

max. 350 m³/h

ACmaxx axial fans

Series AC 6100 N 172 ø x 51 mm



Highlights:

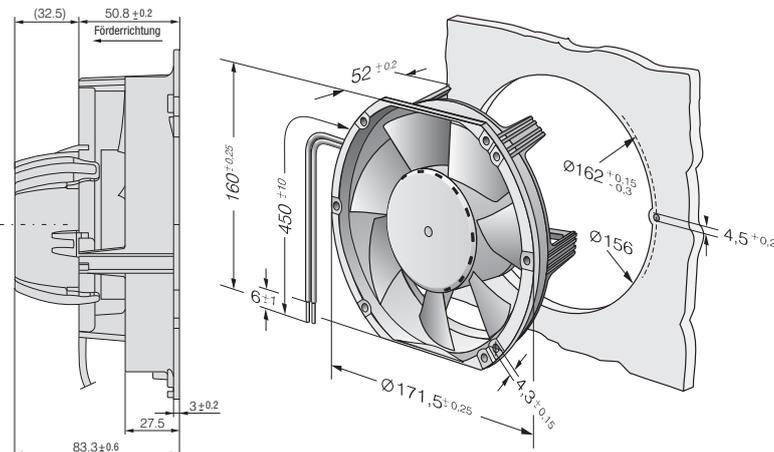
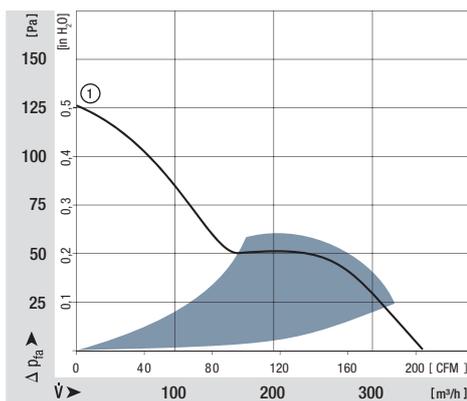
- Universally suitable for all AC voltages between 85 and 265 V.
- Fan speed independent of power frequency.
- Significantly reduced power consumption compared to conventional AC fans.
- Open loop speed control, sensor and alarm signal possible on request.

General attributes:

- Material: fibreglass-reinforced PA housing and impeller.
- Fully integrated electronic commutation.
- Protected against locking.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation clockwise, seen on rotor.
- Mass: 760 g.

| Nominal data | Air flow | | Nominal voltage | Frequency | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ | | Curve |
|--------------|-------------------|-------|-----------------|-----------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|------------------------------|----|-------|
| | m ³ /h | CFM | | | | | | | | | | V | Hz | |
| AC 6100 NM | 350 | 206,0 | 115 / 230 | 50 / 60 | 85 ... 265 | 52 | 6,1 | ■ | 14 | 2 850 | -20...+70 | 80 000 / 37 500 | 1 | |

Speed variants available on request.



max. 350 m³/h

ACmaxx axial fans

Series AC 6200 N 172 ø x 51 mm

Highlights:

- Universally suitable for all AC voltages between 85 and 265 V, 50-60 Hz.
- Fan speed independent of power frequency.
- Significantly reduced power consumption compared to conventional AC fans.
- Open loop speed control, sensor and alarm signal possible on request.

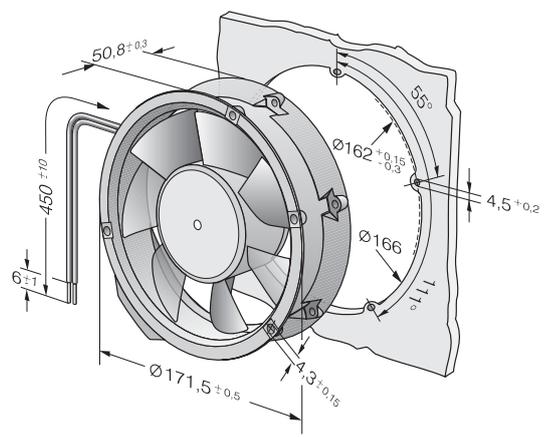
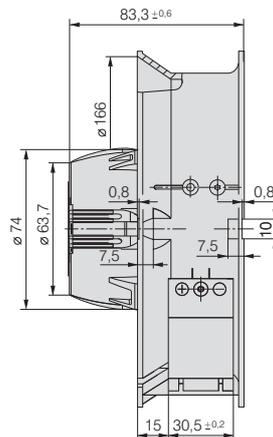
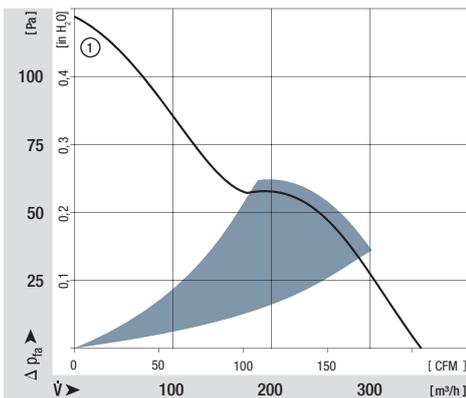
General attributes:

- Material: aluminium housing, fibreglass-reinforced PA impeller. Housing with grounding lug for screw M4 x 8 (Torx).
- Fully integrated electronic commutation.
- Protected against locking.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 900 g.



| Nominal data | Air flow | | Nominal voltage | Frequency | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | | Power input | Nominal speed | Temperature range | Service life L ₁₀ | | Curve |
|--------------|-------------------|-------|-----------------|-----------|---------------|----------------------|-------------------|---|----|-------------|---------------|-------------------|------------------------------|-------|-------|
| | m ³ /h | CFM | | | | | | V | Hz | | | | VAC | dB(A) | |
| AC 6200 NM | 350 | 206,0 | 115 / 230 | 50 / 60 | 85 ... 265 | 50 | 5,7 | □ | ■ | 14 | 2 850 | -20...+70 | 80 000 / 40 000 | 1 | |

Speed variants available on request.



max. 135 m³/h

ACmaxx in-line duct fan

Series AC 100 NR Ø 98,5 x 130 mm



Highlights:

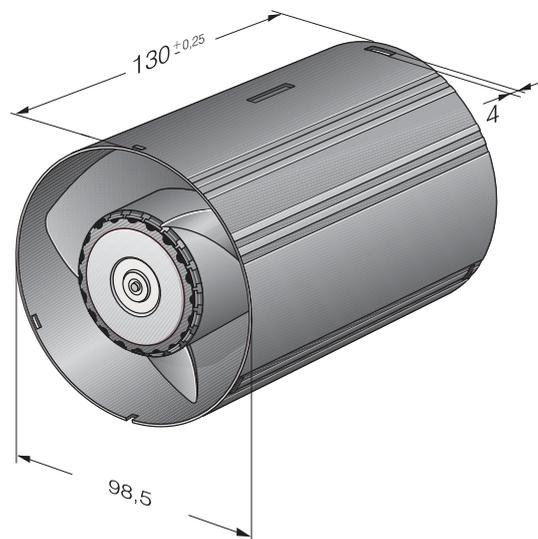
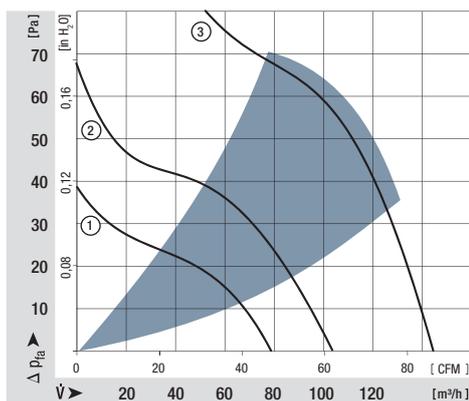
- Highest energy efficiency thanks to EC technology.
- Protection class IP44 (IP45 possible depending on mounting position).
- Speed-boost function via mains voltage switch.
- Vibration-isolated motor.
- Global voltage - one product applicable for all line voltages and frequencies between 85-265 VAC and 50/60 Hz. Fan speed independent from power frequency.

General features:

- Material: fiberglass-reinforced plastic, housing PP, impeller PA.
- Electrical connection via 3-pole terminal block, max. 1.5 mm².
- Protection class 2.
- Approvals: VDE 60335-3-80. UL, CE, CSA on request.
- Mass: 400 g.

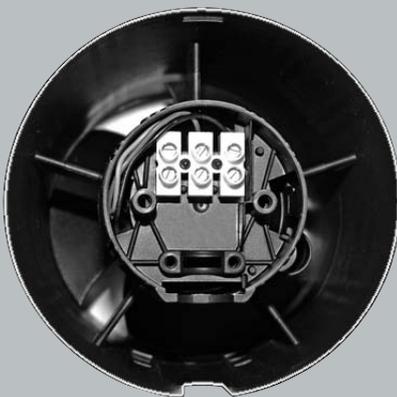
| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Voltage range | Sound pressure level | Sound power level | Sintec sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|--|--|-------------------|----------|-----------------|-----------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | | m ³ /h | CFM | V | Hz | VAC | dB(A) | Bel(A) | □/■ | Watts | RPM | °C | Hours | Hours | |
| NEW <small>nominal boost</small> AC 100 NR | | 80 | 47,1 | 115/230 | 50-60 | 85...265 | 35 | 4,7 | ■ | 2,5 | 2 750 | -10...+55 | 70 000 / 40 000 | | 1 |
| | | 105 | 61,8 | | | | 42 | 5,3 | | 4,5 | 3 500 | | | | 2 |

Optional: Max. speed at 135 m³/h (Curve 3).

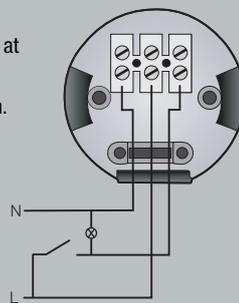


Highest energy efficiency: 0.03 - 0.045 W/m³/h free air (Specific fan power).
Boost speed setting: 2 speed settings possible via boost function.
Vibration isolation: Reduced transmission of vibrations from motor to housing.
Intelligence: Speed settings and control outputs optional.

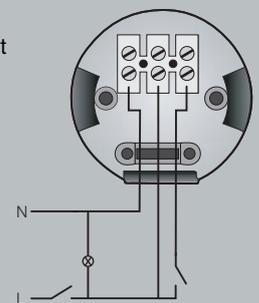
Connection



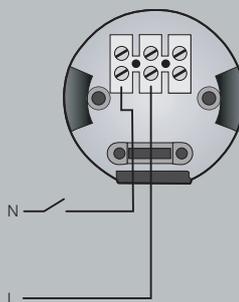
Example 1:
 Continuous operation at nominal speed boost speed via light switch.



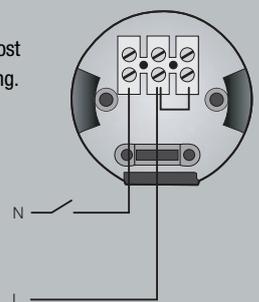
Example 2:
 Nominal speed via light switch, separate boost switch.



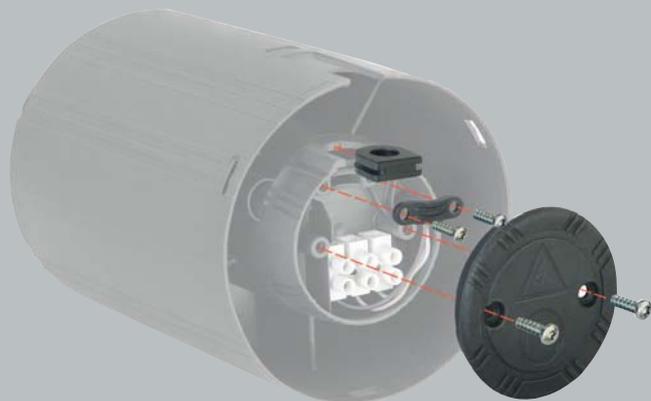
Example 3:
 Simple connection, nominal speed without switching.

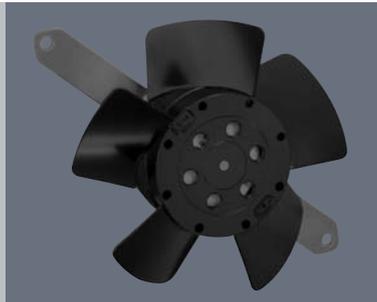


Example 4:
 Simple connection, boost speed without switching.



Scope of delivery





AC axial fans

Information

DC axial fans

DC centrifugal fans

DC fans - specials

ACmaxx / GreenTech EC-compact fans

AC axial fans

AC centrifugal fans

Accessories

Representatives

| | |
|-----------------------|-----|
| AC axial fan overview | 143 |
| AC axial fans | 144 |



AC fans

Technical information

Product line

The renowned ebm-papst AC fans are used when DC voltage is not available. The AC range of fans is based on experience gained from decades of development activity, millions of units in series production and competence in innovation of a world-wide technological leader.

A wide range of fans for AC operation is presented in this catalogue. In addition to complete device fans, you will also find fans without external housing, providing a particularly economical advantage when the air duct can be integrated in the respective device.

Variety of sizes

AC fans are available in a variety of sizes with either air exhaust or air intake over struts. Silent running models with sleeve bearings or for extreme ambient conditions; fans with ball bearings are available with plug connection or external leads.

Shaded-pole or capacitor motors

Fan drives by shaded-pole or capacitor motors, most of which incorporate the world-famous ebm-papst external rotor principle: The fan blades are directly attached to the external rotor of the external rotor motor, thus combining both high performance and profitability.

Flat built AC fans

ebm-papst also has particularly flat built AC fans with internal rotor motor. Their advantage: quick start to full speed. A plastic impeller and the both smaller and lighter internal rotor motor lead to a lower moment of inertia.

Bearings

AC fans with sleeve bearings are powered by Class E insulated motors. Fans with ball bearings are equipped with Class B, E or F insulated motors.

Protection class

All ebm-papst fans conform to the requirements of IP 20. Fans conforming to IP 54 and special types of protection class are also available.

AC voltage

The line of AC fans for Euro voltage according to IEC 60038 (230 V + 6 %, -10 %) is basically also available for 115 V.

Frequencies

AC fans can be operated at frequencies of 50 Hz or 60 Hz. However, their technical data then changes accordingly.

Capacitor

Fans driven by capacitor external motors provide particularly high operating efficiency. Generally, the required operating capacitor is already integrated in the fan housing.

Overloading

Almost all AC fans are protected against overloading (e.g. due to locked rotor) the drive motors are either impedance protected (marked "Impedance protected", and/or "Z.P.") or are equipped with a thermal switch (marked "Thermally protected" or "Th.P."). The model designation of these fans ends with "S".

max. 57 m³/h

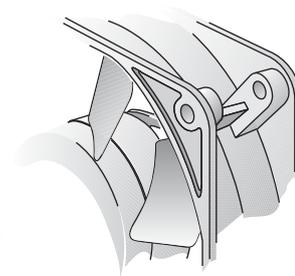
AC axial fans

Series 8000 A 80 x 80 x 38 mm

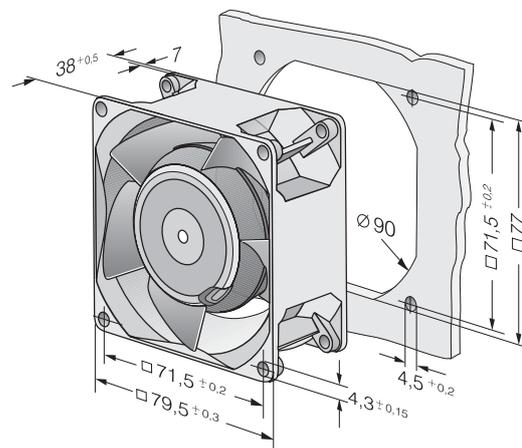
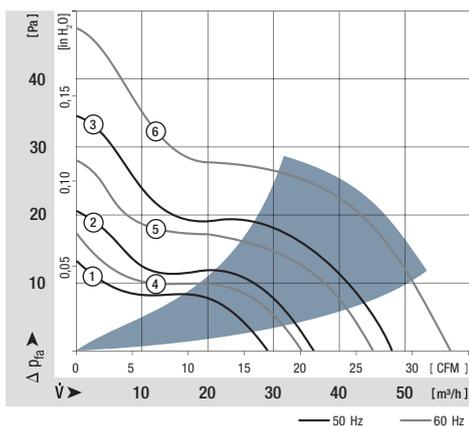


- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing and impeller.
- Air intake over struts. Direction of rotation clockwise, seen on rotor.
- Electrical connection via 2 flat plugs 2.8 x 0.5 mm.
- Fan housing with grounding lug and screw M4 x 8 (TORX).
- Mass: 490 g.
- Optionally available with electrical connection via leads.
- Optionally available with air exhaust over struts and clockwise direction of rotation.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | Air flow | | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ | | Curve |
|--------------|-------------------|------|-----------------|-----------|----------------------|-------------------|---|-------------|---------------|-------------------|------------------------------|----|-------|
| | m ³ /h | CFM | | | | | | | | | V | Hz | |
| 8880 A | 29 | 17,1 | 230 | 50 | 26 | 4,1 | □ | 9,0 | 1 750 | -10...+80 | 60 000 / 25 000 | | 1 |
| 8850 A | 36 | 21,2 | 230 | 50 | 31 | 4,6 | □ | 12,5 | 2 150 | -10...+70 | 52 500 / 25 000 | | 2 |
| 8550 A | 48 | 28,3 | 230 | 50 | 36 | 5,0 | □ | 12,0 | 2 700 | -10...+70 | 52 500 / 25 000 | | 3 |
| 8556 A | 48 | 28,3 | 230 | 50 | 37 | 5,1 | ■ | 12,0 | 2 800 | -40...+90 | 52 500 / 15 000 | | 3 |
| 8830 A | 34 | 20,0 | 115 | 60 | 29 | 4,3 | □ | 8,0 | 1 950 | -10...+80 | 62 500 / 25 000 | | 4 |
| 8800 A | 45 | 26,5 | 115 | 60 | 34 | 4,8 | □ | 11,0 | 2 500 | -10...+70 | 55 000 / 27 500 | | 5 |
| 8500 A | 57 | 33,5 | 115 | 60 | 41 | 5,5 | □ | 11,0 | 3 200 | -10...+75 | 55 000 / 25 000 | | 6 |
| 8506 A | 57 | 33,5 | 115 | 60 | 42 | 5,7 | ■ | 11,0 | 3 300 | -40...+95 | 55 000 / 15 000 | | 6 |



Series 8000 A with reinforced flanges



max. 61 m³/h

AC axial fans

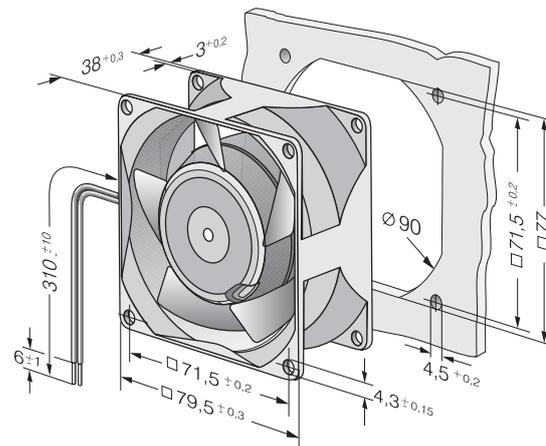
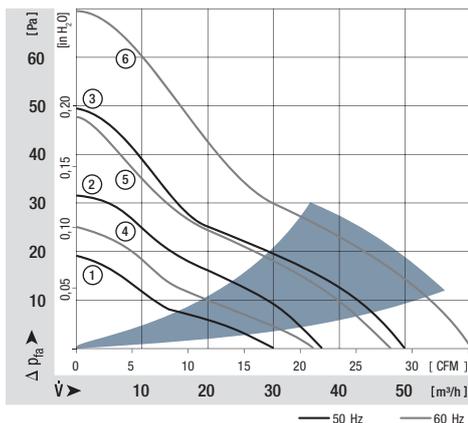
Series 8000 N 80 x 80 x 38 mm



- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing and impeller.
- Air exhaust over struts. Direction of rotation clockwise, seen on rotor.
- Electrical connection via 2 leads. Bared and tin-plated.
- Fan housing with grounding lug for screw M4 x 8 (TORX).
- Mass: 490 g.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | | m ³ /h | CFM | V | Hz | dB(A) | Bel(A) | □ / ■ | Watts | RPM | °C | Hours | Hours | |
| 8880 N | | 30 | 17,7 | 230 | 50 | 18 | 3,3 | □ | 9,0 | 1 750 | -10...+80 | 60 000 / 25 000 | | 1 |
| 8850 N | | 37 | 21,8 | 230 | 50 | 24 | 3,9 | □ | 12,5 | 2 150 | -10...+70 | 52 500 / 25 000 | | 2 |
| 8550 N | | 50 | 29,4 | 230 | 50 | 30 | 4,4 | □ | 12,0 | 2 700 | -10...+70 | 52 500 / 25 000 | | 3 |
| 8556 N | | 50 | 29,4 | 230 | 50 | 31 | 4,5 | ■ | 12,0 | 2 800 | -40...+90 | 52 500 / 15 000 | | 3 |
| 8830 N | | 36 | 21,2 | 115 | 60 | 21 | 3,7 | □ | 8,0 | 1 950 | -10...+80 | 62 500 / 25 000 | | 4 |
| 8800 N | | 47 | 27,7 | 115 | 60 | 28 | 4,3 | □ | 11,0 | 2 500 | -10...+70 | 55 000 / 27 500 | | 5 |
| 8500 N | | 61 | 35,9 | 115 | 60 | 34 | 4,8 | □ | 11,0 | 3 200 | -10...+75 | 55 000 / 25 000 | | 6 |
| 8506 N | | 61 | 35,9 | 115 | 60 | 35 | 5,0 | ■ | 11,0 | 3 300 | -40...+95 | 55 000 / 15 000 | | 6 |

| Fan type | | | | Lead wires | |
|----------|--------|--------|--------|-------------|---------------|
| 8830 N | 8800 N | 8550 N | 8500 N | 310 mm long | AWG 18, TR 64 |
| 8880 N | | | | 310 mm long | AWG 18, TR 64 |
| 8556 N | 8506 N | | | 310 mm long | AWG 22 |
| 8850 N | | | | 440 mm long | AWG 18, TR 64 |

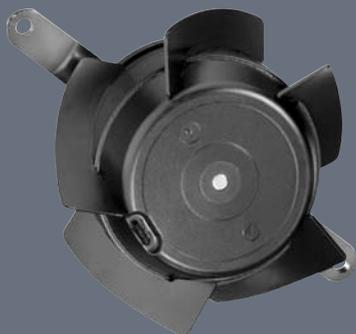


Information
DC axial fans
DC centrifugal fans
DC fans - specials
ACmaxx / GreenTech EC-compact fans
AC axial fans
AC centrifugal fans
Accessories
Representatives

max. 45 m³/h

AC axial fans

Series 8000 TA 76 Ø x 37 mm

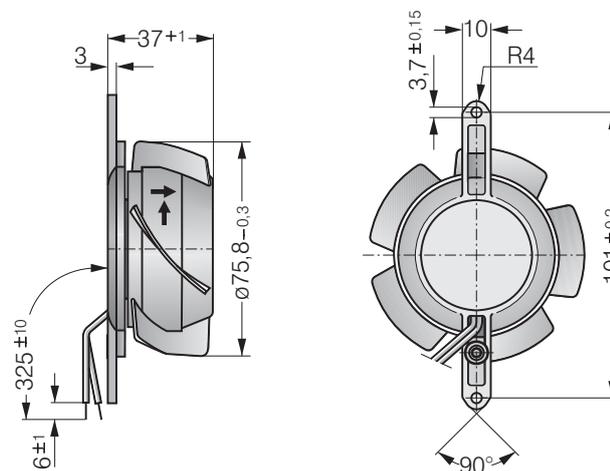


- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Impeller and mounting bracket of metal.
- Air intake over mounting bracket. Direction of rotation clockwise, seen on rotor.
- Electrical connection via 2 leads. Bared and tin-plated.
- Mass: 370 g.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | Air flow | | Nominal voltage | Frequency | Sound pressure level | Sinter sleeve bearings Ball bearings | | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | | Curve |
|--------------|-------------------|------|-----------------|-----------|----------------------|---|------|-------------|---------------|-------------------|--|-------|-------|
| | m ³ /h | CFM | | | | V | Hz | | | | dB(A) | □ / ■ | |
| 8880 TA | 23 | 13,5 | 230 | 50 | 15 | □ | 9,0 | 1 650 | -10...+80 | 60 000 / 25 000 | | - | |
| 8850 TA | 30 | 17,7 | 230 | 50 | 19 | □ | 12,0 | 2 100 | -10...+70 | 52 500 / 25 000 | | - | |
| 8550 TA | 38 | 22,4 | 230 | 50 | 25 | □ | 12,0 | 2 650 | -10...+70 | 52 500 / 25 000 | | - | |
| 8556 TA | 38 | 22,4 | 230 | 50 | 26 | ■ | 12,0 | 2 750 | -40...+90 | 52 500 / 15 000 | | - | |
| 8830 TA | 26 | 15,3 | 115 | 60 | 18 | □ | 8,0 | 1 850 | -10...+80 | 62 500 / 25 000 | | - | |
| 8800 TA | 34 | 20,0 | 115 | 60 | 23 | □ | 11,0 | 2 450 | -10...+70 | 55 000 / 27 500 | | - | |
| 8500 TA | 45 | 26,5 | 115 | 60 | 30 | □ | 11,0 | 3 150 | -10...+75 | 55 000 / 25 000 | | - | |
| 8506 TA | 45 | 26,5 | 115 | 60 | 31 | ■ | 11,0 | 3 250 | -40...+95 | 55 000 / 15 000 | | - | |

The air flow and noise level of fans without external housing depends on the installation conditions. The stated air flow and noise has been measured with an orifice 76.5 mm Ø at a distance of approx. 17 mm from the mounting bracket. Under exceptionally favourable mounting conditions, the air flow of fan series 8000 A is achievable. The noise in the optimal operating range can only be measured for these fans in a specific application.

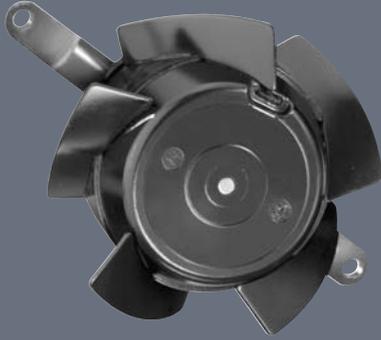
| Fan type | | | | Lead wires | |
|----------|---------|---------|---------|-------------|---------------|
| 8880 TA | 8850 TA | 8830 TA | 8800 TA | 325 mm long | AWG 18, TR 64 |
| 8550 TA | 8500 TA | | | 325 mm long | AWG 18, TR 64 |
| 8556 TA | 8506 TA | | | 325 mm long | AWG 18 |



max. 47 m³/h

AC axial fans

Series 8000 TV 76 Ø x 37 mm

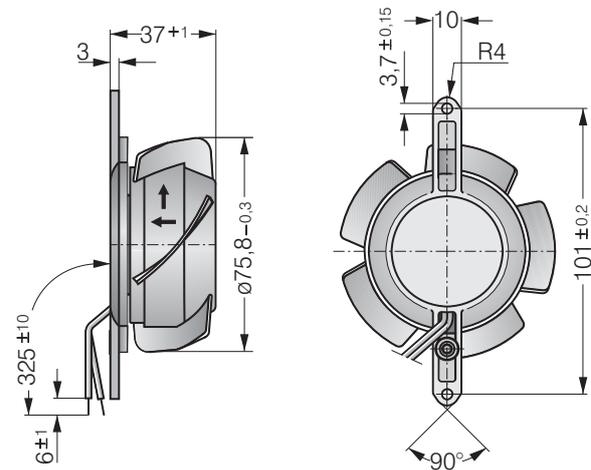


- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Impeller and mounting bracket of metal.
- Air exhaust over mounting bracket. Direction of rotation clockwise, seen on rotor.
- Electrical connection via 2 leads. Bared and tin-plated.
- Mass: 370 g.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | Air flow | | Nominal voltage | Frequency | Sound pressure level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | | Curve |
|--------------|-------------------|------|-----------------|-----------|----------------------|---|-------------|---------------|-------------------|--|----|-------|
| | m ³ /h | CFM | | | | | | | | V | Hz | |
| 8880 TV | 24 | 14,1 | 230 | 50 | 15 | □ | 9,0 | 1 650 | -10...+80 | 60 000 / 25 000 | | - |
| 8850 TV | 31 | 18,2 | 230 | 50 | 20 | □ | 12,0 | 2 100 | -10...+70 | 52 500 / 25 000 | | - |
| 8550 TV | 40 | 23,5 | 230 | 50 | 27 | □ | 12,0 | 2 650 | -10...+70 | 52 500 / 25 000 | | - |
| 8556 TV | 40 | 23,5 | 230 | 50 | 28 | ■ | 12,0 | 2 750 | -40...+90 | 52 500 / 15 000 | | - |
| 8830 TV | 27 | 15,9 | 115 | 60 | 18 | □ | 8,0 | 1 850 | -10...+80 | 62 500 / 25 000 | | - |
| 8800 TV | 36 | 21,2 | 115 | 60 | 24 | □ | 11,0 | 2 450 | -10...+70 | 55 000 / 27 500 | | - |
| 8500 TV | 47 | 27,7 | 115 | 60 | 32 | □ | 11,0 | 3 150 | -10...+75 | 55 000 / 25 000 | | - |
| 8506 TV | 47 | 27,7 | 115 | 60 | 33 | ■ | 11,0 | 3 250 | -40...+95 | 55 000 / 15 000 | | - |

The air flow and noise level of fans without external housing depends on the installation conditions. The stated air flow and noise has been measured with an orifice 76.5 mm Ø at a distance of approx. 17 mm from the mounting bracket. Under exceptionally favourable mounting conditions, the air flow of fan series 8000 N is achievable. The noise in the optimal operating range can only be measured for these fans in a specific application.

| Fan type | | | | Lead wires | |
|----------|---------|---------|---------|-------------|---------------|
| 8880 TV | 8850 TV | 8830 TV | 8800 TV | 325 mm long | AWG 18, TR 64 |
| 8550 TV | 8500 TV | | | 325 mm long | AWG 18, TR 64 |
| 8556 TV | 8506 TV | | | 325 mm long | AWG 18 |



max. 70 m³/h

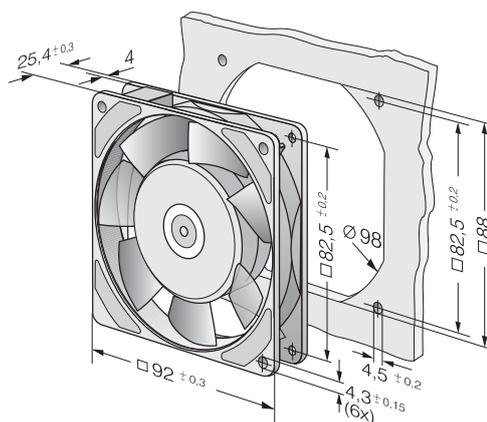
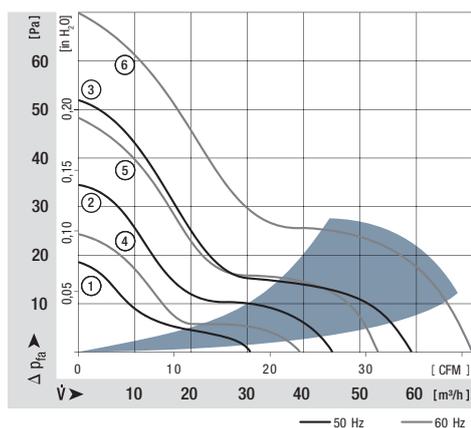
AC axial fans

Series 3900 92 x 92 x 25 mm



- AC fans with internal rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing, impeller of mineral-reinforced plastic PA.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Electrical connection via 2 flat plugs 2.8 x 0.5 mm.
- Fan housing with grounding lug for screw M4.
- Mass: 280 g.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | Air flow | | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ | | Curve |
|--------------|-------------------|------|-----------------|-----------|----------------------|-------------------|---|-------------|---------------|-------------------|------------------------------|----|-------|
| | m ³ /h | CFM | | | | | | | | | V | Hz | |
| 3950 L | 31 | 18,2 | 230 | 50 | 24 | 3,8 | □ | 6,0 | 1 550 | -10...+80 | 70 000 / 27 500 | | 1 |
| 3956 L | 31 | 18,2 | 230 | 50 | 24 | 3,8 | ■ | 6,0 | 1 550 | -40...+80 | 70 000 / 27 500 | | 1 |
| 3950 M | 45 | 26,5 | 230 | 50 | 29 | 4,2 | □ | 6,0 | 2 150 | -10...+80 | 70 000 / 27 500 | | 2 |
| 3956 M | 45 | 26,5 | 230 | 50 | 29 | 4,2 | ■ | 6,0 | 2 150 | -40...+80 | 70 000 / 27 500 | | 2 |
| 3950 | 59 | 34,7 | 230 | 50 | 35 | 4,7 | □ | 11,0 | 2 650 | -20...+80 | 55 000 / 20 000 | | 3 |
| 3956 | 59 | 34,7 | 230 | 50 | 35 | 4,7 | ■ | 11,0 | 2 650 | -40...+80 | 55 000 / 20 000 | | 3 |
| 3900 L | 39 | 23,0 | 115 | 60 | 27 | 4,0 | □ | 5,0 | 1 850 | -10...+80 | 70 000 / 27 500 | | 4 |
| 3906 L | 39 | 23,0 | 115 | 60 | 27 | 4,0 | ■ | 5,0 | 1 850 | -40...+80 | 70 000 / 27 500 | | 4 |
| 3900 M | 53 | 31,2 | 115 | 60 | 34 | 4,6 | □ | 5,0 | 2 600 | -10...+80 | 70 000 / 27 500 | | 5 |
| 3906 M | 53 | 31,2 | 115 | 60 | 34 | 4,6 | ■ | 5,0 | 2 600 | -40...+80 | 70 000 / 27 500 | | 5 |
| 3900 | 70 | 41,2 | 115 | 60 | 40 | 5,1 | □ | 9,0 | 3 150 | -20...+80 | 60 000 / 22 500 | | 6 |
| 3906 | 70 | 41,2 | 115 | 60 | 40 | 5,1 | ■ | 9,0 | 3 150 | -40...+80 | 60 000 / 22 500 | | 6 |



max. 89 m³/h

AC axial fans

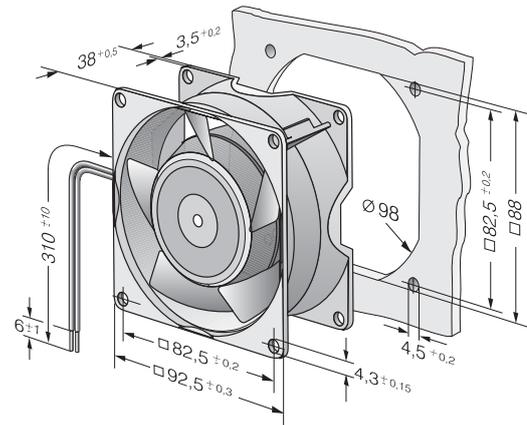
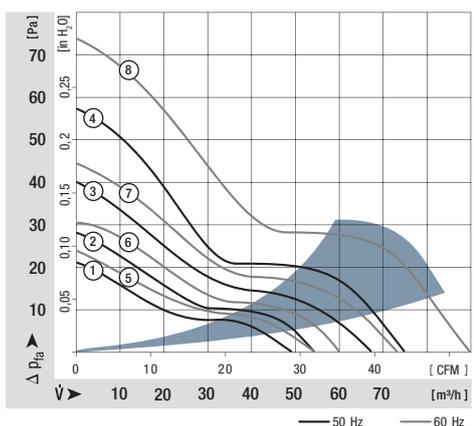
Series 3000 92 x 92 x 38 mm



- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing and impeller.
- Air exhaust over struts. Rotational direction CW looking at rotor.
- Electrical connection via 2 leads. Bared and tin-plated.
- Fan housing with grounding lug and screw M4 x 8 (TORX).
- Mass: 420 g.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | | m ³ /h | CFM | V | Hz | dB(A) | Bel(A) | □ / ■ | Watts | RPM | °C | Hours | Hours | |
| 3850 | | 49 | 28,8 | 230 | 50 | 24 | 3,7 | □ | 9,0 | 1 750 | -10...+75 | 60 000 / 27 500 | | 1 |
| 3856 | | 54 | 31,8 | 230 | 50 | 26 | 3,9 | ■ | 9,0 | 1 950 | -40...+90 | 60 000 / 20 000 | | 2 |
| 3550 | | 67 | 39,4 | 230 | 50 | 32 | 4,4 | □ | 8,5 | 2 300 | -10...+80 | 60 000 / 25 000 | | 3 |
| 3556 | | 67 | 39,4 | 230 | 50 | 33 | 4,5 | ■ | 8,5 | 2 400 | -40...+90 | 60 000 / 20 000 | | 3 |
| 3650 | | 75 | 44,1 | 230 | 50 | 36 | 4,8 | □ | 12,0 | 2 650 | -10...+55 | 52 500 / 37 500 | | 4 |
| 3656 | | 75 | 44,1 | 230 | 50 | 37 | 4,9 | ■ | 12,0 | 2 700 | -40...+75 | 52 500 / 22 500 | | 4 |
| 3800 | | 54 | 31,8 | 115 | 60 | 26 | 3,9 | □ | 8,0 | 1 900 | -10...+80 | 62 500 / 25 000 | | 5 |
| 3806 | | 60 | 35,3 | 115 | 60 | 29 | 4,2 | ■ | 8,0 | 2 150 | -40...+95 | 62 500 / 17 500 | | 6 |
| 3500 | | 73 | 43,0 | 115 | 60 | 35 | 4,6 | □ | 8,0 | 2 500 | -10...+80 | 62 500 / 25 000 | | 7 |
| 3506 | | 73 | 43,0 | 115 | 60 | 36 | 4,7 | ■ | 8,0 | 2 600 | -40...+95 | 62 500 / 17 500 | | 7 |
| 3600 | | 89 | 52,4 | 115 | 60 | 41 | 5,1 | □ | 11,0 | 3 100 | -10...+65 | 55 000 / 30 000 | | 8 |
| 3606 | | 89 | 52,4 | 115 | 60 | 42 | 5,2 | ■ | 11,0 | 3 200 | -40...+75 | 55 000 / 25 000 | | 8 |

| Fan type | Lead wires | |
|----------------------|-------------|---------------|
| With sleeve bearings | 310 mm long | AWG 18, TR 64 |
| With ball bearings | 310 mm long | AWG 18 |



Information
DC axial fans
DC centrifugal fans
DC fans - specials
ACmaxx / GreenTech EC-compact fans
AC axial fans
AC centrifugal fans
Accessories
Representatives

max. 135 m³/h

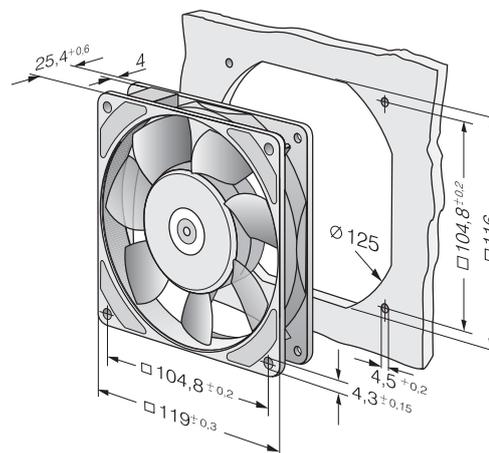
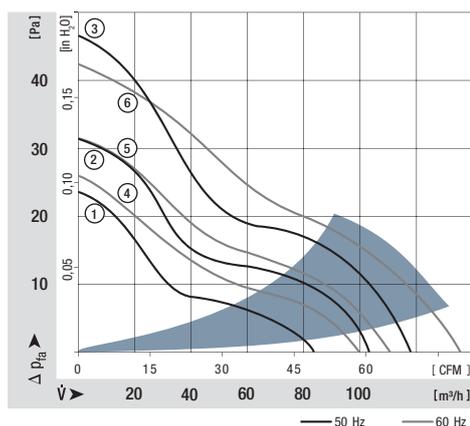
AC axial fans

Series 9900 119 x 119 x 25 mm



- AC fans with external rotor shaded-pole motor.
Protected against overloading by thermal cut-out.
- Metal fan housing and impeller.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Electrical connection via 2 flat plugs 2.8 x 0.5 mm.
- Fan housing with grounding lug and screw M4 x 8 (TORX).
- Mass: 320 g.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | | m ³ /h | CFM | V | Hz | dB(A) | Bel(A) | □/■ | Watts | RPM | °C | Hours | Hours | |
| 9956 L | | 84 | 49,4 | 230 | 50 | 29 | 4,4 | ■ | 9,5 | 1850 | -40...+80 | 57 500 / 22 500 | | 1 |
| 9956 M | | 104 | 61,2 | 230 | 50 | 35 | 4,7 | ■ | 10,0 | 2250 | -40...+80 | 57 500 / 22 500 | | 2 |
| 9950 | | 117 | 68,9 | 230 | 50 | 37 | 5,0 | □ | 14,0 | 2450 | -20...+70 | 47 500 / 22 500 | | 3 |
| 9956 | | 117 | 68,9 | 230 | 50 | 37 | 5,0 | ■ | 14,0 | 2450 | -40...+70 | 47 500 / 22 500 | | 3 |
| 9906 L | | 100 | 58,9 | 115 | 60 | 34 | 4,6 | ■ | 8,0 | 2100 | -40...+80 | 62 500 / 25 000 | | 4 |
| 9906 M | | 111 | 65,3 | 115 | 60 | 37 | 5,0 | ■ | 8,0 | 2450 | -40...+80 | 62 500 / 25 000 | | 5 |
| 9900 | | 135 | 79,5 | 115 | 60 | 42 | 5,4 | □ | 12,0 | 2850 | -20...+70 | 52 500 / 25 000 | | 6 |
| 9906 | | 135 | 79,5 | 115 | 60 | 42 | 5,4 | ■ | 12,0 | 2850 | -40...+70 | 52 500 / 25 000 | | 6 |



max. 180 m³/h

AC axial fans

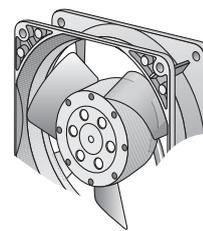
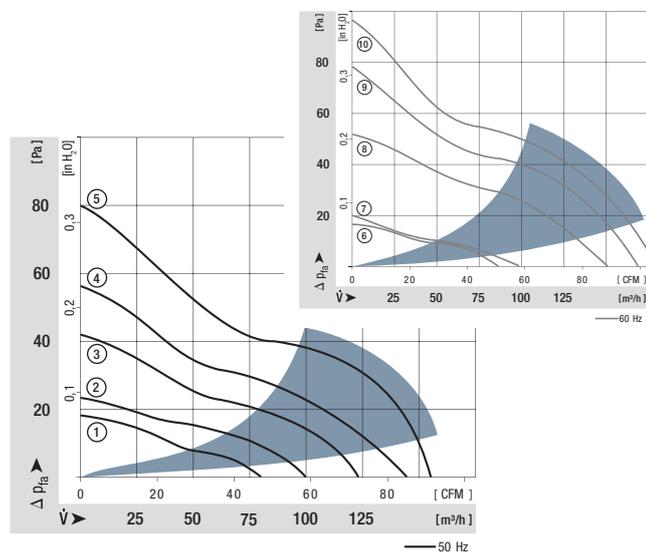
Series 4000 N 119 x 119 x 38 mm



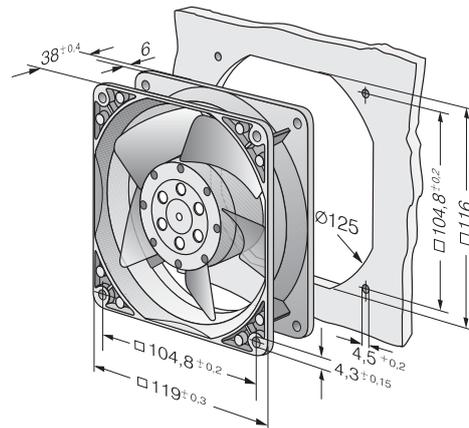
- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing and impeller
- Air intake over struts. Direction of rotation clockwise, seen on rotor.
- Types 4890 N and 4840 N air exhaust over struts.
- Electrical connection via 2 flat plugs 3.0 x 0.5 mm.
- Impeller with 3 or 5 blades, see note for fan type.
- Optionally available: Models with reinforced flanges and single leads.
- Fan housing with grounding lug for screw M 4 and UNC.
- Mass: 550 g.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | Air flow | Air flow | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|--------------|-------------------|----------|-----------------|-----------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | m ³ /h | CFM | V | Hz | dB(A) | Bel(A) | □ / ■ | Watts | RPM | °C | Hours | Hours | |
| 4890 N | 80 | 47,1 | 230 | 50 | 25 | 4,0 | □ | 11,0 | 1 550 | -10...+70 | 55 000 / 27 500 | | 1 |
| 4850 N* | 100 | 58,9 | 230 | 50 | 32 | 4,4 | □ | 10,0 | 1 800 | -10...+70 | 57 500 / 27 500 | | 2 |
| 4580 N* | 123 | 72,4 | 230 | 50 | 41 | 5,2 | □ | 18,0 | 2 350 | -10...+55 | 40 000 / 27 500 | | 3 |
| 4550 N* | 145 | 85,3 | 230 | 50 | 44 | 5,4 | □ | 16,5 | 2 550 | -10...+55 | 42 500 / 30 000 | | 4 |
| 4650 N | 160 | 94,2 | 230 | 50 | 46 | 5,4 | □ | 19,0 | 2 650 | -10...+55 | 37 500 / 27 500 | | 5 |
| 4656 N | 160 | 94,2 | 230 | 50 | 47 | 5,5 | ■ | 19,0 | 2 650 | -40...+85 | 37 500 / 15 000 | | 5 |
| 4840 N | 85 | 50,0 | 115 | 60 | 26 | 4,1 | □ | 10,0 | 1 650 | -10...+75 | 57 500 / 25 000 | | 6 |
| 4800 N* | 97 | 57,1 | 115 | 60 | 32 | 4,3 | □ | 9,0 | 1 750 | -10...+75 | 60 000 / 27 500 | | 7 |
| 4530 N* | 151 | 88,9 | 115 | 60 | 45 | 5,4 | □ | 16,0 | 2 700 | -10...+65 | 42 500 / 25 000 | | 8 |
| 4500 N* | 169 | 99,5 | 115 | 60 | 48 | 5,7 | □ | 15,0 | 3 000 | -10...+65 | 47 500 / 25 000 | | 9 |
| 4600 N | 180 | 105,9 | 115 | 60 | 50 | 5,7 | □ | 18,0 | 3 100 | -10...+60 | 40 000 / 25 000 | | 10 |
| 4606 N | 180 | 105,9 | 115 | 60 | 51 | 5,8 | ■ | 18,0 | 3 100 | -40...+90 | 40 000 / 15 000 | | 10 |

230 V and 115 V versions are rated for both 50 Hz and 60 Hz operation.
For 60 Hz data, please refer to the corresponding 115 V 60 Hz model,
for 50 Hz data please refer to the corresponding 230 V 50 Hz model.



* Fan with 3 blades.



max. 180 m³/h

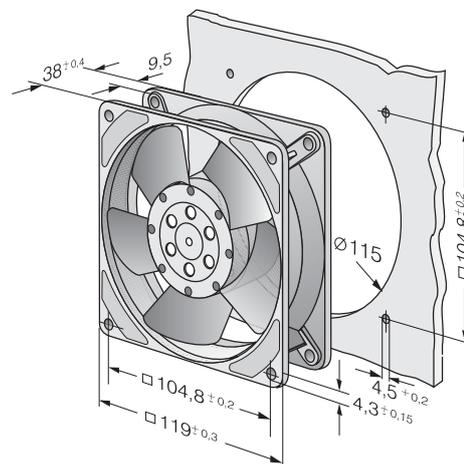
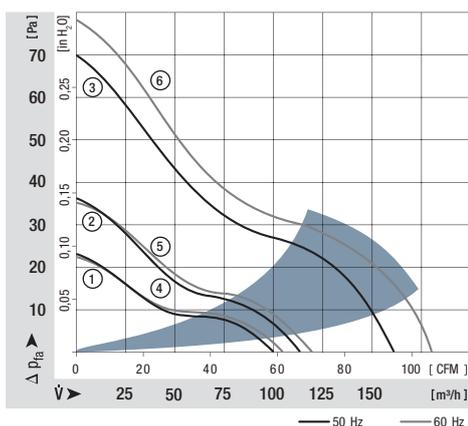
AC axial fans

Series 4000 Z 119 x 119 x 38 mm



- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing and impeller.
- Air exhaust over struts. Direction of rotation clockwise, seen on rotor.
- Electrical connection via 2 flat plugs 2.8 x 0.5 mm.
- Optionally available: Models with reinforced flanges and single leads.
- Fan housing with grounding lug and screw M4 x 8 (TORX).
- Mass: 540 g.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | Air flow | | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ | | Curve |
|--------------|-------------------|-------|-----------------|-----------|----------------------|-------------------|---|-------------|---------------|-------------------|------------------------------|---------------------|-------|
| | m ³ /h | CFM | | | | | | | | | at 40 °C | at T _{max} | |
| Type | m ³ /h | CFM | V | Hz | dB(A) | Bel(A) | □/■ | Watts | RPM | °C | Hours | Hours | |
| 4850 Z | 100 | 58,9 | 230 | 50 | 26 | 4,0 | □ | 13,0 | 1 700 | -10...+65 | 50 000 / 27 500 | | 1 |
| 4856 Z | 100 | 58,9 | 230 | 50 | 26 | 4,0 | ■ | 13,0 | 1 700 | -40...+75 | 50 000 / 20 000 | | 1 |
| 4580 Z | 115 | 67,7 | 230 | 50 | 30 | 4,3 | □ | 13,0 | 1 900 | -10...+65 | 50 000 / 27 500 | | 2 |
| 4586 Z | 115 | 67,7 | 230 | 50 | 30 | 4,3 | ■ | 13,0 | 1 900 | -40...+75 | 50 000 / 20 000 | | 2 |
| 4650 Z | 160 | 94,2 | 230 | 50 | 40 | 5,3 | □ | 19,0 | 2 650 | -10...+50 | 37 500 / 30 000 | | 3 |
| 4656 Z | 160 | 94,2 | 230 | 50 | 40 | 5,3 | ■ | 19,0 | 2 650 | -40...+75 | 37 500 / 17 500 | | 3 |
| 4800 Z | 105 | 61,6 | 115 | 60 | 28 | 4,1 | □ | 12,0 | 1 800 | -10...+70 | 52 500 / 25 000 | | 4 |
| 4806 Z | 105 | 61,6 | 115 | 60 | 28 | 4,1 | ■ | 12,0 | 1 800 | -40...+75 | 52 500 / 17 500 | | 4 |
| 4530 Z | 120 | 70,6 | 115 | 60 | 32 | 4,4 | □ | 12,0 | 2 000 | -10...+70 | 52 500 / 25 000 | | 5 |
| 4536 Z | 120 | 70,6 | 115 | 60 | 32 | 4,4 | ■ | 12,0 | 2 000 | -40...+75 | 52 500 / 17 500 | | 5 |
| 4600 Z | 180 | 105,9 | 115 | 60 | 45 | 5,6 | □ | 18,0 | 3 100 | -10...+60 | 40 000 / 25 000 | | 6 |
| 4606 Z | 180 | 105,9 | 115 | 60 | 45 | 5,6 | ■ | 18,0 | 3 100 | -40...+85 | 40 000 / 15 000 | | 6 |



max. 147 m³/h

AC axial fans

Series 4600 TA 113 Ø x 37 mm

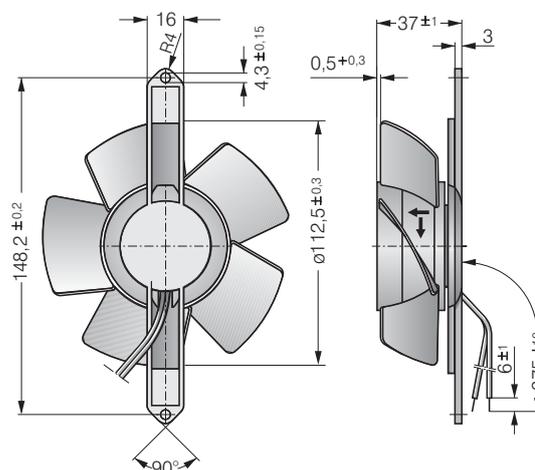


- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Impeller and mounting bracket of metal.
- Air intake over mounting bracket. Direction of rotation clockwise, seen on rotor.
- Electrical connection via 2 leads. Bared and tin-plated.
- Mass: 430 g.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | Air flow | | Nominal voltage | Frequency | Sound pressure level | Sinter sleeve bearings Ball bearings | | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | | Curve |
|--------------|-------------------|------|-----------------|-----------|----------------------|---|------|-------------|---------------|-------------------|--|-------|-------|
| | m ³ /h | CFM | | | | V | Hz | | | | dB(A) | □ / ■ | |
| 4650 TA | 138 | 81,2 | 230 | 50 | 41 | □ | 19,0 | 2 550 | -10...+45 | 37 500 / 32 500 | | - | |
| 4656 TA | 138 | 81,2 | 230 | 50 | 42 | ■ | 19,0 | 2 550 | -40...+75 | 37 500 / 17 500 | | - | |
| 4600 TA | 147 | 86,5 | 115 | 60 | 43 | □ | 18,0 | 2 900 | -10...+50 | 40 000 / 32 500 | | - | |
| 4606 TA | 147 | 86,5 | 115 | 60 | 44 | ■ | 18,0 | 2 900 | -40...+80 | 40 000 / 17 500 | | - | |

The air flow and noise level of fans without external housing depends on the installation conditions. The stated air flow and noise has been measured with an orifice 109 mm Ø at a distance of approx. 17 mm from the mounting bracket. Under exceptionally favourable mounting conditions, the air flow of fan series 4600 N is achievable. The noise in the optimal operating range can only be measured for these fans in a specific application.

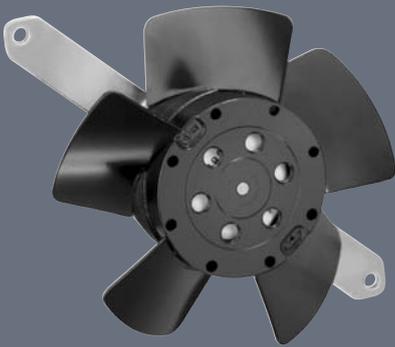
| Fan type | Lead wires |
|----------|---------------|
| 4650 TA | 4600 TA |
| | AWG 22, TR 32 |



max. 140 m³/h

AC axial fans

Series 4600 TZ 108 Ø x 37 mm

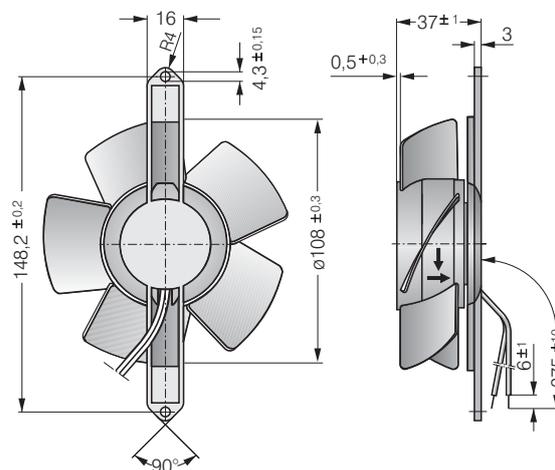


- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Impeller and mounting bracket of metal.
- Air exhaust over mounting bracket. Direction of rotation clockwise, seen on rotor.
- Electrical connection via 2 leads. Bared and tin-plated.
- Mass: 430 g.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | Air flow | Air flow | Nominal voltage | Frequency | Sound pressure level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ | | Curve |
|--------------|-------------------|----------|-----------------|-----------|----------------------|---|-------------|---------------|-------------------|------------------------------|----|-------|
| | m ³ /h | CFM | | | | | | | | V | Hz | |
| 4650 TZ | 125 | 73,6 | 230 | 50 | 42 | □ | 19,0 | 2 600 | -10...+50 | 37 500 / 37 500 | | - |
| 4656 TZ | 125 | 73,6 | 230 | 50 | 42 | ■ | 19,0 | 2 600 | -40...+65 | 37 500 / 20 000 | | - |
| 4600 TZ | 140 | 82,4 | 115 | 60 | 45 | □ | 18,0 | 2 950 | -10...+50 | 40 000 / 32 500 | | - |
| 4606 TZ | 140 | 82,4 | 115 | 60 | 45 | ■ | 18,0 | 2 950 | -40...+75 | 40 000 / 17 500 | | - |

The air flow and noise level of fans without external housing depends on the installation conditions. The stated air flow and noise has been measured with an orifice 109 mm Ø at a distance of approx. 17 mm from the mounting bracket. Under exceptionally favourable mounting conditions, the air flow of fan series 4000 Z is achievable. The noise in the optimal operating range can only be measured for these fans in a specific application.

| Fan type | Lead wires |
|----------|---------------|
| 4650 TZ | 4600 TZ |
| 4656 TZ | 4606 TZ |
| | AWG 22, TR 32 |
| | AWG 18 |



max. 206 m³/h

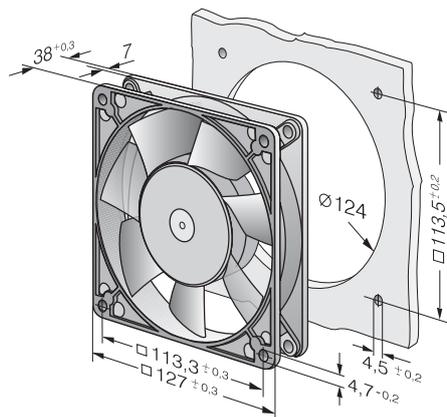
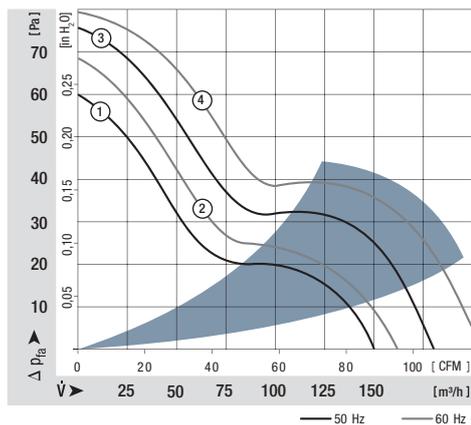
AC axial fans

Series 5900 127 x 127 x 38 mm



- AC fans with internal rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing and impeller of fibreglass-reinforced plastic PA.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Electrical connection via 2 flat plugs 2.8 x 0.8 mm.
- Fan housing with grounding lug and screw M4 x 6.
- Mass: 570 g.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | | m ³ /h | CFM | V | Hz | dB(A) | Bel(A) | □/■ | Watts | RPM | °C | Hours | Hours | |
| 5988 | | 150 | 88,3 | 230 | 50 | 37 | 4,9 | ■ | 13,0 | 2 250 | -30...+55 | 35 000 / 20 000 | | 1 |
| 5950 | | 180 | 105,9 | 230 | 50 | 43 | 5,4 | □ | 18,0 | 2 700 | -20...+50 | 40 000 / 32 500 | | 3 |
| 5958 | | 180 | 105,9 | 230 | 50 | 44 | 5,5 | ■ | 18,0 | 2 750 | -30...+60 | 40 000 / 25 000 | | 3 |
| 5938 | | 162 | 95,3 | 115 | 60 | 40 | 4,9 | ■ | 12,0 | 2 500 | -30...+55 | 35 000 / 20 000 | | 2 |
| 5900 | | 206 | 121,2 | 115 | 60 | 46 | 5,7 | □ | 17,0 | 3 050 | -20...+55 | 42 500 / 30 000 | | 4 |
| 5908 | | 206 | 121,2 | 115 | 60 | 47 | 5,8 | ■ | 17,0 | 3 100 | -30...+75 | 42 500 / 20 000 | | 4 |



max. 270 m³/h

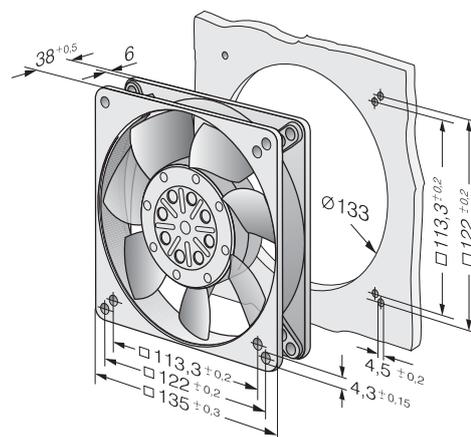
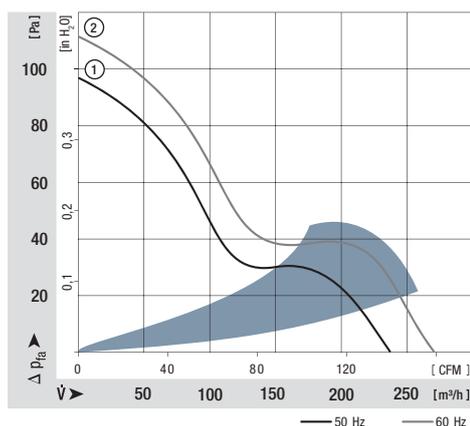
AC axial fans

Series 5600 135 x 135 x 38 mm



- AC fans with external rotor shaded-pole motor. Protected against overloading by thermal cut-out.
- Metal fan housing and impeller.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Electrical connection via 2 flat plugs 2.8 x 0.5 mm.
- Fan housing with grounding lug and screw M4 x 8 (TORX).
- Mass: 800 g.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

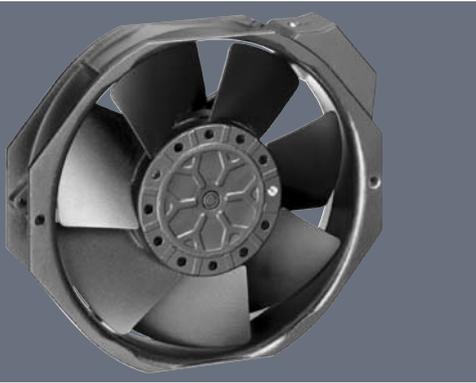
| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | | m ³ /h | CFM | V | Hz | dB(A) | Bel(A) | □/■ | Watts | RPM | °C | Hours | Hours | |
| 5656 S | | 235 | 138,3 | 230 | 50 | 46 | 5,9 | ■ | 30,0 | 2 700 | -35...+70 | 45 000 / 20 000 | | 1 |
| 5606 S | | 270 | 158,9 | 115 | 60 | 50 | 6,2 | ■ | 26,0 | 3 100 | -35...+80 | 47 500 / 20 000 | | 2 |



max. 380 m³/h

AC axial fans

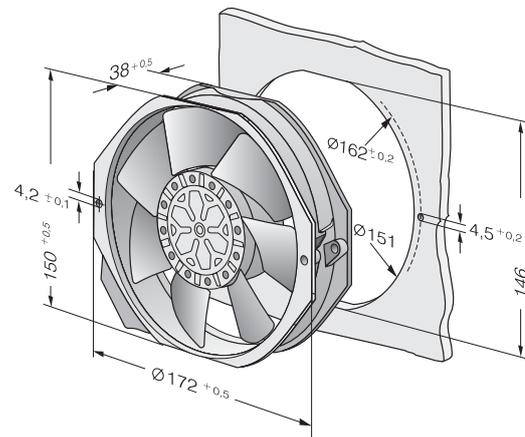
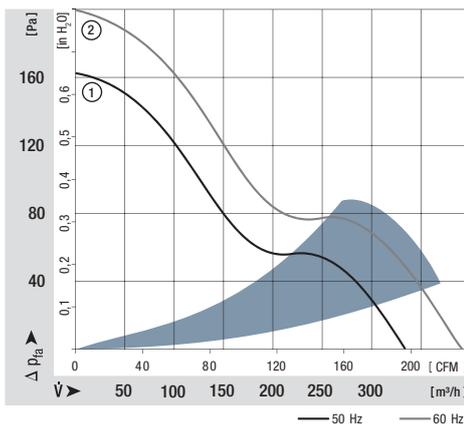
Series 7000 150 x 172 x 38 mm



- AC fans with external rotor capacitor motor. Protected against overloading by integrated thermal cut-out.
- Metal fan housing and impeller.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Electrical connection via 2 flat plugs 2.8 x 0.5 mm.
- Fan housing with grounding lug and screw M4 x 6.
- Mass: 900 g.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | | m ³ /h | CFM | V | Hz | dB(A) | Bel(A) | □/■ | Watts | RPM | °C | Hours | Hours | |
| 7056 ES | | 320 | 188,3 | 230 | 50 | 51 | 6,4 | ■ | 27,0 | 2 800 | -25...+55 | 60 000 / 32 000 | | 1 |
| 7006 ES | | 380 | 223,6 | 115 | 60 | 56 | 6,8 | ■ | 28,0 | 3 350 | -25...+65 | 55 000 / 18 000 | | 2 |

Minimum ambient temperature -15 °C.



max. 380 m³/h

AC axial fans

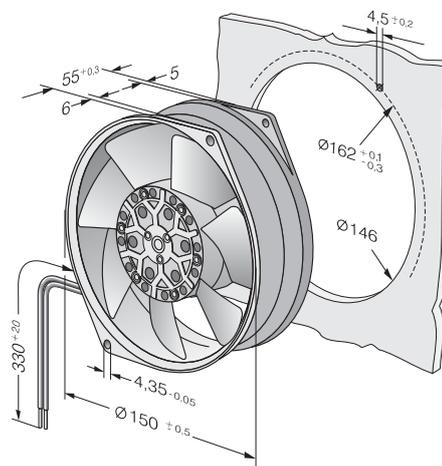
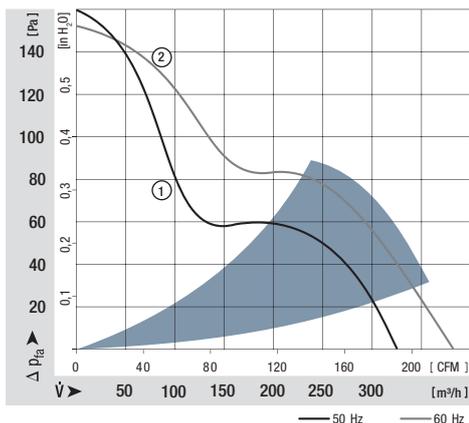
Series 7800 150 Ø x 55 mm



- AC fans with external rotor shaded-pole motor. Protected against overloading by integrated thermal cut-out.
- Metal fan housing and impeller.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Electrical connection via 2 leads. Bared and tin-plated.
- Fan housing with grounding lug and screw M4 x 6.
- Mass: 1.1 kg.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | Air flow | | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ | | Curve |
|--------------|-------------------|-------|-----------------|-----------|----------------------|-------------------|---|-------------|---------------|-------------------|------------------------------|---------------------|-------|
| | m ³ /h | CFM | | | | | | | | | at 40 °C | at T _{max} | |
| Type | m ³ /h | CFM | V | Hz | dB(A) | Bel(A) | □/■ | Watts | RPM | °C | Hours | Hours | |
| 7855 ES | 325 | 191,3 | 230 | 50 | 49 | 6,0 | ■ | 45,0 | 2 800 | -25...+50 | 60 000 / 47 000 | | 1 |
| 7856 ES | 325 | 191,3 | 230 | 50 | 49 | 6,0 | ■ | 45,0 | 2 800 | -25...+70 | 60 000 / 23 000 | | 1 |
| 7805 ES | 380 | 223,7 | 115 | 60 | 53 | 6,4 | ■ | 38,0 | 3 250 | -25...+70 | 60 000 / 47 000 | | 2 |
| 7806 ES | 380 | 223,7 | 115 | 60 | 53 | 6,4 | ■ | 38,0 | 3 250 | -25...+90 | 60 000 / 18 000 | | 2 |

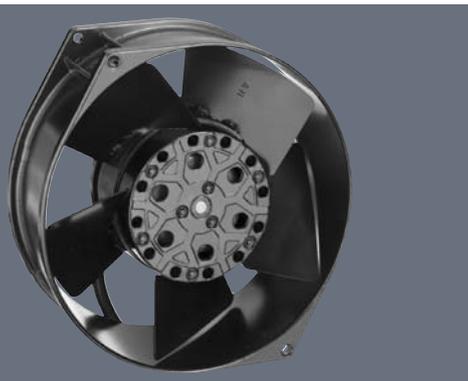
Minimum ambient temperature -15 °C, admissible for a short time at -30 °C; without condensation.



max. 425 m³/h

AC axial fans

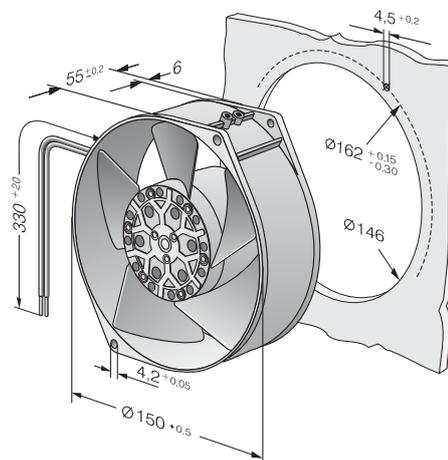
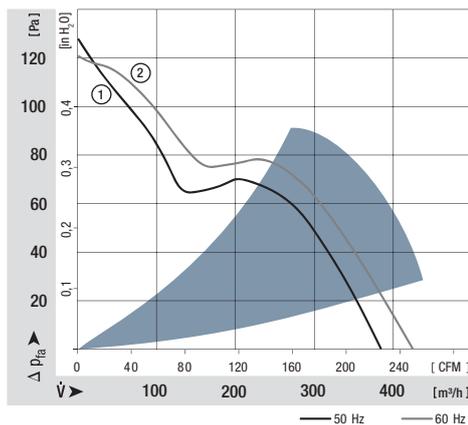
Series 7400 150 Ø x 55 mm



- AC fans with external rotor shaded-pole motor. Protected against overloading by integrated thermal cut-out.
- Metal fan housing and impeller.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Electrical connection via 2 leads. Strand ends with brass lead tips.
- Fan housing with grounding lug and screw M4 x 6.
- Mass: 1.1 kg.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | | m ³ /h | CFM | V | Hz | dB(A) | Bel(A) | □/■ | Watts | RPM | °C | Hours | Hours | |
| 7450 ES | | 380 | 223,6 | 230 | 50 | 60 | 6,8 | ■ | 47,0 | 2 700 | -25...+50 | 63 000 / 50 000 | | 1 |
| 7400 ES | | 425 | 250,1 | 115 | 60 | 62 | 6,9 | ■ | 46,0 | 3 050 | -25...+70 | 50 000 / 24 000 | | 2 |

Minimum ambient temperature -15 °C, admissible for a short time at -30 °C; without condensation.



max. 500 m³/h

AC axial fans

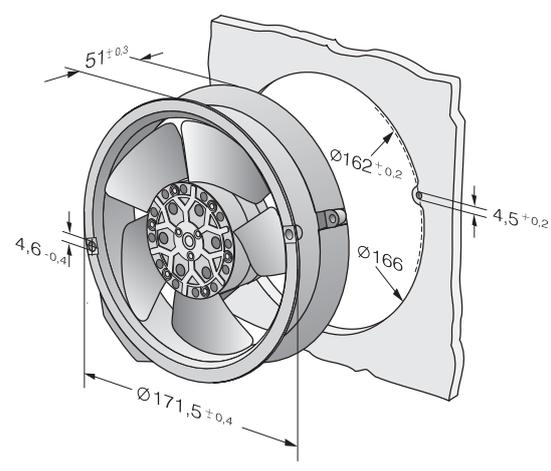
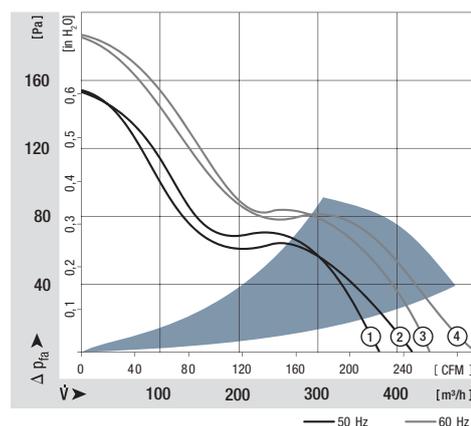
Series 6000 172 Ø x 51 mm



- AC fans with external rotor capacitor motor. Protected against overloading by integrated thermal cut-out.
- Metal fan housing and impeller.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Electrical connection via 2 flat plugs 2.8 x 0.5 mm.
- Fan housing with grounding lug and screw M4 x 6.
- Mass: 1.0 kg.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | Air flow | | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ | | Curve |
|--------------|-------------------|-------|-----------------|-----------|----------------------|-------------------|---|-------------|---------------|-------------------|------------------------------|----|-------|
| | m ³ /h | CFM | | | | | | | | | V | Hz | |
| 6058 ES | 375 | 220,7 | 230 | 50 | 55 | 5,9 | ■ | 24,0 | 2 800 | -25...+70 | 62 000 / 31 000 | | 1 |
| 6078 ES | 420 | 247,2 | 230 | 50 | 54 | 6,3 | ■ | 26,0 | 2 800 | -25...+60 | 62 000 / 39 000 | | 2 |
| 6008 ES | 440 | 259,0 | 115 | 60 | 60 | 6,4 | ■ | 26,0 | 3 300 | -25...+70 | 57 000 / 28 000 | | 3 |
| 6028 ES | 500 | 284,3 | 115 | 60 | 58 | 6,7 | ■ | 29,0 | 3 300 | -25...+75 | 57 000 / 22 000 | | 4 |

Minimum ambient temperature -15 °C, admissible for a short time at -30 °C; without condensation.



max. 1030 m³/h

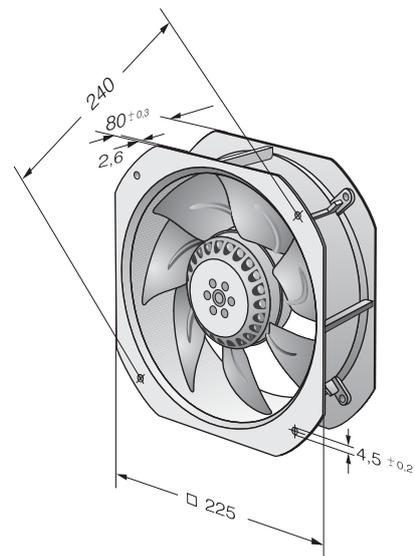
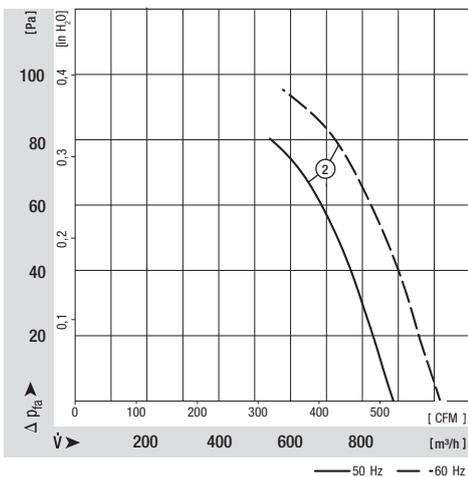
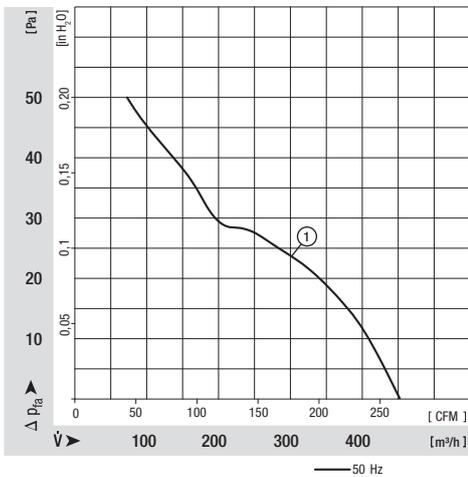
AC axial fans

W** 200 225 x 225 x 80 mm



- External-rotor single-phase motor.* / External rotor shaded-pole motor.**
- Motor protection: TOP wired internally.
- Material: Wall ring die-cast aluminium, seven blades of sheet steel. Blades and rotor coated in black.
- Direction of air flow "V", air exhaust over struts. Direction of rotation: counter-clockwise, seen on rotor.
- Electrical connection: Terminal strip (operating capacitor connected).
- Continuous operation (S1).
- Insulation class: "F"
- Mass: 2 kg.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | | Air flow | | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|------------------|-------------------|----------|-----|-----------------|-----------|----------------------|-------------------|----------------------------------|-------------|---------------|-------------------|--|---------------------|-------|
| Type | m ³ /h | CFM | V | Hz | dB(A) | Bel(A) | □/■ | Watts | RPM | °C | Hours | Hours | | |
| W2E200-HK86-01* | 1030 | 606,2 | 115 | 60 | 61 | 6,7 | ■ | 80,0 | 2800 | -25...+65 | 60 000 / 58 000 | | 2 | |
| W2E200-HK38-01* | 880 | 517,9 | 230 | 50 | 58 | 6,6 | ■ | 64,0 | 2550 | -25...+60 | 63 000 / 60 000 | | 2 | |
| W4S200-HK04-01** | 450 | 264,9 | 230 | 50 | 40 | 4,7 | ■ | 30,0 | 1370 | -25...+70 | 85 000 / 80 000 | | 1 | |



max. 1865 m³/h

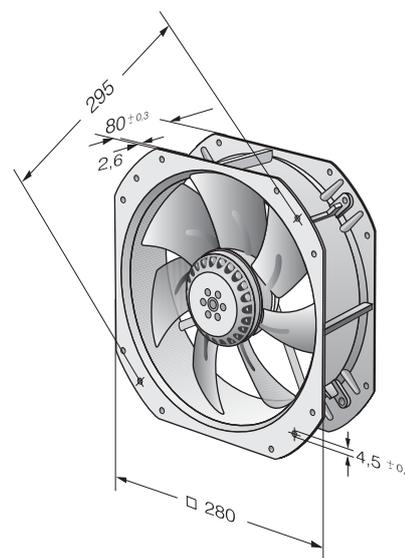
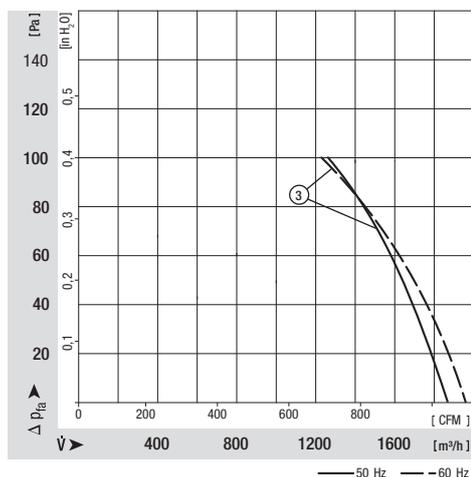
AC axial fans

W2E 250 280 x 280 x 80 mm



- External-rotor single-phase motor.
- Motor protection: TOP wired internally.
- Material: Wall ring die-cast aluminium, seven blades of sheet steel. Blades and rotor coated in black.
- Direction of air flow "V", air exhaust over struts. Direction of rotation: counter-clockwise, seen on rotor.
- Electrical connection: Terminal strips (operating capacitor connected).
- Continuous operation (S1).
- Insulation class: "F"
- Mass: 2 kg.
- Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency.

| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Sound pressure level | Sound power level | Sleeve bearings | Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|-----------------|--|-------------------|----------|-----------------|-----------|----------------------|-------------------|-----------------|---------------|-------------|---------------|-------------------|---------------------------------------|---------------------|-------|
| Type | | m ³ /h | CFM | V | Hz | dB(A) | Bel(A) | □/■ | | Watts | RPM | °C | Hours | Hours | |
| W2E 250-HL06-01 | | 1865 | 1077,1 | 230 | 50 | 66 | 7,2 | ■ | | 127,0 | 2 550 | -25...+60 | 63 000 / 70 000 | | 3 |



AC centrifugal fans

Information
DC axial fans
DC centrifugal fans
DC fans - specials
ACmaxx / GreenTech EC-compact fans
AC axial fans
AC centrifugal fans
Accessories
Representatives

| | |
|-----------------------------|-----|
| AC centrifugal fan overview | 165 |
| AC centrifugal fans | 166 |



AC fans

Technical information

Product line

The renowned ebm-papst AC fans are used when DC voltage is not available. The AC range of fans is based on experience gained from decades of development activity, millions of units in series production and competence in innovation of a world-wide technological leader.

A wide range of fans for AC operation is presented in this catalogue. In addition to complete device fans, you will also find fans without external housing, providing a particularly economical advantage when the air duct can be integrated in the respective device.

Variety of sizes

AC fans are available in a variety of sizes with either air exhaust or air intake over struts. Silent running models with sleeve bearings or for extreme ambient conditions; fans with ball bearings are available with plug connection or external leads.

Shaded-pole or capacitor motors

Fan drives by shaded-pole or capacitor motors, most of which incorporate the world-famous ebm-papst external rotor principle: The fan blades are directly attached to the external rotor of the external rotor motor, thus combining both high performance and profitability.

Flat built AC fans

ebm-papst also has particularly flat built AC fans with internal rotor motor. Their advantage: quick start to full speed. A plastic impeller and the both smaller and lighter internal rotor motor lead to a lower moment of inertia.

Bearings

AC fans with sleeve bearings are powered by Class E insulated motors. Fans with ball bearings are equipped with Class B, E or F insulated motors.

Protection class

All ebm-papst fans conform to the requirements of IP 20. Fans conforming to IP 54 and special types of protection class are also available.

AC voltage

The line of AC fans for Euro voltage according to IEC 60038 (230 V + 6 %, -10 %) is basically also available for 115 V.

Frequencies

AC fans can be operated at frequencies of 50 Hz or 60 Hz. However, their technical data then change accordingly.

Capacitor

Fans driven by capacitor external motors provide particularly high operating efficiency. Generally, the required operating capacitor is already integrated in the fan housing.

Overloading

Almost all AC fans are protected against overloading (e.g. due to locked rotor) the drive motors are either impedance protected (marked "Impedance protected", and/or "Z.P.") or are equipped with a thermal switch (marked "Thermally protected" or "Th.P."). The model designation of these fans ends with "S".

Centrifugal fans for AC operation

Overview of air performance

| Dimension | Series | Air flow | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 2000 | 3000 | Page | | |
|------------|---------|-------------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|--|-----|
| mm | | m ³ /h | | | | | | | | | | | | | | | | | | | | | | | | |
| □ 121 x 37 | RL 90 | 40...42 | | | | | | | | | | | | | | | | | | | | | | | | 166 |
| □ 135 x 38 | RG 90 | 47...54 | | | | | | | | | | | | | | | | | | | | | | | | 167 |
| □ 180 x 40 | RG 125 | 86...94 | | | | | | | | | | | | | | | | | | | | | | | | 168 |
| □ 220 x 56 | RG 160 | 202...223 | | | | | | | | | | | | | | | | | | | | | | | | 169 |
| ∅ 138 x 40 | RER 125 | 104...115 | | | | | | | | | | | | | | | | | | | | | | | | 170 |
| ∅ 176 x 54 | RER 160 | 234...274 | | | | | | | | | | | | | | | | | | | | | | | | 171 |

Overview of technically feasible designs

| Centrifugal fans | | Dimension | VDE, UL, CSA | Sleeve bearings/ Ball bearings | Speed sensor | Humidity protection | IP >= IP54 | Salt spray fog protection | Page |
|------------------|----------------|-----------|--------------|--------------------------------|--------------|---------------------|------------|---------------------------|------|
| Series | mm | | | □ / ■ | – | • | • | • | P. |
| RL 90 | 121 x 121 x 37 | yes | □ / ■ | – | • | • | • | • | 166 |
| RG 90 | 135 x 135 x 38 | yes | □ / ■ | – | • | • | • | • | 167 |
| RG 125 | 180 x 180 x 40 | yes | ■ | – | • | • | • | • | 168 |
| RG 160 | 220 x 220 x 56 | yes | ■ | – | • | • | • | • | 169 |
| RER 125 | 138 ∅ x 40 | yes | ■ | – | • | • | • | • | 170 |
| RER 160 | 176 ∅ x 54 | yes | ■ | – | • | • | • | • | 171 |

• available – not yet available □ Sleeve bearings ■ Ball bearings

Information on pictograms

On the pages of the catalogue and on the following overview pages, the pictograms illustrated below provide information about technically possible special versions in the fan line presented.

Please note that these special versions are not possible for all voltages and speeds, and not in all combinations.

The special versions are designed for specific customers and projects and are not usually available off the shelf.



Speed signal

The fan uses a separate wire to output information about its speed, and thus about the speed of the rotor. For technical details, please refer to page 110.



Protection against moisture

Protection for the fan's electronics against moisture and condensation. For technical details, please refer to page 123.



IP 54

Protection of motor and PCB board against splashed water and humidity. For technical details, please refer to page 123.



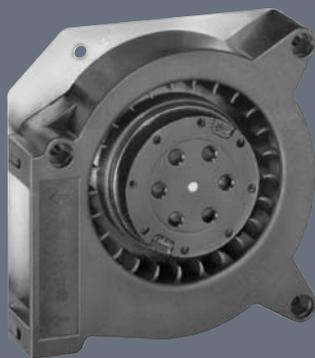
Protection against salt spray fog

Protection of fan against the damaging effects of salt spray fog. For technical details, please refer to page 123.

max. 42 m³/h

AC centrifugal fans

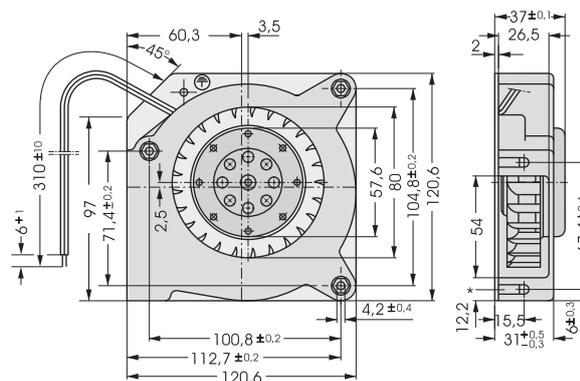
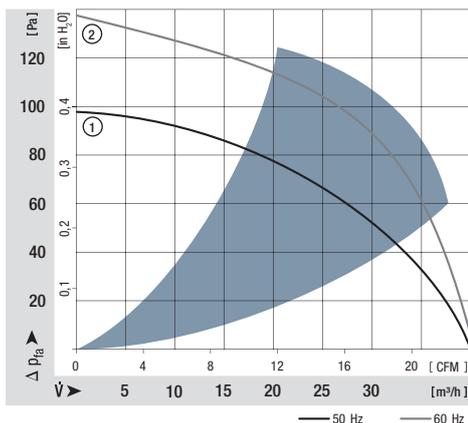
Series RL 90 121 x 121 x 37 mm



- AC centrifugal fan with external rotor shaded-pole motor. Impedance protected against overloading.
- Spiral housing and impeller of fibreglass-reinforced plastic. Housing base of galvanised steel plate. Housing base with flat plug 6.3 x 0.8 mm for protective earth.
- Direction of air flow radial, through housing port. Direction of rotation clockwise, seen on rotor.
- Electrical connection via 2 leads. Bared and tin-plated.
- Mass: 680 g.

| Nominal data | Air flow | | Nominal voltage | Frequency | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ | | Curve |
|--------------|-------------------|------|-----------------|-----------|-------------------|---|-------------|---------------|-------------------|------------------------------|-------|-------|
| | m ³ /h | CFM | | | | | | | | Hours | Hours | |
| RL 90-18/50 | 40 | 23,5 | 230 | 50 | 5,6 | □ | 20,0 | 2 450 | -10...+50 | 37 500 / 30 000 | | 1 |
| RL 90-18/56 | 40 | 23,5 | 230 | 50 | 5,6 | ■ | 20,0 | 2 450 | -30...+70 | 37 500 / 20 000 | | 1 |
| RL 90-18/00 | 42 | 24,7 | 115 | 60 | 6,0 | □ | 19,5 | 2 550 | -10...+60 | 37 500 / 25 000 | | 2 |
| RL 90-18/06 | 42 | 24,7 | 115 | 60 | 6,0 | ■ | 19,5 | 2 550 | -30...+85 | 37 500 / 15 000 | | 2 |

| Fan type | Lead wires |
|-------------|---------------|
| RL 90-18/50 | AWG 18, TR 32 |



*Speed nut M4 or 8-32UNC. Screw- in depth max.12,5 min.9.0



max. 54 m³/h

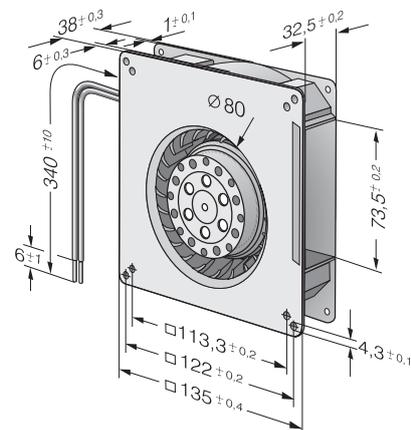
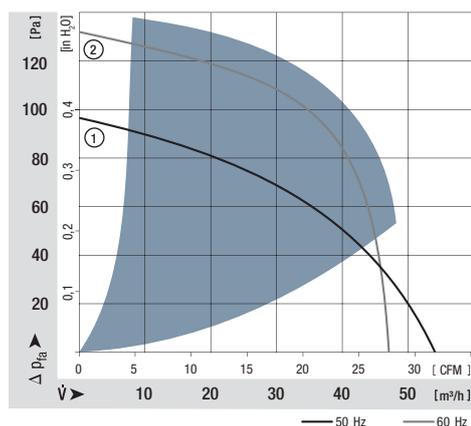
AC centrifugal fans

Series RG 90 135 x 135 x 38 mm



- AC centrifugal fan with external rotor shaded-pole motor. Impedance protected against overloading.
- Spiral housing and impeller of fibreglass-reinforced plastic. Housing base of galvanised steel plate.
- Direction of air flow radial, through housing port. Direction of rotation clockwise, seen on rotor.
- Electrical connection via 2 leads AWG 22. Bared and tin-plated.
- Mass: 560 g.

| Nominal data | Air flow | | Nominal voltage | Frequency | Sound power level | Sinter sleeve bearings Ball bearings | | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | | Curve |
|--------------|-------------------|------|-----------------|-----------|-------------------|---|------|-------------|---------------|-------------------|--|-------|-------|
| | m ³ /h | CFM | | | | V | Hz | | | | Bel(A) | □ / ■ | |
| RG 90-18/50 | 54 | 31,8 | 230 | 50 | 5,8 | □ | 22,0 | 2 200 | -30...+60 | 35 000 / 20 000 | | 1 | |
| RG 90-18/56 | 54 | 31,8 | 230 | 50 | 5,8 | ■ | 22,0 | 2 200 | -30...+60 | 35 000 / 20 000 | | 1 | |
| RG 90-18/00 | 47 | 27,7 | 115 | 60 | 6,2 | □ | 22,0 | 1 900 | -30...+65 | 35 000 / 20 000 | | 2 | |
| RG 90-18/06 | 47 | 27,7 | 115 | 60 | 6,2 | ■ | 22,0 | 1 900 | -30...+65 | 35 000 / 20 000 | | 2 | |



max. 94 m³/h

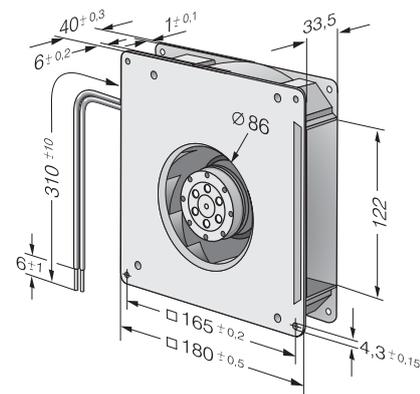
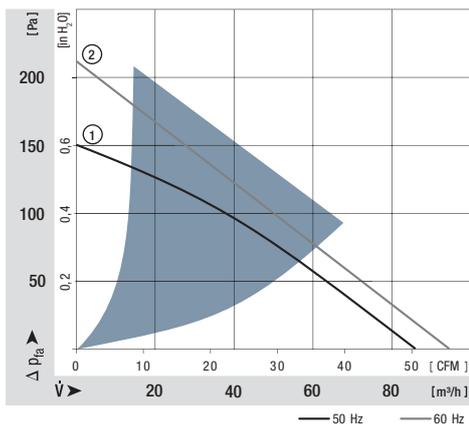
AC centrifugal fans

Series RG 125 180 x 180 x 40 mm



- AC centrifugal fan with external rotor shaded-pole motor. Impedance protected against overloading.
- Spiral housing and impeller of fibreglass-reinforced plastic. Housing base of galvanised steel plate.
- Direction of air flow radial, through housing port. Direction of rotation clockwise, seen on rotor.
- Electrical connection via 2 leads AWG 22. Bared and tin-plated.
- Mass: 850 g.

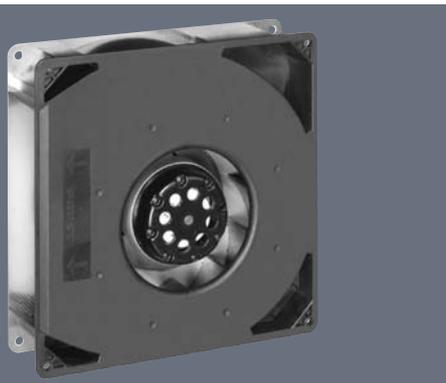
| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | | m ³ /h | CFM | V | Hz | Bel(A) | □ / ■ | Watts | RPM | °C | Hours | Hours | |
| RG 125-19/56 | | 86 | 50,6 | 230 | 50 | 5,8 | ■ | 20,0 | 2 550 | -30...+70 | 37 500 / 20 000 | | 1 |
| RG 125-19/06 | | 94 | 55,3 | 115 | 60 | 6,0 | ■ | 19,0 | 2 750 | -30...+80 | 40 000 / 15 000 | | 2 |



max. 223 m³/h

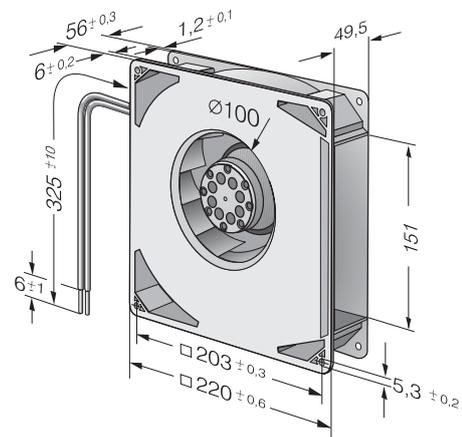
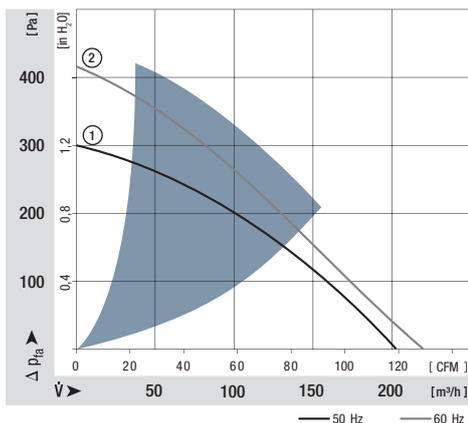
AC centrifugal fans

Series RG 160 220 x 220 x 56 mm



- AC centrifugal fan with external rotor shaded-pole motor. Thermal contactor as protection against thermal overloading.
- Spiral housing and impeller of fibreglass-reinforced plastic. Housing base of galvanised steel plate.
- Direction of air flow radial, through housing port. Direction of rotation counter-clockwise, seen on rotor.
- Electrical connection via leads AWG 18. Bared and tin-plated.
- Mass: 1.7 kg.

| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|---------------|--|-------------------|----------|-----------------|-----------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | | m ³ /h | CFM | V | Hz | Bel(A) | □/■ | Watts | RPM | °C | Hours | Hours | |
| RG 160-28/56S | | 202 | 118,9 | 230 | 50 | 6,6 | ■ | 47,0 | 2 750 | -30...+70 | 30 000 / 15 000 | | 1 |
| RG 160-28/06S | | 223 | 131,3 | 115 | 60 | 6,9 | ■ | 50,0 | 3 050 | -30...+80 | 27 500 / 12 500 | | 2 |



max. 115 m³/h

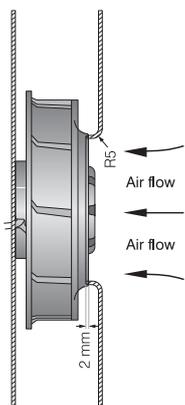
AC centrifugal fans

Series RER 125 138 Ø x 40 mm

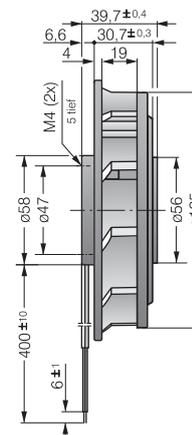
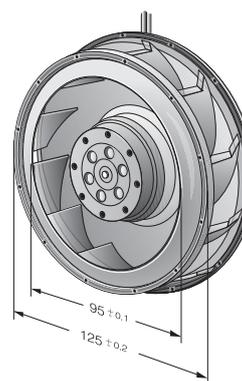
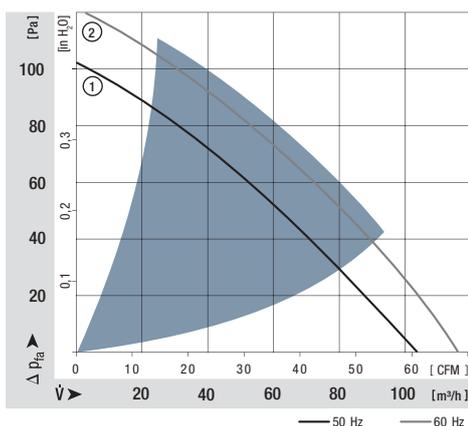


- AC centrifugal fan with external rotor shaded-pole motor. Impedance protected against overloading.
- Impeller of fibreglass-reinforced plastic, with steel plate reinforced.
- Direction of air flow radial. Direction of rotation clockwise, seen on rotor.
- Electrical connection via leads AWG 22. Bared and tin-plated.
- Mass: 500 g.

| Nominal data | Air flow | | Nominal voltage | Frequency | Sound power level | Sinter sleeve bearings Ball bearings | | Power input | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | | Curve |
|---------------|-------------------|------|-----------------|-----------|-------------------|---|------|-------------|---------------|-------------------|--|-----|-------|
| | m ³ /h | CFM | | | | V | Hz | | | | Bel(A) | □/■ | |
| RER 125-19/56 | 104 | 61,2 | 230 | 50 | 6,2 | ■ | 19,0 | 2 600 | -30...+60 | 37 500 / 22 500 | 1 | | |
| RER 125-19/06 | 115 | 67,7 | 115 | 60 | 6,5 | ■ | 18,0 | 2 850 | -30...+70 | 40 000 / 20 000 | 2 | | |



The air flow and noise level of fans without external housing depend on the installation conditions. The stated air flow and noise levels have been measured under the following conditions:
Centrifugal fan mounted on a base plate 220 x 220 mm. Cover plate 220 x 220 mm with an air inlet of Ø 86 mm, concentric to the impeller.



max. 274 m³/h

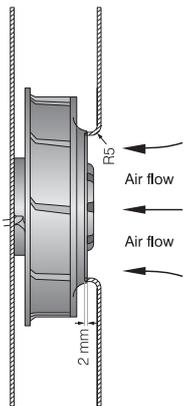
AC centrifugal fans

Series RER 160 176 Ø x 54 mm

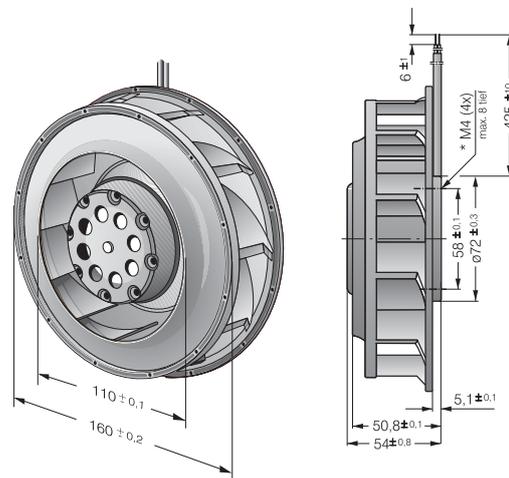
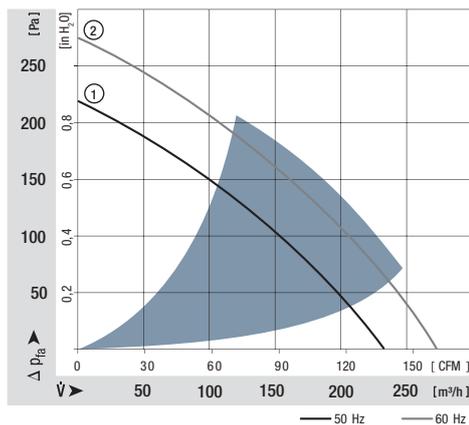


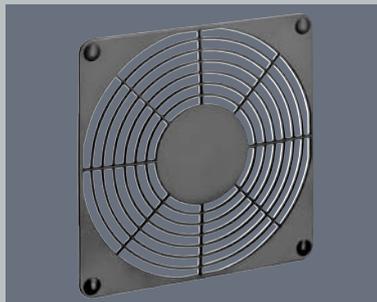
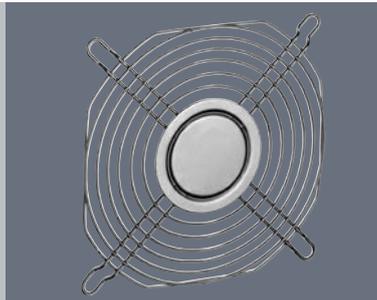
- AC centrifugal fan with external rotor shaded-pole motor. Impedance protected against overloading.
- Impeller of fibreglass-reinforced plastic, with steel plate reinforced.
- Direction of air flow radial. Direction of rotation counter-clockwise, seen on rotor.
- Electrical connection via leads AWG 18. Bared and tin-plated.
- Mass: 1.0 kg.

| Nominal data | Air flow | | Nominal voltage | Frequency | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ | | Curve |
|----------------|-------------------|-------|-----------------|-----------|-------------------|---|-------------|---------------|-------------------|------------------------------|---------------------|-------|
| | m ³ /h | CFM | | | | | | | | at 40 °C | at T _{max} | |
| Type | m ³ /h | CFM | V | Hz | Bel(A) | □/■ | Watts | RPM | °C | Hours | Hours | |
| RER 160-28/56S | 234 | 137,7 | 230 | 50 | 6,6 | ■ | 45,0 | 2 800 | -30...+60 | 30 000 / 20 000 | | 1 |
| RER 160-28/06S | 274 | 161,3 | 115 | 60 | 6,8 | ■ | 46,0 | 3 250 | -30...+70 | 30 000 / 15 000 | | 2 |



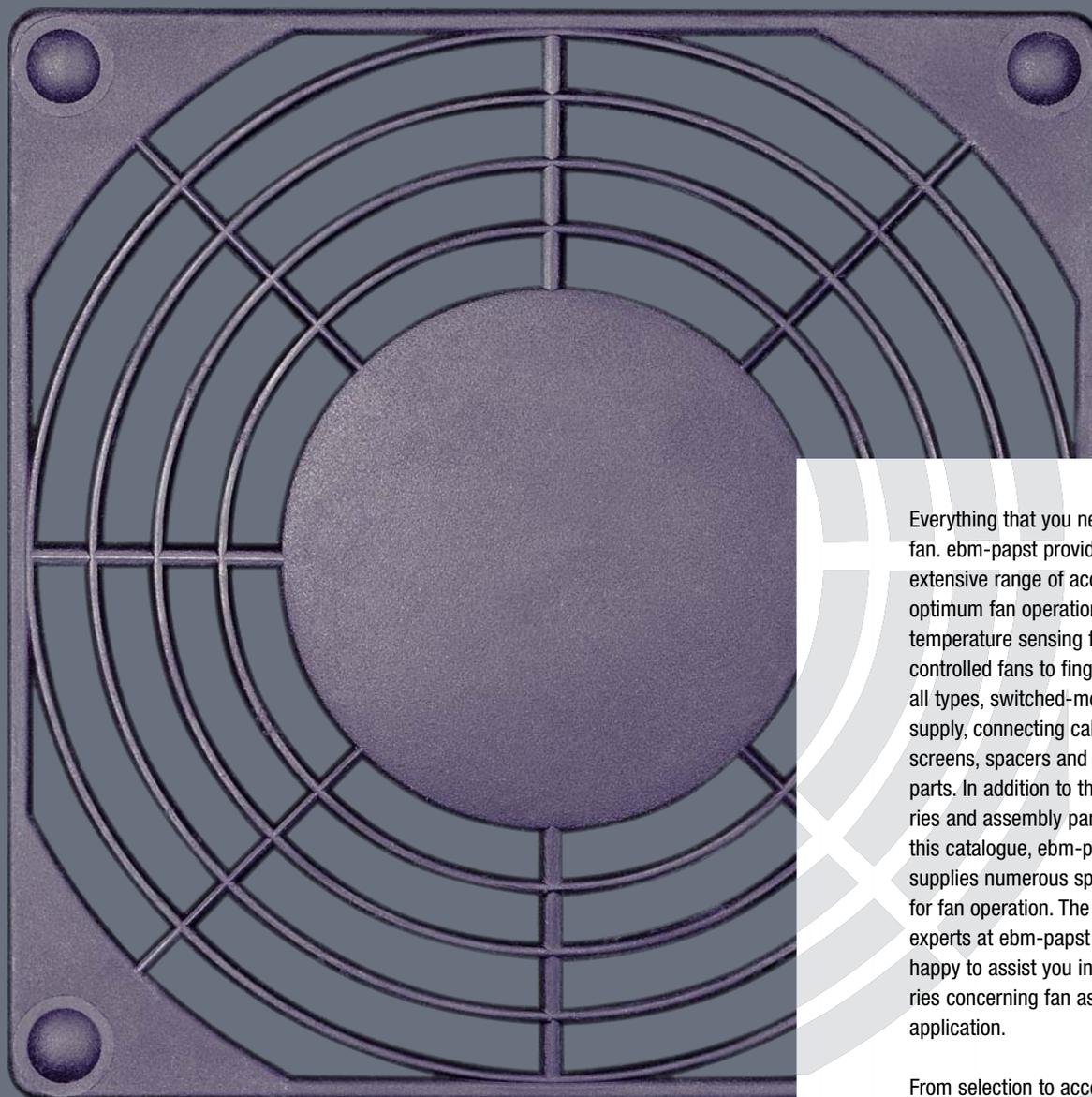
The air flow and noise level of fans without external housing depend on the installation conditions. The stated air flow and noise levels have been measured under the following conditions:
Centrifugal fan mounted on a base plate 260 x 260 mm. Cover plate 260 x 260 mm with an air inlet of Ø 100 mm, concentric to the impeller.





Accessories

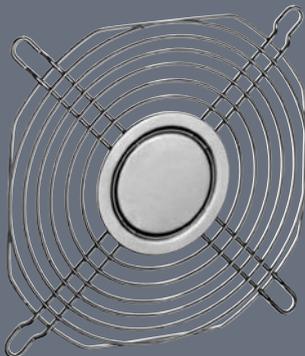
| | | |
|---|---------------------------------|-----|
|  | Guard grilles | 174 |
|  | Fan filter guard grilles | 180 |
|  | Inlet nozzles | 182 |
|  | Connection cables / Accessories | 183 |



Everything that you need for your fan. ebm-papst provides an extensive range of accessories for optimum fan operation: From temperature sensing for speed-controlled fans to finger guards of all types, switched-mode power supply, connecting cable, filter, screens, spacers and assembly parts. In addition to the accessories and assembly parts listed in this catalogue, ebm-papst also supplies numerous special parts for fan operation. The sales experts at ebm-papst will be happy to assist you in your enquiries concerning fan assembly and application.

From selection to accessories: Insist on the efficient and reliable service provided by ebm-papst.

Guard grilles



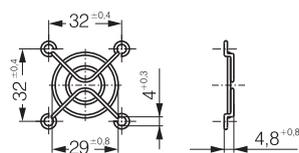
- Guard grille acc. to DIN EN ISO 13857 (previously EN 294), made of galvanised or nickel-plated and passivated steel wire for device fans.
- Additional guard grilles that do not conform to DIN EN ISO 13857 are available on request.
- Our guard grilles are specially designed for use with ebm-papst fans. Their design ensures maximum safety with minimum effect on the operating noise level. Note that when using guard grilles from other manufacturers, compliance with safety-related distances will not always be present.

| Fan series | Guard grilles |
|------------|-----------------|
| 400 | LZ29-1 |
| 500 | LZ31 |
| 600 | LZ28-1 |
| 3000 | LZ23-1 |
| 8000 | LZ32-4 / LZ22-2 |
| 9000 | LZ30-4 / LZ 30 |
| 4000 | LZ30-4 / LZ 30 |
| 5100 | LZ25 |

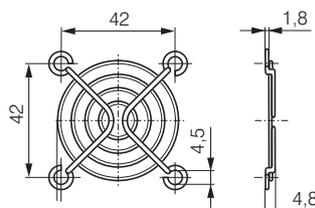
| Fan series | Guard grilles |
|------------|---------------|
| 5600 | LZ25 |
| 5200 | LZ35 |
| 5300 | LZ53 |
| 5900 | LZ35 |
| 7000 | LZ36 |
| 6300 | LZ37 |
| 6400 | LZ38 |
| 2200F | LZ22 |

| Fan series | Guard grilles |
|------------|------------------|
| DV 6200 | LZ37 Intake side |
| DV 6200 | LZ39 Outlet side |
| DV 6400 | LZ38 Intake side |
| DV 6400 | LZ39 Outlet side |

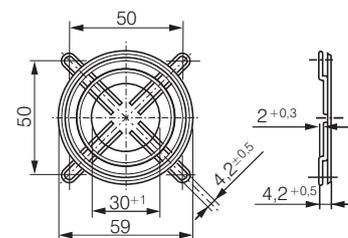
LZ29-1 Fan size 40 x 40



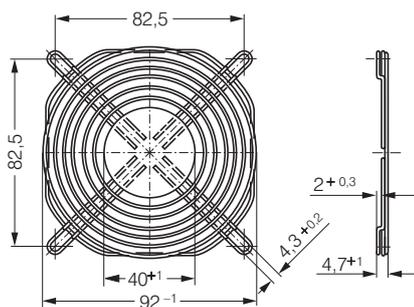
LZ31 Fan size 50 x 50



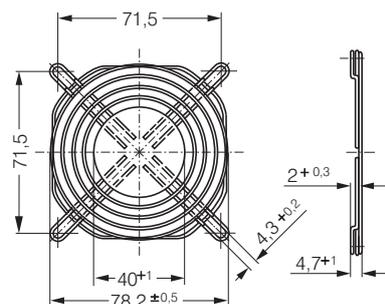
LZ28-1 Fan size 60 x 60



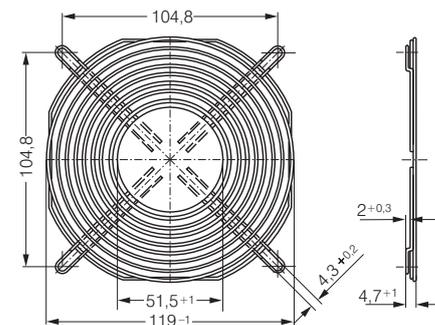
LZ23-1 Fan size 92 x 92



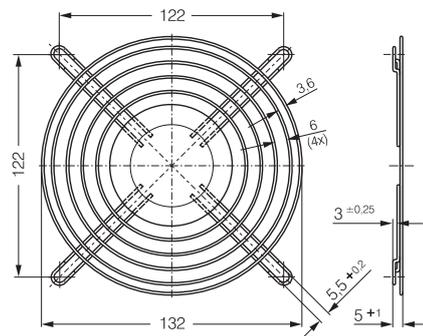
LZ32-4 Fan size 80 x 80



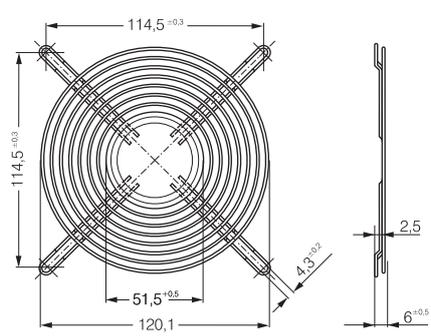
LZ30-4 Fan size 119 x 119



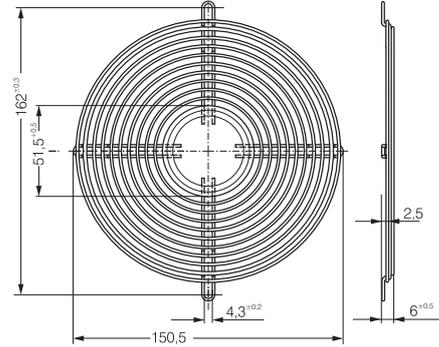
LZ25 Fan size 135 x 135



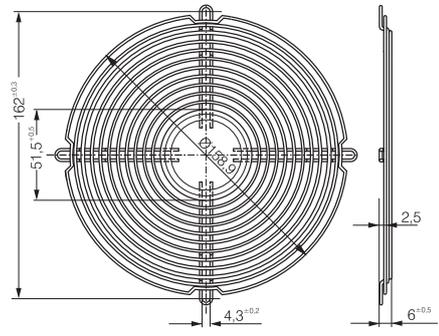
LZ35 Fan size 127 x 127



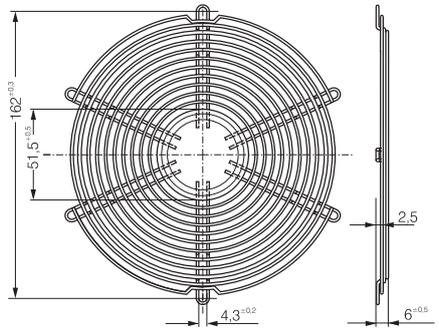
LZ36 Fan size 150 x 172



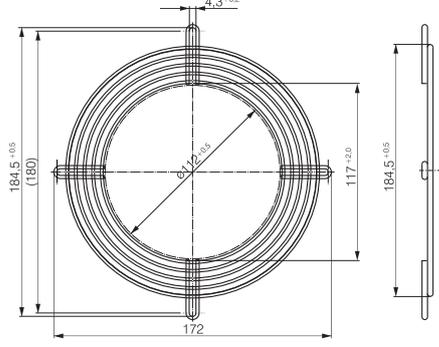
LZ37 Fan size 172 Ø x 51



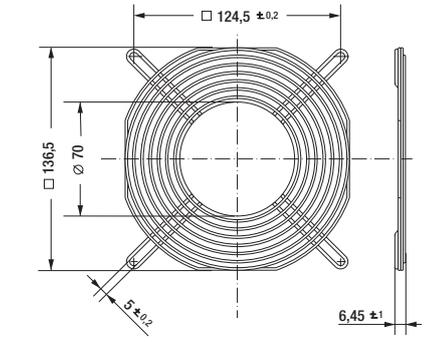
LZ38 Fan size 172 Ø x 51



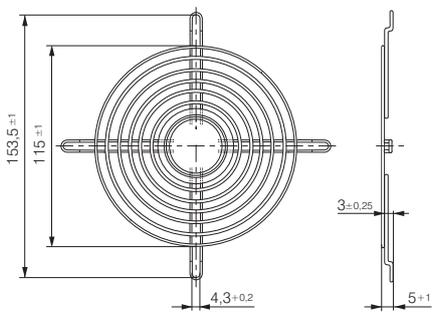
LZ39 Fan size 172 Ø x 51



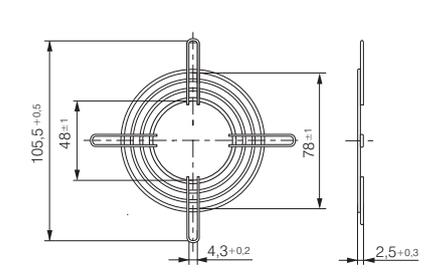
LZ53 Fan size 140 x 140



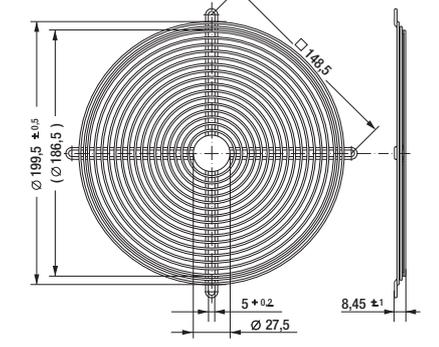
LZ30 Fan size 119 x 119



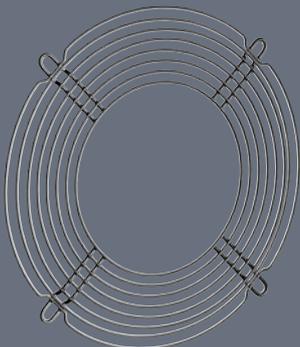
LZ22-2 Fan size 80 x 80



LZ22 Fan size 200 x 51



ACmaxx guard grilles



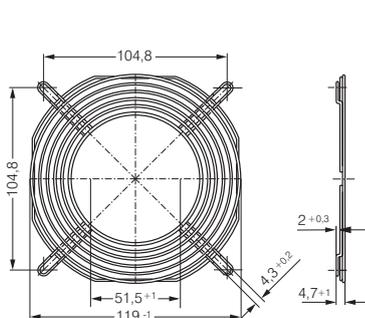
- Guard grille acc. to DIN EN ISO 13857 (previously EN 294), made of galvanised or nickel-plated and passivated steel wire for device fans.
- The guard grilles shown on this page are designed specially for ACmaxx series fans and are installed on the outlet side.

| Fan series | Guard grilles | |
|------------|---------------|---------------------|
| AC 8300 | LZ32-4 | Intake side s.P.174 |
| AC 8300 H | LZ32-7 | Outlet side |
| AC 3200 J | LZ23-1 | Intake side s.P.174 |
| AC 3200 J | LZ23-6 | Outlet side |
| AC 4400 FN | LZ30-4 | Intake side s.P.174 |
| AC 4400 FN | LZ30-9 | Outlet side |
| AC 4300 | LZ30-4 | Intake side s.P.174 |
| AC 4300 | LZ30-9 | Outlet side |
| ACi 4400 | LZ30 | Intake side s.P.175 |
| ACi 4400 | LZ30 | Outlet side s.P.175 |

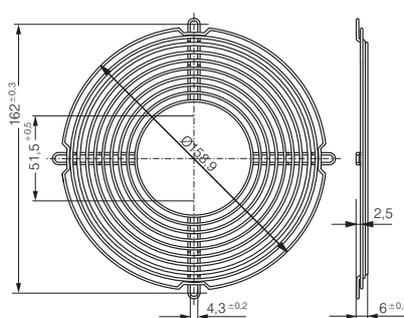
| Fan series | Guard grilles | |
|------------|---------------|---------------------|
| AC 6200 N | LZ37 | Intake side s.P.175 |
| AC 6200 N | LZ37-2 | Outlet side |
| AC 6100 N | LZ37 | Intake side s.P.175 |
| AC 6100 N | * | Outlet side |

*Outlet-side grilles on request

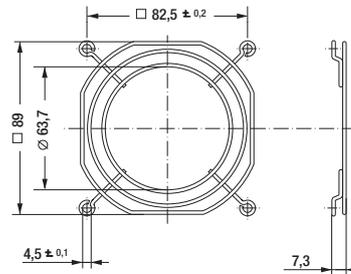
LZ30-9 Fan size 119 X 119



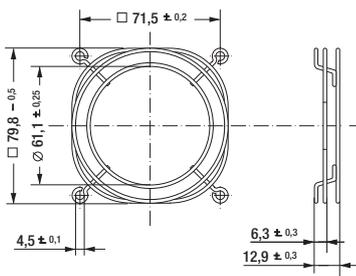
LZ37-2 Fan size 172 Ø X 51



LZ23-6 Fan size 92 x 92

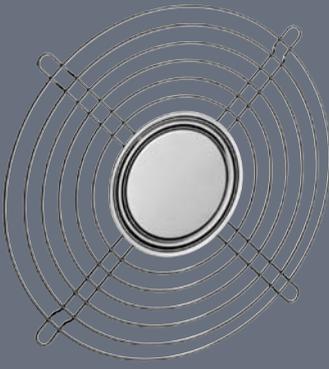


LZ32-7 Fan size 80 x 80



Guard grilles

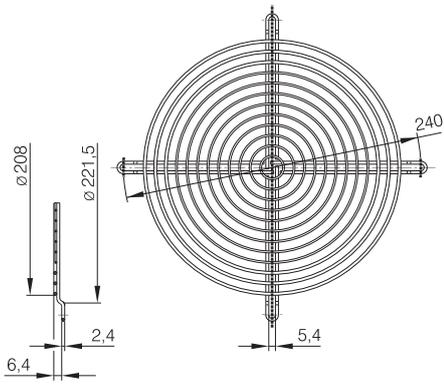
– Steel wire, plastic-coated, silver-metallic gloss.



| Fan series | Guard grilles | Fan series | Guard grilles |
|------------|---------------|------------|---------------|
| W1G 200 | 78128-2-4039 | W4S 200 | 78128-2-4039 |
| W1G 250 | 09418-2-4039 | W2E 250 | 09418-2-4039 |
| W2E 200 | 78128-2-4039 | | |

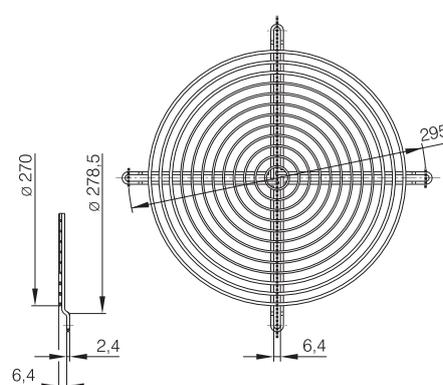
78128-2-4039

Size 200



09418-2-4039

Size 250



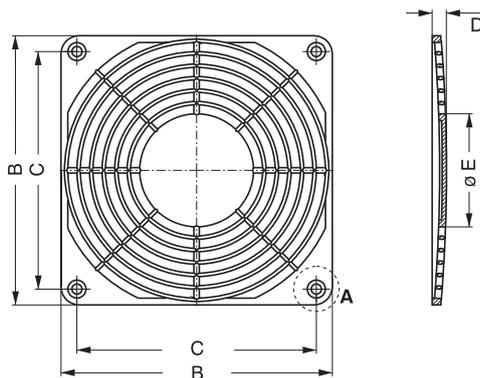
Guard grilles



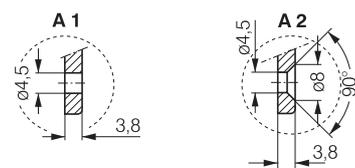
- Guard grille acc. to DIN EN ISO 13857 (previously EN 294), made of fibreglass-reinforced plastic.
- Plastic grilles must not be used for the following models:
 8200 JH3 / JH4
 3200 JH3 / JH4
 4100 NH5 - NH8

| Guard grilles | Mounting | B | C | D | E | Guard grilles | Mounting | B | C | D | E |
|---------------|----------|----------------------|----------|-----|----|---------------|----------|---------------------|-----------|-----|----|
| LZ32-2 | A1 | 80 ^{-0,5} | 71,5±0,2 | 7,0 | 34 | LZ30-5 | A2 | 119 ^{-0,5} | 105±0,2 | 6,5 | 50 |
| LZ32-3 | A3 | 80 ^{-0,5} | 71,5±0,2 | 7,0 | 34 | LZ30-6 | A4 | 119 ^{-0,5} | 105±0,2 | 6,5 | 50 |
| LZ23-2 | A1 | 92,5 ^{-0,5} | 82,5±0,2 | 6,5 | 46 | LZ33-1 | A2 | 127 ^{-0,5} | 113,5±0,2 | 6,5 | 50 |
| LZ23-3 | A3 | 92,5 ^{-0,5} | 82,5±0,2 | 6,5 | 46 | LZ33-2 | A4 | 127 ^{-0,5} | 113,5±0,2 | 6,5 | 50 |

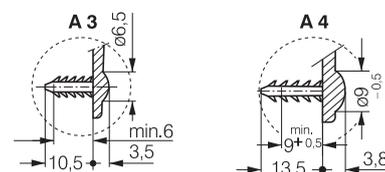
| | |
|-----------------|----------------|
| LZ32-2 / LZ32-3 | Size 80 x 80 |
| LZ23-2 / LZ23-3 | Size 92 x 92 |
| LZ30-5 / LZ30-6 | Size 119 x 119 |
| LZ33-1 / LZ33-2 | Size 127 x 127 |



Screw connection

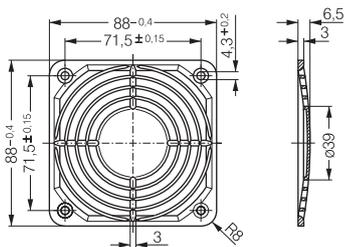


Barbed inserts

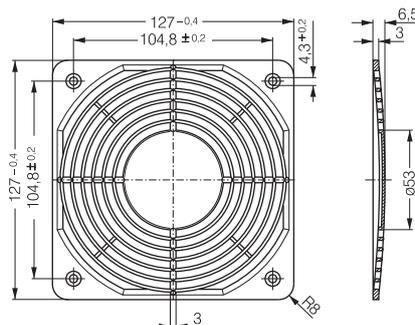


Suitable for bore diameters 4.3 - 4.7 only.

LZ32P Fan size 80 x 80



LZ30P Fan size 119 x 119



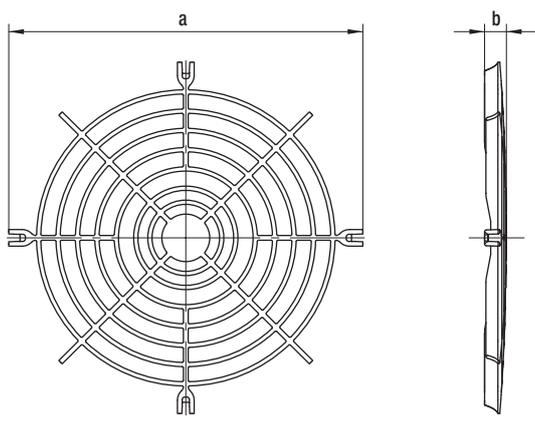
Guard grilles

for compact centrifugal modules

– PA plastic 6, fibreglass-reinforced



| Fan series | Guard grilles | a | b |
|------------|---------------|-----|-----|
| RG 190 | LZ46 | 133 | 9,0 |
| RG 220 | LZ47 | 166 | 8,7 |
| RG 225 | LZ48 | 158 | 8,7 |



Fan filter guard grilles



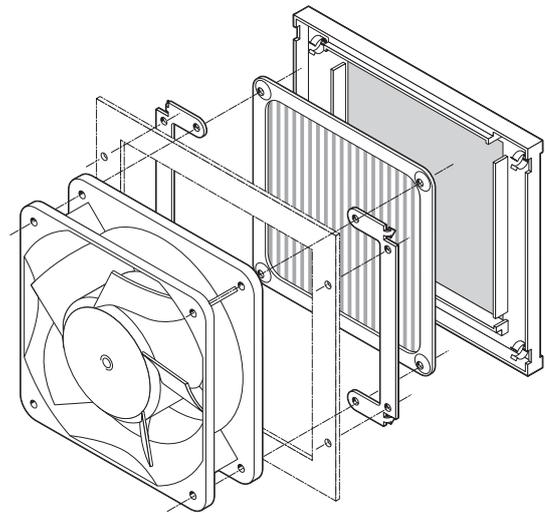
- Filter guard grilles consist of a mounting plate, filter and screen.
- Screen LZ40 N made of black, fibreglass-reinforced plastic with inserted wire netting LZ60.
- Filter LZ60 made of Nirosta stainless steel wire netting.
- Mounting plate LZ40-1 for installation.

Fan series DC

4400 F
4400 FN
4300
4300 N
4400
4200
4100 N

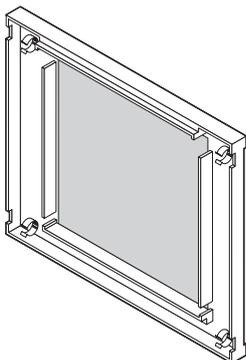
Fan series AC

AC 4300
9900
4000 N
4000 Z



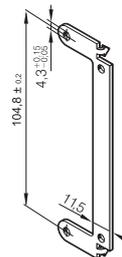
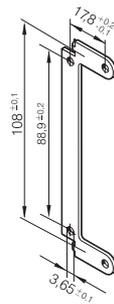
LZ40N

Screen



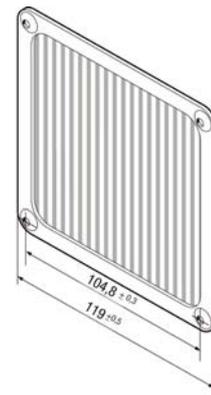
LZ40-1

Bracket



LZ60

Filter



Fan filter guard grilles



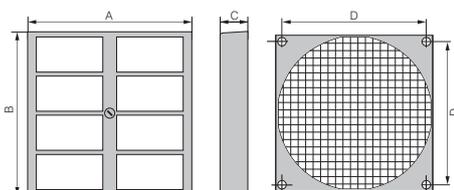
- Filter guard grille suitable for attachment to axial fan series of size 60 mm, 80 mm, 92 mm, 119 mm, ϕ 172 mm. All filter units fit directly onto the existing installation holes of the fans.
- Filter guard grille consisting of 3 parts: outer grille barrier, inner fastening plate and replaceable filter mat.
- Grille barrier made of moulded polycarbonate (PC), with matted surface.
- Fast and easy exchange of filter mat via a quick release on the grille barrier.
- Fastening plate made of wire netting, with black powder coating.
- Filter mat can be replaced while the fan is running, protection provided by welded wire netting.
- Filter mat made of white, synthetically bonded fibres.

| Protection filter | Fan size | A | B | C | D | Replacement filter* |
|-------------------|---------------|-----|-----|------|-------|---------------------|
| FF60 | 60 x 60 mm | 65 | 65 | 13,5 | 50,0 | RF 60 |
| FF80 | 80 x 80 mm | 85 | 85 | 14,0 | 71,5 | RF 80 |
| FF92 | 92 x 92 mm | 125 | 105 | 17,5 | 82,5 | RF 92 |
| FF119 | 119 x 119 mm | 162 | 136 | 18,5 | 104,5 | RF 119 |
| FF172 | ϕ 172 mm | 226 | 190 | 19,5 | 162,0 | RF 172 |

* Replacement filters only in packs of 5.

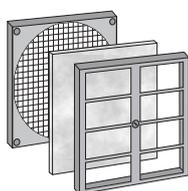
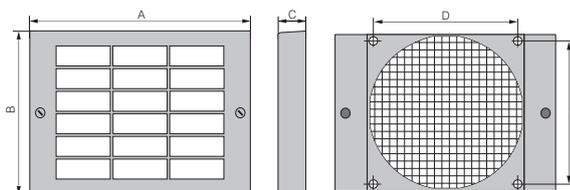
FF60 / FF80

Fan size: 60 x 60 mm
80 x 80 mm



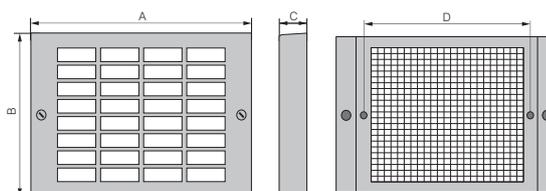
FF92 / FF 119

Fan size: 92 x 92 mm
119 x 119 mm



FF 172

Fan size: ϕ 172 mm



Filter capacity

A fan filter guard filters out up to 75% of dust particles up to a size of 5-10 microns and withstands temperatures of up to 100°C. Flame retardant in accordance with DIN 53438, grade F1. For installed, clean filters, an air flow reduction of 20 – 30% can be assumed.

Inlet nozzles

for centrifugal fans

– Material: Sheet steel, galvanised

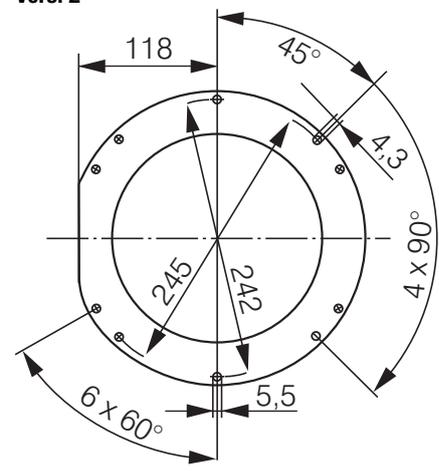
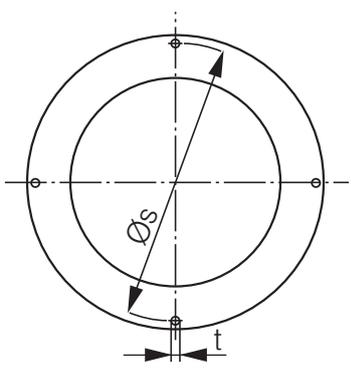
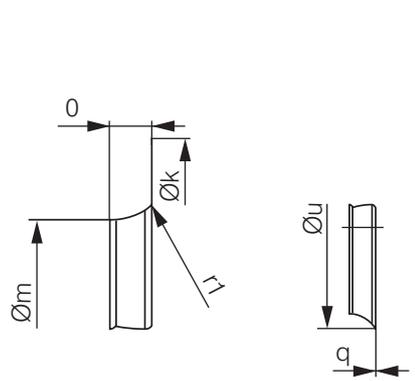


| Fan | Vers. | k | m | o | q | r ₁ | s | t | u | No.: |
|---------------|-------|-------|-------|------|------|----------------|-------|-------|-------|-------------|
| RET 97 | (S) 1 | 116,0 | 80,0 | 10,0 | 0,80 | 10,0 | 108,0 | 3x4,5 | – | LZ 1000-097 |
| RER 120 | (P) 1 | 146,0 | 94,4 | 18,0 | 0,80 | 16,0 | 134,0 | 4x4,5 | 126,0 | LZ 1000-120 |
| RER 133 | (P) 1 | 129,0 | 87,0 | 13,0 | 1,00 | 8,0 | 118,0 | 4x4,5 | 103,0 | LZ 1000-133 |
| RER 175 / 190 | (P) 1 | 170,0 | 125,5 | 14,0 | 1,25 | 10,0 | 158,0 | 4x4,5 | 146,0 | LZ 1000-175 |
| RER 220 | (P) 2 | 252,0 | 155,0 | 21,0 | 0,80 | 22,0 | – | – | 199,0 | LZ 1000-220 |
| RER 225 | (P) 1 | 223,0 | 146,0 | 28,0 | 1,50 | 25,0 | 210,0 | 4x4,5 | 196,0 | LZ 1000-225 |

(P) = plastic, (S) = sheet steel

Vers. 1

Vers. 2



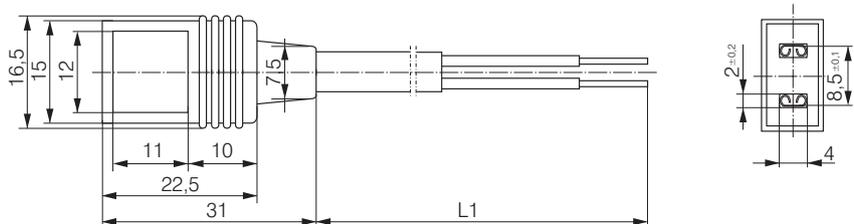
Connector cables



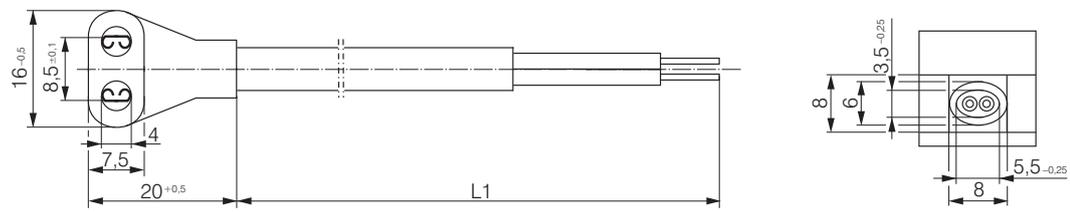
- Connector cable with injection-moulded plug in various lengths.
- Strand ends with core-crimping sleeve, core-end sleeve or tin-plated.
- Straight or angled plug.
- For all types of fan with flat plug 2.8 / 3.0 x 0.5.

| Plug model | L1 (mm) | Leads | Plug | Leads end | Lead colour | Receptacle for tabs | Application |
|------------|---------|----------------------|------|-----------|-------------|---------------------|-------------|
| LZ120 | 610 | 0,5 mm ² | G | C | black/black | 2,8 x 0,5 | AC |
| LZ120-4 | 2 000 | 0,5 mm ² | G | A | black/black | 2,8 x 0,5 | AC |
| LZ120-5 | 380 | 0,5 mm ² | W | B | red/black | 2,8 x 0,5 | DC |
| LZ120-6 | 610 | 0,5 mm ² | W | B | red/black | 2,8 x 0,5 | DC |
| LZ120-11 | 2 000 | 0,5 mm ² | G | A | red/black | 2,8 x 0,5 | DC |
| LZ120-16 | 800 | 0,5 mm ² | G | B | black/black | 2,8 x 0,5 | AC |
| LZ120-18 | 4 000 | 0,5 mm ² | G | A | black/black | 2,8 x 0,5 | AC |
| LZ126 | 1 000 | 0,5 mm ² | G | C | black/black | 2,8 x 0,5 | AC |
| LZ127 | 1 600 | 0,5 mm ² | G | B | black/black | 2,8 x 0,5 | AC |
| LZ130-1 | 610 | 0,82 mm ² | G | C | black/black | 2,8 x 0,5 | AC |
| LZ140 | 610 | 0,73 mm ² | G | B | black/black | 2,8 x 0,8 | AC |

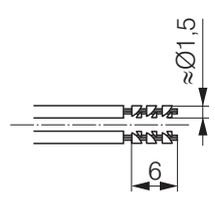
Connector cable Straight plug (G)



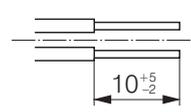
Connector cable Angled plug (W)



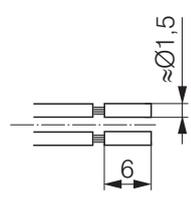
Core crimp sleeve Leads end A



Tin-plated Leads end B

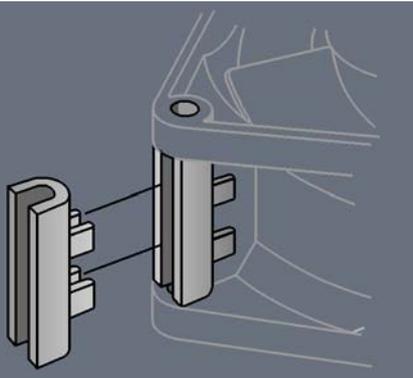


Core end sleeve Leads end C



Accessories

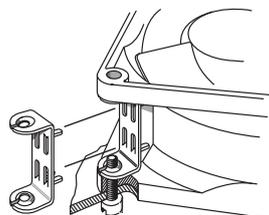
In addition to the accessories and assembly parts listed in this catalogue, ebm-papst also supplies numerous special parts for fans. The sales experts at ebm-papst will be happy to assist you in your enquiries concerning fan assembly and application.



| Fan series | Accessories |
|------------|---------------|
| 8300 | LZ212 / LZ260 |
| 8400 N | LZ261 |
| 3300 | LZ212 / LZ260 |
| 3400 N | LZ261 |
| 9000 | LZ210 |
| 4000 | LZ210 |
| 4300 | LZ212 / LZ260 |
| 8300 | LZ212 |

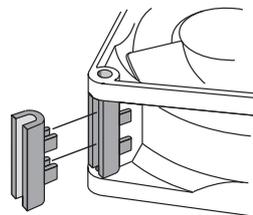
| Fan series | Accessories |
|------------|-------------|
| 5100 | LZ210 |
| 5600 | LZ210 |
| 5200 | LZ210 |
| 5900 | LZ210 |
| 7000 | LZ210 |
| VARIOFAN | LZ370 |

LZ212



Screw clip of stainless steel. For mounting fans with threaded pin 3.5 DIN EN ISO 1478 (7970).

LZ260/LZ261



Spacer of fibreglass reinforced plastic. For screw mounting over both fan mounting flanges.

LZ210



Screw clip of hardened steel. For mounting fans with threaded pin 6-32 UNC and/or 3.5 DIN 7970.

LZ370

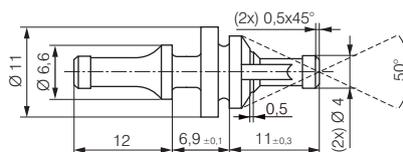


Required performance data:

R_{25} = 100 k Ω \pm 5% @25°C
 B-value = 4190 \pm 2%
 P_{max} = 0,25 W

Temperature sensor for speed-controlled fan operation. Temperature range 30...50 °C.

LZ550



Rubber anti-vibration mounts for fans with a hole ϕ of 4.3 \pm 0.2 mm and flange thickness of 3 - 5.5 mm. For a carrier plate with a hole ϕ of 6.5 \pm 0.15 mm and plate thickness of 1 - 2 mm.