                       |                   | (CFM)    | m <sup>3</sup> /min | (mmH <sub>2</sub> O) | inch-H <sub>2</sub> O |                   |
| CD5015E05X | 5             | 4~5.5                       | 0.14                | 0.7                   | 3500              | 7.97     | 0.226               | 1.93                 | 0.076                 | 21.00             |
| CD5015L05X |               | 4~5.5                       | 0.18                | 0.9                   | 4500              | 10.88    | 0.308               | 3.31                 | 0.130                 | 26.60             |
| CD5015M05X |               | 4~5.5                       | 0.21                | 1.05                  | 5500              | 14.24    | 0.400               | 5.06                 | 0.199                 | 30.50             |
| CD5015L12X | 12            | 7~13.8                      | 0.08                | 0.96                  | 4500              | 10.88    | 0.308               | 3.31                 | 0.130                 | 26.60             |
| CD5015M12X |               | 7~13.8                      | 0.12                | 1.44                  | 5500              | 14.24    | 0.400               | 5.06                 | 0.199                 | 30.50             |
| CD5015H12X |               | 7~13.8                      | 0.18                | 2.16                  | 6500              | 16.68    | 0.472               | 6.97                 | 0.274                 | 34.00             |
| CD5015X12X |               | 7~13.8                      | 0.22                | 2.64                  | 7500              | 19.52    | 0.553               | 9.18                 | 0.361                 | 37.60             |
| CD5015M24X | 24            | 12~25.6                     | 0.04                | 0.96                  | 5500              | 14.24    | 0.400               | 5.06                 | 0.199                 | 30.50             |
| CD5015H24X |               | 12~25.6                     | 0.08                | 1.92                  | 6500              | 16.68    | 0.472               | 6.97                 | 0.274                 | 34.00             |
| CD5015X24X |               | 12~25.6                     | 0.13                | 3.12                  | 7500              | 19.52    | 0.553               | 9.18                 | 0.361                 | 37.60             |

# DC BLOWER

## CD5015 series A

**SIZE: 51X51X15 mm**

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

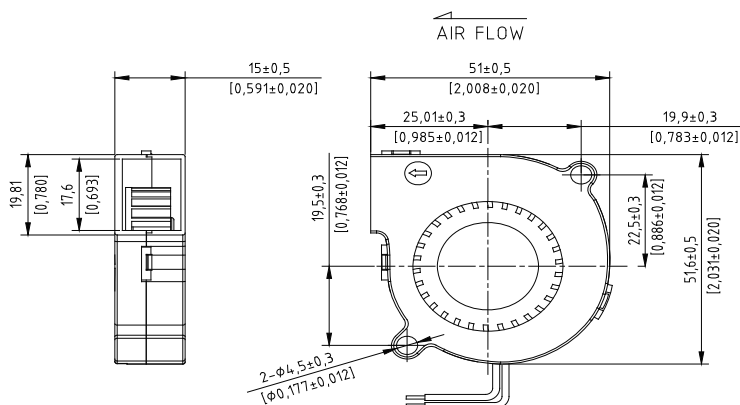
#### Lead Wire

+red -black or blue Sensor yellow

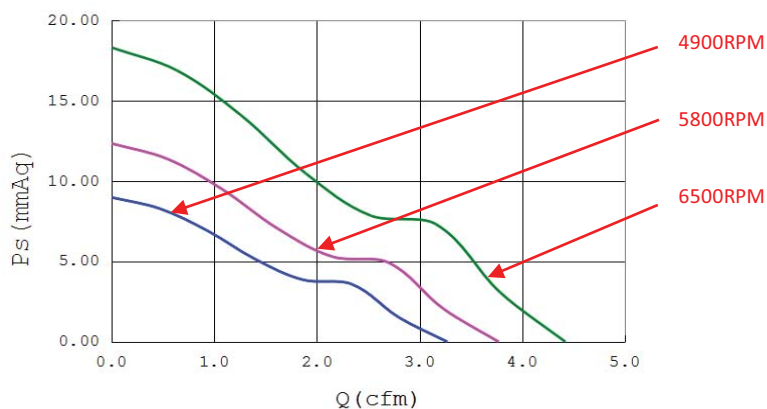
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure      |                       | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|----------------------|-----------------------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH <sub>2</sub> O) | inch-H <sub>2</sub> O | dB(A)       |
| CD5015L05X | 5             | 4~5.5                   | 0.25          | 1.25              | 4900        | 3.27     | 0.093               | 8.98                 | 0.354                 | 31.2        |
| CD5015M05X |               | 4~5.5                   | 0.35          | 1.75              | 5800        | 3.77     | 0.107               | 12.34                | 0.486                 | 36.5        |
| CD5015H05X |               | 4~5.5                   | 0.45          | 2.25              | 6500        | 4.42     | 0.125               | 18.31                | 0.721                 | 41.3        |
| CD5015L12X | 12            | 7~13.8                  | 0.12          | 1.44              | 4900        | 3.27     | 0.093               | 8.98                 | 0.354                 | 31.2        |
| CD5015M12X |               | 7~13.8                  | 0.15          | 1.80              | 5800        | 3.77     | 0.107               | 12.34                | 0.486                 | 36.5        |
| CD5015H12X |               | 7~13.8                  | 0.18          | 2.16              | 6500        | 4.42     | 0.125               | 18.31                | 0.721                 | 41.3        |
| CD5015L24X | 24            | 12~25.6                 | 0.06          | 1.44              | 4900        | 3.27     | 0.093               | 8.98                 | 0.354                 | 31.2        |
| CD5015M24X |               | 12~25.6                 | 0.08          | 1.92              | 5800        | 3.77     | 0.107               | 12.34                | 0.486                 | 36.5        |
| CD5015H24X |               | 12~25.6                 | 0.10          | 2.40              | 6500        | 4.42     | 0.125               | 18.31                | 0.721                 | 41.3        |



# DC BLOWER

## CD5015 series B

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

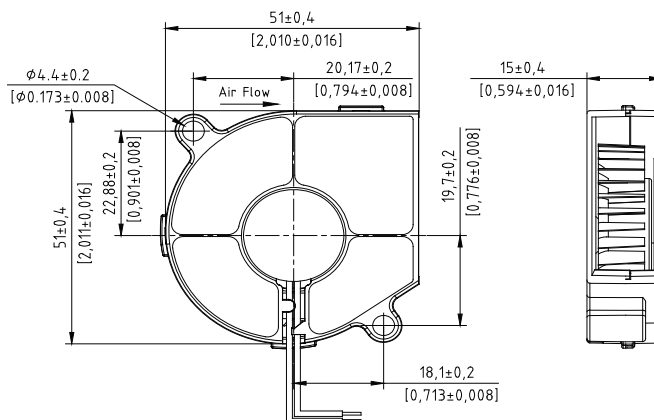
#### Lead Wire

+red -black or blue Sensor yellow

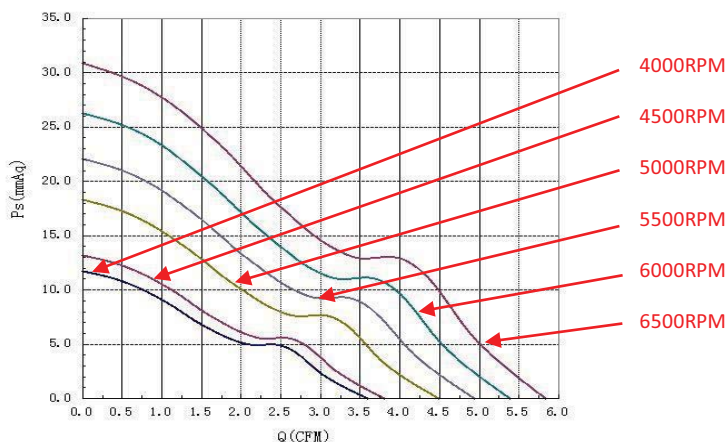
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |        | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|--------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m³/min | (mmH2O)         | inch-H2O | dB(A)       |
| CD5015L05X | 5             | 4~5.5                   | 0.17          | 0.85              | 4000        | 3.59     | 0.101  | 11.70           | 0.461    | 33.20       |
| CD5015M05X |               | 4~5.5                   | 0.22          | 1.10              | 4500        | 3.80     | 0.108  | 13.20           | 0.519    | 35.30       |
| CD5015H05X |               | 4~5.5                   | 0.25          | 1.25              | 5000        | 4.49     | 0.127  | 18.28           | 0.719    | 37.60       |
| CD5015X05X |               | 4~5.5                   | 0.28          | 1.40              | 5500        | 4.94     | 0.139  | 22.10           | 0.870    | 40.60       |
| CD5015L12X | 12            | 7~13.8                  | 0.07          | 0.84              | 5000        | 4.49     | 0.127  | 18.28           | 0.719    | 37.60       |
| CD5015M12X |               | 7~13.8                  | 0.12          | 1.44              | 5500        | 4.94     | 0.139  | 22.10           | 0.870    | 40.60       |
| CD5015H12X |               | 7~13.8                  | 0.17          | 2.04              | 6000        | 5.39     | 0.153  | 26.30           | 1.035    | 42.20       |
| CD5015X12X |               | 7~13.8                  | 0.22          | 2.64              | 6500        | 5.83     | 0.165  | 30.90           | 1.217    | 43.40       |

# DC FAN

## CD5020 series

**SIZE: 50X50X20 mm**

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

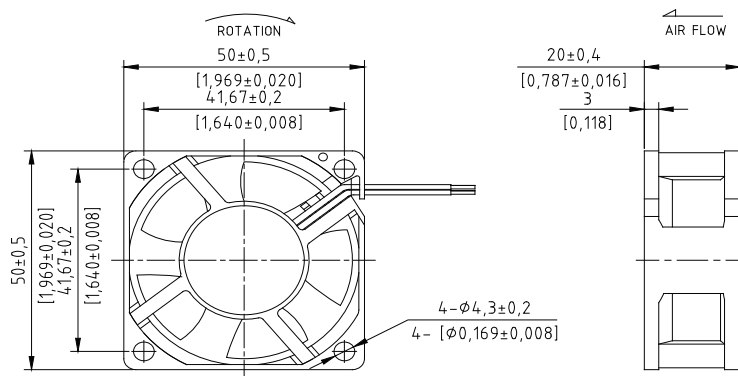
#### Lead Wire

+red -black or blue Sensor yellow

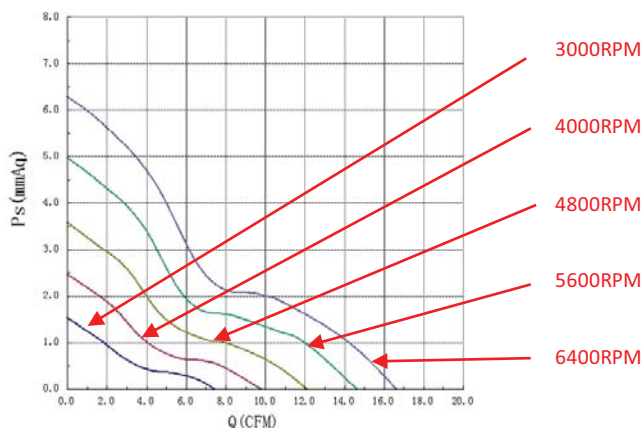
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage (V) | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow (CFM) | m <sup>3</sup> /min | Static Pressure (mmH2O) | inch-H2O | Sound level dB(A) |
|------------|-------------------|-----------------------------|---------------------|-----------------------|-------------------|----------------|---------------------|-------------------------|----------|-------------------|
| CD5020E05X | 5                 | 4~5.5                       | 0.16                | 0.80                  | 3000              | 7.45           | 0.211               | 1.53                    | 0.061    | 18.60             |
| CD5020L05X |                   | 4~5.5                       | 0.25                | 1.25                  | 4000              | 9.78           | 0.276               | 2.47                    | 0.097    | 21.30             |
| CD5020M05X |                   | 4~5.5                       | 0.35                | 1.75                  | 4800              | 12.13          | 0.343               | 3.15                    | 0.124    | 25.10             |
| CD5020E12X | 12                | 7~13.8                      | 0.08                | 0.96                  | 3000              | 7.45           | 0.211               | 1.53                    | 0.061    | 18.60             |
| CD5020L12X |                   | 7~13.8                      | 0.13                | 1.56                  | 4000              | 9.78           | 0.276               | 2.47                    | 0.097    | 21.30             |
| CD5020M12X |                   | 7~13.8                      | 0.17                | 2.04                  | 4800              | 12.13          | 0.343               | 3.15                    | 0.124    | 25.10             |
| CD5020H12X |                   | 7~13.8                      | 0.24                | 2.88                  | 5600              | 14.64          | 0.415               | 4.98                    | 0.196    | 29.30             |
| CD5020L24X | 24                | 7~13.8                      | 0.08                | 1.92                  | 4000              | 9.78           | 0.276               | 2.47                    | 0.097    | 21.30             |
| CD5020M24X |                   | 7~13.8                      | 0.11                | 2.64                  | 4800              | 12.13          | 0.343               | 3.15                    | 0.124    | 25.10             |
| CD5020H24X |                   | 7~13.8                      | 0.13                | 3.12                  | 5600              | 14.64          | 0.415               | 4.98                    | 0.196    | 29.30             |
| CD5020X24X |                   | 7~13.8                      | 0.20                | 4.80                  | 6400              | 16.61          | 0.470               | 5.28                    | 0.207    | 32.80             |

# DC FAN

## CD6010 series

**SIZE: 60X60X10 mm**

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

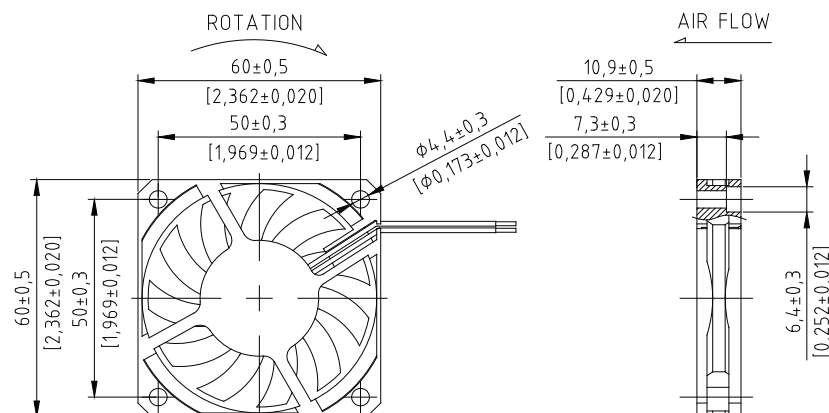
#### Lead Wire

+red -black or blue Sensor yellow

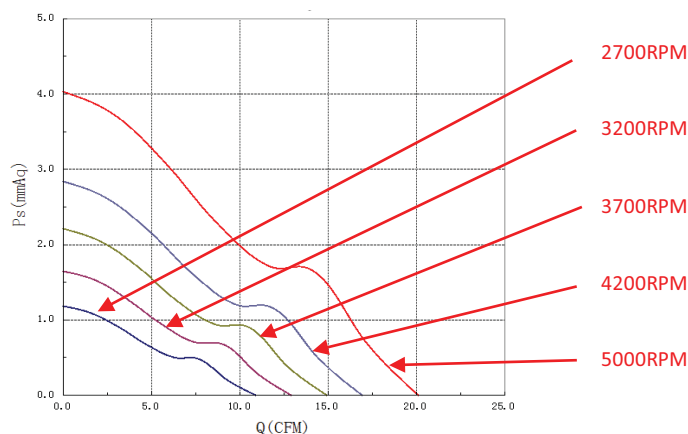
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage<br>(V) | Operating Voltage Range<br>(V) | Rated Current<br>(Amp) | Rated Input Power<br>(W) | Rated Speed<br>(rpm) | Air Flow<br>(CFM) | m <sup>3</sup> /min | Static Pressure<br>(mmH2O) | inch-H2O | Sound level<br>dB(A) |
|------------|----------------------|--------------------------------|------------------------|--------------------------|----------------------|-------------------|---------------------|----------------------------|----------|----------------------|
| CD6010L05X | 5                    | 4~5.5                          | 0.16                   | 0.80                     | 2700                 | 10.87             | 0.307               | 1.18                       | 0.046    | 24.50                |
| CD6010M05X |                      | 4~5.5                          | 0.25                   | 1.25                     | 3200                 | 12.88             | 0.364               | 1.65                       | 0.045    | 28.20                |
| CD6010H05X |                      | 4~5.5                          | 0.35                   | 1.75                     | 3700                 | 14.90             | 0.422               | 2.21                       | 0.087    | 31.40                |
| CD6010L12X | 12                   | 7~13.8                         | 0.08                   | 0.96                     | 3200                 | 12.88             | 0.364               | 1.65                       | 0.045    | 28.20                |
| CD6010M12X |                      | 7~13.8                         | 0.13                   | 1.56                     | 3700                 | 14.90             | 0.422               | 2.21                       | 0.087    | 31.40                |
| CD6010H12X |                      | 7~13.8                         | 0.17                   | 2.04                     | 4200                 | 16.91             | 0.479               | 2.84                       | 0.112    | 34.10                |
| CD6010X12X |                      | 7~13.8                         | 0.24                   | 2.88                     | 5000                 | 20.13             | 0.570               | 4.03                       | 0.159    | 37.90                |
| CD6010L24X | 24                   | 7~13.8                         | 0.08                   | 1.92                     | 3200                 | 12.88             | 0.364               | 1.65                       | 0.045    | 28.20                |
| CD6010M24X |                      | 7~13.8                         | 0.11                   | 2.64                     | 3700                 | 14.90             | 0.422               | 2.21                       | 0.087    | 31.40                |
| CD6010H24X |                      | 7~13.8                         | 0.13                   | 3.12                     | 4200                 | 16.91             | 0.479               | 2.84                       | 0.112    | 34.10                |
| CD6010X24X |                      | 7~13.8                         | 0.20                   | 4.80                     | 5000                 | 20.13             | 0.570               | 4.03                       | 0.159    | 37.90                |

# DC FAN

## CD6015 series A

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

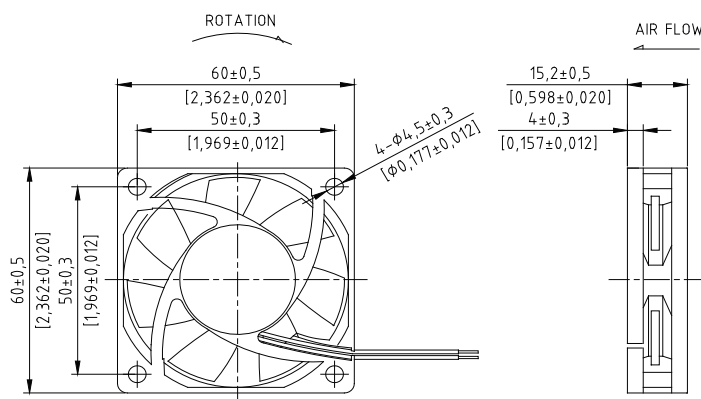
#### Lead Wire

+red -black or blue Sensor yellow

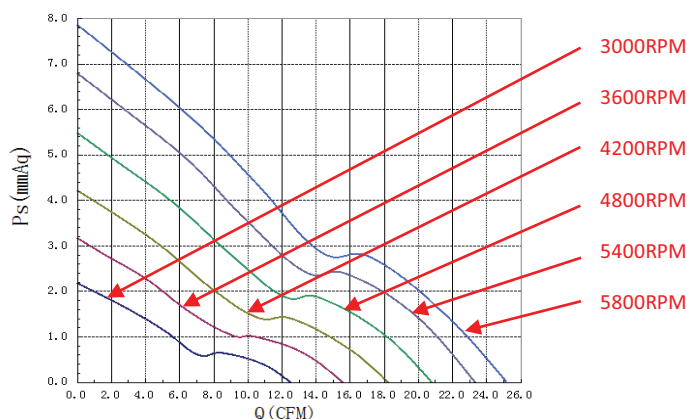
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD6015L12X | 12            | 7~13.8                  | 0.12          | 1.44              | 3000        | 12.43    | 0.352               | 2.17            | 0.085    | 23.00       |
| CD6015M12X |               | 7~13.8                  | 0.18          | 2.16              | 3600        | 15.58    | 0.441               | 3.16            | 0.124    | 27.60       |
| CD6015H12X |               | 7~13.8                  | 0.23          | 2.76              | 4200        | 18.17    | 0.515               | 4.22            | 0.166    | 31.80       |
| CD6015X12X |               | 7~13.8                  | 0.27          | 3.24              | 4800        | 20.83    | 0.590               | 5.48            | 0.216    | 35.60       |
| CD6015L24X | 24            | 12~25.6                 | 0.15          | 3.60              | 4200        | 18.17    | 0.515               | 4.22            | 0.166    | 31.80       |
| CD6015M24X |               | 12~25.6                 | 0.18          | 4.32              | 4800        | 20.83    | 0.590               | 5.48            | 0.216    | 35.60       |
| CD6015H24X |               | 12~25.6                 | 0.21          | 5.04              | 5400        | 23.28    | 0.660               | 6.78            | 0.267    | 38.60       |
| CD6015X24X |               | 12~25.6                 | 0.24          | 5.76              | 5800        | 25.13    | 0.712               | 7.85            | 0.310    | 41.90       |

# DC FAN

## CD6015 series B

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

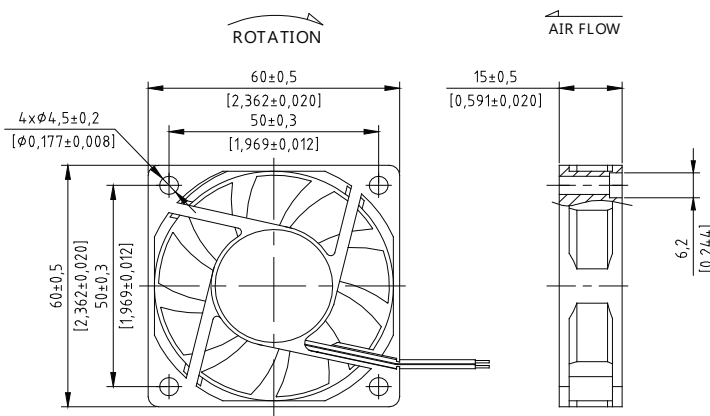
#### Lead Wire

+red -black or blue Sensor yellow

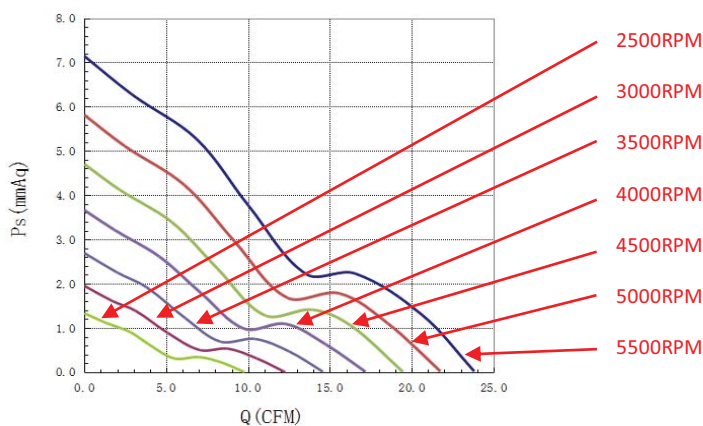
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |                     | Static Pressure |          | Sound level (dB(A)) |
|------------|---------------|-----------------------------|---------------------|-----------------------|-------------------|----------|---------------------|-----------------|----------|---------------------|
|            | (V)           |                             |                     |                       |                   | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O |                     |
| CD6015L05X | 5             | 4~5.6                       | 0.25                | 1.25                  | 2500              | 9.77     | 0.277               | 1.33            | 0.052    | 19.4                |
| CD6015M05X |               | 4~5.6                       | 0.45                | 2.25                  | 3500              | 14.57    | 0.413               | 2.69            | 0.106    | 23.9                |
| CD6015H05X |               | 4~5.6                       | 0.65                | 3.25                  | 4500              | 19.45    | 0.551               | 4.7             | 0.185    | 30.5                |
| CD6015L12X | 12            | 7~13.8                      | 0.12                | 1.44                  | 3000              | 12.26    | 0.347               | 1.95            | 0.077    | 21.1                |
| CD6015M12X |               | 7~13.8                      | 0.22                | 2.64                  | 4000              | 17.17    | 0.486               | 3.66            | 0.144    | 27.2                |
| CD6015H12X |               | 7~13.8                      | 0.33                | 3.96                  | 5000              | 21.75    | 0.616               | 5.81            | 0.229    | 33.4                |
| CD6015L24X | 24            | 12~25.6                     | 0.11                | 2.64                  | 3500              | 14.57    | 0.413               | 2.69            | 0.106    | 23.9                |
| CD6015M24X |               | 12~25.6                     | 0.16                | 3.84                  | 4500              | 19.45    | 0.551               | 4.70            | 0.185    | 30.5                |
| CD6015H24X |               | 12~25.6                     | 0.22                | 5.28                  | 5500              | 23.82    | 0.675               | 7.14            | 0.281    | 36.2                |

# DC FAN

## CD6025 series A

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

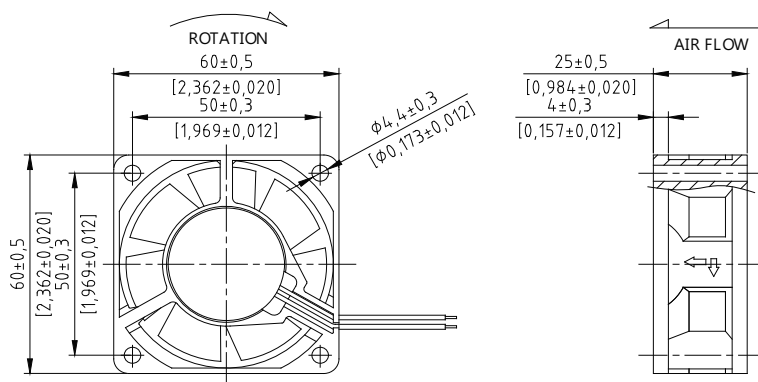
#### Lead Wire

+red -black or blue Sensor yellow

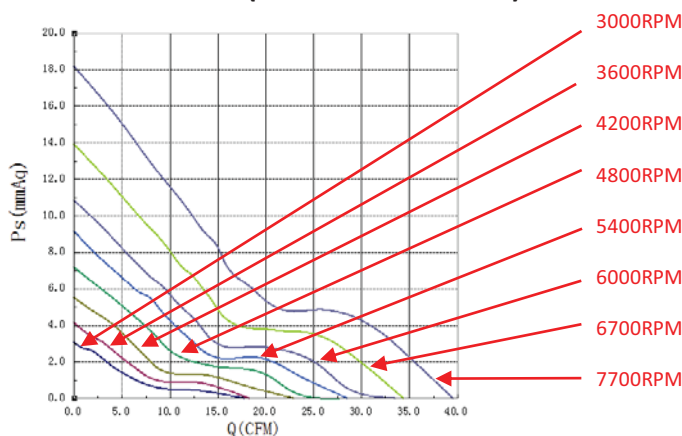
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD6025E12X | 12            | 7~13.8                  | 0.09          | 1.08              | 3000        | 17.72    | 0.500               | 3.10            | 0.122    | 31.40       |
| CD6025L12X |               | 7~13.8                  | 0.15          | 1.80              | 3600        | 18.25    | 0.517               | 4.16            | 0.164    | 35.40       |
| CD6025M12X |               | 7~13.8                  | 0.27          | 3.24              | 4200        | 22.87    | 0.650               | 5.53            | 0.218    | 38.70       |
| CD6025H12X |               | 7~13.8                  | 0.35          | 4.20              | 4800        | 27.87    | 0.789               | 7.21            | 0.284    | 41.62       |
| CD6025E24X | 24            | 12~25.6                 | 0.18          | 4.32              | 5400        | 28.43    | 0.805               | 9.17            | 0.361    | 43.66       |
| CD6025L24X |               | 12~25.6                 | 0.22          | 5.28              | 6000        | 33.43    | 0.947               | 10.85           | 0.427    | 46.10       |
| CD6025M24X |               | 12~25.6                 | 0.27          | 6.48              | 6700        | 34.34    | 0.972               | 13.93           | 0.548    | 51.66       |
| CD6025H24X |               | 12~25.6                 | 0.35          | 8.40              | 7700        | 39.54    | 1.120               | 18.17           | 0.715    | 54.90       |

# DC FAN

## CD6025 series B

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

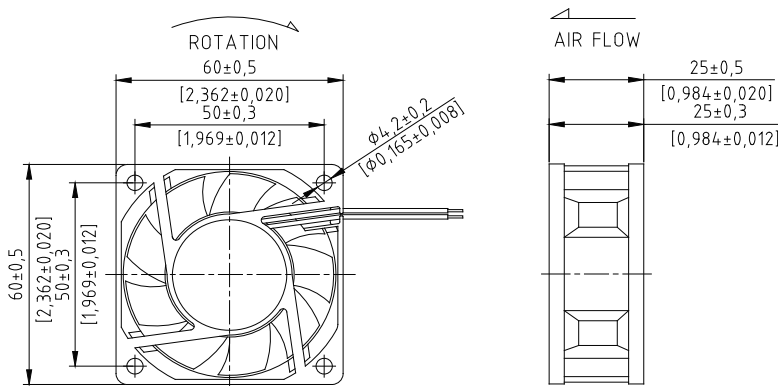
#### Lead Wire

+red -black or blue Sensor yellow

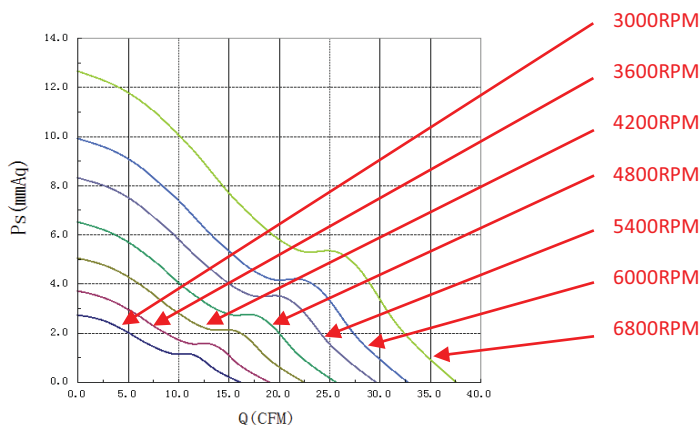
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD6025E12X | 12            | 7~13.8                  | 0.11          | 1.32              | 3000        | 16.18    | 0.458               | 2.75            | 0.122    | 26.40       |
| CD6025L12X |               | 7~13.8                  | 0.15          | 1.80              | 3600        | 19.05    | 0.539               | 3.72            | 0.146    | 29.30       |
| CD6025M12X |               | 7~13.8                  | 0.27          | 3.24              | 4200        | 22.44    | 0.635               | 5.07            | 0.199    | 35.20       |
| CD6025H12X |               | 7~13.8                  | 0.35          | 4.20              | 4800        | 25.68    | 0.727               | 6.51            | 0.256    | 38.50       |
| CD6025L24X | 24            | 12~25.6                 | 0.12          | 2.88              | 4800        | 25.68    | 0.727               | 6.51            | 0.256    | 38.50       |
| CD6025M24X |               | 12~25.6                 | 0.15          | 3.60              | 5400        | 29.58    | 0.837               | 8.33            | 0.327    | 40.30       |
| CD6025H24X |               | 12~25.6                 | 0.17          | 4.08              | 6000        | 32.75    | 0.927               | 9.94            | 0.391    | 45.60       |
| CD6025X24X |               | 12~25.6                 | 0.20          | 4.80              | 6800        | 37.53    | 1.062               | 12.68           | 0.022    | 48.30       |



# DC FAN

## CD6038 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)

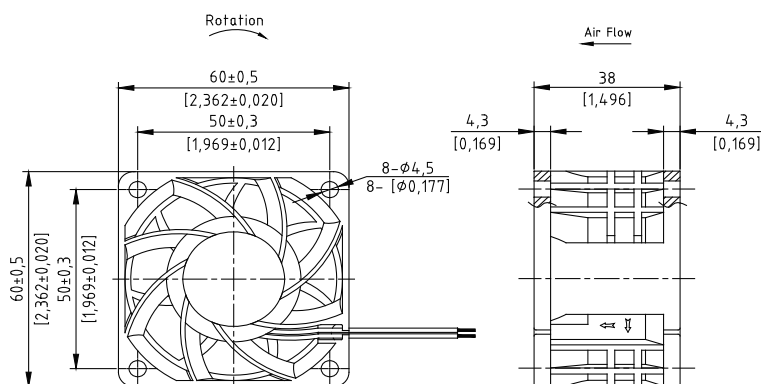
#### Lead Wire

+red -black or blue Sensor yellow

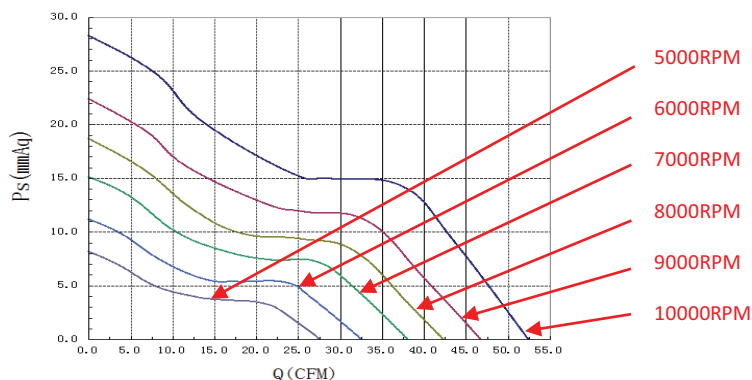
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD6038E12X | 12            | 7~13.8                  | 1.05          | 12.60             | 5000        | 29.40    | 0.83                | 8.20            | 0.32     | 43.50       |
| CD6038L12X |               | 7~13.8                  | 1.48          | 17.76             | 6000        | 32.55    | 0.92                | 11.20           | 0.44     | 48.10       |
| CD6038M12X |               | 7~13.8                  | 1.97          | 23.64             | 7000        | 38.70    | 1.10                | 15.10           | 0.59     | 49.40       |
| CD6038H12X |               | 7~13.8                  | 2.98          | 35.76             | 8000        | 44.86    | 1.27                | 18.70           | 0.74     | 56.80       |
| CD6038L24X | 24            | 12~25.6                 | 0.55          | 13.20             | 6000        | 32.55    | 0.92                | 11.20           | 0.44     | 48.10       |
| CD6038M24X |               | 12~25.7                 | 0.76          | 18.24             | 7000        | 38.70    | 1.10                | 15.10           | 0.59     | 49.40       |
| CD6038H24X |               | 12~25.8                 | 1.08          | 25.92             | 8000        | 44.86    | 1.27                | 18.70           | 0.74     | 56.80       |
| CD6038X24X |               | 12~25.9                 | 1.55          | 37.20             | 9000        | 46.76    | 1.32                | 22.40           | 0.88     | 58.70       |
| CD6038L48X | 48            | 28.0~56.0               | 0.42          | 20.16             | 7000        | 38.70    | 1.10                | 15.10           | 0.59     | 49.40       |
| CD6038M48X |               | 28.0~56.0               | 0.51          | 24.48             | 8000        | 44.86    | 1.27                | 18.70           | 0.74     | 56.80       |
| CD6038H48X |               | 28.0~56.0               | 0.62          | 29.76             | 9000        | 46.76    | 1.32                | 22.40           | 0.88     | 58.70       |
| CD6038X48X |               | 28.0~56.0               | 0.78          | 37.44             | 10000       | 52.42    | 1.48                | 28.30           | 1.11     | 63.50       |



# DC FAN

## CD7015 series

**SIZE: 70X70X15 mm**

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

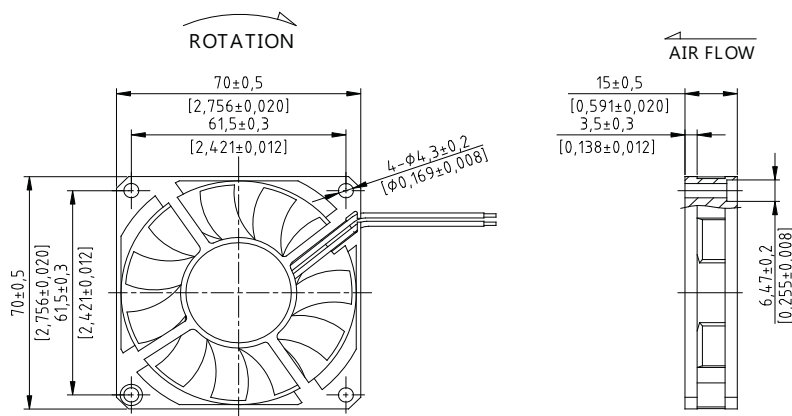
#### Lead Wire

+red -black or blue Sensor yellow

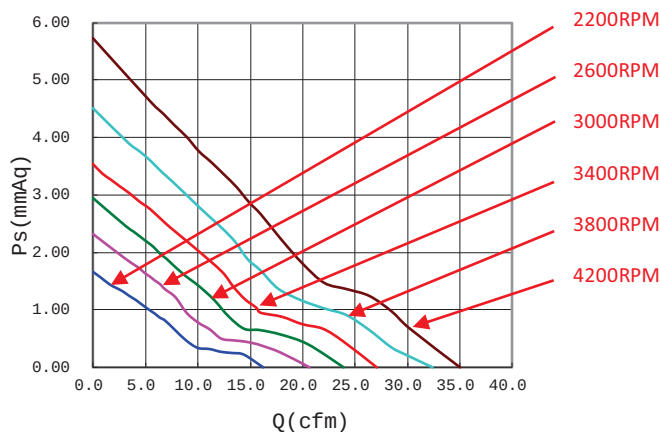
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage (V) | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |                     | Static Pressure |          | Sound level |
|------------|-------------------|-----------------------------|---------------------|-----------------------|-------------------|----------|---------------------|-----------------|----------|-------------|
|            |                   |                             |                     |                       |                   | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD7015L05X |                   | 4~5.5                       | 0.15                | 0.75                  | 2200              | 16.220   | 0.459               | 1.670           | 0.066    | 20.60       |
| CD7015M05X | 5                 | 4~5.5                       | 0.19                | 0.95                  | 2600              | 20.670   | 0.585               | 2.320           | 0.091    | 26.20       |
| CD7015H05X |                   | 4~5.5                       | 0.22                | 1.10                  | 3000              | 23.930   | 0.678               | 2.950           | 0.116    | 31.70       |
| CD7015L12X |                   | 7~13.8                      | 0.13                | 1.56                  | 3400              | 27.050   | 0.766               | 3.540           | 0.139    | 34.70       |
| CD7015M15X | 12                | 7~13.8                      | 0.16                | 1.92                  | 3800              | 32.380   | 0.917               | 4.510           | 0.178    | 38.60       |
| CD7015H12X |                   | 7~13.8                      | 0.19                | 2.28                  | 4200              | 35.000   | 0.991               | 5.730           | 0.225    | 41.20       |

# DC FAN

## CD7020 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

#### Lead Wire

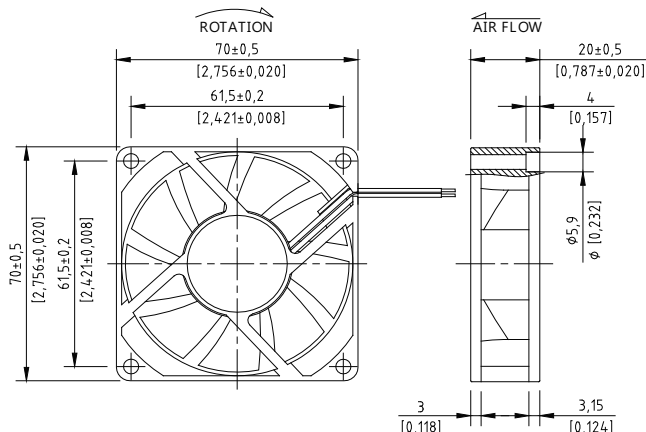
+red -black or blue Sensor yellow

#### Temperature Range

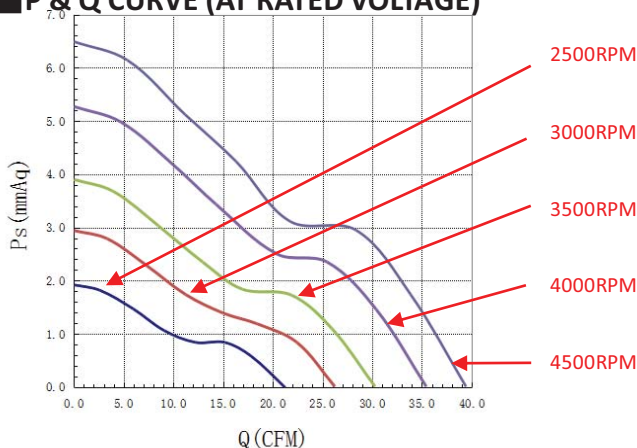
Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)



### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD7020L12X | 12            | 7~13.8                  | 0.20          | 2.40              | 2500        | 21.25    | 0.602               | 1.92            | 0.076    | 23.8        |
| CD7020M12X |               | 7~13.8                  | 0.30          | 3.60              | 3500        | 30.28    | 0.857               | 3.90            | 0.154    | 33.3        |
| CD7020H12X |               | 7~13.8                  | 0.40          | 4.80              | 4000        | 35.43    | 1.003               | 5.27            | 0.207    | 37.1        |
| CD7020L24X | 24            | 12~25.6                 | 0.20          | 4.80              | 3000        | 26.24    | 0.743               | 2.94            | 0.116    | 28.6        |
| CD7020M24X |               | 12~25.6                 | 0.30          | 7.20              | 3500        | 30.28    | 0.857               | 3.90            | 0.154    | 33.3        |
| CD7020H24X |               | 12~25.6                 | 0.40          | 9.60              | 4500        | 39.43    | 1.117               | 6.49            | 0.256    | 40.2        |

# DC FAN

## CD7025 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

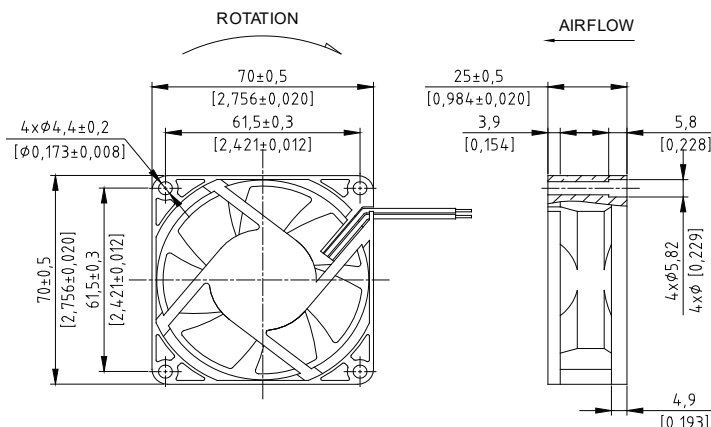
#### Lead Wire

+red -black or blue Sensor yellow

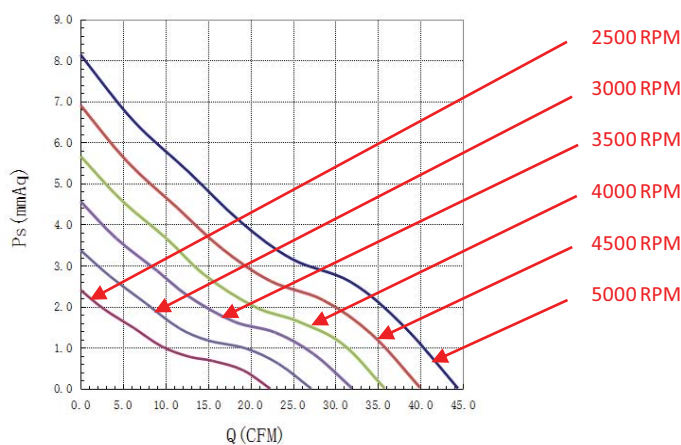
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |                     | Static Pressure |          | Sound level (dB(A)) |
|------------|---------------|-----------------------------|---------------------|-----------------------|-------------------|----------|---------------------|-----------------|----------|---------------------|
|            | (V)           |                             |                     |                       |                   | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O |                     |
| CD7025L12X | 12            | 7~13.8                      | 0.20                | 2.40                  | 2500              | 22.32    | 0.632               | 2.40            | 0.094    | 32.2                |
| CD7025M12X |               | 7~13.8                      | 0.30                | 3.60                  | 3500              | 31.96    | 0.905               | 4.56            | 0.180    | 37.9                |
| CD7025H12X |               | 7~13.8                      | 0.40                | 4.80                  | 4500              | 39.95    | 1.131               | 6.91            | 0.272    | 40.3                |
| CD7025L24X | 24            | 12~25.6                     | 0.20                | 4.80                  | 3000              | 27.15    | 0.769               | 2.74            | 0.108    | 32.2                |
| CD7025M24X |               | 12~25.6                     | 0.30                | 7.20                  | 4000              | 35.79    | 1.013               | 5.66            | 0.223    | 35.3                |
| CD7025H24X |               | 12~25.6                     | 0.40                | 9.60                  | 5000              | 44.42    | 1.258               | 8.13            | 0.320    | 42.5                |

# DC BLOWER

## CD7515 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

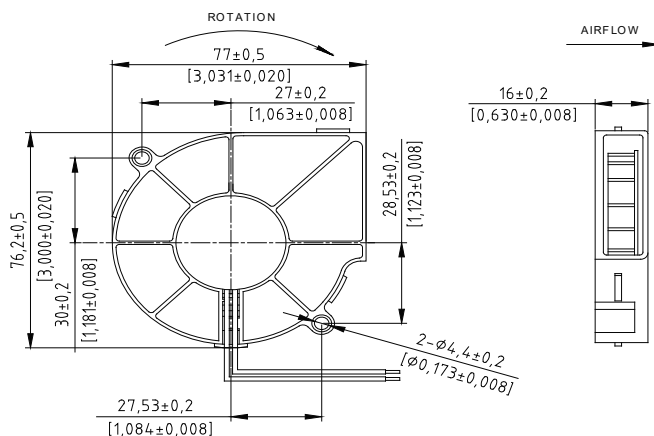
#### Lead Wire

+red -black or blue Sensor yellow

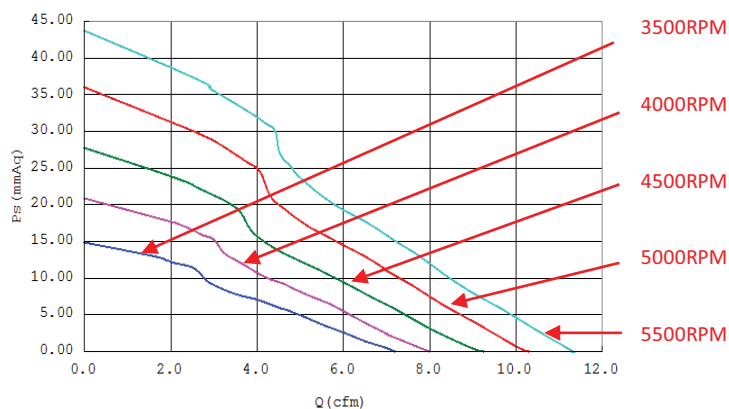
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |        | Static Pressure |          | Sound level dB(A) |
|------------|---------------|-----------------------------|---------------------|-----------------------|-------------------|----------|--------|-----------------|----------|-------------------|
|            | (V)           |                             |                     |                       |                   | (CFM)    | m³/min | (mmH2O)         | inch-H2O |                   |
| CD7515E12X | 12            | 7~13.8                      | 0.25                | 3.00                  | 3500              | 7.190    | 0.203  | 14.850          | 0.584    | 42.80             |
| CD7515L12X |               | 7~13.8                      | 0.30                | 3.60                  | 4000              | 7.990    | 0.226  | 20.900          | 0.823    | 46.60             |
| CD7515M12X |               | 7~13.8                      | 0.38                | 4.56                  | 4500              | 9.240    | 0.262  | 27.800          | 1.094    | 49.70             |
| CD7515H12X |               | 7~13.8                      | 0.41                | 4.92                  | 5000              | 10.300   | 0.291  | 36.000          | 1.417    | 53.10             |
| CD7515L24X | 24            | 12~25.6                     | 0.18                | 4.32                  | 4500              | 9.240    | 0.262  | 27.800          | 1.094    | 49.70             |
| CD7515M24X |               | 12~25.6                     | 0.21                | 5.04                  | 5000              | 10.300   | 0.291  | 36.000          | 1.417    | 53.10             |
| CD7515H24X |               | 12~25.6                     | 0.250               | 6.000                 | 5500              | 11.290   | 0.319  | 43.800          | 1.724    | 55.70             |

# DC BLOWER

## CD7530 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

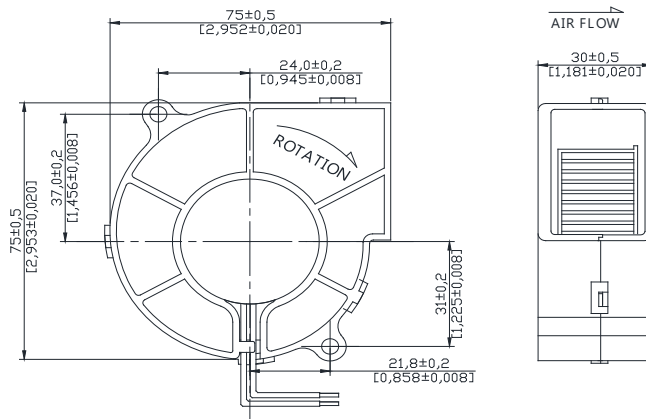
#### Lead Wire

+red -black or blue Sensor yellow

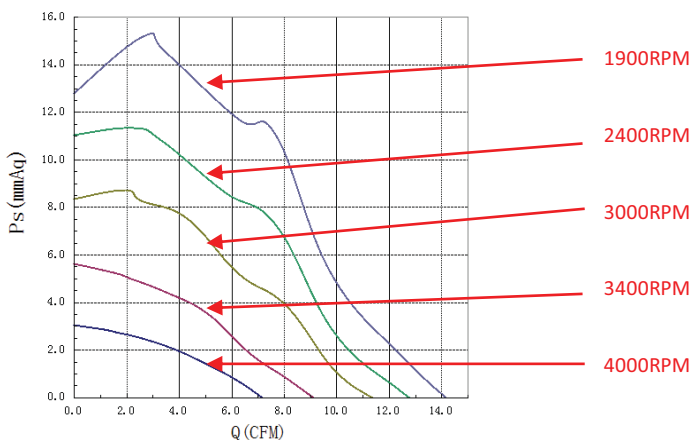
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD7530E12X | 12            | 7~13.8                  | 0.10          | 1.20              | 1900        | 7.140    | 0.202               | 3.070           | 0.121    | 26.50       |
| CD7530L12X |               | 7~13.8                  | 0.12          | 1.44              | 2400        | 9.490    | 0.268               | 5.640           | 0.222    | 33.10       |
| CD7530M12X |               | 7~13.8                  | 0.17          | 2.04              | 3000        | 11.360   | 0.321               | 8.350           | 0.328    | 39.00       |
| CD7530H12X |               | 7~13.8                  | 0.22          | 2.64              | 3400        | 14.220   | 0.402               | 11.040          | 0.435    | 42.30       |
| CD7530L24X | 24            | 12~25.6                 | 0.11          | 2.64              | 3000        | 11.360   | 0.321               | 8.350           | 0.328    | 39.00       |
| CD7530M24X |               | 12~25.6                 | 0.13          | 3.12              | 3400        | 14.220   | 0.402               | 11.040          | 0.435    | 42.30       |
| CD7530H24X |               | 12~25.6                 | 0.16          | 3.84              | 4000        | 14.500   | 0.410               | 12.800          | 0.503    | 45.80       |

# DC FAN

## CD8015 series

**SIZE: 80X80X15 mm**

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

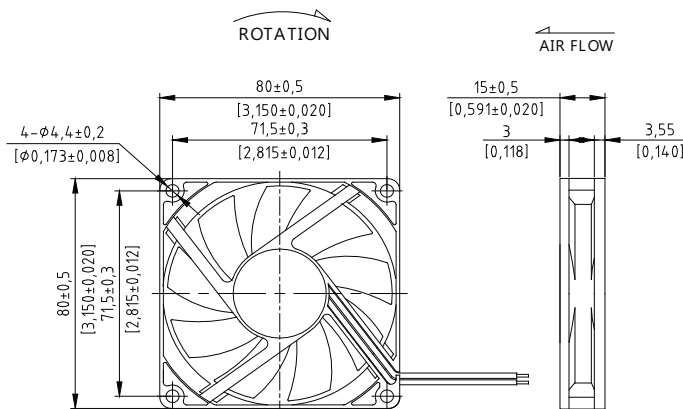
#### Lead Wire

+red -black or blue Sensor yellow

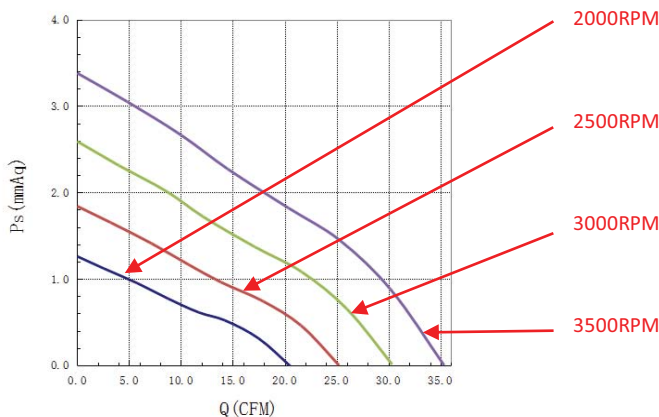
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD8015L05X | 5             | 4~5.6                   | 0.38          | 1.90              | 2000        | 20.53    | 0.581               | 1.26            | 0.050    | 23.8        |
| CD8015M05X |               | 4~5.6                   | 0.25          | 1.25              | 2500        | 25.22    | 0.714               | 1.84            | 0.072    | 28.3        |
| CD8015L12X | 12            | 7~13.8                  | 0.12          | 1.44              | 2000        | 20.53    | 0.581               | 1.26            | 0.050    | 23.8        |
| CD8015M12X |               | 7~13.8                  | 0.20          | 2.40              | 2500        | 25.22    | 0.714               | 1.84            | 0.072    | 28.3        |
| CD8015H12X |               | 7~13.8                  | 0.30          | 3.60              | 3000        | 30.34    | 0.859               | 2.59            | 0.102    | 31.9        |
| CD8015L24X | 24            | 12~25.6                 | 0.10          | 2.40              | 2500        | 25.22    | 0.714               | 1.84            | 0.072    | 28.3        |
| CD8015M24X |               | 12~25.6                 | 0.16          | 3.84              | 3000        | 30.34    | 0.859               | 2.59            | 0.102    | 31.9        |
| CD8015H24X |               | 12~25.6                 | 0.22          | 5.28              | 3500        | 35.36    | 1.001               | 3.38            | 0.133    | 38.2        |

# DC FAN

## CD8020 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

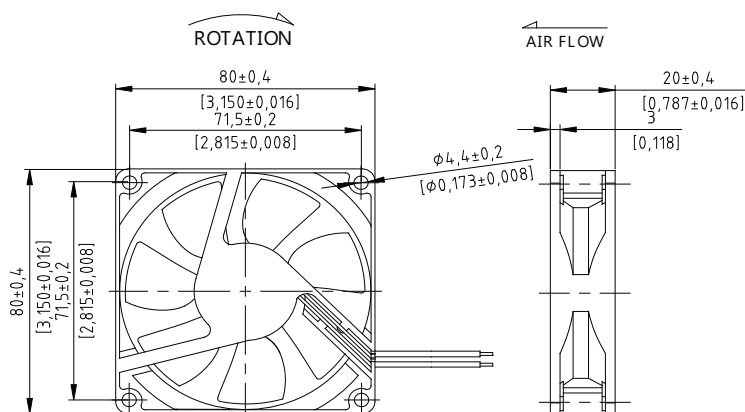
#### Lead Wire

+red -black or blue Sensor yellow

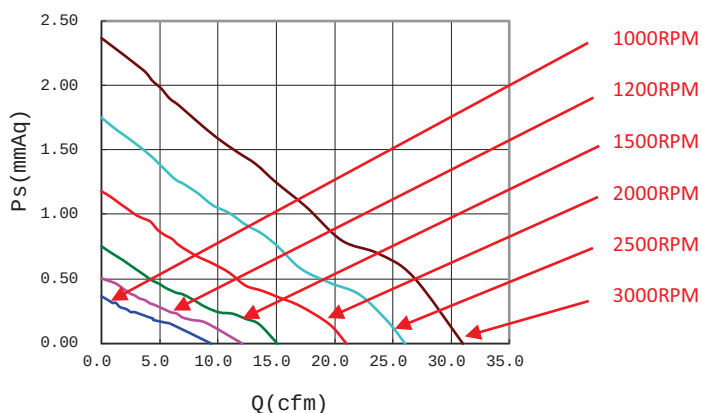
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD8020L05X | 5             | 4~5.5                   | 0.19          | 0.95              | 1000        | 9.4      | 0.266               | 0.36            | 0.014    | 8.1         |
| CD8020M05X |               | 4~5.5                   | 0.22          | 1.10              | 1200        | 12.1     | 0.341               | 0.50            | 0.019    | 12.1        |
| CD8020H05X |               | 4~5.5                   | 0.24          | 1.20              | 1500        | 15.1     | 0.426               | 0.75            | 0.029    | 15.1        |
| CD8020L12X | 12            | 7~13.8                  | 0.16          | 1.92              | 1500        | 15.1     | 0.426               | 0.75            | 0.029    | 15.1        |
| CD8020M12X |               | 7~13.8                  | 0.21          | 2.52              | 2000        | 21.4     | 0.606               | 1.18            | 0.465    | 22.4        |
| CD8020H12X |               | 7~13.8                  | 0.23          | 2.76              | 2500        | 26.9     | 0.761               | 1.75            | 0.688    | 30.6        |
| CD8020L24X | 24            | 12~25.6                 | 0.14          | 3.36              | 2000        | 21.4     | 0.606               | 1.18            | 0.465    | 22.4        |
| CD8020M24X |               | 12~25.6                 | 0.16          | 3.84              | 2500        | 26.9     | 0.761               | 1.75            | 0.688    | 30.6        |
| CD8020H24X |               | 12~25.6                 | 0.22          | 5.28              | 3000        | 31.0     | 0.878               | 2.37            | 0.093    | 34.20       |



# DC FAN

## CD8025 series A

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

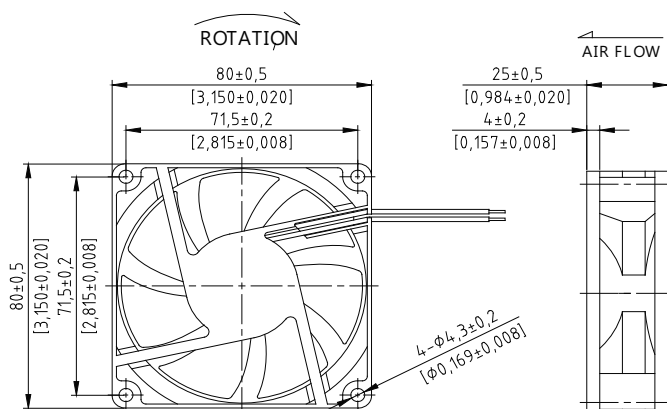
#### Lead Wire

+red -black or blue Sensor yellow

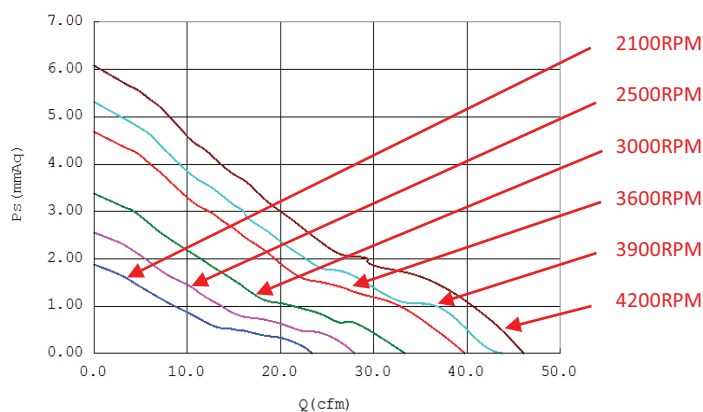
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |                     | Static Pressure |          | Sound level dB(A) |
|------------|---------------|-----------------------------|---------------------|-----------------------|-------------------|----------|---------------------|-----------------|----------|-------------------|
|            | (V)           |                             |                     |                       |                   | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O |                   |
| CD8025L05X | 5             | 4~5.5                       | 0.17                | 0.85                  | 2100              | 23.4     | 0.663               | 1.88            | 0.074    | 24.0              |
| CD8025M05X |               | 4~5.5                       | 0.25                | 1.25                  | 2500              | 30.0     | 0.848               | 2.56            | 0.100    | 29.0              |
| CD8025H05X |               | 4~5.5                       | 0.35                | 1.75                  | 3000              | 33.3     | 0.944               | 3.39            | 0.133    | 34.6              |
| CD8025L12X | 12            | 7~13.8                      | 0.17                | 2.04                  | 3600              | 39.7     | 1.125               | 4.68            | 0.184    | 38.7              |
| CD8025M12X |               | 7~13.8                      | 0.25                | 3.00                  | 3900              | 43.8     | 1.240               | 5.32            | 0.209    | 40.6              |
| CD8025H12X |               | 7~13.8                      | 0.35                | 4.20                  | 4200              | 46.1     | 1.305               | 6.08            | 0.239    | 42.8              |



# DC FAN

## CD8025 series B

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

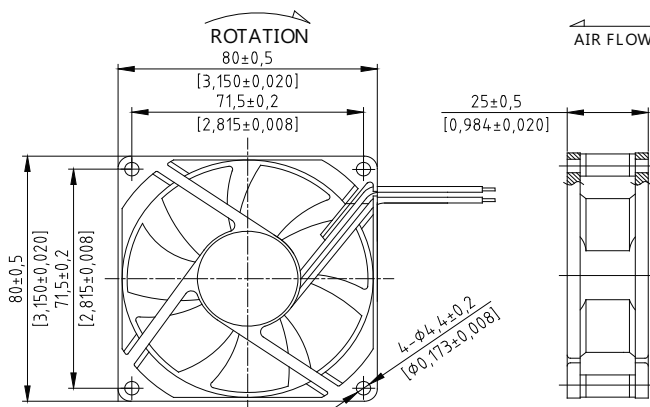
#### Lead Wire

+red -black or blue Sensor yellow

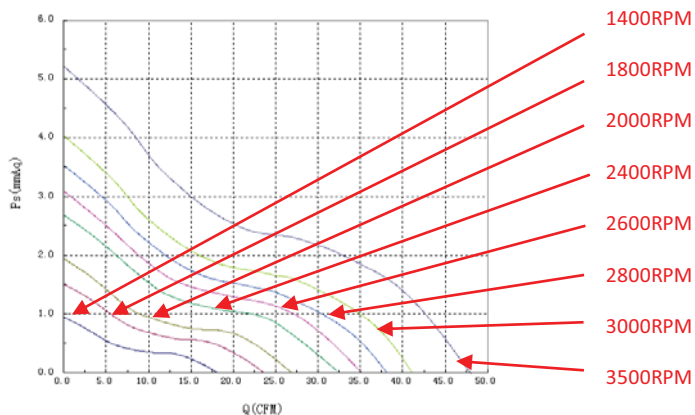
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|-------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|             | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD8025E05X  | 5             | 4~5.5                   | 0.09          | 0.45              | 1400        | 18.900   | 0.535               | 0.940           | 0.037    | 18.60       |
| CD8025L05X  |               | 4~5.5                   | 0.11          | 0.55              | 1800        | 23.580   | 0.668               | 1.510           | 0.059    | 20.60       |
| CD8025M05X  |               | 4~5.5                   | 0.13          | 0.65              | 2000        | 26.900   | 0.762               | 1.940           | 0.076    | 22.00       |
| CD8025H05X  |               | 4~5.5                   | 0.17          | 0.85              | 2400        | 32.260   | 0.913               | 2.680           | 0.106    | 26.60       |
| CD68025E12X | 12            | 7~13.8                  | 0.13          | 1.56              | 2000        | 26.900   | 0.762               | 1.940           | 0.076    | 22.00       |
| CD8025L12X  |               | 7~13.8                  | 0.17          | 2.04              | 2400        | 32.260   | 0.913               | 2.680           | 0.106    | 26.60       |
| CD8025M12X  |               | 7~13.8                  | 0.25          | 3.00              | 2600        | 35.100   | 0.993               | 3.100           | 0.122    | 27.90       |
| CD8025H12X  |               | 7~13.8                  | 0.35          | 4.20              | 2800        | 38.110   | 1.079               | 3.530           | 0.138    | 29.50       |
| CD8025E24X  | 24            | 12~25.6                 | 0.13          | 3.12              | 2600        | 35.100   | 0.993               | 3.100           | 0.122    | 27.90       |
| CD8025L24X  |               | 12~25.6                 | 0.17          | 4.08              | 2800        | 38.110   | 1.079               | 3.530           | 0.138    | 29.50       |
| CD8025M24X  |               | 12~25.6                 | 0.25          | 6.00              | 3000        | 41.030   | 1.162               | 4.040           | 0.159    | 31.50       |
| CD8025H24X  |               | 12~25.6                 | 0.29          | 6.96              | 3500        | 48.060   | 1.360               | 5.220           | 0.205    | 36.10       |

# DC FAN

## CD9217 series A

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

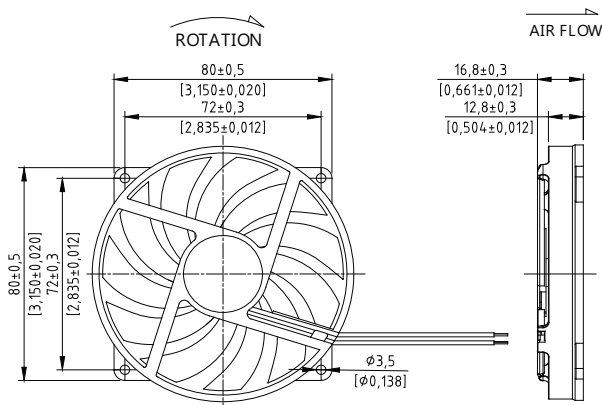
#### Lead Wire

+red -black or blue Sensor yellow

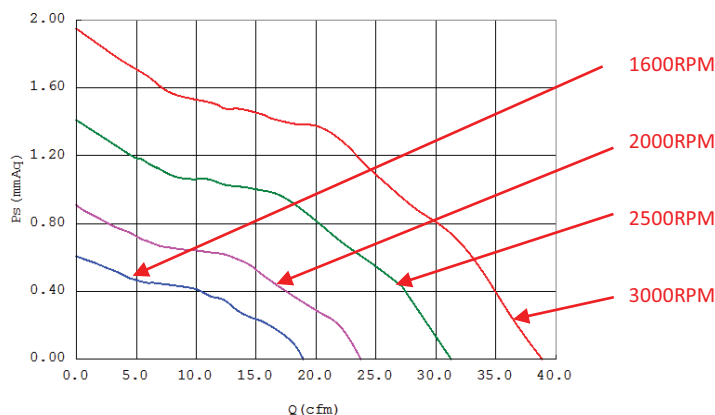
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |                     | Static Pressure      |                       | Sound level (dB(A)) |
|------------|---------------|-----------------------------|---------------------|-----------------------|-------------------|----------|---------------------|----------------------|-----------------------|---------------------|
|            | (V)           |                             |                     |                       |                   | (CFM)    | m <sup>3</sup> /min | (mmH <sub>2</sub> O) | inch-H <sub>2</sub> O |                     |
| CD9215E12X | 12            | 7~13.8                      | 0.13                | 1.56                  | 1600              | 18.92    | 0.536               | 0.61                 | 0.024                 | 19.60               |
| CD9215L12X |               | 7~13.8                      | 0.16                | 1.92                  | 2000              | 23.76    | 0.673               | 0.91                 | 0.036                 | 27.40               |
| CD9215M12X |               | 7~13.8                      | 0.19                | 2.28                  | 2500              | 31.26    | 0.885               | 1.41                 | 0.056                 | 34.50               |
| CD9215H12X |               | 7~13.8                      | 0.22                | 2.64                  | 3000              | 38.87    | 1.100               | 1.95                 | 0.077                 | 39.10               |
| CD9215E24X | 24            | 7~13.8                      | 0.08                | 1.92                  | 1600              | 18.92    | 0.536               | 0.61                 | 0.024                 | 19.60               |
| CD9215L24X |               | 7~13.8                      | 0.10                | 2.40                  | 2000              | 23.76    | 0.673               | 0.91                 | 0.036                 | 27.40               |
| CD9215M24X |               | 7~13.8                      | 0.15                | 3.60                  | 2500              | 31.26    | 0.885               | 1.41                 | 0.056                 | 34.50               |
| CD9215H24X |               | 7~13.8                      | 0.18                | 4.32                  | 3000              | 38.87    | 1.100               | 1.95                 | 0.077                 | 39.10               |

# DC FAN

## CD9225 series A

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

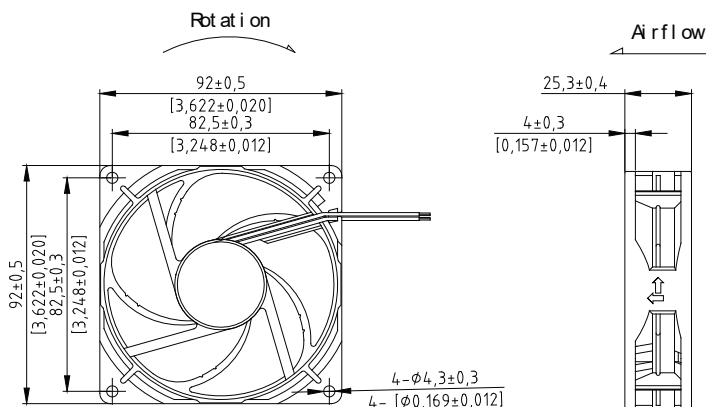
#### Lead Wire

+red -black or blue Sensor yellow

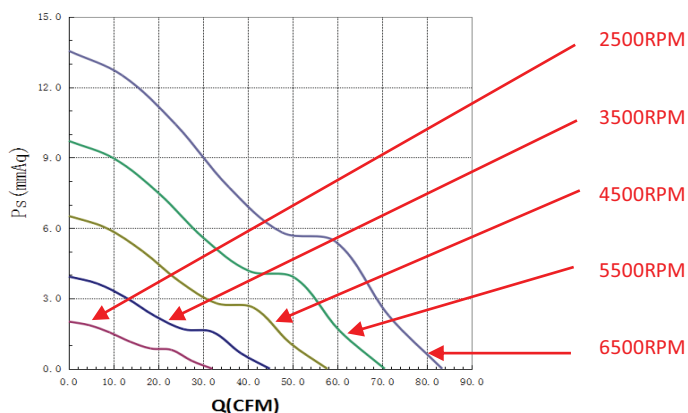
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD9225E12X |               | 7~13.8                  | 0.12          | 1.44              | 2500        | 32.06    | 0.908               | 2.01            | 0.079    | 29.1        |
| CD9225L12X |               | 7~13.8                  | 0.20          | 2.40              | 3500        | 44.88    | 1.271               | 3.93            | 0.155    | 36.6        |
| CD9225M12X | 12            | 7~13.8                  | 0.30          | 3.60              | 4500        | 57.71    | 1.634               | 6.51            | 0.256    | 41.8        |
| CD9225H12X |               | 7~13.8                  | 0.40          | 4.80              | 5500        | 70.53    | 1.997               | 9.71            | 0.382    | 46.1        |
| CD9225X12X |               | 7~13.8                  | 0.52          | 6.24              | 6500        | 83.35    | 2.360               | 13.55           | 0.533    | 49.7        |

# DC FAN

## CD9225 series B

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

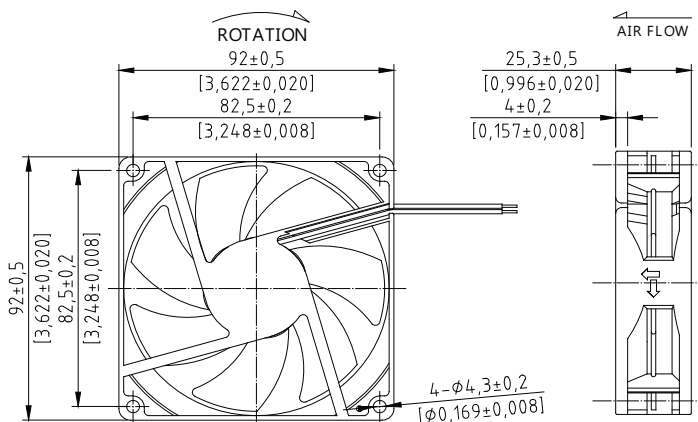
#### Lead Wire

+red -black or blue Sensor yellow

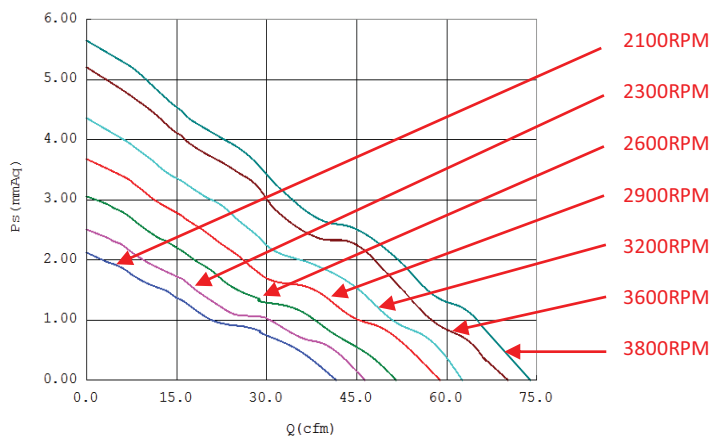
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage<br>(V) | Operating Voltage Range<br>(V) | Rated Current<br>(Amp) | Rated Input Power<br>(W) | Rated Speed<br>(rpm) | Air Flow |        | Static Pressure |          | Sound level |
|------------|----------------------|--------------------------------|------------------------|--------------------------|----------------------|----------|--------|-----------------|----------|-------------|
|            |                      |                                |                        |                          |                      | (CFM)    | m³/min | (mmH2O)         | inch-H2O | dB(A)       |
| CD9225E12X | 12                   | 7~13.8                         | 0.10                   | 1.20                     | 2100                 | 41.60    | 1.178  | 2.12            | 0.083    | 30.50       |
| CD9225L12X |                      | 7~13.8                         | 0.20                   | 2.40                     | 2600                 | 51.54    | 1.459  | 3.06            | 0.120    | 36.60       |
| CD9225M12X |                      | 7~13.8                         | 0.30                   | 3.60                     | 3200                 | 62.54    | 1.781  | 4.43            | 0.174    | 41.90       |
| CD9225H12X |                      | 7~13.8                         | 0.40                   | 4.80                     | 3600                 | 70.20    | 1.990  | 5.20            | 0.204    | 45.20       |
| CD9225E24X | 24                   | 7~13.8                         | 0.12                   | 2.88                     | 2300                 | 46.38    | 1.313  | 2.51            | 0.099    | 32.70       |
| CD9225L24X |                      | 7~13.8                         | 0.15                   | 3.60                     | 2900                 | 58.86    | 1.667  | 3.86            | 0.152    | 40.10       |
| CD9225M24X |                      | 7~13.8                         | 0.19                   | 4.56                     | 3600                 | 70.20    | 1.990  | 5.20            | 0.204    | 45.20       |
| CD9225H24X |                      | 7~13.8                         | 0.22                   | 5.28                     | 3800                 | 73.98    | 2.095  | 5.65            | 0.222    | 46.60       |

# DC FAN

## CD9225 series C

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

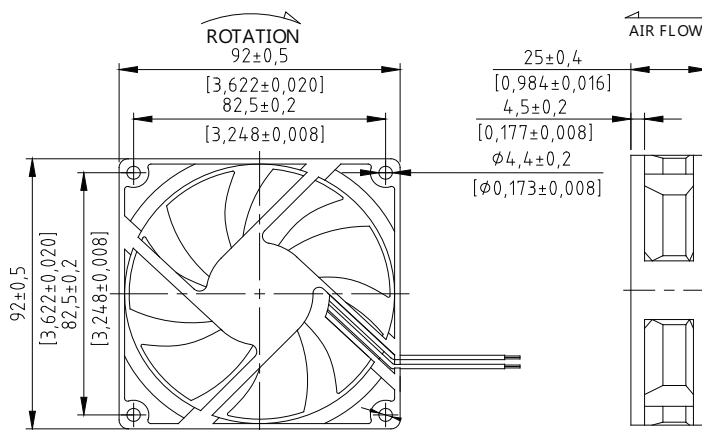
#### Lead Wire

+red -black or blue Sensor yellow

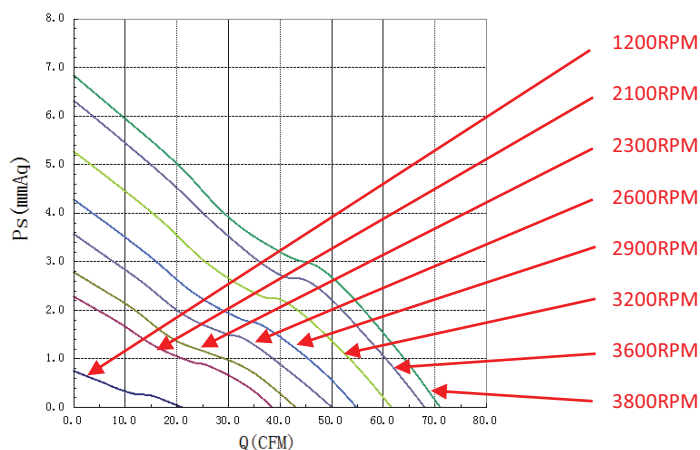
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage<br>(V) | Operating Voltage Range<br>(V) | Rated Current<br>(Amp) | Rated Input Power<br>(W) | Rated Speed<br>(rpm) | Air Flow |        | Static Pressure |          | Sound level |
|------------|----------------------|--------------------------------|------------------------|--------------------------|----------------------|----------|--------|-----------------|----------|-------------|
|            |                      |                                |                        |                          |                      | (CFM)    | m3/min | (mmH2O)         | inch-H2O | dB(A)       |
| CD9225E12X | 12                   | 7~13.8                         | 0.16                   | 1.92                     | 1200                 | 20.99    | 0.594  | 0.74            | 0.029    | 18.80       |
| CD9225L12X |                      | 7~13.8                         | 0.20                   | 2.40                     | 2100                 | 38.71    | 1.096  | 2.28            | 0.090    | 29.50       |
| CD9225M12X |                      | 7~13.8                         | 0.30                   | 3.60                     | 2600                 | 50.05    | 1.417  | 3.56            | 0.140    | 35.70       |
| CD9225H12X |                      | 7~13.8                         | 0.40                   | 4.80                     | 3600                 | 68.03    | 1.934  | 6.31            | 0.248    | 44.70       |
| CD9225E24X | 24                   | 7~13.8                         | 0.15                   | 3.60                     | 2300                 | 45.15    | 1.101  | 1.28            | 0.109    | 33.20       |
| CD9225L24X |                      | 7~13.8                         | 0.18                   | 4.32                     | 2900                 | 54.76    | 1.550  | 4.28            | 0.169    | 39.40       |
| CD9225M24X |                      | 7~13.8                         | 0.26                   | 6.24                     | 3200                 | 61.94    | 1.754  | 5.26            | 0.207    | 42.70       |
| CD9225H24X |                      | 7~13.8                         | 0.35                   | 8.40                     | 3800                 | 71.09    | 2.013  | 6.83            | 0.269    | 45.80       |

# DC FAN

## CD9225 series D

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

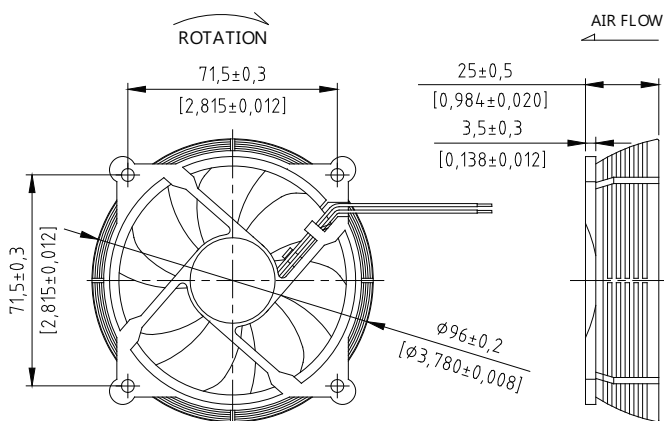
#### Lead Wire

+red -black or blue Sensor yellow

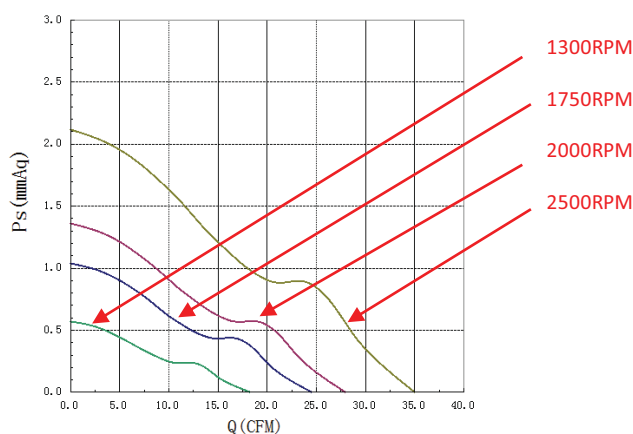
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |        | Static Pressure |          | Sound level dB(A) |
|------------|---------------|-----------------------------|---------------------|-----------------------|-------------------|----------|--------|-----------------|----------|-------------------|
|            | (V)           |                             |                     |                       |                   | (CFM)    | m3/min | (mmH2O)         | inch-H2O |                   |
| CD9225E12X | 12            | 7~13.8                      | 0.15                | 1.80                  | 1300              | 18.17    | 0.514  | 0.57            | 0.022    | 14.20             |
| CD9225L12X |               | 7~13.8                      | 0.20                | 2.40                  | 1750              | 24.46    | 0.693  | 1.04            | 0.041    | 20.70             |
| CD9225M12X |               | 7~13.8                      | 0.30                | 3.60                  | 2000              | 27.95    | 0.791  | 1.36            | 0.054    | 23.60             |
| CD9225H12X |               | 7~13.8                      | 0.40                | 4.80                  | 2500              | 34.96    | 0.989  | 2.12            | 0.083    | 24.46             |

# DC FAN

## CD9225 series E

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

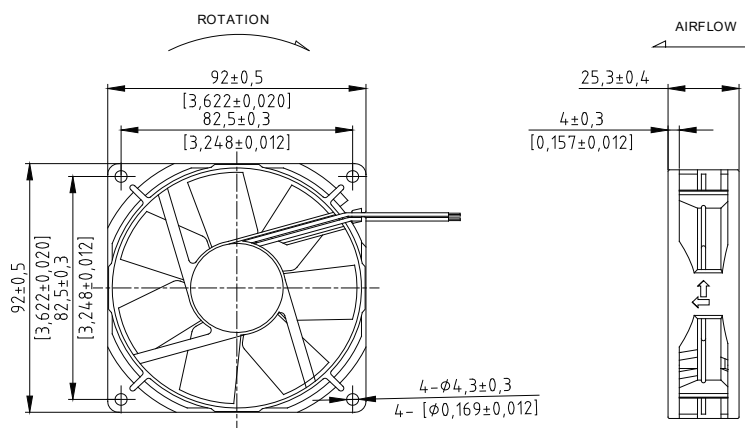
#### Lead Wire

+red -black or blue Sensor yellow

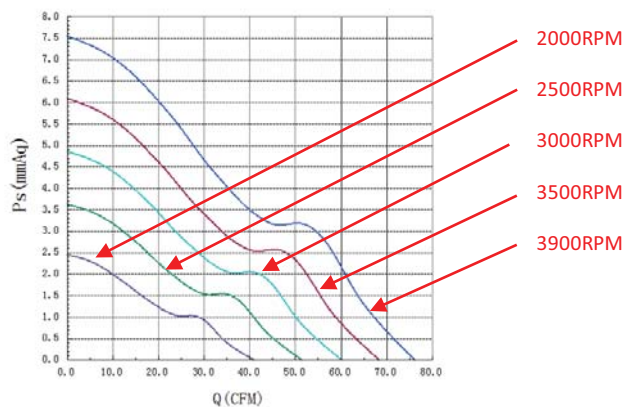
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD9225L12X | 12            | 7~13.8                  | 0.20          | 2.40              | 2000        | 40.89    | 1.158               | 2.45            | 0.096    | 28.3        |
| CD9225M12X |               | 7~13.8                  | 0.30          | 3.60              | 3000        | 60.13    | 1.703               | 4.87            | 0.192    | 39.9        |
| CD9225H12X |               | 7~13.8                  | 0.40          | 4.80              | 3500        | 68.36    | 1.936               | 6.09            | 0.240    | 45.3        |
| CD9225L24X | 24            | 12~25.6                 | 0.11          | 2.64              | 2500        | 51.30    | 1.453               | 3.64            | 0.143    | 34.8        |
| CD9225M24X |               | 12~25.6                 | 0.15          | 3.60              | 3000        | 60.13    | 1.703               | 4.87            | 0.192    | 39.9        |
| CD9225H24X |               | 12~25.6                 | 0.38          | 9.12              | 3900        | 76.16    | 2.157               | 7.56            | 0.298    | 48.1        |



# DC FAN

## CD9232 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

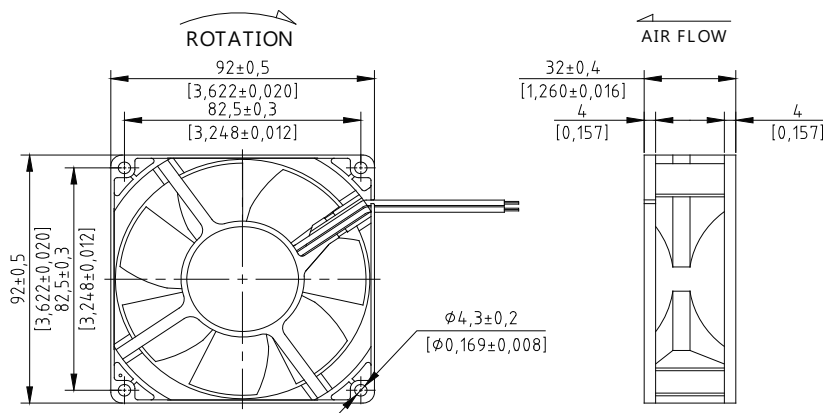
#### Lead Wire

+red -black or blue Sensor yellow

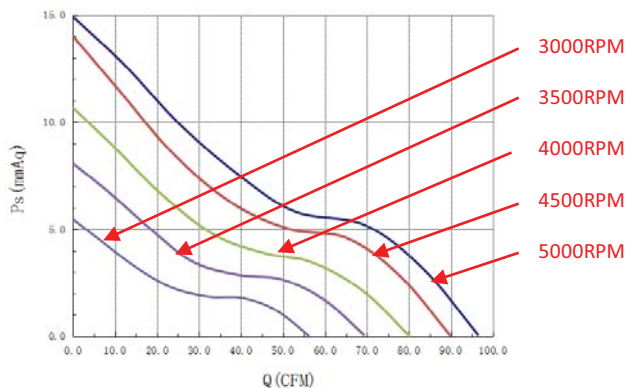
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|            | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD9232L12X | 12            | 7~13.8                  | 0.35          | 4.20              | 3000        | 56.36    | 1.596               | 5.46            | 0.215    | 21.0        |
| CD9232M13X |               | 7~13.8                  | 0.49          | 5.88              | 3500        | 69.40    | 1.965               | 8.06            | 0.317    | 36.8        |
| CD9232H14X |               | 7~13.8                  | 0.68          | 8.16              | 4000        | 80.24    | 2.272               | 10.66           | 0.420    | 44.6        |
| CD9232L24X | 24            | 12~25.6                 | 0.25          | 6.00              | 3500        | 69.40    | 1.965               | 8.06            | 0.317    | 36.8        |
| CD9232M25X |               | 12~25.6                 | 0.37          | 8.88              | 4000        | 80.24    | 2.272               | 10.66           | 0.420    | 44.6        |
| CD9232H26X |               | 12~25.6                 | 0.48          | 11.52             | 4500        | 90.01    | 2.549               | 14.00           | 0.551    | 47.7        |
| CD9232L25X | 48            | 28~25.6                 | 0.18          | 8.64              | 4000        | 80.24    | 2.272               | 10.66           | 0.420    | 44.6        |
| CD9232M26X |               | 28~25.6                 | 0.23          | 11.04             | 4500        | 90.01    | 2.549               | 14.00           | 0.551    | 47.7        |
| CD9232H27X |               | 28~25.6                 | 0.29          | 13.92             | 5000        | 96.50    | 2.733               | 14.90           | 0.587    | 51.7        |

# DC BLOWER

## CD9733 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

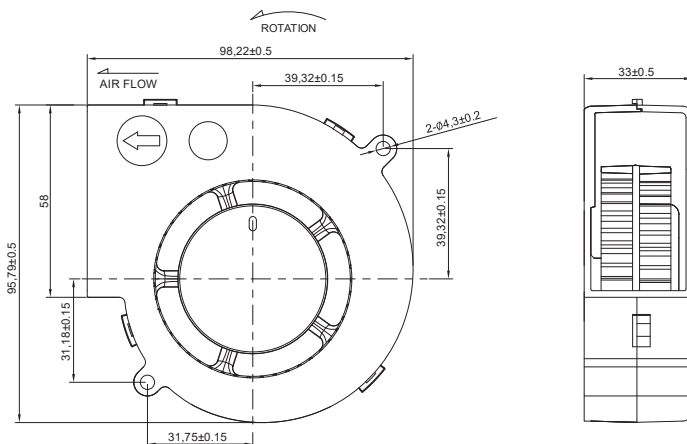
#### Lead Wire

+red -black or blue Sensor yellow

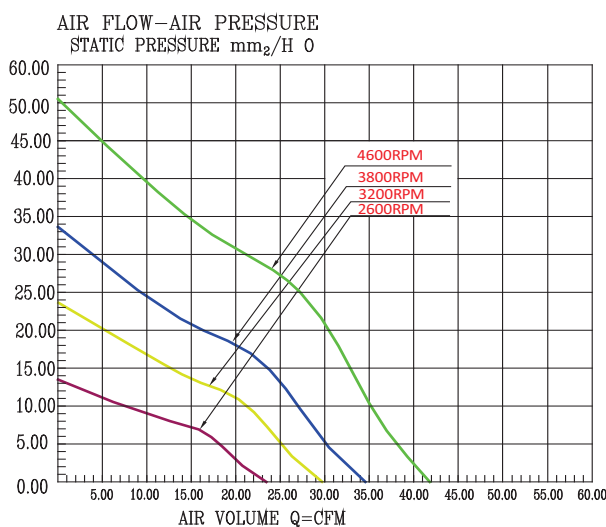
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL      | Rated Voltage<br>(V) | Operating Voltage Range<br>(V) | Rated Current<br>(Amp) | Rated Input Power<br>(W) | Rated Speed<br>(rpm) | Air Flow |                     | Static Pressure      |                       | Sound level |
|------------|----------------------|--------------------------------|------------------------|--------------------------|----------------------|----------|---------------------|----------------------|-----------------------|-------------|
|            |                      |                                |                        |                          |                      | (CFM)    | m <sup>3</sup> /min | (mmH <sub>2</sub> O) | inch-H <sub>2</sub> O | dB(A)       |
| CD9733L12X | 12                   | 7~13.8                         | 0.40                   | 4.80                     | 2200                 | 23.53    | 0.67                | 13.57                | 0.534                 | 46.4        |
| CD9733M12X |                      | 7~13.8                         | 0.45                   | 5.40                     | 2700                 | 29.28    | 0.83                | 23.46                | 0.924                 | 50.5        |
| CD9733H12X |                      | 7~13.8                         | 0.80                   | 9.60                     | 3600                 | 34.58    | 1.01                | 33.67                | 1.325                 | 55.3        |
| CD9733X12X |                      | 7~13.8                         | 1.20                   | 14.40                    | 4600                 | 41.65    | 1.18                | 50.47                | 1.987                 | 59.8        |

## General Specifications

### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

### Lead Wire

+red -black or blue Sensor yellow

### Temperature Range

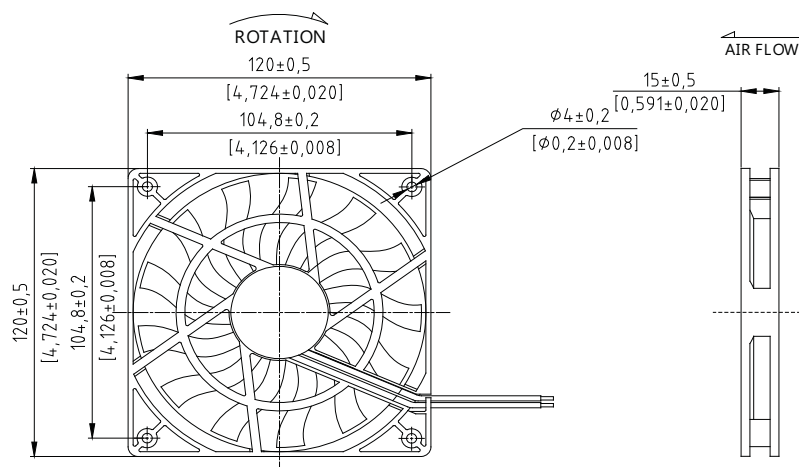
Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)



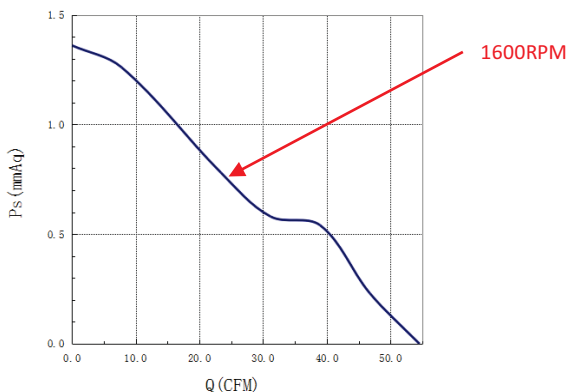
# DC FAN CD12015 series

**SIZE: 120X120X15 mm**

## Dimensions(Unit : mm)



## P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|-------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|             | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD12015H12X | 12            | 7~13.8                  | 0.22          | 2.64              | 1600        | 54.55    | 1.545               | 1.36            | 0.054    | 30.2        |
| CD12015H24X | 24            | 12~25.6                 | 0.15          | 3.60              | 1600        | 54.55    | 1.545               | 1.36            | 0.054    | 30.2        |

# DC FAN

## CD12025 series A

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

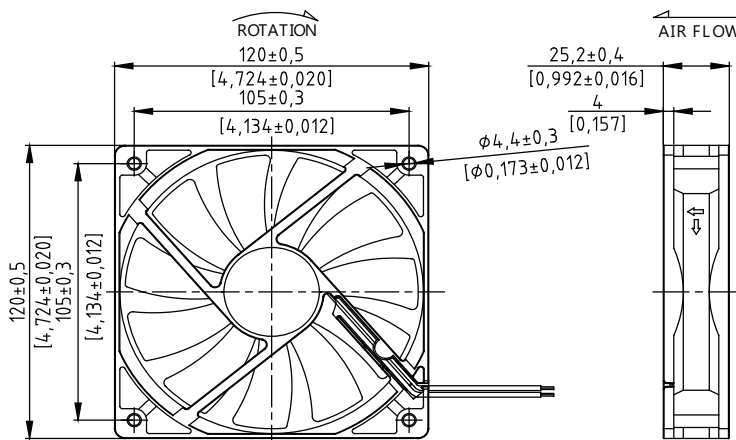
#### Lead Wire

+red -black or blue Sensor yellow

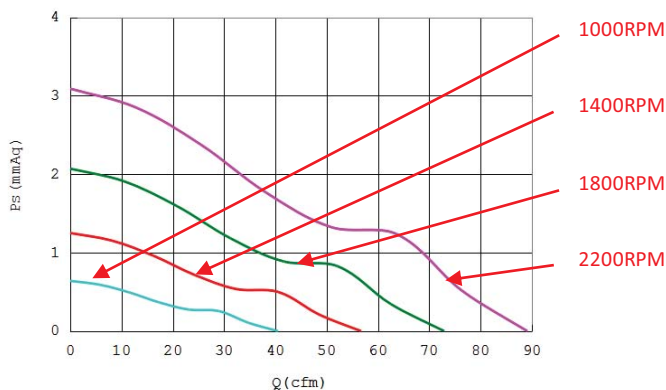
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |        | Static Pressure |          | Sound level |
|-------------|---------------|-------------------------|---------------|-------------------|-------------|----------|--------|-----------------|----------|-------------|
|             | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m³/min | (mmH2O)         | inch-H2O | dB(A)       |
| CD12025L12X | 12            | 7~13.8                  | 0.33          | 3.96              | 1000        | 40.50    | 1.147  | 0.64            | 0.025    | 23.4        |
| CD12025M12X |               | 7~13.8                  | 0.45          | 5.40              | 1400        | 56.71    | 1.606  | 1.25            | 0.049    | 30.7        |
| CD12025M12X |               | 7~13.8                  | 0.45          | 5.40              | 1800        | 72.91    | 2.065  | 2.07            | 0.081    | 36.1        |
| CD12025H12X |               | 7~13.8                  | 0.58          | 6.96              | 2200        | 89.11    | 2.523  | 3.09            | 0.122    | 40.5        |
| CD12025L24X | 24            | 12~25.6                 | 0.14          | 3.36              | 1000        | 40.50    | 1.147  | 0.64            | 0.025    | 23.4        |
| CD12025M24X |               | 12~25.6                 | 0.20          | 4.80              | 1400        | 56.71    | 1.606  | 1.25            | 0.049    | 30.7        |
| CD12025M24X |               | 12~25.6                 | 0.20          | 4.80              | 1800        | 72.91    | 2.065  | 2.07            | 0.081    | 36.1        |
| CD12025H24X |               | 12~25.6                 | 0.28          | 6.72              | 2200        | 89.11    | 2.523  | 3.09            | 0.122    | 40.5        |

# DC FAN

## CD12025 series B

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

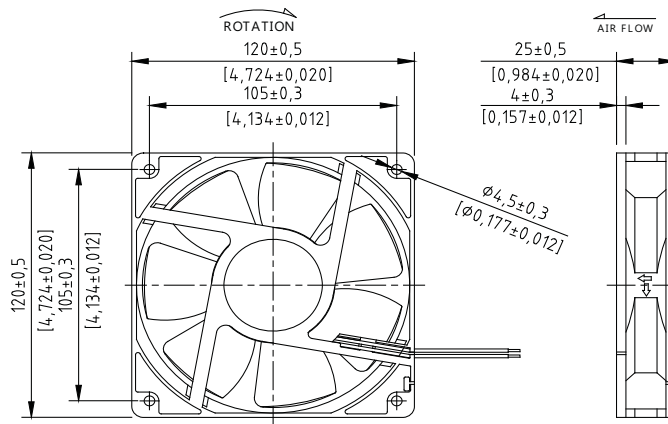
#### Lead Wire

+red -black or blue Sensor yellow

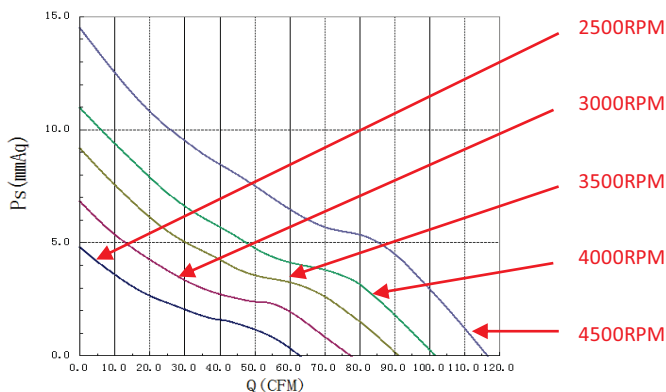
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|-------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|             | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD12025L12X | 12            | 7~13.8                  | 0.33          | 3.96              | 2500        | 63.5     | 1.798               | 4.79            | 0.188    | 35.80       |
| CD12025M12X |               | 7~13.8                  | 0.45          | 5.40              | 3000        | 82.5     | 2.335               | 6.82            | 0.268    | 41.40       |
| CD12025H12X |               | 7~13.8                  | 0.58          | 6.96              | 3500        | 90.9     | 2.573               | 9.17            | 0.361    | 45.40       |
| CD12025X12X |               | 7~13.8                  | 0.70          | 8.40              | 4000        | 101.5    | 2.874               | 10.97           | 0.432    | 48.90       |
| CD12025L24X | 24            | 12~25.6                 | 0.14          | 3.36              | 3500        | 90.9     | 2.573               | 9.17            | 0.361    | 45.40       |
| CD12025M24X |               | 12~25.6                 | 0.20          | 4.80              | 4000        | 101.5    | 2.874               | 10.97           | 0.432    | 48.90       |
| CD12025H24X |               | 12~25.6                 | 0.28          | 6.72              | 4500        | 117.0    | 3.312               | 14.50           | 0.571    | 51.40       |

# DC FAN

## CD12025 series C

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

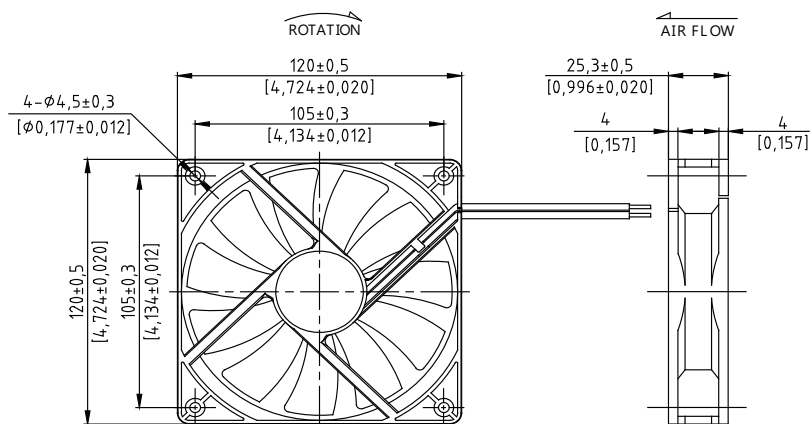
#### Lead Wire

+red -black or blue Sensor yellow

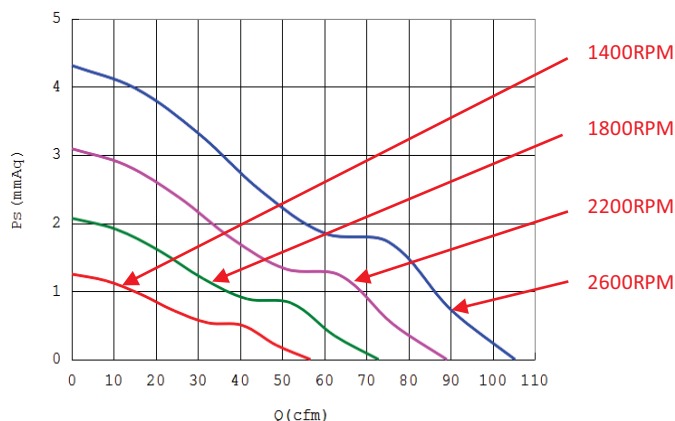
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |        | Static Pressure |          | Sound level |
|-------------|---------------|-------------------------|---------------|-------------------|-------------|----------|--------|-----------------|----------|-------------|
|             | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m³/min | (mmH2O)         | inch-H2O | dB(A)       |
| CD12025L12X | 12            | 7~13.8                  | 0.33          | 3.96              | 1400        | 56.71    | 1.606  | 1.25            | 0.049    | 30.7        |
| CD12025M12X |               | 7~13.8                  | 0.45          | 5.40              | 1800        | 72.91    | 2.065  | 2.07            | 0.081    | 36.1        |
| CD12025M12X |               | 7~13.8                  | 0.45          | 5.40              | 2200        | 89.11    | 2.523  | 3.09            | 0.122    | 40.5        |
| CD12025H12X |               | 7~13.8                  | 0.58          | 6.96              | 2600        | 105.31   | 2.982  | 4.31            | 0.170    | 44.1        |
| CD12025L24X | 24            | 12~25.6                 | 0.14          | 3.36              | 1400        | 56.71    | 1.606  | 1.25            | 0.049    | 30.7        |
| CD12025M24X |               | 12~25.6                 | 0.20          | 4.80              | 1800        | 72.91    | 2.065  | 2.07            | 0.081    | 36.1        |
| CD12025M24X |               | 12~25.6                 | 0.20          | 4.80              | 2200        | 89.11    | 2.523  | 3.09            | 0.122    | 40.5        |
| CD12025H24X |               | 12~25.6                 | 0.28          | 6.72              | 2600        | 105.31   | 2.982  | 4.31            | 0.170    | 44.1        |

# DC FAN

## CD12025 series D

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

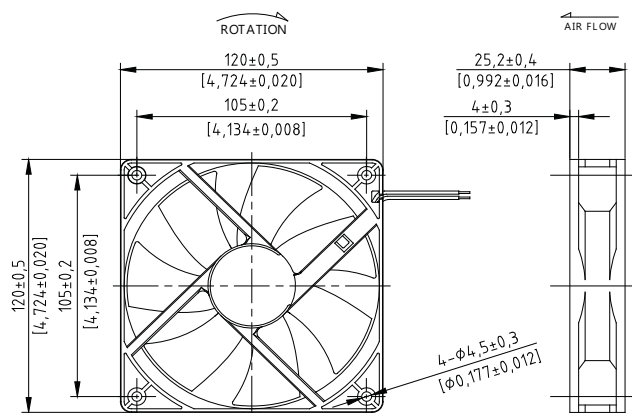
#### Lead Wire

+red -black or blue Sensor yellow

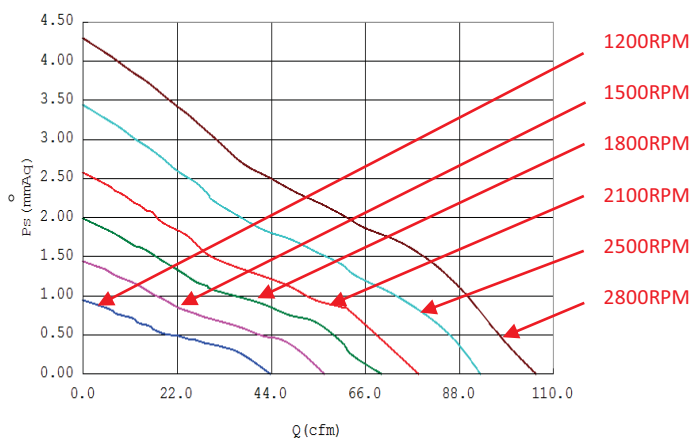
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure      |                       | Sound level |
|-------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|----------------------|-----------------------|-------------|
|             | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH <sub>2</sub> O) | inch-H <sub>2</sub> O | dB(A)       |
| CD12025E12X | 12            | 7~13.8                  | 0.26          | 3.12              | 1200        | 43.630   | 1.235               | 0.950                | 0.037                 | 24.20       |
| CD12025L12X |               | 7~13.8                  | 0.33          | 3.96              | 1500        | 56.410   | 1.597               | 1.440                | 0.056                 | 29.50       |
| CD12025M12X |               | 7~13.8                  | 0.45          | 5.40              | 1800        | 69.760   | 1.975               | 1.990                | 0.078                 | 33.40       |
| CD12025H12X |               | 7~13.8                  | 0.58          | 6.96              | 2100        | 78.410   | 2.220               | 2.570                | 0.101                 | 37.70       |
| CD12025E24X | 24            | 12~25.6                 | 0.12          | 2.88              | 1800        | 69.760   | 1.975               | 1.990                | 0.078                 | 33.40       |
| CD12025L24X |               | 12~25.6                 | 0.14          | 3.36              | 2100        | 78.410   | 2.220               | 2.570                | 0.101                 | 37.70       |
| CD12025M24X |               | 12~25.6                 | 0.20          | 4.80              | 2500        | 92.830   | 2.686               | 3.440                | 0.135                 | 42.80       |
| CD12025H24X |               | 12~25.6                 | 0.28          | 6.72              | 2800        | 105.820  | 2.996               | 4.300                | 0.169                 | 46.20       |



# DC BLOWER

## CD12025 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

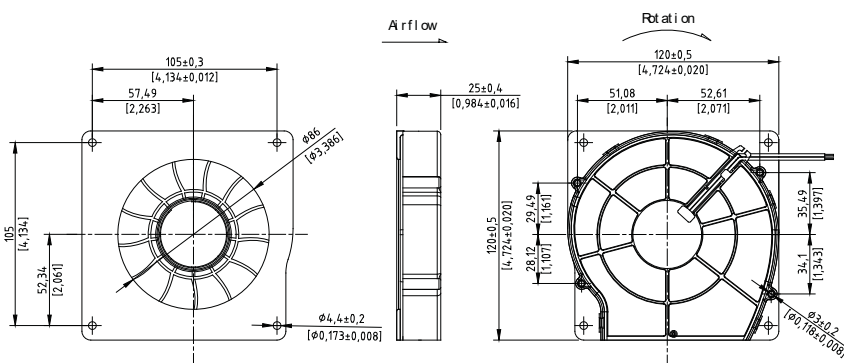
#### Lead Wire

+red -black or blue Sensor yellow

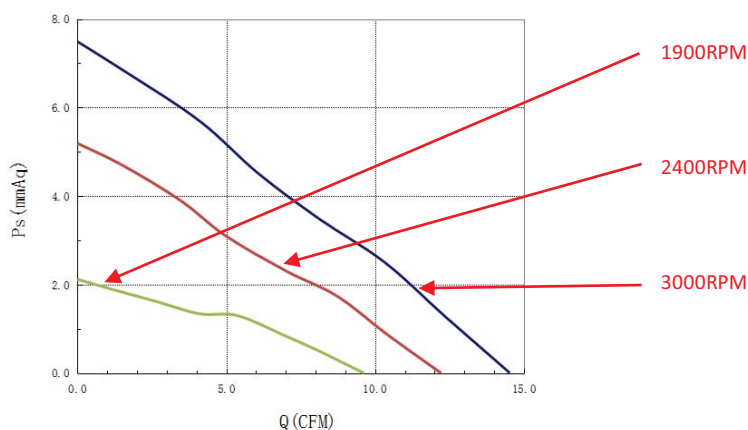
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|-------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|             | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD12025L12X | 12            | 7~13.8                  | 0.33          | 3.96              | 1200        | 9.63     | 0.273               | 2.12            | 0.083    | 28.7        |
| CD12025M12X |               | 7~13.8                  | 0.45          | 5.40              | 1500        | 12.22    | 0.346               | 5.19            | 0.204    | 34.5        |
| CD12025H12X |               | 7~13.8                  | 0.58          | 6.96              | 1800        | 14.52    | 0.411               | 7.49            | 0.295    | 37.7        |
| CD12025L24X | 24            | 12~25.6                 | 0.14          | 3.36              | 1200        | 9.63     | 0.273               | 2.12            | 0.083    | 28.7        |
| CD12025M24X |               | 12~25.6                 | 0.20          | 4.80              | 1500        | 12.22    | 0.346               | 5.19            | 0.204    | 34.5        |
| CD12025H24X |               | 12~25.6                 | 0.28          | 6.72              | 1800        | 14.52    | 0.411               | 7.49            | 0.295    | 37.7        |

# DC BLOWER

## CD12032 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

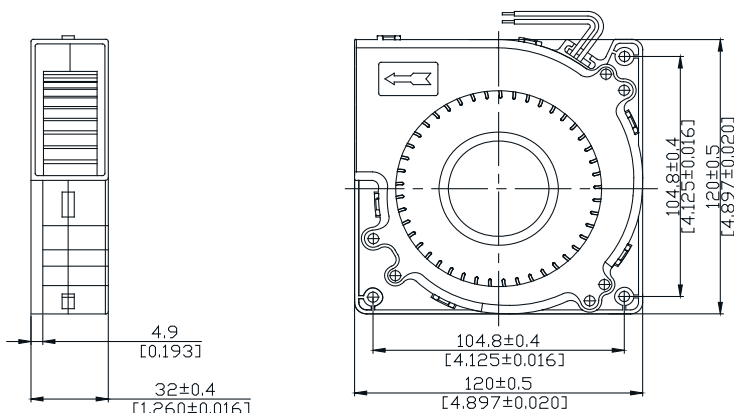
#### Lead Wire

+red -black or blue Sensor yellow

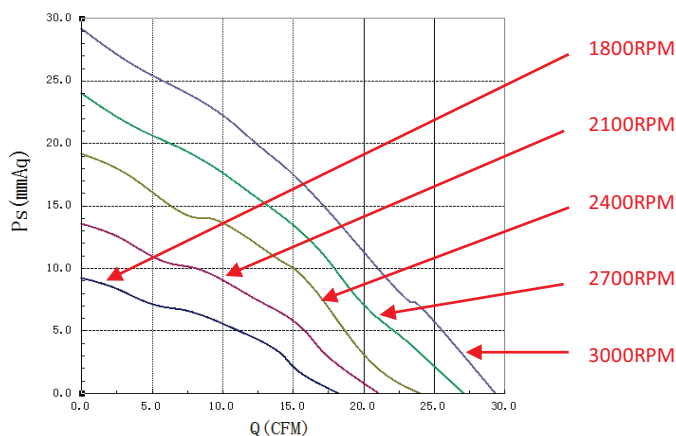
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|-------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|             | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD12032E12X | 12            | 7~13.8                  | 0.10          | 1.20              | 1800        | 19.16    | 0.543               | 9.22            | 0.363    | 38.60       |
| CD12032L12X |               | 7~13.8                  | 0.20          | 2.40              | 2100        | 21.16    | 0.599               | 13.60           | 0.535    | 42.80       |
| CD12032M12X |               | 7~13.8                  | 0.30          | 3.60              | 2400        | 24.16    | 0.684               | 19.20           | 0.756    | 47.60       |
| CD12032H12X |               | 7~13.8                  | 0.40          | 4.80              | 2700        | 28.62    | 0.810               | 24.00           | 0.945    | 51.10       |
| CD12032E24X | 24            | 12~25.6                 | 0.12          | 2.88              | 2100        | 21.16    | 0.599               | 13.60           | 0.535    | 42.80       |
| CD12032L24X |               | 12~25.6                 | 0.15          | 3.60              | 2400        | 24.16    | 0.684               | 19.20           | 0.756    | 47.60       |
| CD13032M24X |               | 12~25.6                 | 0.19          | 4.56              | 2700        | 28.62    | 0.810               | 24.00           | 0.945    | 51.10       |
| CD13032H24X |               | 12~25.6                 | 0.22          | 5.28              | 3000        | 29.66    | 0.839               | 29.20           | 1.149    | 51.60       |

# DC FAN

## CD12038 series A

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)

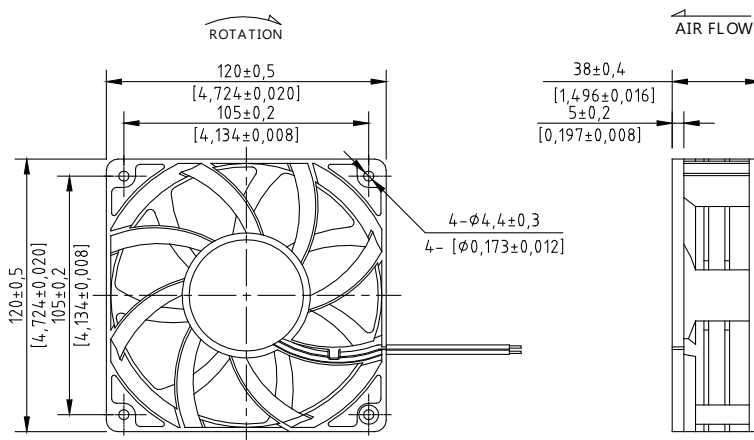
#### Lead Wire

+red -black or blue Sensor yellow

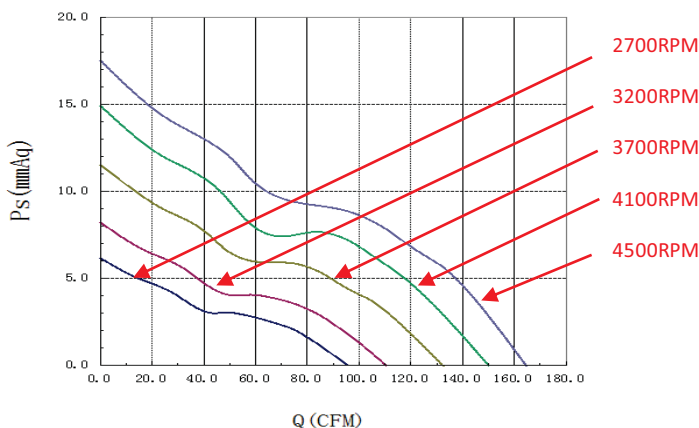
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage (V) | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |                     | Static Pressure |          | Sound level |
|-------------|-------------------|-----------------------------|---------------------|-----------------------|-------------------|----------|---------------------|-----------------|----------|-------------|
|             |                   |                             |                     |                       |                   | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD12038L12B | 12                | 7~13.8                      | 0.34                | 4.08                  | 2700              | 94.88    | 2.677               | 6.19            | 0.244    | 37.10       |
| CD12038M12B |                   | 7~13.8                      | 0.46                | 5.52                  | 3200              | 110.46   | 3.128               | 8.21            | 0.323    | 40.80       |
| CD12038H12B |                   | 7~13.8                      | 0.56                | 6.72                  | 3700              | 132.87   | 3.762               | 11.50           | 0.453    | 42.60       |
| CD12038X12B |                   | 7~13.8                      | 0.78                | 9.36                  | 4100              | 150.12   | 4.251               | 14.900          | 0.587    | 46.00       |
| CD12038L24B | 24                | 12~25.6                     | 0.34                | 8.16                  | 3700              | 132.87   | 3.762               | 11.50           | 0.453    | 42.60       |
| CD12038M24B |                   | 12~25.6                     | 0.46                | 11.04                 | 4100              | 150.12   | 4.251               | 14.900          | 0.587    | 46.00       |
| CD12038H24B |                   | 12~25.6                     | 0.56                | 13.44                 | 4500              | 168.47   | 4.771               | 17.50           | 0.689    | 48.20       |
| CD12038L48B | 48                | 28.0~56.0                   | 0.36                | 17.28                 | 4100              | 150.12   | 4.251               | 14.900          | 0.587    | 46.00       |
| CD12038H48B |                   | 28.0~56.0                   | 0.46                | 22.08                 | 4500              | 168.47   | 4.771               | 17.50           | 0.689    | 48.20       |

# DC FAN

## CD12038 series B

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)

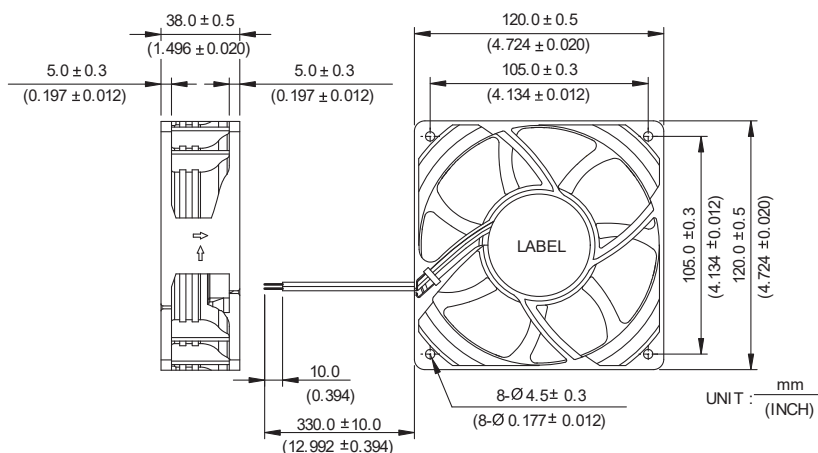
#### Lead Wire

+red -black or blue Sensor yellow

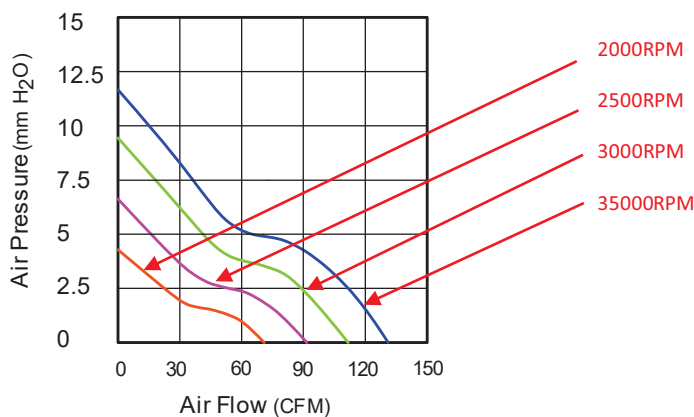
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)-

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|-------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|             | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD12038L12X | 12            | 7~13.8                  | 0.30          | 3.60              | 2000        | 71.27    | 2.018               | 4.22            | 0.166    | 32.5        |
| CD12038M12X |               | 7~13.8                  | 0.40          | 4.80              | 2500        | 91.95    | 2.604               | 6.45            | 0.254    | 38.0        |
| CD12038H12X |               | 7~13.8                  | 0.55          | 6.60              | 3000        | 109.17   | 3.092               | 9.22            | 0.363    | 44.0        |
| CD12038X12X |               | 7~13.8                  | 0.60          | 7.20              | 3500        | 130.80   | 3.704               | 11.48           | 0.452    | 47.0        |
| CD12038L24X | 24            | 12~25.6                 | 0.11          | 2.64              | 2000        | 71.27    | 2.018               | 4.22            | 0.166    | 32.5        |
| CD12038M24X |               | 12~25.6                 | 0.14          | 3.36              | 2500        | 91.95    | 2.604               | 6.45            | 0.254    | 38.0        |
| CD12038H24X |               | 12~25.6                 | 0.20          | 4.80              | 3000        | 109.17   | 3.092               | 9.22            | 0.363    | 44.0        |
| CD12038X24X |               | 12~25.6                 | 0.27          | 6.48              | 3500        | 130.80   | 3.704               | 11.48           | 0.452    | 47.0        |

## General Specifications

### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

### Lead Wire

+red -black or blue Sensor yellow

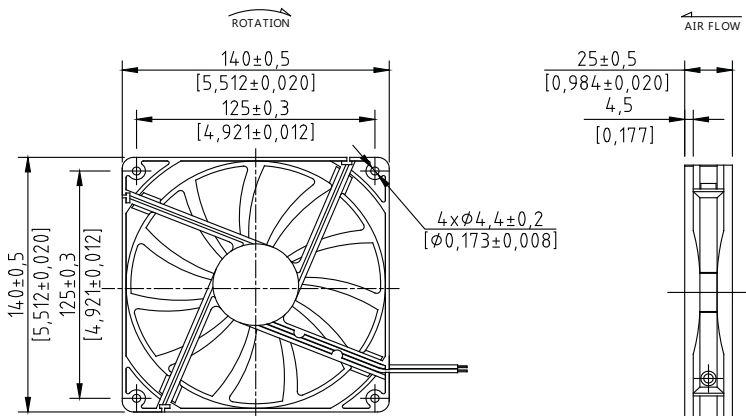
### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

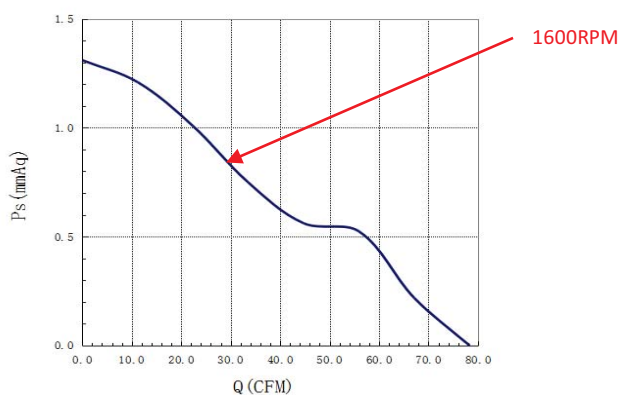
# DC FAN CD14025 series

**SIZE: 140X140X25 mm**

## Dimensions(Unit : mm)



## P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage<br>(V) | Operating Voltage Range<br>(V) | Rated Current<br>(Amp) | Rated Input Power<br>(W) | Rated Speed<br>(rpm) | Air Flow |                     | Static Pressure |          | Sound level<br>dB(A) |
|-------------|----------------------|--------------------------------|------------------------|--------------------------|----------------------|----------|---------------------|-----------------|----------|----------------------|
|             |                      |                                |                        |                          |                      | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O |                      |
| CD14025H12X | 12                   | 7~13.8                         | 0.22                   | 2.64                     | 1200                 | 78.30    | 2.217               | 1.31            | 0.052    | 25.9                 |
| CD14025H24X | 24                   | 12~25.6                        | 0.16                   | 3.84                     | 1200                 | 78.30    | 2.217               | 1.31            | 0.052    | 25.9                 |

# DC BLOWER

## CD14025 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)  
Long Life Bearing 35,000hrs (40°C)  
Sleeve Bearing 20,000hrs (40°C)

#### Lead Wire

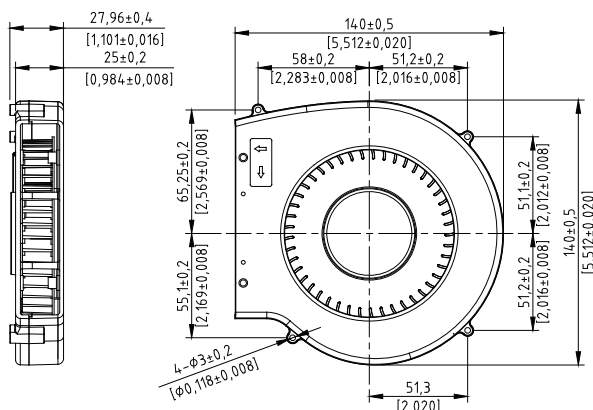
+red -black or blue Sensor yellow

#### Temperature Range

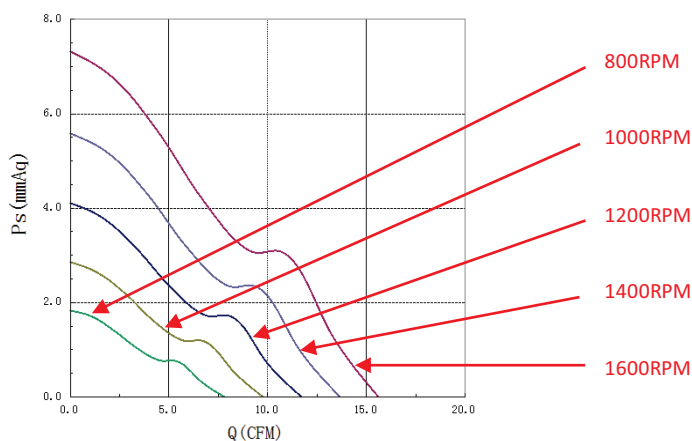
Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)



### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage | Operating Voltage Range (V) | Rated Current (Amp) | Rated Input Power (W) | Rated Speed (rpm) | Air Flow |                     | Static Pressure      |                       | Sound level dB(A) |
|-------------|---------------|-----------------------------|---------------------|-----------------------|-------------------|----------|---------------------|----------------------|-----------------------|-------------------|
|             | (V)           |                             |                     |                       |                   | (CFM)    | m <sup>3</sup> /min | (mmH <sub>2</sub> O) | inch-H <sub>2</sub> O |                   |
| CD14025L05X | 5             | 4~5.5                       | 0.16                | 0.80                  | 800               | 7.45     | 0.210               | 1.53                 | 0.060                 | 25.60             |
| CD14025M05X |               | 4~5.5                       | 0.25                | 1.25                  | 1000              | 9.78     | 0.270               | 2.47                 | 0.097                 | 30.40             |
| CD14025H05X |               | 4~5.5                       | 0.35                | 1.75                  | 1200              | 11.72    | 0.332               | 4.11                 | 0.162                 | 34.40             |
| CD14025L12X | 12            | 7~13.8                      | 0.08                | 0.96                  | 1200              | 11.72    | 0.332               | 4.11                 | 0.162                 | 34.40             |
| CD14025M12X |               | 7~13.8                      | 0.13                | 1.56                  | 1400              | 13.67    | 0.339               | 5.59                 | 0.220                 | 37.70             |
| CD14025H12X |               | 7~13.8                      | 0.17                | 2.04                  | 1600              | 15.63    | 0.443               | 7.31                 | 0.288                 | 40.60             |

# DC FAN

## CD15051 series

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)

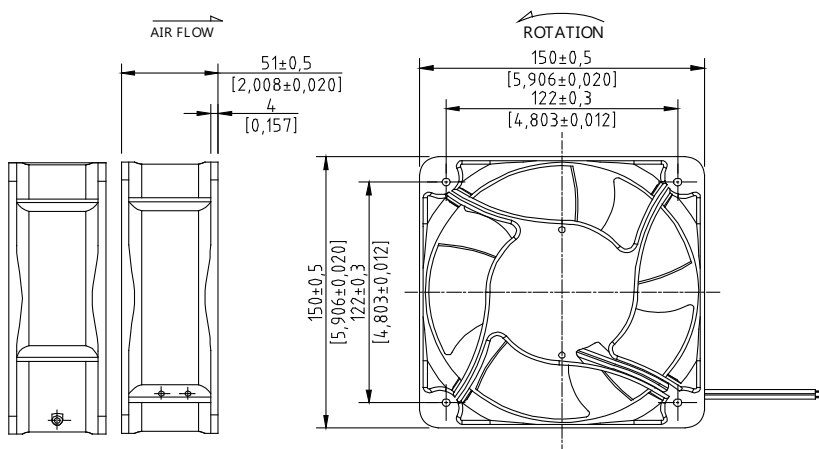
#### Lead Wire

+red -black or blue Sensor yellow

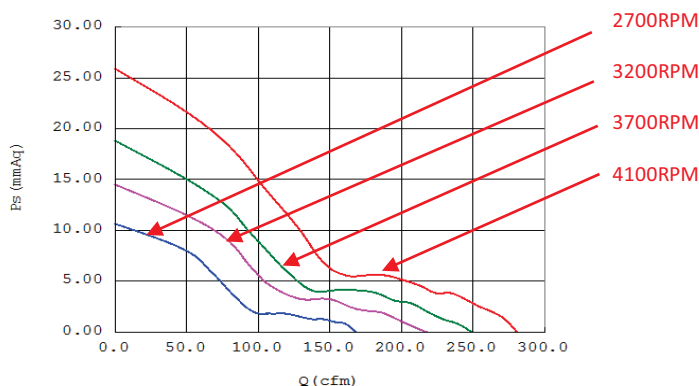
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|-------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|             | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD15051L12B | 12            | 7~13.8                  | 1.05          | 12.60             | 2500        | 168.50   | 4.18                | 10.67           | 0.42     | 53.40       |
| CD15051M12B |               | 7~13.8                  | 1.48          | 17.76             | 3000        | 218.10   | 6.18                | 14.48           | 0.57     | 57.90       |
| CD15051H12B |               | 7~13.8                  | 1.97          | 23.64             | 3500        | 249.00   | 7.05                | 18.80           | 0.74     | 62.30       |
| CD15051X12B |               | 7~13.8                  | 2.98          | 35.76             | 4000        | 280.80   | 7.95                | 25.91           | 1.02     | 65.80       |
| CD15051L24B | 24            | 12~25.6                 | 0.55          | 13.20             | 2500        | 168.50   | 4.18                | 10.67           | 0.42     | 53.40       |
| CD15051M24B |               | 12~25.7                 | 0.76          | 18.24             | 3000        | 218.10   | 6.18                | 14.48           | 0.57     | 57.90       |
| CD15051H24B |               | 12~25.8                 | 1.08          | 25.92             | 3500        | 249.00   | 7.05                | 18.80           | 0.74     | 62.30       |
| CD15051X24B |               | 12~25.9                 | 1.55          | 37.20             | 4000        | 280.80   | 7.95                | 25.91           | 1.02     | 65.80       |
| CD15051L48B | 48            | 28.0~56.0               | 0.42          | 20.16             | 2500        | 168.50   | 4.18                | 10.67           | 0.42     | 53.40       |
| CD15051M48B |               | 28.0~56.0               | 0.51          | 24.48             | 3000        | 218.10   | 6.18                | 14.48           | 0.57     | 57.90       |
| CD15051H48B |               | 28.0~56.0               | 0.62          | 29.76             | 3500        | 249.00   | 7.05                | 18.80           | 0.74     | 62.30       |
| CD15051X48B |               | 28.0~56.0               | 0.78          | 37.44             | 4000        | 280.80   | 7.95                | 25.91           | 1.02     | 65.80       |



# DC FAN

## CD17251 series A

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)

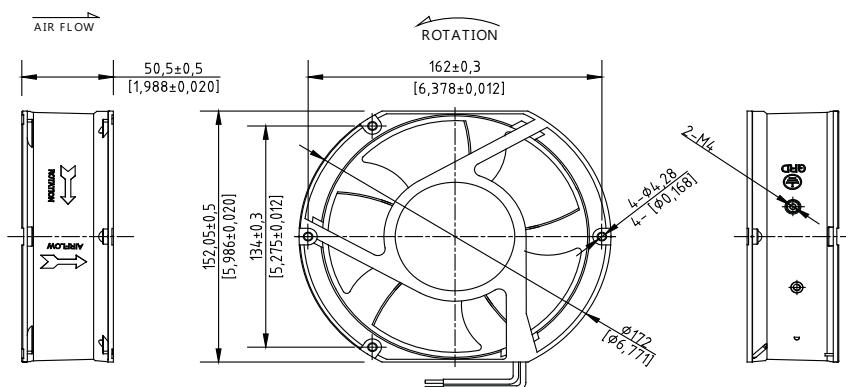
#### Lead Wire

+red -black or blue Sensor yellow

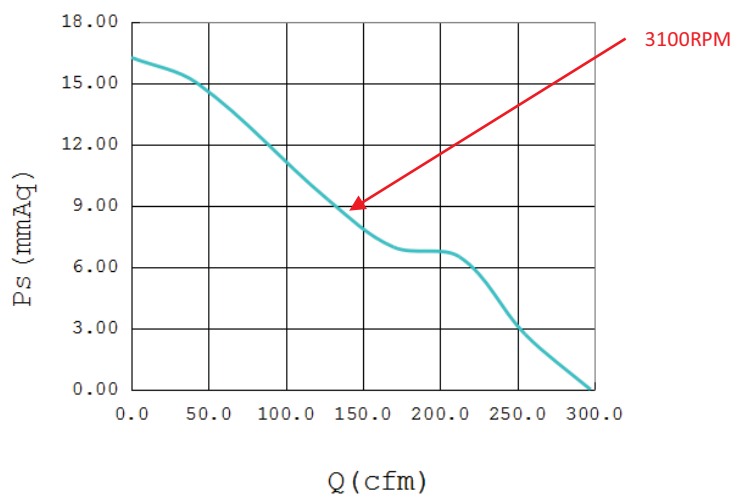
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|-------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|             | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD17251H24X | 24            | 12~25.6                 | 0.17          | 4.08              | 3100        | 297.50   | 8.424               | 16.26           | 0.640    | 37.9        |

# DC FAN

## CD17251 series B

**SIZE: 172X150X50.8 mm**

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)

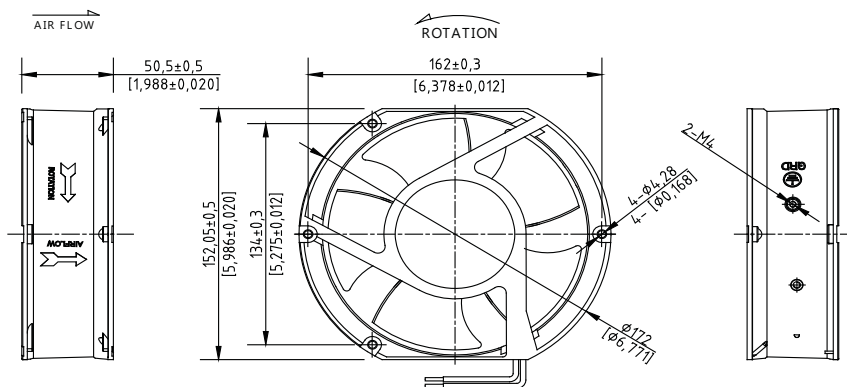
#### Lead Wire

+red -black or blue Sensor yellow

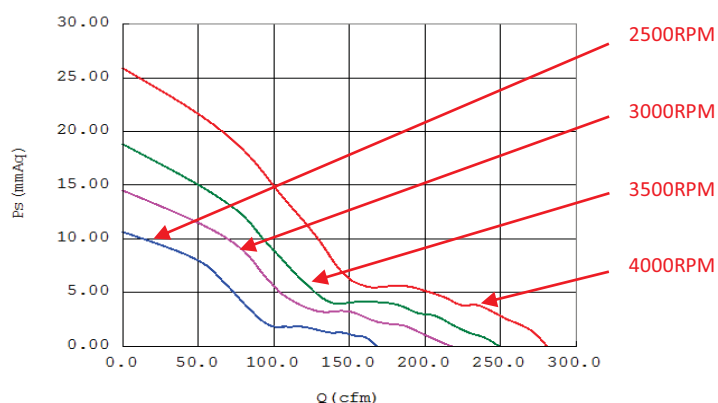
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



| MODEL       | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|-------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|             | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD17251L12X | 12            | 7~13.8                  | 1.05          | 12.60             | 2500        | 168.50   | 4.18                | 10.67           | 0.42     | 53.40       |
| CD17251M12X |               | 7~13.8                  | 1.48          | 17.76             | 3000        | 218.10   | 6.18                | 14.48           | 0.57     | 57.90       |
| CD17251H12X |               | 7~13.8                  | 1.97          | 23.64             | 3500        | 249.00   | 7.05                | 18.80           | 0.74     | 62.30       |
| CD17251X12X |               | 7~13.8                  | 2.98          | 35.76             | 4000        | 280.80   | 7.95                | 25.91           | 1.02     | 65.80       |
| CD17251L24X | 24            | 12~25.6                 | 0.55          | 13.20             | 2500        | 168.50   | 4.18                | 10.67           | 0.42     | 53.40       |
| CD17251M24X |               | 12~25.7                 | 0.76          | 18.24             | 3000        | 218.10   | 6.18                | 14.48           | 0.57     | 57.90       |
| CD17251H24X |               | 12~25.8                 | 1.08          | 25.92             | 3500        | 249.00   | 7.05                | 18.80           | 0.74     | 62.30       |
| CD17251X24X |               | 12~25.9                 | 1.55          | 37.20             | 4000        | 280.80   | 7.95                | 25.91           | 1.02     | 65.80       |
| CD17251L48X | 48            | 28.0~56.0               | 0.42          | 20.16             | 2500        | 168.50   | 4.18                | 10.67           | 0.42     | 53.40       |
| CD17251M48X |               | 28.0~56.0               | 0.51          | 24.48             | 3000        | 218.10   | 6.18                | 14.48           | 0.57     | 57.90       |
| CD17251H48X |               | 28.0~56.0               | 0.62          | 29.76             | 3500        | 249.00   | 7.05                | 18.80           | 0.74     | 62.30       |
| CD17251X48X |               | 28.0~56.0               | 0.78          | 37.44             | 4000        | 280.80   | 7.95                | 25.91           | 1.02     | 65.80       |

# DC FAN

## CD17251 series C

### General Specifications

#### Material

Frame – PBT (UL94-V0)  
impeller – PBT (UL94-V0)

#### Expected Life

Two Ball Bearing 60,000hrs (40°C)

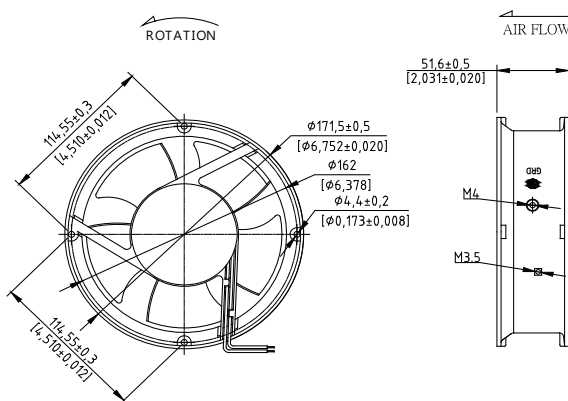
#### Lead Wire

+red -black or blue Sensor yellow

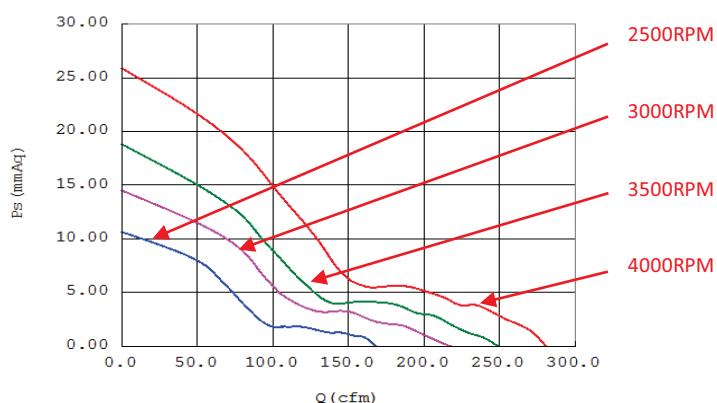
#### Temperature Range

Operating temperature  
-20°C ~ 70°C (Non-condensing)  
Strong temperature  
-40°C ~ 85°C (Non-condensing)

### Dimensions(Unit : mm)



### P & Q CURVE (AT RATED VOLTAGE)



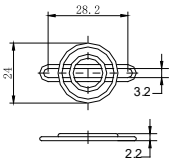
| MODEL       | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Rated Speed | Air Flow |                     | Static Pressure |          | Sound level |
|-------------|---------------|-------------------------|---------------|-------------------|-------------|----------|---------------------|-----------------|----------|-------------|
|             | (V)           | (V)                     | (Amp)         | (W)               | (rpm)       | (CFM)    | m <sup>3</sup> /min | (mmH2O)         | inch-H2O | dB(A)       |
| CD17251L12X | 12            | 7~13.8                  | 1.05          | 12.60             | 2500        | 168.50   | 4.18                | 10.67           | 0.42     | 53.40       |
| CD17251M12X |               | 7~13.8                  | 1.48          | 17.76             | 3000        | 218.10   | 6.18                | 14.48           | 0.57     | 57.90       |
| CD17251H12X |               | 7~13.8                  | 1.97          | 23.64             | 3500        | 249.00   | 7.05                | 18.80           | 0.74     | 62.30       |
| CD17251X12X |               | 7~13.8                  | 2.98          | 35.76             | 4000        | 280.80   | 7.95                | 25.91           | 1.02     | 65.80       |
| CD17251L24X | 24            | 12~25.6                 | 0.55          | 13.20             | 2500        | 168.50   | 4.18                | 10.67           | 0.42     | 53.40       |
| CD17251M24X |               | 12~25.7                 | 0.76          | 18.24             | 3000        | 218.10   | 6.18                | 14.48           | 0.57     | 57.90       |
| CD17251H24X |               | 12~25.8                 | 1.08          | 25.92             | 3500        | 249.00   | 7.05                | 18.80           | 0.74     | 62.30       |
| CD17251X24X |               | 12~25.9                 | 1.55          | 37.20             | 4000        | 280.80   | 7.95                | 25.91           | 1.02     | 65.80       |
| CD17251L48X | 48            | 28.0~56.0               | 0.42          | 20.16             | 2500        | 168.50   | 4.18                | 10.67           | 0.42     | 53.40       |
| CD17251M48X |               | 28.0~56.0               | 0.51          | 24.48             | 3000        | 218.10   | 6.18                | 14.48           | 0.57     | 57.90       |
| CD17251H48X |               | 28.0~56.0               | 0.62          | 29.76             | 3500        | 249.00   | 7.05                | 18.80           | 0.74     | 62.30       |
| CD17251X48X |               | 28.0~56.0               | 0.78          | 37.44             | 4000        | 280.80   | 7.95                | 25.91           | 1.02     | 65.80       |

Wire Form Fan Guards

Dimensions (Unit:mm)

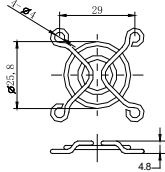
□25mm type

Model: ZS-FG025  
Surface truenment: Nickel-chrome plating  
Color: silver



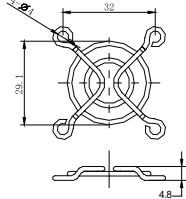
□35mm type

Model: ZS-FG035  
Surface truenment: Nickel-chrome plating  
Color: silver



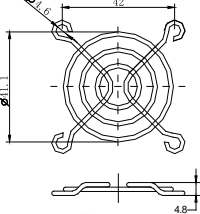
□40mm type

Model: ZS-FG040  
Surface truenment: Nickel-chrome plating  
Color: silver



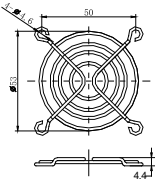
□50mm type

Model: ZS-FG050  
Surface truenment: Nickel-chrome plating  
Color: silver



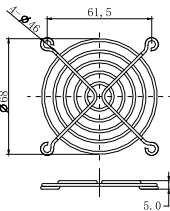
□60mm type

Model: ZS-FG060  
Surface truenment: Nickel-chrome plating  
Color: silver



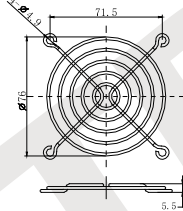
□70mm type

Model: ZS-FG070  
Surface truenment: Nickel-chrome plating  
Color: silver



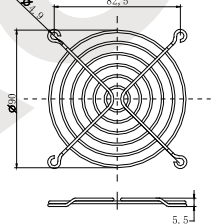
□80mm type

Model: ZS-FG080  
Surface truenment: Nickel-chrome plating  
Color: silver



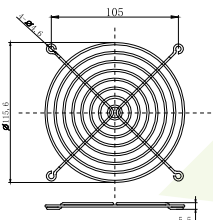
□92mm type

Model: ZS-FG092  
Surface truenment: Nickel-chrome plating  
Color: silver



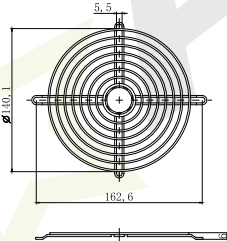
ø120mm type

Model: ZS-FG120  
Surface truenment: Nickel-chrome plating  
Color: silver



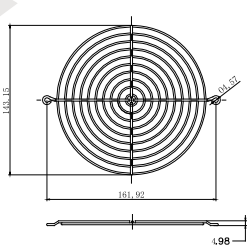
ø150mm type

Model: ZS-FG150-1  
Surface truenment: Nickel-chrome plating  
Color: silver



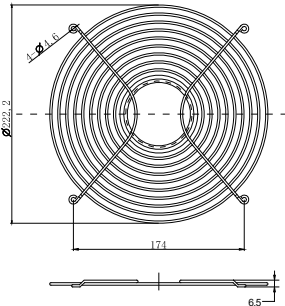
ø150mm type

Model: ZS-FG150-2  
Surface truenment: Nickel-chrome plating  
Color: silver



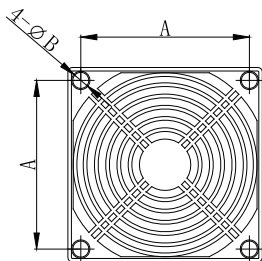
ø250mm type

Model: ZS-FG250  
Surface truenment: Nickel-chrome plating  
Color: silver



Plastic Fan Guard (1)

Dimensions (Unit:mm)



Material: ABS

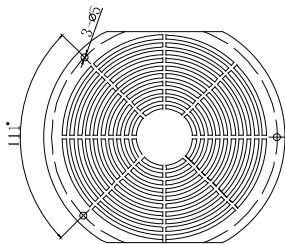
Unit: mm

| Model    | Fan Size   | Dimension |     |
|----------|------------|-----------|-----|
|          |            | A         | B   |
| ZS-PG040 | 40x40 mm   | 43.0      | 3.0 |
| ZS-PG060 | 60x60 mm   | 64.5      | 5.0 |
| ZS-PG080 | 80x80 mm   | 86.0      | 4.8 |
| ZS-PG090 | 92x92 mm   | 96.2      | 4.8 |
| ZS-PG120 | 120x120 mm | 125.5     | 5.7 |

Plastic Fan Guard (2)

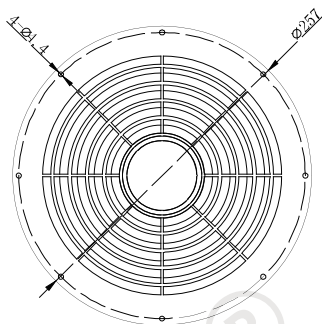
Material:ABS

Fan size:Ø150X51,Ø172X51



Material:ABS

Fan size:Ø254X89

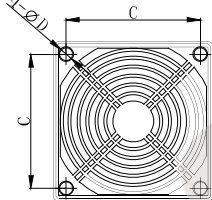
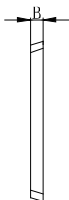
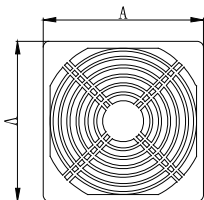


Plastic Fan Filter

Retainer

Filter

Guard



Material:ABS

Structure:Retainer, Filter, Guard

Unit:mm

| Model    | Fan Size  | Dimension |      |       |     |
|----------|-----------|-----------|------|-------|-----|
|          |           | A         | B    | C     | D   |
| ZS-PF040 | 40x40mm   | 43.0      | 6.2  | 32.0  | 3.0 |
| ZS-PF060 | 60x60mm   | 64.5      | 7.0  | 50.5  | 5.0 |
| ZS-PF080 | 80x80mm   | 86.0      | 10.0 | 71.0  | 4.8 |
| ZS-PF092 | 92x92mm   | 96.2      | 10.0 | 83.0  | 4.8 |
| ZS-PF120 | 120x120mm | 125.5     | 10.0 | 105.0 | 5.7 |

Plastic Fan Filter Assemblies



Guard

Filter

Retainor



General Specifications:

- Pressing damages of filter: initial period 639mmAQ,final stage 24mmAQ.
- Maximum wind speed: 2.0M.sec.
- Effective wind speed: 50m<sup>2</sup>/min
- Ingress Protection grade: IP40
- Use Scope: Indoor -10℃~55℃
- Dust removal rate: up to 90%

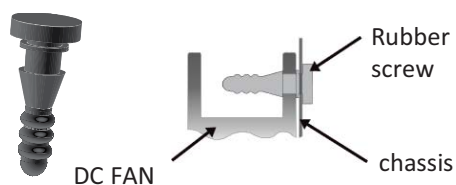
### General Specification

Material : Rubber or silicone

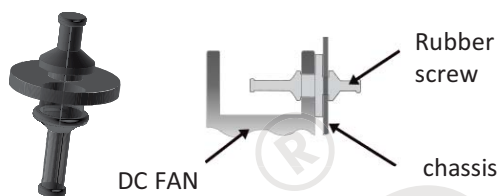
Application: 40X40mm to 180mmX180mm DC axial fans

Rohs compliance

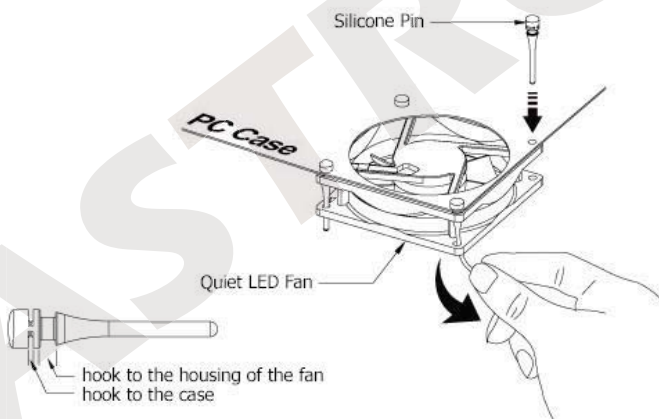
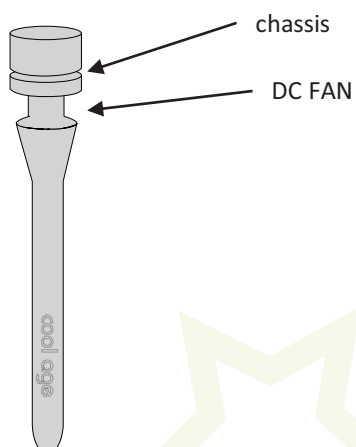
### Model : CA-SP01



### Model : CA-SP02



### Model : CA-SP03



# DC Fan Common Specifications

|                            |                                                                                                                 |
|----------------------------|-----------------------------------------------------------------------------------------------------------------|
| Material.....              | Frame, Impeller- Plastics / Frame- Aluminum, Impeller - Plastics                                                |
| Operation Temperature...   | -10°C to 70°C (humidity 35%~85%RF)                                                                              |
| Storage Temperature .....  | -40°C to 75°C (humidity 35%~85%RF)                                                                              |
| Life Expectancy.....       | Varies from each model.                                                                                         |
| Dielectric Strength.....   | 5mA MAX. at 500 VAC 60Hz one minute (between frame and lead conductor)                                          |
| Insulation Resistance..... | 10MΩ at 500V DC one minute (between) frame and lead conductor)                                                  |
| Vibration Resistance Test  | Applied 5.30Hz, 0.04 peak to peak amplitude, 30~500Hz, 2G peak. amplitude for five minutes to all three axis. . |
| Shock test.....            | Under the conditions of 60G, 22ms(1/2 sine), two times to all three axis                                        |
| Noise.....                 | Expressed as the value at 1m from air inlet side.                                                               |
| Bearing System.....        | Ball bearing/ Long life bearing ( /Sleeve bearing                                                               |

## Specifications for DC Fan sensors

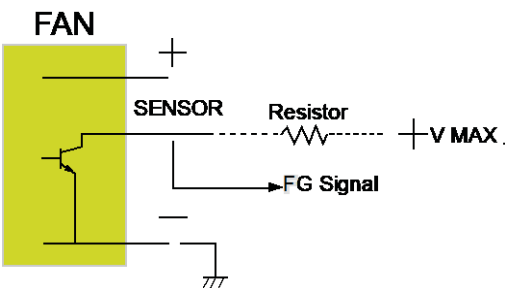
### Pulse sensor ( FG signal)

Pulse sensors produce two-cycle rectangular waves per rotation of fan motor. These are best suited for detecting rotating speeds. Pulse sensors can be incorporated in all kinds of DC fans.

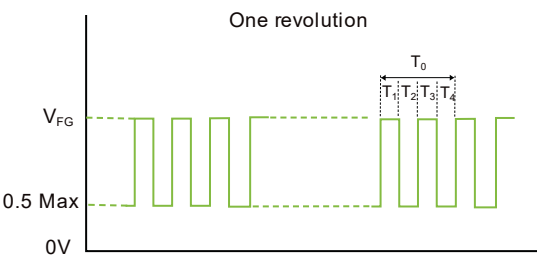
**Output circuit**  
Open collector

#### Specifications

VFGMAX. Voltage  
13.8VFGMAX as 12V fans  
24.6VFGMAX as 24V fans  
56.0VFGMAX as 48V fans  
ICMAX current=5mA



Output waveform (Need full-up resistor)



$$T_{1\text{ to }4} \approx (1/4)T_0$$
$$T_{1\text{ to }4} \approx (1/4)T_0 = 60/4N(\text{sec})$$
$$N = \text{Fan speed}(\text{min}^{-1})$$



## Reliability and Life Expectancy

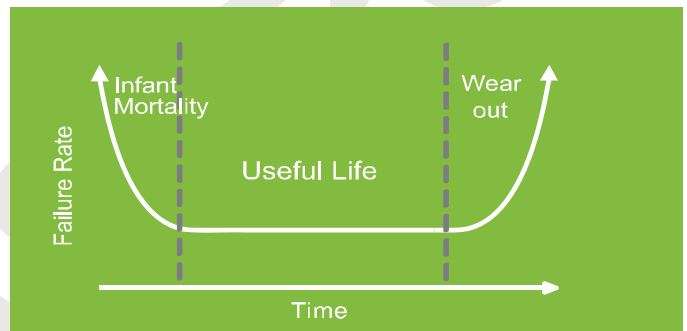
A fan is basically an electro-mechanical device. It includes electronics as an essential, but secondary, constituent. Commonly, product life is identified as a value for L10, the time at which 90 percent of a population of fans can be expected to survive, 10 percent having failed.

In the case of rolling contact bearings, that's the time at which 10 percent of the bearing population might be expected to have fallen, due to metal fatigue. Crown's bearing life tests have shown that the lubricant life expectancy is also distributed differently - more narrowly - than that controlled by metal fatigue.

Many electronic components have virtually no mechanism of failure except such random events for a very long service time. They are therefore often characterized by MTTF (mean-time-between-failures), the accumulated service for the population between successive failures of two members.

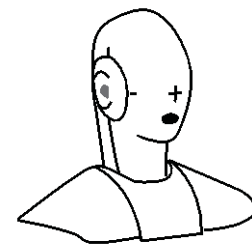
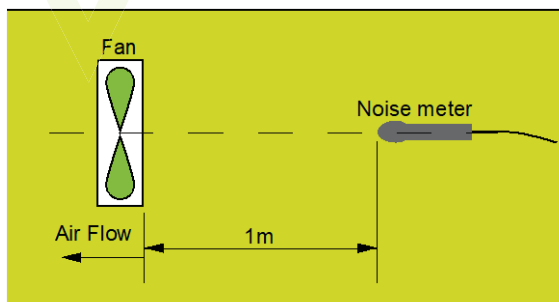
Mechanical systems do not have constant rates of random failure. Wear-outs are also broadly distributed over time but follow a pattern of Increasing frequency with age. For rotating equipment of many types, Including fans the bearing system controls average life expectancy. Usually, it's life characteristic is represented as a Weibull distribution, where the fraction of a population failing in elapsed time.

### BATHTUB CURVE



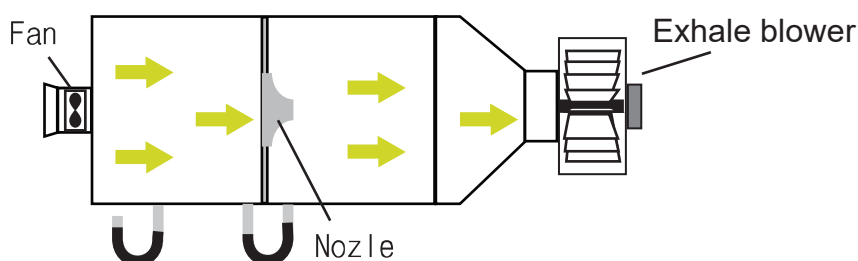
## Noise characteristics & Air Flow & Static pressure

Noise measurements are central values as measured at a point 1m from the suction surface of a fan suspended and started voltage in an anechoic room with LARSON DAVIS type 824s sound level meter.



Noise meter

The performance including air flow end air pressure measured at rated voltage in double chamber is measured according to AMCA 210-99 standard as shown below.



RD signal(rotation/lock detection type)

RD signal is an open-drained output. The output will be logical low when fan motor is operating and be logical high when fan motor is locked. RD signal sensors can be incorporated in most of DC fans motors.

Output circuit

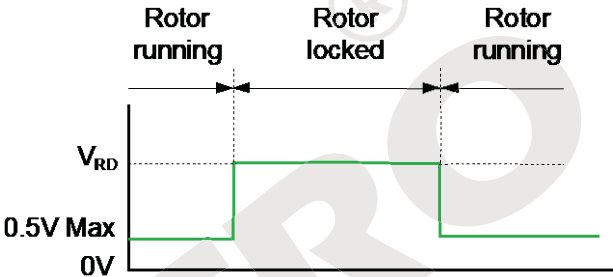
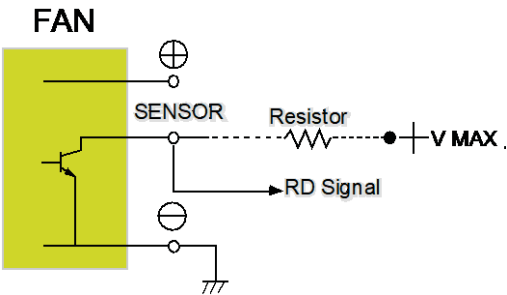
Open collector

Output waveform (Need full-up resistor)

Output waveform (with load resistance connected and pulled up.)

Specifications

$V_{RD}$  MAX. voltage  
13.8V<sub>RD</sub> MAX. as 12V fans  
26.4V<sub>RD</sub> MAX. as 24V fans  
56.0V<sub>RD</sub> MAX. as 48V fans  
 $I_C$  MAX. current=5mA

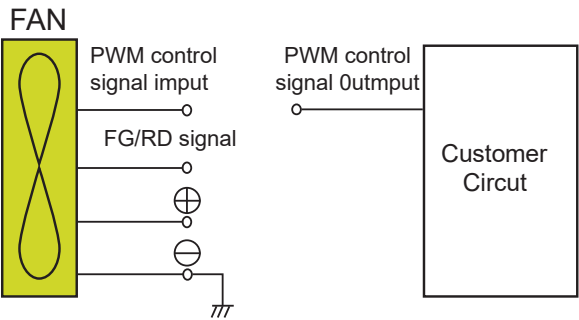


PWM control (rotation / Lock detection type)

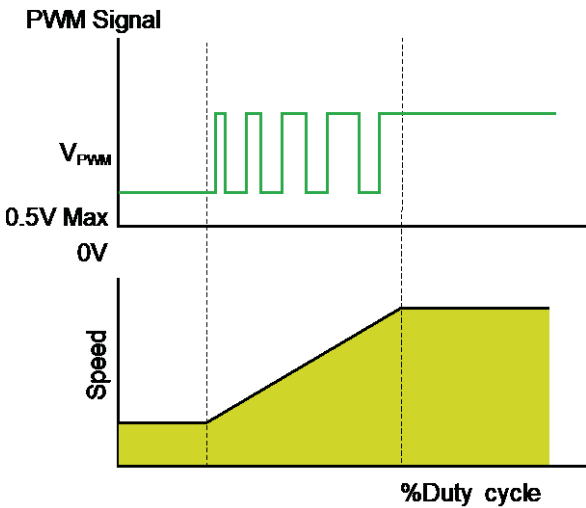
In PWM speed control, a feed frequency square wave is applied to the speed control lead wire of the fan. The ratio of the on time vs. the PWM period is proportional to the RPM.

Specifications

PWM  $V_{PWM}$  voltage=2.8 to 12.0V  
PWM input MAX. current = 40μA to 5mA

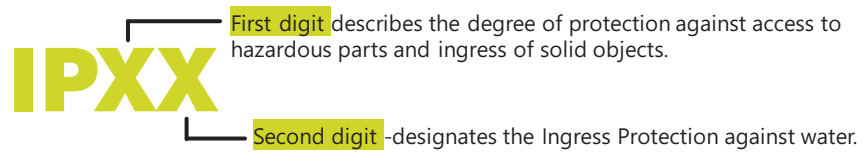


Speed V.S. cycle



# Ingress Protection

The IEC, standard 60529, has defined ingress Protection as a two-digit code. Please refer to the appropriate sections of IEC. The IP indication is as follow.



(Refer to IEC, standard 60529 for complete information regarding applications, features, and design tests.)

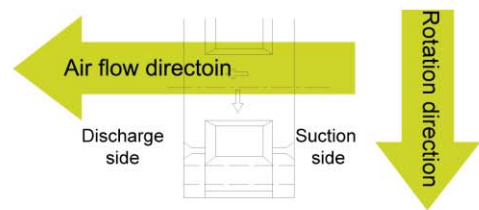
| First digit | Definition                                                                                                                                                               |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0           | <ul style="list-style-type: none"><li>No special protection.</li></ul>                                                                                                   |
| 1           | <ul style="list-style-type: none"><li>With back of a hand.</li><li>Large foreign bodies equal or greater than50mm dia.</li></ul>                                         |
| 2           | <ul style="list-style-type: none"><li>With a finger.</li><li>Medium foreign bodies equal or greater than12.5mm dia.</li></ul>                                            |
| 3           | <ul style="list-style-type: none"><li>With tools and wires etc. equal or greater than2.5mm thick.</li><li>Small foreign bodies equal or greater than2.5mm dia.</li></ul> |
| 4           | <ul style="list-style-type: none"><li>Complete protection.</li><li>Granular foreign bodies equal or greater than 1.0mm dia.</li></ul>                                    |
| 5           | <ul style="list-style-type: none"><li>Complete protection.</li><li>Dust allowed but not affect function.</li></ul>                                                       |
| 6           | <ul style="list-style-type: none"><li>Complete protection.</li><li>Dust proof.</li></ul>                                                                                 |

| First digit | Definition                                                                                    |
|-------------|-----------------------------------------------------------------------------------------------|
| 0           | <ul style="list-style-type: none"><li>Non-protected.</li></ul>                                |
| 1           | <ul style="list-style-type: none"><li>Water dripping vertically.</li></ul>                    |
| 2           | <ul style="list-style-type: none"><li>Water dripping, enclosure titled up to 15°.</li></ul>   |
| 3           | <ul style="list-style-type: none"><li>Spraying water, up to 60°angle from vertical.</li></ul> |
| 4           | <ul style="list-style-type: none"><li>Splashing water, any direction.</li></ul>               |
| 5           | <ul style="list-style-type: none"><li>Jetting water, any direction.</li></ul>                 |
| 6           | <ul style="list-style-type: none"><li>Powerful jetting water, any direction.</li></ul>        |
| 7           | <ul style="list-style-type: none"><li>Temporary immersion in water.</li></ul>                 |
| 8           | <ul style="list-style-type: none"><li>Continuous immersion in water.</li></ul>                |

# Operation notice

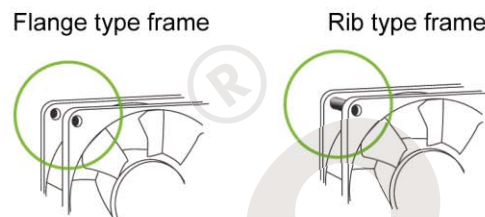
## Air flow direction & rotation

There are symbols on the fan indicating the air flow direction and blade rotation direction . When installing, check the airflow direction with these symbols .



## Rib and Flange frame fans

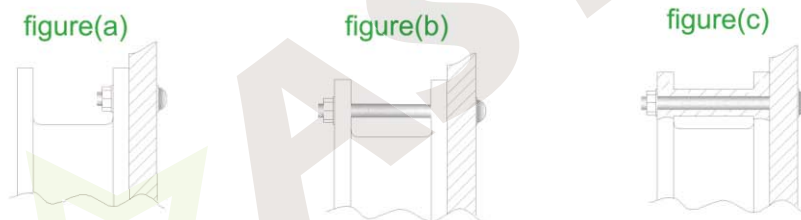
There two kinds of plastic frame for DC axial fans, flange and rib frame.



## Installation

### Bolt-nut fasteners

1. the flatness of chassis mating surfaces should be kept below 0.1mm.
2. Model was designed to be installed by fastening at either inlet or outlet flange frame only,figure(a). In cases of the bolt passing through both flanges,figure(b), or rib type frame, figure(c), the torque to be applied to the nut must not exceed:
  - Flange type frame: 4.5 kgf-cm
  - Rib type frame: 7.5 kgf-cm



### self-tapping screw

In case of using self-tapping screws, appropriate screws according to JIS B 1122 Type 2 should be used. The dimensional detail of the self-tapping screws recommended are shown in Table(a). Each fastener hole should only be tightened once or slippage may occur. In addition, the torque to be applied to the self-tapping screws must not exceed the values stated in Table(a).

Table(a)

| MOUNT HOLE DIAMETER | SCREW SPEC. | Major diameter[Fig.(g)] |       | **Recommended max. torque(kgf-cm) |                |
|---------------------|-------------|-------------------------|-------|-----------------------------------|----------------|
|                     |             | max.                    | mini. | Flange type frame                 | Rib type frame |
| Ø3.5                | M4 X1.41    | 4.0                     | 3.85  | 4.5                               | 7.5            |
| *Ø4.3               | M4.8X1.59   | 4.8                     | 4.65  | 5.5                               | 7.5            |
| Ø4.5                | M5 X1.59    | 5.0                     | 4.85  | 5.5                               | 7.5            |

\* Not JIS B1122 spec

\*\*A lower torque than the recommended value should be used if slippage is observed



JIS B 1122 screw

4. The countersunk part of fastener head should not interfere with the frame or there would be a risk of breakage . Fastener head with flat inner shurface, i.e. no countersunk, is recommended.



Memo

