

DC axial fans

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Information

DC axial fans

DC centrifugal fans

DC fans - specials

ACmaxx / i-maxx

AC axial fans

AC centrifugal fans

Accessories

Representatives

DC fans

Technical information



Range of fans

ebm-papst offers you the widest full product line of DC axial and diagonal fans: From 25 mm to 280 mm in size. Every single type of fan can be optimally integrated in the respective device concept. The highly economical brushless motor technology of these fans provides a unique variety of intelligent innovations that can be realised today at prices that would have been unthinkable just a few years ago.



Electronic protection against reverse polarity

ebm-papst DC fans have electronically commutated drives with electronic protection against reverse polarity. The electronics are conveniently located in the fan hub.



Product life expectancy

A distinctive feature of DC fan technology is the convincingly high product life expectancy. Thanks to the excellent efficiency of the brushless drives, the thermal load of the bearings is reduced, thus considerably increasing the life expectancy of the fans.

Protection class

DC fans with sleeve and ball bearings are powered by Class E insulated motors. All ebm-papst fans conform to the requirements of protection class IP 20. Fans conforming to IP 54 and special protection classes are also available.

Voltage range

Many of our DC fans can be operated on voltages that are up to 50% lower and 25% higher than their nominal voltage (see Voltage range in the technical tables). This enables the air performance to be adapted to the cooling requirements and allows the noise to be reduced, even if the fan does not have a control input.

Closed-loop speed control and monitoring

Closed-loop speed control and function monitoring are becoming increasingly important in many applications. ebm-papst offers many fans in the standard design with a control input and open collector speed signal.

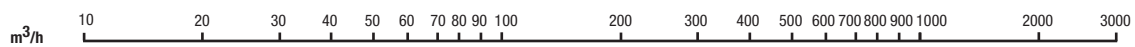
S-Force

The new S-Force fans with their extremely high blower capacity of up to 950 m³/h and pressure build-up of up to 1200 pascals are capable of dealing with the extreme heat load. If needed, these fans can produce up to 100% more output under full load and they work with a much broader delivery bandwidth than current models. This makes them ideal for equipment and systems with a high density of components. Thanks to intelligent motor features, they can be individually adapted for any application. S-Force fans are available in 5 standard dimensions.

Axial fans for DC operation

Overview of air performance

| Dimensions | Series | Air flow | Air flow | | | | | | | | | | | | | | | | Page | | | | | | | | |
|------------|-----------------|-------------|----------|-------------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|------|------|------|----|
| | | | mm | m ³ /h | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 300 | 400 | 500 | | 600 | 700 | 800 | 900 | 1000 | 2000 | 3000 | |
| □ 25 x 8 | 250 | 2,1...4,5 | | | | | | | | | | | | | | | | | | | | | | | | 23 | |
| □ 40 x 10 | 400 F | 6...9 | | | | | | | | | | | | | | | | | | | | | | | | | 24 |
| □ 40 x 20 | 400 | 10...13,5 | | | | | | | | | | | | | | | | | | | | | | | | | 25 |
| □ 40 x 25 | 400 J | 19...24 | | | | | | | | | | | | | | | | | | | | | | | | | 26 |
| □ 50 x 15 | 500 F | 11...20 | | | | | | | | | | | | | | | | | | | | | | | | | 27 |
| □ 60 x 15 | 600 F | 19...33 | | | | | | | | | | | | | | | | | | | | | | | | | 28 |
| □ 60 x 25 | 620 | 21...67 | | | | | | | | | | | | | | | | | | | | | | | | | 29 |
| □ 60 x 25 | 630 | 40...44 | NEW | | | | | | | | | | | | | | | | | | | | | | | | 30 |
| □ 60 x 25 | 600 N | 21...56 | | | | | | | | | | | | | | | | | | | | | | | | | 31 |
| □ 60 x 25 | 600 N VARIOFAN | 16...41 | | | | | | | | | | | | | | | | | | | | | | | | | 32 |
| □ 60 x 32 | 600 J | 70...84 | NEW | | | | | | | | | | | | | | | | | | | | | | | | 33 |
| □ 70 x 15 | 700 F | 28...44 | | | | | | | | | | | | | | | | | | | | | | | | | 34 |
| □ 80 x 25 | 8450 | 33...118 | NEW | | | | | | | | | | | | | | | | | | | | | | | | 35 |
| □ 80 x 25 | 8400 N | 33...79 | | | | | | | | | | | | | | | | | | | | | | | | | 36 |
| □ 80 x 25 | 8400 N VARIOFAN | 20...58 | | | | | | | | | | | | | | | | | | | | | | | | | 37 |
| □ 80 x 32 | 8300 | 32...80 | | | | | | | | | | | | | | | | | | | | | | | | | 38 |
| □ 80 x 38 | 8200 J | 132...222 | | | | | | | | | | | | | | | | | | | | | | | | | 39 |
| □ 92 x 25 | 3400 N | 61...102 | | | | | | | | | | | | | | | | | | | | | | | | | 40 |
| □ 92 x 25 | 3400 N VARIOFAN | 44...84 | | | | | | | | | | | | | | | | | | | | | | | | | 41 |
| □ 92 x 32 | 3300 | 56...107 | | | | | | | | | | | | | | | | | | | | | | | | | 42 |
| □ 92 x 38 | 3200 J | 130...280 | | | | | | | | | | | | | | | | | | | | | | | | | 43 |
| □ 119 x 25 | 4400 F | 94...170 | | | | | | | | | | | | | | | | | | | | | | | | | 44 |
| □ 119 x 25 | 4400 FN | 200...225 | | | | | | | | | | | | | | | | | | | | | | | | | 45 |
| □ 119 x 32 | 4300 | 95...204 | | | | | | | | | | | | | | | | | | | | | | | | | 46 |
| □ 119 x 32 | 4300 VARIOFAN | 61...170 | | | | | | | | | | | | | | | | | | | | | | | | | 47 |
| □ 119 x 38 | 4400 | 150...285 | | | | | | | | | | | | | | | | | | | | | | | | | 48 |
| □ 119 x 38 | 4100 N | 160...237 | | | | | | | | | | | | | | | | | | | | | | | | | 49 |
| □ 119 x 38 | 4100 NHH...NH6 | 260...440 | | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| □ 119 x 38 | 4100 NH7...NH8 | 500...570 | | | | | | | | | | | | | | | | | | | | | | | | | 51 |
| □ 119 x 38 | DV 4100 | 275 | | | | | | | | | | | | | | | | | | | | | | | | | 52 |
| □ 127 x 38 | 5200 N | 187...338 | | | | | | | | | | | | | | | | | | | | | | | | | 53 |
| □ 127 x 38 | DV 5200 | 270...324 | | | | | | | | | | | | | | | | | | | | | | | | | 54 |
| □ 135 x 38 | 5100 N | 122...250 | | | | | | | | | | | | | | | | | | | | | | | | | 55 |
| □ 140 x 51 | 5300 | 338 | NEW | | | | | | | | | | | | | | | | | | | | | | | | 56 |
| □ 140 x 51 | 5300 TD | 410...670 | | | | | | | | | | | | | | | | | | | | | | | | | 57 |
| ∅ 150 x 38 | 7100 N | 360...420 | | | | | | | | | | | | | | | | | | | | | | | | | 58 |
| ∅ 150 x 55 | 7200 N | 360 | | | | | | | | | | | | | | | | | | | | | | | | | 59 |
| 172x160x52 | 6100 | 350 | NEW | | | | | | | | | | | | | | | | | | | | | | | | 60 |
| ∅ 172 x 51 | 6300 | 395...545 | NEW | | | | | | | | | | | | | | | | | | | | | | | | 61 |
| ∅ 172 x 51 | 6300 TD | 600...950 | NEW | | | | | | | | | | | | | | | | | | | | | | | | 62 |
| 172x160x51 | 6300 TD | 710...950 | NEW | | | | | | | | | | | | | | | | | | | | | | | | 63 |
| ∅ 172 x 51 | DV 6200 | 540 | | | | | | | | | | | | | | | | | | | | | | | | | 64 |
| ∅ 172 x 51 | DV 6200 TD | 100...700 | | | | | | | | | | | | | | | | | | | | | | | | | 65 |
| 172x150x51 | 6400 | 205...480 | | | | | | | | | | | | | | | | | | | | | | | | | 66 |
| 172x150x51 | 6400 TD | 90...900 | | | | | | | | | | | | | | | | | | | | | | | | | 67 |
| 172x160x51 | DV 6400 | 530 | | | | | | | | | | | | | | | | | | | | | | | | | 68 |
| 172x160x51 | DV 6400 TD | 100...680 | | | | | | | | | | | | | | | | | | | | | | | | | 69 |
| 220x200x51 | 2200 FTD | 790...1220 | NEW | | | | | | | | | | | | | | | | | | | | | | | | 70 |
| □ 225 x 80 | W1G 200 | 1090 | | | | | | | | | | | | | | | | | | | | | | | | | 71 |
| □ 225 x 80 | K1G 200 | 1020...1245 | NEW | | | | | | | | | | | | | | | | | | | | | | | | 72 |
| □ 225 x 89 | K3G 200 | 1215...1640 | NEW | | | | | | | | | | | | | | | | | | | | | | | | 73 |
| □ 280 x 80 | W1G 250 | 1920 | | | | | | | | | | | | | | | | | | | | | | | | | 74 |



Optional special versions

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.



Go / No-go alarm

The fan uses a separate wire to output a static signal when it is stationary, thus providing information about whether or not the rotor is turning. For technical details, please refer to page 117.



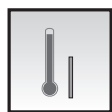
Alarm with limit speed

If the speed drops below a certain level defined in the fan's electronics, the fan will emit a static signal, thus providing information about whether or not the rotor is turning. For technical details, please refer to page 114.



External temperature sensor

An NTC is connected to the fan via a separate wire and the fan changes its speed depending on the temperature at the NTC. For technical details, please refer to page 120.



Internal temperature sensor

In this case, the NTC is integrated into the fan and the fan changes its speed depending on the temperature at the NTC. For technical details, please refer to page 120.



PWM control input

The speed of the fan can be changed via a pulse-width-modulated signal. This signal is applied to a specially provided wire. For technical details, please refer to page 121.



Analogue control input

The speed of the fan can be changed via a control voltage. This control voltage is applied to a specially provided wire. For technical details, please refer to page 121.



Multi-option control input

The fan has a control input that the user can trigger either using a PWM signal, an analogue signal or a resistor. For technical details, please refer to page 122.



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.

Axial fans for DC operation

Overview of technically feasible designs

| Axial fans | | Dimensions | VDE, UL, CSA | Sleeve bearings/ball bearings | Sensor | Go / No-go alarm | Alarm with limit speed | External temperature sensor | Internal temperature sensor | PWM control input | Analogue control input | Multi-option control input | Humidity protection | IP >= IP54 | Salt spray fog protection | Page |
|--------------------|----------------|------------|--------------|-------------------------------|--------|------------------|------------------------|-----------------------------|-----------------------------|-------------------|------------------------|----------------------------|---------------------|------------|---------------------------|------|
| Series | mm | | | | | | | | | | | | | | | |
| OPTIONAL | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | P. |
| 250 | 25 x 25 x 8 | yes | □ | • | - | - | - | - | - | - | - | - | • | - | - | 23 |
| 400 F | 40 x 40 x 10 | yes | □ | • | • | - | - | - | - | - | - | - | • | - | - | 24 |
| 400 | 40 x 40 x 20 | yes | □ | • | • | - | - | - | • | - | - | - | • | - | - | 25 |
| 400 J | 40 x 40 x 25 | yes | ■ | • | • | - | - | - | - | - | - | - | • | • | - | 26 |
| 500 F | 50 x 50 x 15 | yes | □ | • | • | - | - | - | • | - | - | - | • | - | - | 27 |
| 600 F | 60 x 60 x 15 | yes | □ | • | • | - | - | - | • | - | - | - | • | - | - | 28 |
| 620 | 60 x 60 x 25 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | - | 29 |
| NEW 630 | 60 x 60 x 25 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 30 |
| 600 N | 60 x 60 x 25 | yes | □/■ | • | • | - | - | - | - | - | - | - | • | • | - | 31 |
| 600 N VARIOFAN | 60 x 60 x 25 | yes | □/■ | • | • | - | - | - | - | - | - | - | • | • | - | 32 |
| NEW 600 J | 60 x 60 x 32 | yes | ■ | • | • | - | - | - | - | - | - | - | • | - | - | 33 |
| 700 F | 70 x 70 x 15 | yes | □ | • | • | - | - | - | - | - | - | - | • | - | - | 34 |
| NEW 8450 | 80 x 80 x 25 | yes | ■ | • | • | - | - | - | • | - | - | - | • | - | - | 35 |
| 8400 N | 80 x 80 x 25 | yes | □/■ | • | • | • | • | • | • | • | - | - | • | • | - | 36 |
| 8400 N VARIOFAN | 80 x 80 x 25 | yes | □ | • | • | - | - | - | - | - | - | - | • | - | - | 37 |
| 8300 | 80 x 80 x 32 | yes | □/■ | • | • | • | • | • | • | • | - | - | • | • | • | 38 |
| 8200 J S-Force | 80 x 80 x 38 | yes | ■ | • | • | • | • | • | • | • | - | - | • | - | - | 39 |
| 3400 N | 92 x 92 x 25 | yes | □/■ | • | • | • | • | • | • | • | - | - | • | • | - | 40 |
| 3400 N VARIOFAN | 92 x 92 x 25 | yes | ■ | • | • | - | - | - | - | - | - | - | • | - | - | 41 |
| 3300 | 92 x 92 x 32 | yes | □/■ | • | • | • | • | • | • | • | - | - | • | • | • | 42 |
| 3200 J | 92 x 92 x 38 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | - | 43 |
| 4400 F | 119 x 119 x 25 | yes | □/■ | • | • | • | • | • | • | • | - | - | • | - | - | 44 |
| 4400 FN | 119 x 119 x 25 | yes | ■ | • | • | • | • | • | • | • | - | - | • | - | - | 45 |
| 4300 | 119 x 119 x 32 | yes | □/■ | • | • | • | • | • | • | • | - | - | • | • | • | 46 |
| 4300 VARIOFAN | 119 x 119 x 32 | yes | ■ | • | • | • | • | • | • | • | - | - | • | - | - | 47 |
| 4400 | 119 x 119 x 38 | yes | ■ | • | • | • | • | • | • | • | - | - | • | - | - | 48 |
| 4100 N | 119 x 119 x 38 | yes | □/■ | • | • | • | • | • | • | • | - | - | • | • | • | 49 |
| 4100 NH...NH6 | 119 x 119 x 38 | yes | ■ | • | • | • | • | • | • | • | - | - | • | - | - | 50 |
| 4100 NH7...NH8 | 119 x 119 x 38 | yes | ■ | • | • | • | • | • | • | • | - | - | • | - | - | 51 |
| DV 4100 | 119 x 119 x 38 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 52 |
| 5200 N | 127 x 127 x 38 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 53 |
| DV 5200 | 127 x 127 x 38 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 54 |
| 5100 N | 135 x 135 x 38 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 55 |
| NEW 5300 S-Force | 140 x 140 x 51 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 56 |
| 5300 TDS-Force | 140 x 140 x 51 | yes | ■ | • | • | • | • | • | • | • | - | - | • | - | - | 57 |
| 7100 N | 150 Ø x 38 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 58 |
| 7200 N | 150 Ø x 55 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 59 |
| NEW 6100 N | 172 x 160 x 51 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 60 |
| NEW 6300 S-Force | 172 Ø x 51 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 61 |
| NEW 6300 TDS-Force | 172 Ø x 51 | yes | ■ | • | • | • | • | • | • | • | - | - | • | - | - | 62 |
| NEW 6300 TDS-Force | 172 x 160 x 51 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 63 |
| DV 6200 | 172 Ø x 51 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 64 |
| DV 6200 TD | 172 Ø x 51 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 65 |
| 6400 | 172 x 150 x 51 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 66 |
| 6400 TD | 172 x 150 x 51 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 67 |
| DV 6400 | 172 x 160 x 51 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 68 |
| DV 6400 TD | 172 x 160 x 51 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 69 |
| NEW 2200 FTD | 200 Ø x 51 | yes | ■ | • | • | • | • | • | • | • | - | - | • | • | • | 70 |
| W1G 200 | 225 x 225 x 80 | UL/CSA | ■ | • | • | • | • | - | • | • | • | - | • | - | • | 71 |
| NEW K1G 200 | 225 x 225 x 80 | yes | ■ | • | • | • | • | - | • | • | • | - | • | - | • | 72 |
| NEW K3G 200 | 225 x 225 x 89 | yes | ■ | • | • | • | • | - | • | • | • | - | • | - | • | 73 |
| W1G 250 | 280 x 280 x 80 | UL/CSA | ■ | • | • | • | • | - | • | • | • | - | • | - | • | 74 |

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. As a rule they are not available off the shelf and are tied to minimum volumes.

Please consult your customer support representative about the feasibility of your special variant.

* approvals applied for - not yet available □ Sleeve bearings
 • available ■ Ball bearings

Connection instructions for S-Force fans

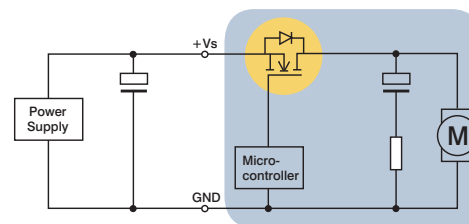
Special features of S-Force fans

The S-Force series is the most powerful product series on the market. S-Force stands for the highest innovation in motor technology, fluid mechanics and electronics. The one-of-a-kind power density of the products requires special attention to the application at the customer's facility.

Service life

Due to the high currents in the fans, the load on the electrolyte capacitors is greater, which reduces the service life of the capacitor. As a larger or additional capacitor cannot be housed in the fan, the capacitor must be housed in the supply line.

If the power pack of the application has a corresponding capacitor, in some cases it may be possible to omit the external capacitor.



Recommended measure: Additional external capacitor (thus must be installed as close to the fan as possible < 30 cm).

| Fan | Capacitor required |
|----------------------------|--------------------|
| S-Force axial | |
| 8200 / 3200 JH3-JH4 | no |
| 4100 NH3 / NH4 / NH5 / NH6 | no |
| 4100 NH7 / NH8 | yes |
| 5300 / 5300 TD | no |
| 6300 / 6300 TD | no |
| 2200 FTD | no |
| S-Force centrifugal | |
| RET 97 TD | yes |
| RER 120 TD | yes |
| RER 133 TD | no |
| RER 160 NTDHH | yes |
| REF 175 TD | no |
| RER 175 TD | no |
| RER 190 TD / RG 190 TD | no |
| RER 220 TD / RG 220 | no |
| RER 225 TDM / RG 225 TDM | no |
| RER 225 TD / RG 225 TD | yes |

Recommended capacitors

We recommend using the following capacitors from Rubycon:

24 VDC:

50 ZL 680 μ F; 12,5 mm x 30 mm or

50 ZLH 680 μ F 12,5 mm x 30 mm

48 VDC:

100 YXG 470 μ F; 16 mm x 35,5 mm or

100 ZLH 470 μ F 16 mm x 31,5 mm

Other capacitors with equal or greater capacitance and equal or lower serial resistance can also be used.

ebm-papst St. Georgen offers the following capacitors ex stock:

24 VDC: 1000 μ F / 50 V, 16 mm x 25 mm

Art. No.: 992 0345 000 (LZ 354)

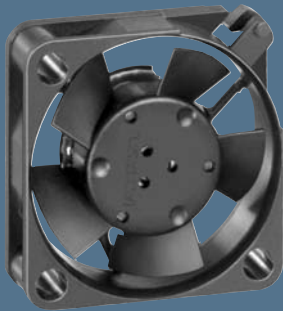
48 VDC: 680 μ F / 100 V, 18 mm x 40 mm

Art. No. : 992 0355 000 (LZ 355)

max. 4,5 m³/h

DC axial fans

Series 250 25 x 25 x 8 mm



Highlights:

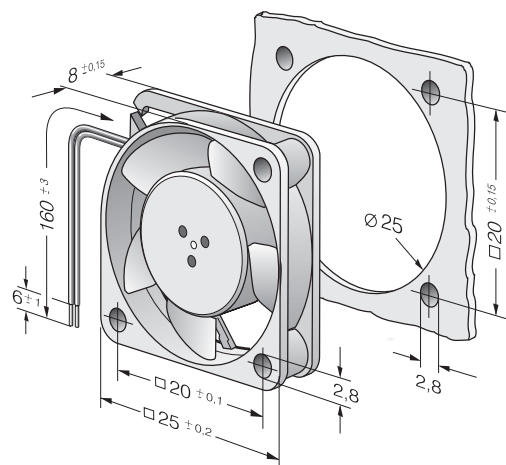
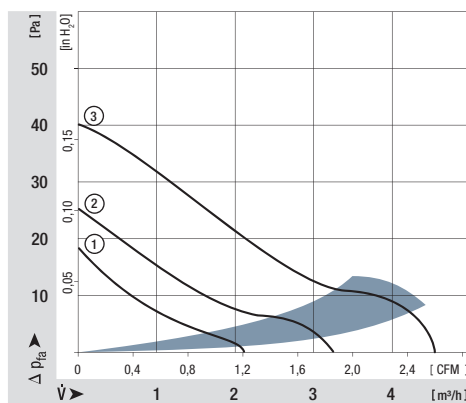
- Compact fan with low power consumption.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 28, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 5 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (20 °C) ebm-papst Standard | Service life L ₁₀ (60 °C) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-------------------|-----|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 255 M | 2,1 | 1,2 | 5 | 4,5...5,5 | 5 | < 3 | ■ | 0,2 | 6 000 | -10...+70 | 45 000 / 14 000 | 45 000 | 1 | | |
| 255 N | 3,2 | 1,9 | 5 | 4,5...5,5 | 16 | < 3 | ■ | 0,4 | 9 600 | -10...+70 | 40 000 / 12 000 | 40 000 | 2 | /2 | |
| 255 H | 4,5 | 2,6 | 5 | 4,5...5,5 | 23 | 4,4 | ■ | 0,6 | 12 000 | -10...+55 | 35 000 / 12 000* | 30 000 | 3 | /2 | |
| 252 N | 3,2 | 1,9 | 12 | 10...14 | 15 | < 3 | ■ | 0,5 | 9 000 | -10...+70 | 40 000 / 12 000 | 40 000 | 2 | /2 | |
| 252 H | 4,5 | 2,6 | 12 | 10...14 | 23 | 4,4 | ■ | 0,7 | 12 000 | -10...+55 | 35 000 / 12 000* | 30 000 | 3 | | |

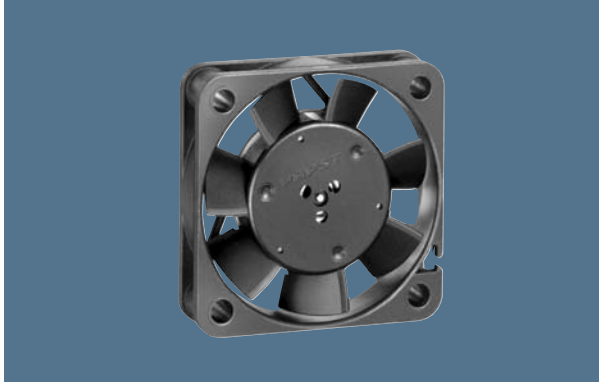
* at 55 °C



max. 9 m³/h

DC axial fans

Series 400 F 40 x 40 x 10 mm



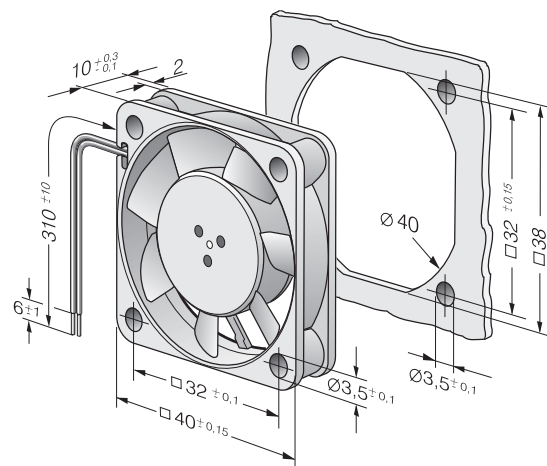
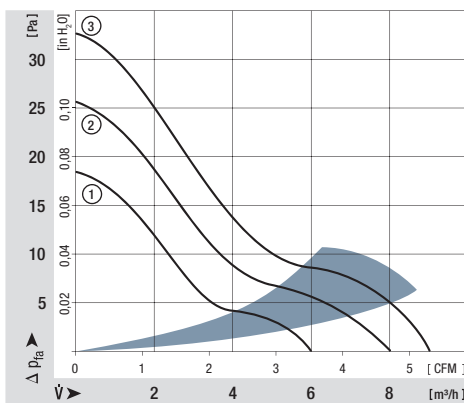
Highlights:

- Compact fan with low power consumption.
- Some models suitable for use at high ambient temperatures.

General characteristics:

- Material: fibreglass-reinforced plastic. impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 28, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 17 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (20 °C) ebm-papst Standard | Service life (60 °C) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--|-------------------|-----|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 405 F | 8 | 4,7 | 5 | 4,5...5,5 | 22,1 | 4,4 | ■ | 0,7 | 5 400 | -20...+70 | 45 000 / 15 000 | 47 500 | 2 | /2 | |
| 405 FH | 9 | 5,3 | 5 | 4,5...5,5 | 26,0 | 4,6 | ■ | 0,9 | 6 000 | -20...+70 | 45 000 / 15 000 | 47 500 | 3 | /2 | |
| 412 FM | 6 | 3,5 | 12 | 10...14 | 16,5 | 3,8 | ■ | 0,6 | 4 300 | -20...+70 | 45 000 / 15 000 | 47 500 | 1 | | |
| 412 F | 8 | 4,7 | 12 | 10...14 | 22,1 | 4,4 | ■ | 0,7 | 5 400 | -20...+70 | 45 000 / 15 000 | 47 500 | 2 | | |
| 412 FH | 9 | 5,3 | 12 | 10...14 | 26,0 | 4,6 | ■ | 0,8 | 6 000 | -20...+70 | 45 000 / 15 000 | 47 500 | 3 | /2 | |
| 414 F | 8 | 4,7 | 24 | 20...28 | 22,1 | 4,4 | ■ | 0,8 | 5 400 | -20...+70 | 45 000 / 15 000 | 47 500 | 2 | /2 | |
| 414 FH | 9 | 5,3 | 24 | 21,6...26,4 | 26,0 | 4,4 | ■ | 0,9 | 6 000 | -20...+70 | 45 000 / 15 000 | 47 500 | 3 | | |
| Models with temperature range up to +85 °C. | | | | | | | | | | | | | | | |
| 412 FM-074 | 6 | 3,5 | 12 | 10...14 | 16,5 | 3,8 | ■ | 0,4 | 4 300 | -20...+85 | 45 000 / 15 000 | 47 500 | 1 | /2 | |
| 412 F-130 | 8 | 4,7 | 12 | 10...14 | 22,1 | 4,4 | ■ | 0,6 | 5 400 | -20...+85 | 45 000 / 15 000 | 47 500 | 2 | | |
| 412 FH-132 | 9 | 5,3 | 12 | 10...14 | 26,0 | 4,6 | ■ | 0,7 | 6 000 | -20...+85 | 45 000 / 15 000 | 47 500 | 3 | /2 | |



max. 13,5 m³/h

DC axial fans

Series 400 40 x 40 x 20 mm



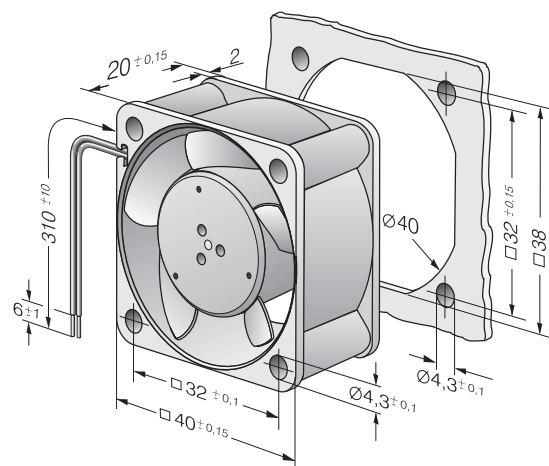
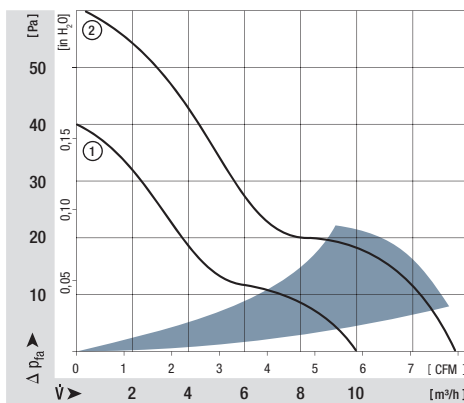
Highlights:

- Compact fan with low power consumption.
- Some models suitable for use at high ambient temperatures.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 28, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 27 g.

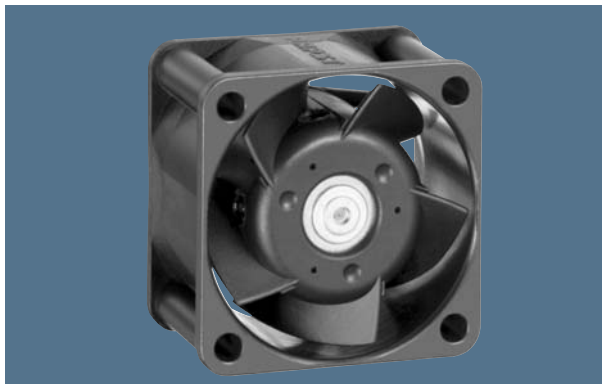
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (20 °C) ebm-papst Standard | Service life (60 °C) ebm-papst Standard | Life expectancy L _{10Δ} (40 °C) see P. 15 | Curve | Specials |
|--|----------|-------------------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | Type | m ³ /h | | | | | | | | | | | | | |
| 405 | | 10,0 | 5,9 | 5 | 4,5...5,5 | 18 | 3,8 | □ | 0,9 | 6 000 | -20...+70 | 50 000 / 20 000 | 62 500 | 1 | /2 |
| 412 | | 10,0 | 5,9 | 12 | 10...14 | 18 | 3,8 | □ | 0,9 | 6 000 | -20...+70 | 50 000 / 20 000 | 62 500 | 1 | /2 |
| 412 H | | 13,5 | 7,9 | 12 | 10...14 | 29 | 4,7 | □ | 1,6 | 8 100 | -20...+60 | 45 000 / 15 000 | 47 500 | 2 | /39 |
| 414 | | 10,0 | 5,9 | 24 | 20...28 | 18 | 3,8 | □ | 1,0 | 6 000 | -20...+70 | 50 000 / 20 000 | 62 500 | 1 | /2 |
| 414 H | | 13,5 | 7,9 | 24 | 20...26,5 | 29 | 4,7 | □ | 1,6 | 8 100 | -20...+60 | 45 000 / 15 000 | 47 500 | 2 | /2 |
| Model with temperature range up to +85 °C. | | | | | | | | | | | | | | | |
| 412-099 | | 10,0 | 5,9 | 12 | 10...14 | 18 | 3,8 | □ | 0,8 | 6 000 | -20...+85 | 50 000 / 20 000 | 62 500 | 1 | |



max. 24 m³/h

DC axial fans

Series 400 J 40 x 40 x 25 mm



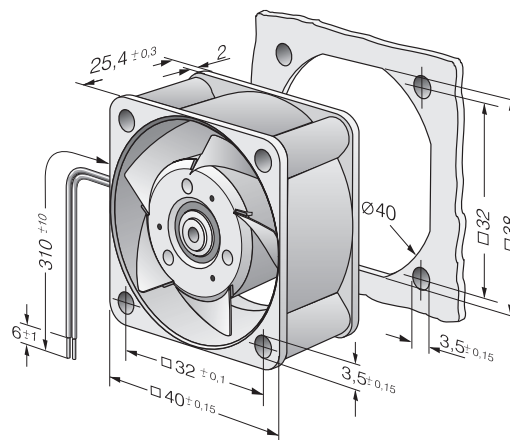
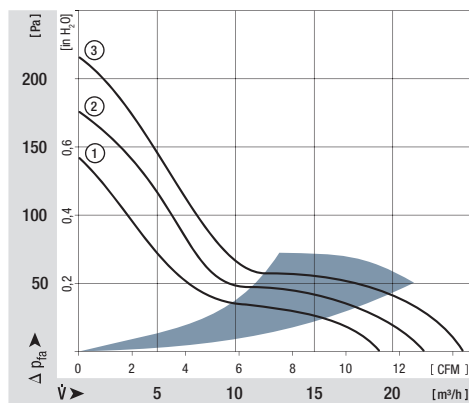
Highlights:

- Very rigid compression curve for high air flow at high back pressure.
- Low operating noise level at high back pressure.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 26, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 50 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-------------------|------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 412 J | 19 | 11,2 | 12 | 8...14 | 39 | 5,5 | ■ | 2,4 | 10 300 | -20...+70 | 60 000 / 30 000 | 120 000 | 1 | | |
| 412 JH | 22 | 12,9 | 12 | 8...13,5 | 43 | 5,8 | ■ | 3,0 | 11 700 | -20...+70 | 60 000 / 30 000 | 120 000 | 2 | /2 | |
| 412 JHH | 24 | 14,1 | 12 | 8...13,5 | 46 | 6,1 | ■ | 3,3 | 13 000 | -20...+60 | 57 500 / 35 000 | 110 000 | 3 | /2 | |
| 414 J | 19 | 11,2 | 24 | 18...27 | 39 | 5,5 | ■ | 2,4 | 10 300 | -20...+70 | 60 000 / 30 000 | 120 000 | 1 | | |
| 414 JH | 22 | 12,9 | 24 | 18...27 | 43 | 5,8 | ■ | 3,0 | 11 700 | -20...+70 | 60 000 / 30 000 | 120 000 | 2 | /2 | |
| 414 JHH | 24 | 14,1 | 24 | 18...27 | 46 | 6,1 | ■ | 3,6 | 13 000 | -20...+60 | 57 500 / 35 000 | 110 000 | 3 | /2 | |



max. 20 m³/h

DC axial fans

Series 500 F 50 x 50 x 15 mm



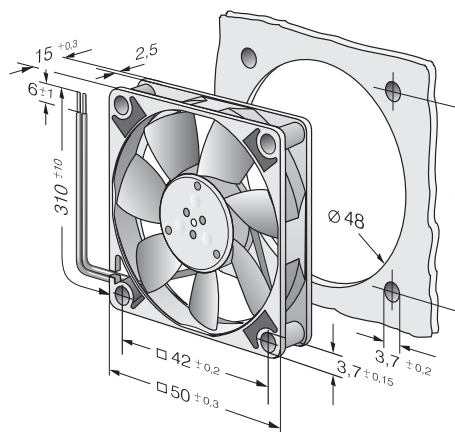
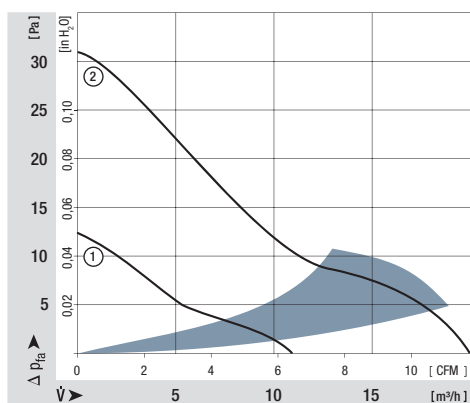
Highlights:

- Compact fan with low power consumption.
- Some models suitable for use at high ambient temperatures.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 28, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 25 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (20 °C) ebm-papst Standard | Service life L ₁₀ (60 °C) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see p. 15 | Curve | Specials |
|--|-------------------|------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 512 F | 20 | 11,8 | 12 | 10,8...13,2 | 30 | 4,5 | ■ | 1,0 | 5 000 | -20...+70 | 50 000 / 20 000 | 62 500 | 2 | /2 | |
| 514 F | 20 | 11,8 | 24 | 21,6...26,4 | 30 | 4,5 | ■ | 1,0 | 5 000 | -20...+70 | 50 000 / 20 000 | 62 500 | 2 | /2 | |
| Model with temperature range up to +85 °C. | | | | | | | | | | | | | | | |
| 512 FL-547 | 11 | 6,5 | 12 | 11,5...13,2 | 12 | 3,7 | ■ | 0,4 | 3 000 | -20...+85 | 50 000 / 20 000 | 65 500 | 1 | | |
| 512 F-532 | 20 | 11,8 | 12 | 10,8...13,2 | 30 | 4,5 | ■ | 0,9 | 5 000 | -20...+85 | 50 000 / 20 000 | 65 500 | 2 | | |



max. 33 m³/h

DC axial fans

Series 600 F 60 x 60 x 15 mm



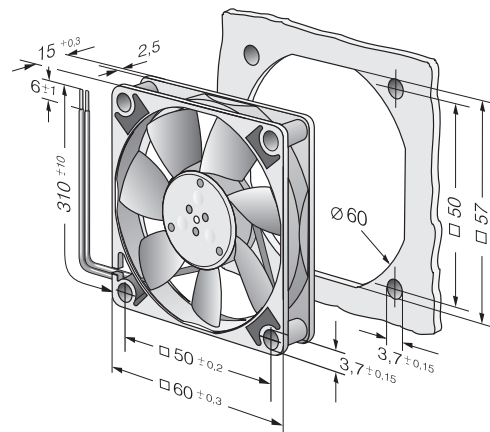
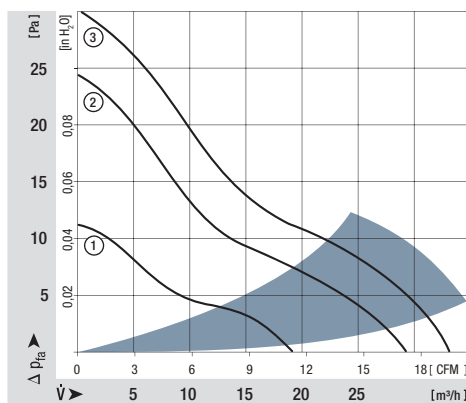
Highlights:

- Compact fan with low power consumption.
- Some models suitable for use at high ambient temperatures.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 28, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 30 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (20 °C) ebm-papst Standard | Service life L ₁₀ (60 °C) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|--|-------------------|------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 605 F | 29 | 17,1 | 5 | 4,5...5,2 | 27 | 4,4 | ■ | 1,1 | 4 000 | -20...+50 | 50 000 / 20 000 | 50 000 | 50 000 | 2 | /2 |
| 612 FL | 19 | 11,2 | 12 | 11,5...13,2 | 16 | 3,6 | ■ | 0,4 | 2 650 | 0...+70 | 50 000 / 20 000 | 62 500 | 62 500 | 1 | |
| 612 F | 29 | 17,1 | 12 | 10,8...13,2 | 27 | 4,4 | ■ | 1,0 | 3 900 | -20...+70 | 50 000 / 20 000 | 62 500 | 62 500 | 2 | /2 |
| 612 FH | 33 | 19,4 | 12 | 10,0...13,2 | 31 | 4,8 | ■ | 1,4 | 4 500 | -20...+60 | 45 000 / 15 000 | 47 500 | 47 500 | 3 | /2/39 |
| 614 F | 29 | 17,1 | 24 | 21,6...26,4 | 27 | 4,4 | ■ | 1,1 | 3 900 | -20...+70 | 50 000 / 20 000 | 62 500 | 62 500 | 2 | /2 |
| Models with temperature range up to +80 / 85 °C. | | | | | | | | | | | | | | | |
| 612 FL-680 | 19 | 11,2 | 12 | 11,5...14 | 16 | 3,6 | ■ | 0,5 | 2 650 | -20...+85 | 50 000 / 20 000 | 62 500 | 62 500 | 1 | |
| 612 F-637 | 29 | 17,1 | 12 | 10,8...12,6 | 27 | 4,4 | ■ | 1,0 | 3 900 | -20...+80 | 50 000 / 20 000 | 62 500 | 62 500 | 2 | |



max. 67 m³/h

DC axial fans

Series 620 60 x 60 x 25 mm



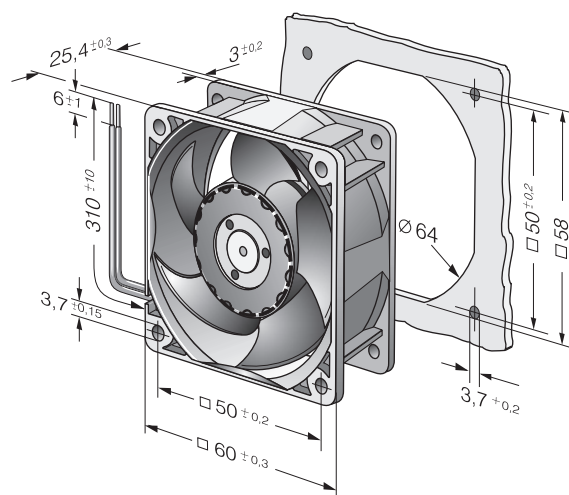
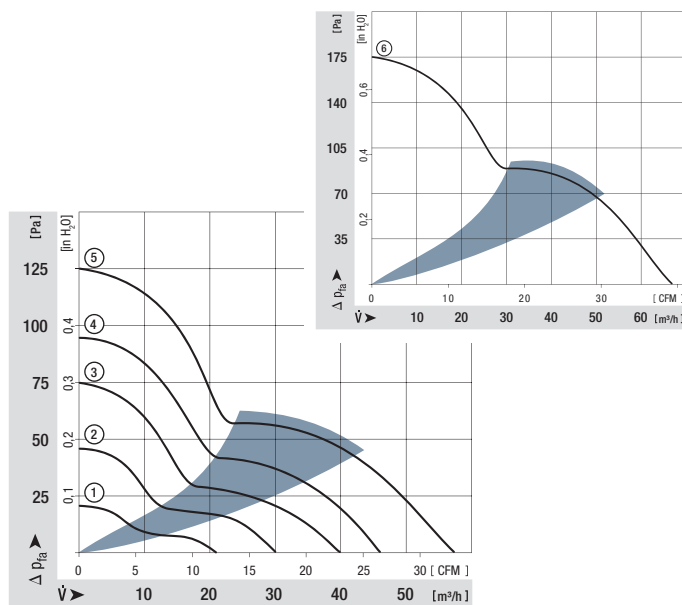
Highlights:

- Very rigid compression curve for high air flow at high back pressure.
- Motor with very low structure-borne noise.
- Innovative impeller with winglets for low noise.
- Control inputs, alarm and speed signals available on request.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 85 g.

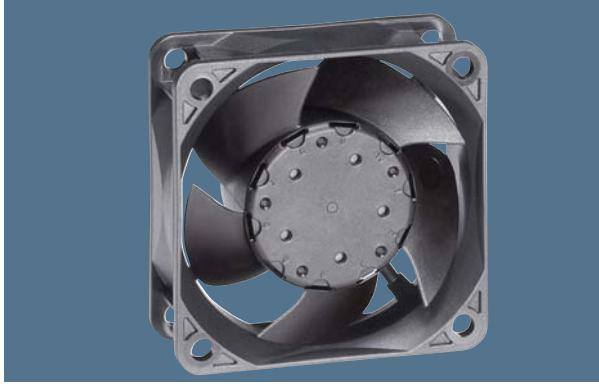
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|---------------|----------|-------------------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | Type | m ³ /h | | | | | | | | | | | | | |
| 622 L | 21 | 12,4 | 12 | 8...15 | 20 | 3,7 | ■ | 0,5 | 3 200 | -20...+85 | 80 000 / 20 000 | 160 000 | 1 | | |
| 622 M | 30 | 17,7 | 12 | 8...15 | 29 | 4,3 | ■ | 1,0 | 4 550 | -20...+75 | 77 500 / 30 000 | 150 000 | 2 | | |
| 622 N | 40 | 23,5 | 12 | 8...15 | 35 | 4,7 | ■ | 1,9 | 6 100 | -20...+70 | 72 500 / 35 000 | 140 000 | 3 | /2 | |
| 622 H | 46 | 27,1 | 12 | 8...15 | 39 | 5,1 | ■ | 2,3 | 6 850 | -20...+70 | 70 000 / 35 000 | 140 000 | 4 | | |
| 622 HH | 56 | 33,0 | 12 | 8...15 | 43 | 5,6 | ■ | 3,5 | 8 200 | -20...+70 | 65 000 / 32 500 | 130 000 | 5 | | |
| NEW 622 /2H3P | 67 | 39,4 | 12 | 8...13,2 | 48 | 5,9 | ■ | 6,3 | 9 700 | -20...+60 | 52 500 / 32 500 | 105 000 | 6 | | |
| 624 L | 21 | 12,4 | 24 | 18...28 | 20 | 3,7 | ■ | 1,0 | 3 200 | -20...+70 | 80 000 / 40 000 | 160 000 | 1 | | |
| 624 M | 30 | 17,7 | 24 | 12...28 | 29 | 4,3 | ■ | 1,5 | 4 550 | -20...+70 | 77 500 / 37 500 | 150 000 | 2 | | |
| 624 N | 40 | 23,5 | 24 | 12...28 | 35 | 4,7 | ■ | 2,2 | 6 100 | -20...+70 | 72 500 / 35 000 | 140 000 | 3 | | |
| 624 H | 46 | 27,1 | 24 | 18...28 | 39 | 5,1 | ■ | 2,4 | 6 850 | -20...+70 | 70 000 / 35 000 | 140 000 | 4 | | |
| 624 HH | 56 | 33,0 | 24 | 18...28 | 43 | 5,6 | ■ | 3,6 | 8 200 | -20...+70 | 65 000 / 32 500 | 130 000 | 5 | /2 | |
| NEW 624 /2H3P | 67 | 39,4 | 24 | 18...28 | 48 | 5,9 | ■ | 5,8 | 9 700 | -20...+60 | 52 500 / 32 500 | 105 000 | 6 | | |
| 628 HH | 56 | 33,0 | 48 | 36...56 | 43 | 5,6 | ■ | 4,2 | 8 200 | -20...+70 | 65 000 / 32 500 | 130 000 | 5 | /2 | |



max. 44 m³/h

DC axial fans

Series 630 60 x 60 x 25 mm



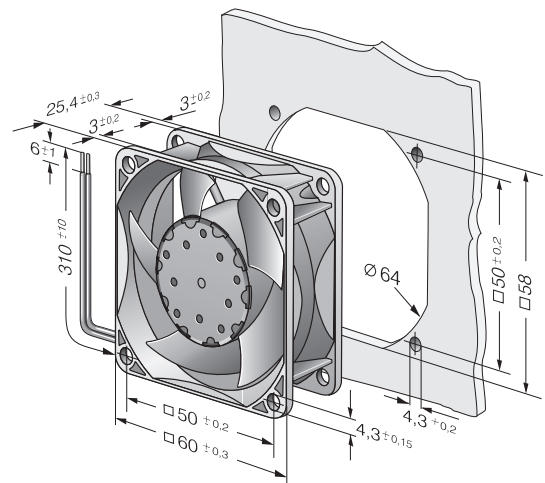
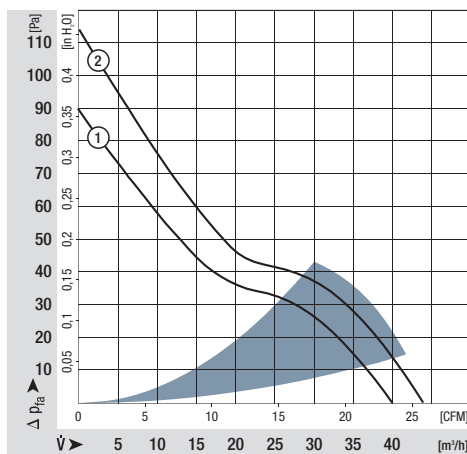
Highlights:

- Very rigid compression curve for high air flow at high back pressure.
- Motor with very low structure-borne noise.
- Control inputs, alarm and speed signals available on request.
- Developed for applications with stringent environmental requirements.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 70 g.

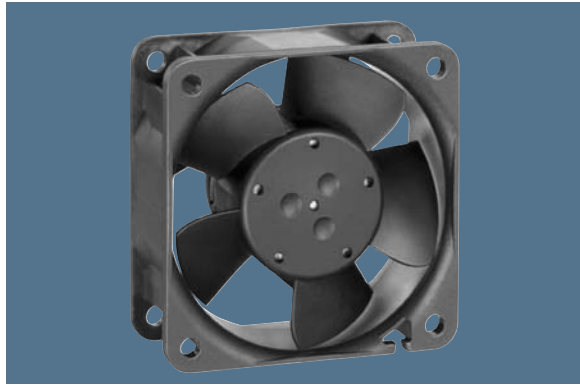
| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see p. 15 | Curve | Specials |
|--------------|-----------|-------------------|----------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| NEW | 632 NU | 40 | 23,5 | 12 | 6...15 | 33 | 5,2 | ■ | 1,8 | 5 900 | -20...+70 | 85 000 / 42 500 | 170 000 | 170 000 | 1 | |
| NEW | 632 /2HPU | 44 | 25,9 | 12 | 10,8...13,2 | 35 | 5,4 | ■ | 1,5 | 6 400 | -20...+70 | 85 000 / 42 500 | 170 000 | 170 000 | 2 | |
| NEW | 638 /2HPU | 44 | 25,9 | 48 | 40...60 | 35 | 5,4 | ■ | 1,8 | 6 400 | -20...+70 | 85 000 / 42 500 | 170 000 | 170 000 | 2 | |



max. 56 m³/h

DC axial fans

Series 600 N 60 x 60 x 25 mm



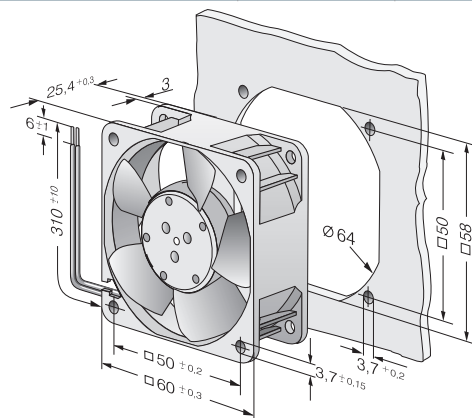
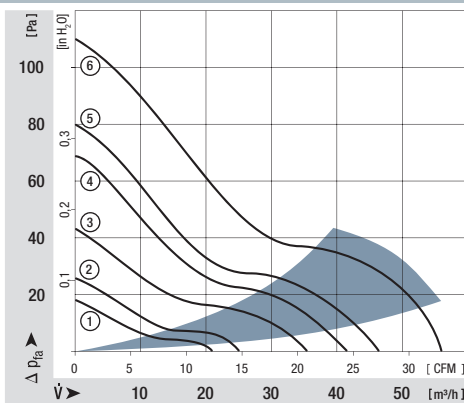
Highlights:

- Ball bearings and sleeve bearings available.
- Some models suitable for use at high ambient temperatures up to 85 °C.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 66 g.

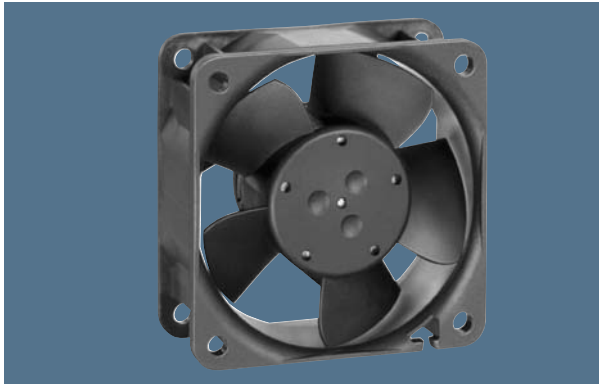
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinterc sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see p. 15 | Curve | Specials |
|--------------|----------|-------------------|-----------------|---------------|----------------------|-------------------|--|-------------|---------------|-------------------|--|--|--|-------|----------|
| | Type | m ³ /h | | | | | | | | | | | | | |
| 612 NGL | 21 | 12,4 | 12 | 8...15 | 16 | 3,6 | □ | 0,6 | 2 500 | -20...+85 | 80 000 / 27 500 | 160 000 | 160 000 | 1 | |
| 612 NLE | 21 | 12,4 | 12 | 8...15 | 16 | 3,6 | ■ | 0,4 | 2 500 | -20...+85 | 80 000 / 27 500 | 160 000 | 160 000 | 1 | |
| 612 NGMLE | 25 | 14,7 | 12 | 8...15 | 19 | 3,9 | □ | 0,7 | 3 000 | -20...+80 | 80 000 / 32 500 | 160 000 | 160 000 | 2 | |
| 612 NMLE | 25 | 14,7 | 12 | 8...15 | 19 | 3,9 | ■ | 0,4 | 3 000 | -20...+85 | 80 000 / 27 500 | 160 000 | 160 000 | 2 | |
| 612 NGME | 35 | 20,6 | 12 | 8...15 | 28 | 4,6 | □ | 1,2 | 4 100 | -20...+75 | 80 000 / 35 000 | 160 000 | 160 000 | 3 | |
| 612 NME | 35 | 20,6 | 12 | 8...15 | 28 | 4,6 | ■ | 0,8 | 4 100 | -20...+75 | 80 000 / 35 000 | 160 000 | 160 000 | 3 | /2 |
| 612 NN | 42 | 24,7 | 12 | 8...15 | 35 | 5,0 | ■ | 1,6 | 5 100 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 4 | |
| 612 NH | 46 | 27,1 | 12 | 8...15 | 37 | 5,3 | ■ | 2,0 | 5 600 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 5 | /2 |
| 612 NHH-118 | 56 | 33,0 | 12 | 8...15 | 41 | 5,7 | ■ | 2,9 | 6 800 | -20...+70 | 60 000 / 30 000 | 120 000 | 120 000 | 6 | /2 |
| 614 NGL | 21 | 12,4 | 24 | 18...28 | 16 | 3,6 | □ | 1,0 | 2 500 | -20...+70 | 80 000 / 40 000 | 160 000 | 160 000 | 1 | |
| 614 NL | 21 | 12,4 | 24 | 18...28 | 16 | 3,6 | ■ | 0,9 | 2 500 | -20...+70 | 80 000 / 40 000 | 160 000 | 160 000 | 1 | /2 |
| 614 NGML | 25 | 14,7 | 24 | 18...28 | 19 | 3,9 | □ | 1,2 | 3 000 | -20...+70 | 80 000 / 40 000 | 160 000 | 160 000 | 2 | /2 |
| 614 NML | 25 | 14,7 | 24 | 18...28 | 19 | 3,9 | ■ | 1,0 | 3 000 | -20...+70 | 80 000 / 40 000 | 160 000 | 160 000 | 2 | |
| 614 NGM | 35 | 20,6 | 24 | 18...28 | 28 | 4,6 | □ | 1,7 | 4 100 | -20...+70 | 80 000 / 40 000 | 160 000 | 160 000 | 3 | /12 |
| 614 NM | 35 | 20,6 | 24 | 18...28 | 28 | 4,6 | ■ | 1,4 | 4 100 | -20...+70 | 80 000 / 40 000 | 160 000 | 160 000 | 3 | /2/39 |
| 614 NN | 42 | 24,7 | 24 | 18...28 | 35 | 5,0 | ■ | 1,8 | 5 100 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 4 | |
| 614 NH | 46 | 27,1 | 24 | 18...26 | 37 | 5,3 | ■ | 2,1 | 5 600 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 5 | /2 |
| 614 NHH | 56 | 33,0 | 24 | 18...26 | 41 | 5,7 | ■ | 3,0 | 6 850 | -20...+70 | 60 000 / 30 000 | 120 000 | 120 000 | 6 | |
| 614 NHH-119 | 56 | 33,0 | 24 | 18...28 | 41 | 5,7 | ■ | 3,0 | 6 850 | -20...+70 | 60 000 / 30 000 | 120 000 | 120 000 | 6 | /2 |
| 618 NM | 35 | 20,6 | 48 | 36...56 | 28 | 4,6 | ■ | 1,4 | 4 100 | -20...+70 | 80 000 / 40 000 | 160 000 | 160 000 | 3 | |
| 618 NN | 42 | 24,7 | 48 | 36...56 | 35 | 5,0 | ■ | 2,1 | 5 100 | -20...+65 | 70 000 / 40 000 | 140 000 | 140 000 | 4 | /2/12/39 |



max. 41 m³/h

DC axial fans

Series 600 N VARIOFAN 60 x 60 x 25 mm



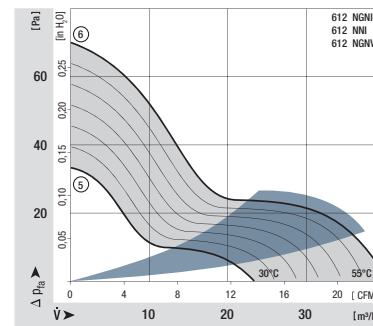
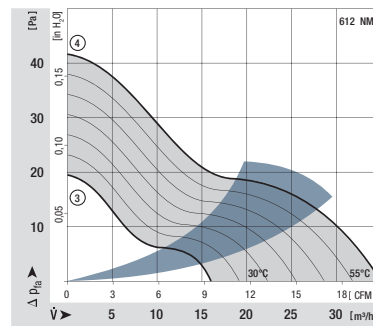
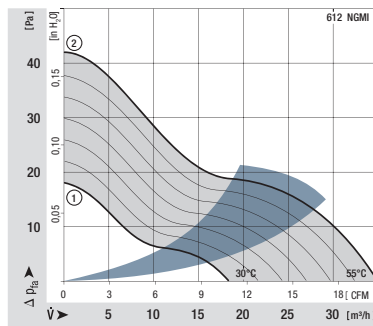
Highlights:

- Open loop speed control by means of external or internal temperature sensor.
- Automatic speed adjustment according to cooling requirements.

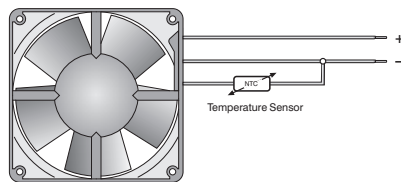
General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 66 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L _{10Δ} (40 °C) see P. 15 | Curve | Specials |
|--------------|----------|-------------------|----------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | □ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| 30°C 55°C | 612 NGMI | 18 | 10,6 | 12 | 8...12,6 | 14 | 3,5 | □ | 1,3 | 2 150 | -20...+65 | 80 000 / 45 000 | 160 000 | 1 | 2 | |
| | | 35 | 20,6 | | | 28 | 4,6 | | 1,7 | 4 100 | | | | | | |
| 30°C 55°C | 612 NMI | 16 | 9,4 | 12 | 8...12,6 | 16 | 3,6 | ■ | 1,0 | 2 400 | -20...+65 | 80 000 / 45 000 | 160 000 | 3 | 4 | |
| | | 35 | 20,6 | | | 28 | 4,6 | | 1,4 | 4 100 | | | | | | |
| 30°C 55°C | 612 NGNI | 23 | 13,5 | 12 | 8...12,6 | 18 | 3,8 | □ | 1,7 | 2 900 | -20...+65 | 70 000 / 40 000 | 142 500 | 5 | 6 | |
| | | 41 | 24,1 | | | 35 | 5,0 | | 2,4 | 5 100 | | | | | | |
| 30°C 55°C | 612 NNI | 23 | 13,5 | 12 | 8...12,6 | 18 | 3,8 | ■ | 1,2 | 2 900 | -20...+65 | 70 000 / 40 000 | 142 500 | 5 | 6 | |
| | | 41 | 24,1 | | | 35 | 5,0 | | 1,5 | 5 100 | | | | | | |
| 30°C 55°C | 612 NNV | 23 | 13,5 | 12 | 8...12,6 | 18 | 3,8 | □ | 1,7 | 2 900 | -20...+65 | 70 000 / 40 000 | 142 500 | 5 | 6 | |
| | | 41 | 24,1 | | | 35 | 5,0 | | 2,4 | 5 100 | | | | | | |

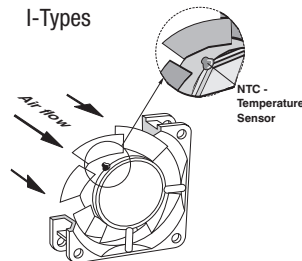


V-Types

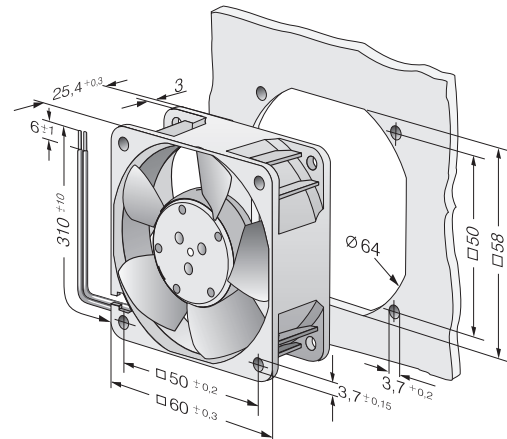


The temperature sensor for controlling the motor speed is not included in delivery.
Temperature sensor LZ 370 see accessories.

I-Types



Temperature sensor (NTC-resistor) for controlling the motor speed is positioned directly in the air flow.



max. 82 m³/h

DC axial fans

Series 600 J 60 x 60 x 32 mm



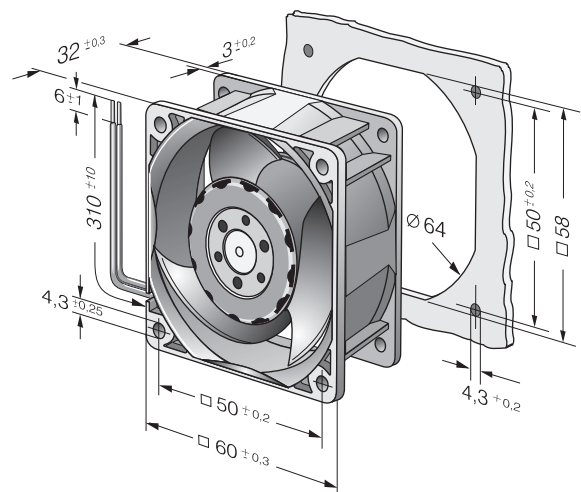
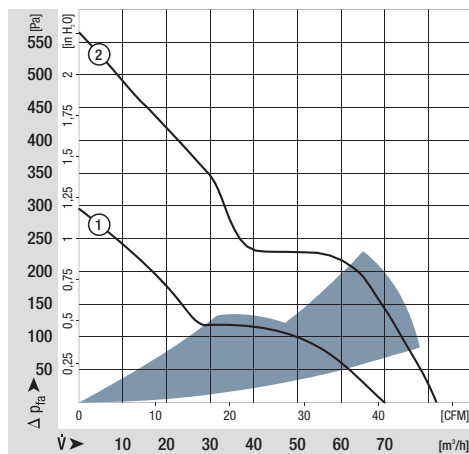
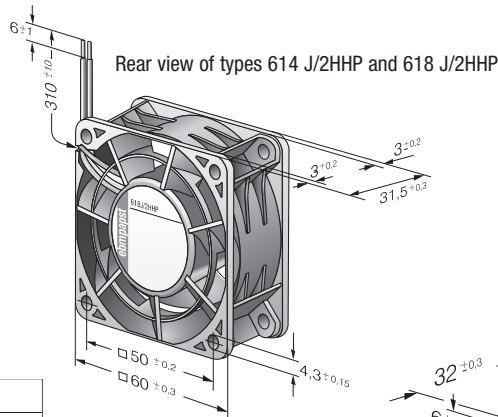
Highlights:

- Very rigid compression curve for high air flow at high back pressure.
- Innovative impeller with winglets for low noise.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 24, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation clockwise, seen on rotor.
- Mass: 100 g.

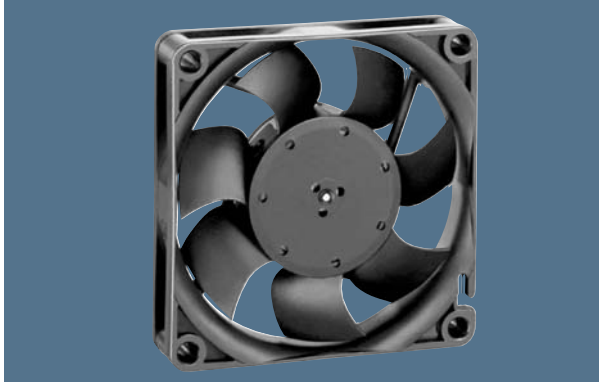
| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings | Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C), see P. 15 | Curve | Specials |
|--|------------|-------------------|----------|-----------------|---------------|----------------------|-------------------|------------------------|---------------|-------------|---------------|-------------------|--|--|---|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | □ / ■ | Watts | RPM | °C | Hours | Hours | | P. 110 | | |
| 612 JH | | 70 | 41,1 | 12 | 7...13,6 | 53 | 6,4 | ■ | 7,7 | 11 700 | -20...+70 | 57 500 / 27 500 | 115 000 | 1 | /2 | | |
| 614 JH | | 70 | 41,1 | 24 | 14...26,4 | 53 | 6,4 | ■ | 7,7 | 11 700 | -20...+70 | 57 500 / 27 500 | 115 000 | 1 | /2 | | |
| 618 JH | | 70 | 41,1 | 48 | 36...60 | 53 | 6,4 | ■ | 7,7 | 11 700 | -20...+70 | 57 500 / 27 500 | 115 000 | 1 | | | |
| Fan types with streamer and integrated guard grille. | | | | | | | | | | | | | | | | | |
| NEW | 614 J/2HHP | 82 | 48,3 | 24 | 18...30 | 62 | 7,6 | ■ | 14,6 | 15 000 | -20...+75 | 65 000 / 25 000 | 130 000 | 2 | | | |
| NEW | 618 J/2HHP | 82 | 48,3 | 48 | 38...58 | 62 | 7,6 | ■ | 14,6 | 15 000 | -20...+75 | 65 000 / 25 000 | 130 000 | 2 | | | |



max. 44 m³/h

DC axial fans

Series 700 F 70 x 70 x 15 mm



Highlights:

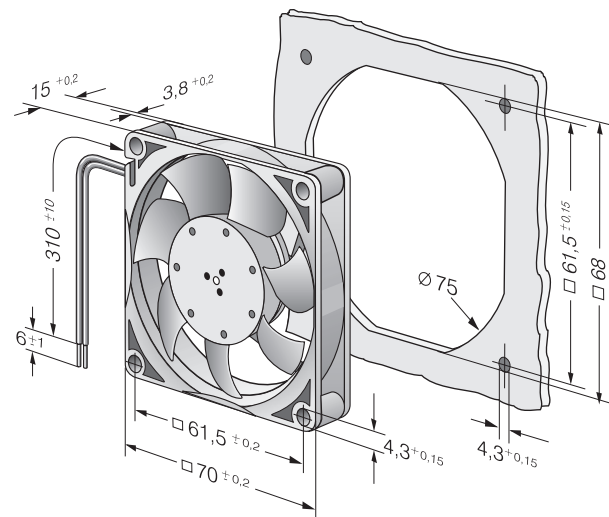
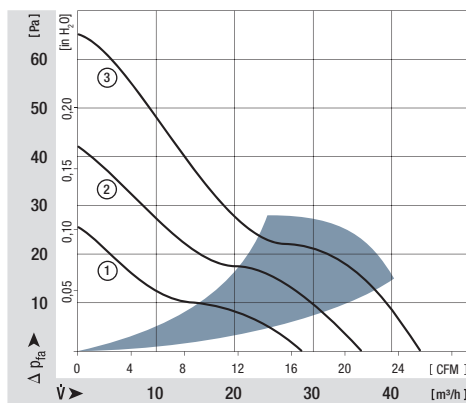
- Very rigid compression curve for high air flow at high back pressure.
- Low operating noise level at high back pressure.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 24 to AWG 28, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 53 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|---------------|-------------------|------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 712 F/2L-005* | 28 | 16,5 | 12 | 8...13,8 | 25 | 4,7 | ■ | 0,6 | 3 300 | -20...+70 | 60 000 / 30 000 | 120 000 | 120 000 | 1 | /2 |
| 712 F/2M-006* | 36 | 21,2 | 12 | 8...13,8 | 32 | 5,0 | ■ | 1,1 | 4 300 | -20...+70 | 60 000 / 30 000 | 120 000 | 120 000 | 2 | /2 |
| 712 F | 44 | 25,9 | 12 | 8...13,8 | 38 | 5,3 | ■ | 1,7 | 5 300 | -20...+70 | 60 000 / 30 000 | 120 000 | 120 000 | 3 | /2 |
| 714 F | 44 | 25,9 | 24 | 18...28 | 38 | 5,3 | ■ | 1,5 | 5 300 | -20...+70 | 60 000 / 30 000 | 120 000 | 120 000 | 3 | |

*Version with 3-pole Molex plug housing Molex Contacts 22-01-2035 08-50-0113



max. 117 m³/h

DC axial fans

Series 8450 80 x 80 x 25 mm



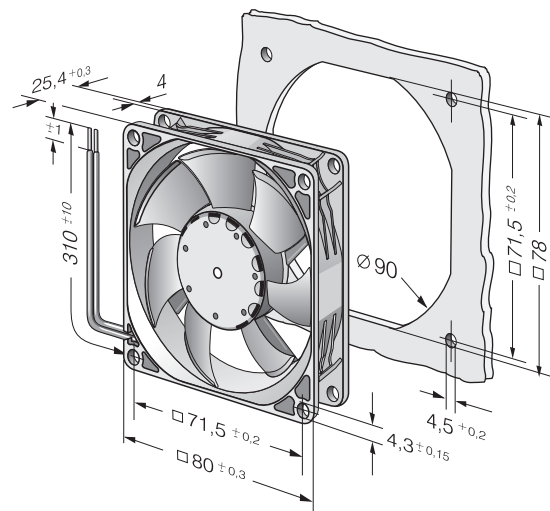
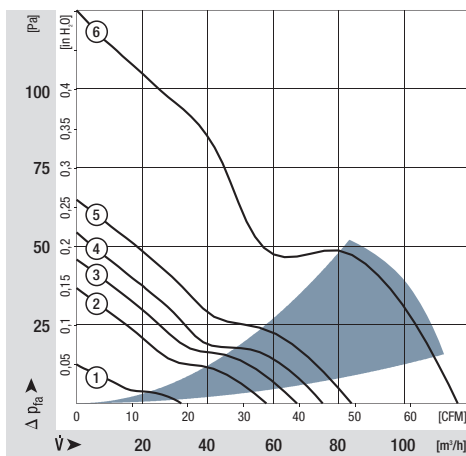
Highlights:

- Highly stable characteristic curve for high air flow at high back pressure.
- Motor with very low structure-borne noise properties.
- Innovative impeller with winglets for low noise.
- Extremely quiet Sintec sleeve bearing / ball bearing.
- Models with PWM control and open collector speed signal.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 24, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 105 g.

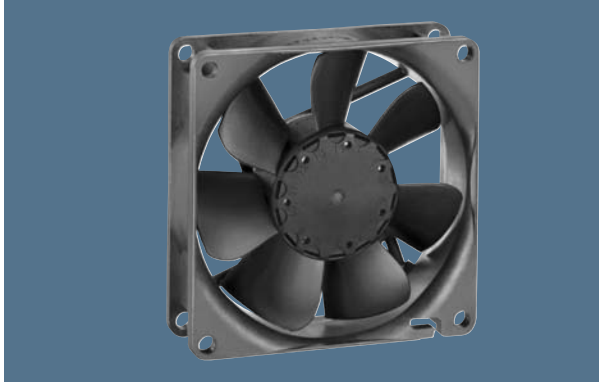
| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sintec sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L _{10Δ} (40 °C) see P. 15 | Curve | Specials |
|--|--|-------------------|----------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | □ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| 8452 GL | | 32 | 18,8 | 12 | 8...15 | 14 | 3,3 | □ | 0,4 | 1 700 | -20...75 | 80 000 / 35 000 | 160 000 | 160 000 | 1 | |
| 8452 GM | | 58 | 34,1 | 12 | 8...15 | 32 | 4,7 | □ | 1,3 | 3 100 | -20...75 | 80 000 / 35 000 | 160 000 | 160 000 | 2 | |
| 8452 GN | | 68 | 40,0 | 12 | 8...15 | 36 | 5,0 | □ | 1,8 | 3 600 | -20...70 | 70 000 / 35 000 | 140 000 | 140 000 | 3 | |
| Models with 25 kHz PWM control and speed signal to 4-wire specification (see P. 121). | | | | | | | | | | | | | | | | |
| 8452 /2 GHP | | 75 | 44,1 | 12 | 10,8...13,2 | 38 | 5,3 | □ | 2,5 | 4 000 | -20...70 | 70 000 / 35 000 | 140 000 | 140 000 | 4 | |
| 8452 /2 GHHP | | 83 | 48,8 | 12 | 10,8...13,2 | 42 | 5,5 | □ | 3,5 | 4 400 | -20...60 | 65 000 / 40 000 | 130 000 | 130 000 | 5 | |
| Models with 1-30 kHz PWM control and speed signal. | | | | | | | | | | | | | | | | |
| NEW 8452 /2 H4P | | 117 | 68,8 | 12 | 8...15 | 50 | 6,4 | ■ | 6,8 | 6 200 | -20...70 | 60 000 / 30 000 | 120 000 | 120 000 | 6 | |
| NEW 8454 /2 H4P | | 117 | 68,8 | 24 | 20,0...26,4 | 50 | 6,4 | ■ | 6,8 | 6 200 | -20...70 | 60 000 / 30 000 | 120 000 | 120 000 | 6 | |



max. 79 m³/h

DC axial fans

Series 8400 N 80 x 80 x 25 mm



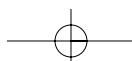
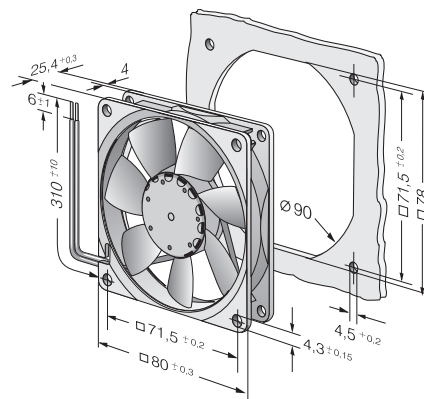
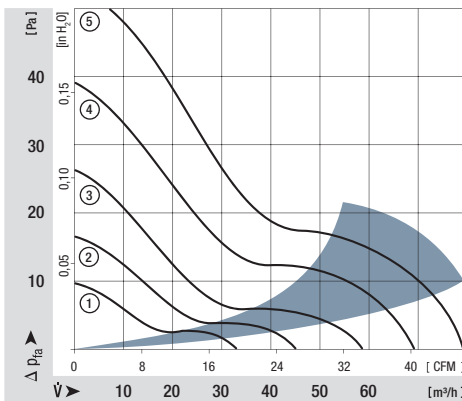
Highlights:

- Ball bearings and sleeve bearings available.
- Some models suitable for use at high ambient temperatures up to 85 °C.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 24, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 95 g.

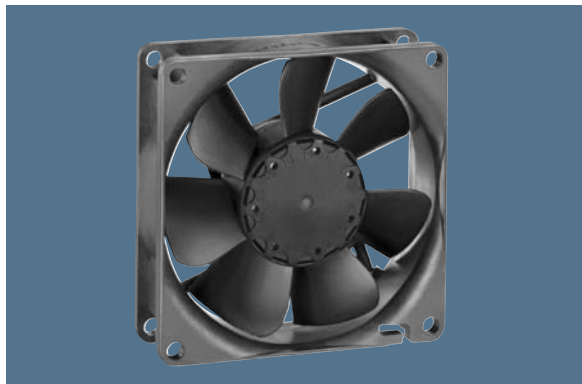
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|----------|-------------------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | Type | m ³ /h | | | | | | | | | | | | | |
| 8412 NGLE | 33 | 19,4 | 12 | 8...15 | 12 | 3,5 | ■ | 0,5 | 1 500 | -20...+85 | 80 000 / 27 500 | 160 000 | 160 000 | 1 | /2 |
| 8412 NLE | 33 | 19,4 | 12 | 8...15 | 17 | 3,7 | ■ | 0,3 | 1 500 | -20...+85 | 80 000 / 27 500 | 160 000 | 160 000 | 1 | |
| 8412 NGMLE | 45 | 26,5 | 12 | 8...15 | 19 | 3,9 | ■ | 0,9 | 2 050 | -20...+80 | 80 000 / 32 500 | 160 000 | 160 000 | 2 | |
| 8412 NMLE | 45 | 26,5 | 12 | 8...15 | 21 | 4,0 | ■ | 0,6 | 2 050 | -20...+85 | 80 000 / 27 500 | 160 000 | 160 000 | 2 | |
| 8412 NGME | 58 | 34,1 | 12 | 8...15 | 26 | 4,3 | ■ | 1,4 | 2 600 | -20...+75 | 80 000 / 35 000 | 160 000 | 160 000 | 3 | /2 |
| 8412 NME | 58 | 34,1 | 12 | 8...15 | 27 | 4,4 | ■ | 1,0 | 2 600 | -20...+75 | 80 000 / 35 000 | 160 000 | 160 000 | 3 | |
| 8412 NG | 69 | 40,6 | 12 | 8...15 | 32 | 4,7 | ■ | 2,0 | 3 100 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 4 | /2 |
| 8412 N | 69 | 40,6 | 12 | 8...15 | 32 | 4,7 | ■ | 2,0 | 3 100 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 4 | /2 |
| 8412 NH | 79 | 46,5 | 12 | 8...13,2 | 37 | 5,0 | ■ | 2,2 | 3 600 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 5 | /2/12 |
| 8412 NH-217 | 79 | 46,5 | 12 | 8...15 | 37 | 5,0 | ■ | 2,4 | 3 600 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 5 | |
| 8414 NGL | 33 | 19,4 | 24 | 18...28 | 12 | 3,5 | ■ | 0,7 | 1 500 | -20...+70 | 80 000 / 40 000 | 160 000 | 160 000 | 1 | /2 |
| 8414 NL | 33 | 19,4 | 24 | 18...28 | 17 | 3,7 | ■ | 0,7 | 1 500 | -20...+70 | 80 000 / 40 000 | 160 000 | 160 000 | 1 | |
| 8414 NGML | 45 | 26,5 | 24 | 18...28 | 19 | 3,9 | ■ | 1,1 | 2 050 | -20...+70 | 80 000 / 40 000 | 160 000 | 160 000 | 2 | |
| 8414 NML | 45 | 26,5 | 24 | 18...28 | 21 | 4,0 | ■ | 1,1 | 2 050 | -20...+70 | 80 000 / 40 000 | 160 000 | 160 000 | 2 | |
| 8414 NGM | 58 | 34,1 | 24 | 18...28 | 26 | 4,3 | ■ | 1,4 | 2 600 | -20...+70 | 80 000 / 40 000 | 160 000 | 160 000 | 3 | /2 |
| 8414 NM | 58 | 34,1 | 24 | 18...28 | 27 | 4,4 | ■ | 1,4 | 2 600 | -20...+70 | 80 000 / 40 000 | 160 000 | 160 000 | 3 | |
| 8414 NG | 69 | 40,6 | 24 | 18...28 | 32 | 4,7 | ■ | 2,0 | 3 100 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 4 | /2 |
| 8414 N | 69 | 40,6 | 24 | 18...28 | 32 | 4,7 | ■ | 2,0 | 3 100 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 4 | /2 |
| 8414 NH | 79 | 46,5 | 24 | 18...26 | 37 | 5,0 | ■ | 2,4 | 3 600 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 5 | /2 |
| 8414 NH-221 | 79 | 46,5 | 24 | 18...28 | 37 | 5,0 | ■ | 2,4 | 3 600 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 5 | |
| 8418 N | 69 | 40,6 | 48 | 36...56 | 32 | 4,7 | ■ | 2,0 | 3 100 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 4 | |



max. 58 m³/h

DC axial fans

Series 8400 N VARIOFAN 80 x 80 x 25 mm



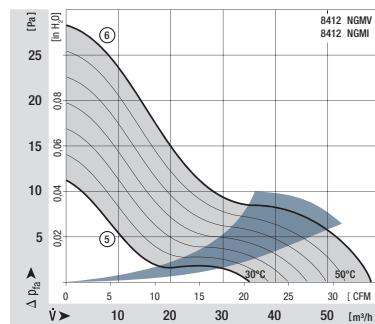
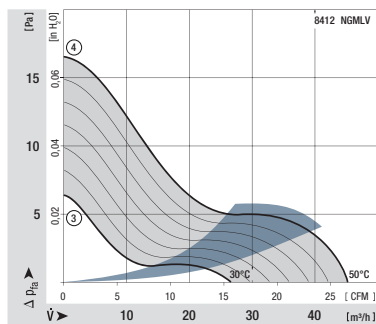
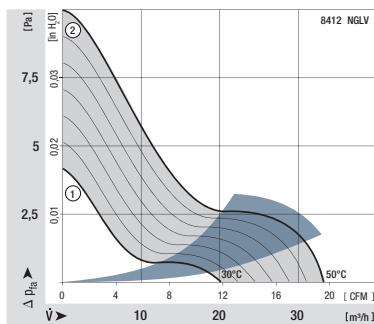
Highlights:

- Open loop speed control by means of (external or internal) temperature sensor.
- Automatic speed adjustment according to cooling requirements.

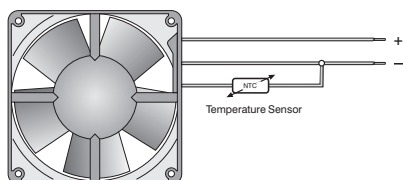
General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 24, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 95 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings | Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|------------|-------------------|----------|-----------------|---------------|----------------------|-------------------|------------------------|---------------|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | □ / ■ | Watts | RPM | °C | Hours | Hours | Hours | P. 117 | | |
| 30°C 50°C | 8412 NGLV | 20 | 11,8 | 12 | 10...14 | < 10 | < 3 | □ | 0,9 | 900 | -20...+70 | 80 000 / 40 000 | 160 000 | 1 | 2 | | |
| | | 33 | 19,4 | | | 12 | 3,5 | | 1,1 | 1 500 | | | | | | | |
| 30°C 50°C | 8412 NGMLV | 27 | 15,9 | 12 | 8...14 | < 10 | 3,0 | □ | 1,1 | 1 200 | -20...+70 | 80 000 / 40 000 | 160 000 | 3 | 4 | /37 | |
| | | 45 | 26,6 | | | 19 | 3,9 | | 1,5 | 2 050 | | | | | | | |
| 30°C 50°C | 8412 NGMI | 35 | 20,6 | 12 | 8...14 | < 13 | 3,5 | □ | 1,4 | 1 600 | -20...+70 | 80 000 / 35 000 | 125 000 | 5 | 6 | | |
| | | 58 | 34,1 | | | 26 | 4,3 | | 2,0 | 2 600 | | | | | | | |

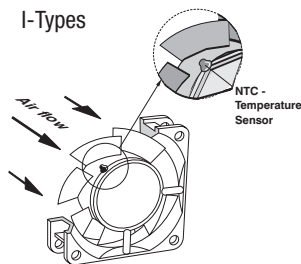


V-Types

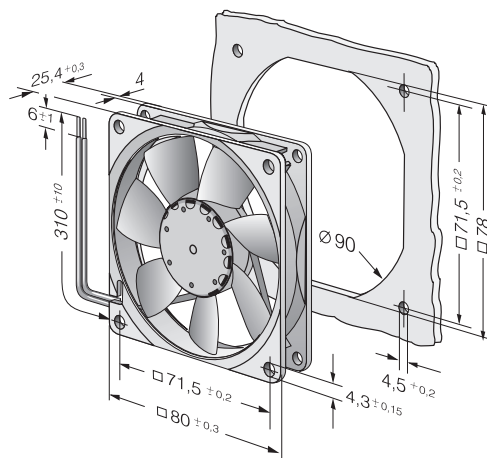


The temperature sensor for controlling the motor speed is not included in delivery. Temperature sensor LZ 370 see accessories.

I-Types



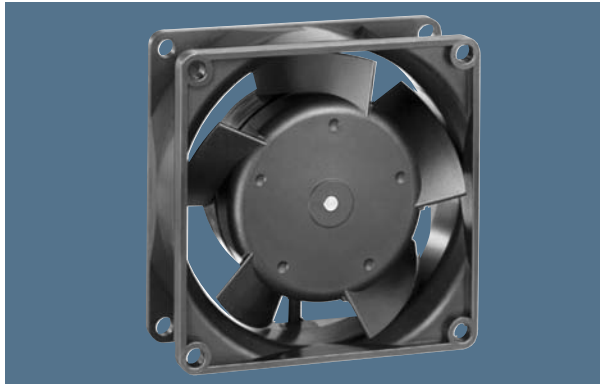
Temperature sensor (NTC-resistor) for controlling the motor speed is positioned directly in the air flow.



max. 80 m³/h

DC axial fans

Series 8300 80 x 80 x 32 mm



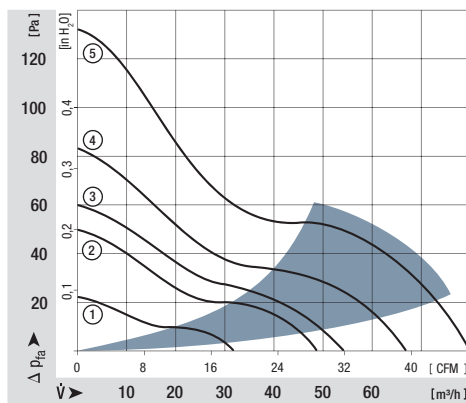
Highlights:

- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.

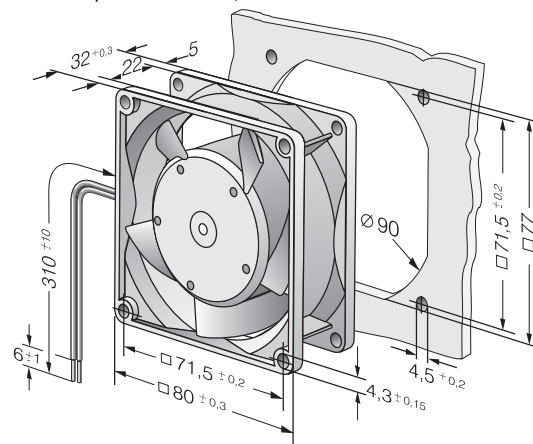
General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 170 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|----------|-------------------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | Type | m ³ /h | | | | | | | | | | | | | |
| 8312 L | 32 | 18,8 | 12 | 6...15 | 24 | 4,0 | ■ | 1,2 | 2 000 | -20...+75 | 80 000 / 32 500 | 160 000 | 1 | | |
| 8312 M | 48 | 28,3 | 12 | 6...15 | 34 | 5,0 | ■ | 2,2 | 3 000 | -20...+75 | 70 000 / 27 500 | 140 000 | 2 | | |
| 8312 | 54 | 31,8 | 12 | 6...15 | 36 | 5,2 | ■ | 2,6 | 3 300 | -20...+75 | 70 000 / 27 500 | 140 000 | 3 | | |
| 8312 HL | 67 | 39,4 | 12 | 6...15 | 43 | 5,8 | ■ | 4,0 | 4 200 | -20...+75 | 62 500 / 25 000 | 125 000 | 4 | /2 | |
| 8312 H | 80 | 47,1 | 12 | 6...12,6 | 48 | 6,2 | ■ | 6,5 | 5 000 | -20...+60 | 55 000 / 35 000 | 110 000 | 5 | | |
| 8314 L | 32 | 18,8 | 24 | 12...31,5 | 24 | 4,0 | ■ | 1,0 | 2 000 | -20...+75 | 80 000 / 32 500 | 160 000 | 1 | | |
| 8314 M | 48 | 28,3 | 24 | 12...31,5 | 34 | 5,0 | ■ | 2,3 | 3 000 | -20...+75 | 70 000 / 27 500 | 140 000 | 2 | | |
| 8314 | 54 | 31,8 | 24 | 12...31,5 | 36 | 5,2 | ■ | 2,7 | 3 300 | -20...+75 | 70 000 / 27 500 | 140 000 | 3 | /2 | |
| 8314 HL | 67 | 39,4 | 24 | 12...31,5 | 43 | 5,8 | ■ | 4,3 | 4 200 | -20...+75 | 62 500 / 25 000 | 125 000 | 4 | /2 | |
| 8314 H | 80 | 47,1 | 24 | 12...28 | 48 | 6,2 | ■ | 6,0 | 5 000 | -20...+75 | 55 000 / 22 500 | 100 000 | 5 | /2/19 | |
| 8318 | 54 | 31,8 | 48 | 36...56 | 36 | 5,2 | ■ | 2,6 | 3 300 | -20...+75 | 70 000 / 27 500 | 140 000 | 3 | /2/17 | |
| 8318 HL | 67 | 39,4 | 48 | 36...56 | 43 | 5,8 | ■ | 4,3 | 4 200 | -20...+75 | 62 500 / 25 000 | 125 000 | 4 | | |
| 8318 H | 80 | 47,1 | 48 | 36...56 | 48 | 6,2 | ■ | 5,8 | 5 000 | -20...+65 | 55 000 / 30 000 | 100 000 | 5 | /17 | |



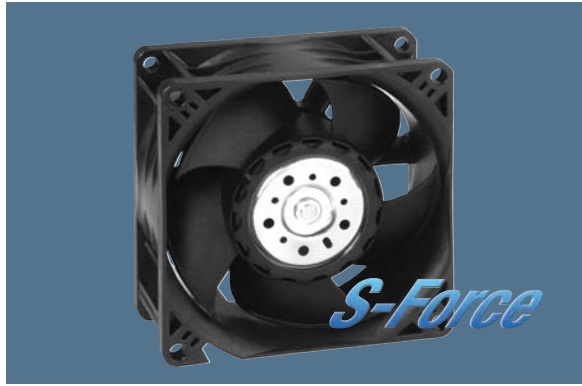
Rotor protrusion max. 0,4 mm.



max. 222 m³/h

DC axial fans

Series 8200 J 80 x 80 x 38 mm



Highlights:

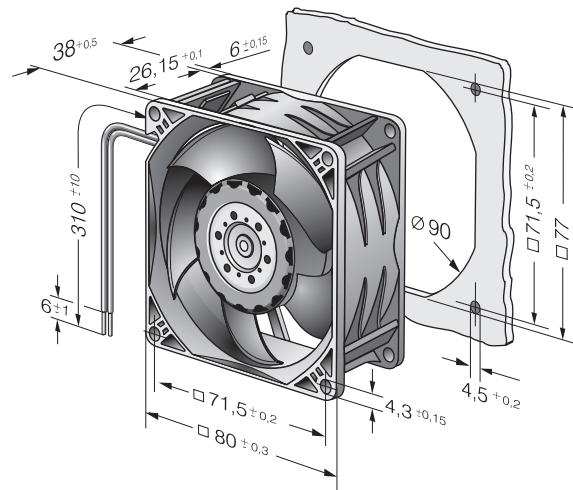
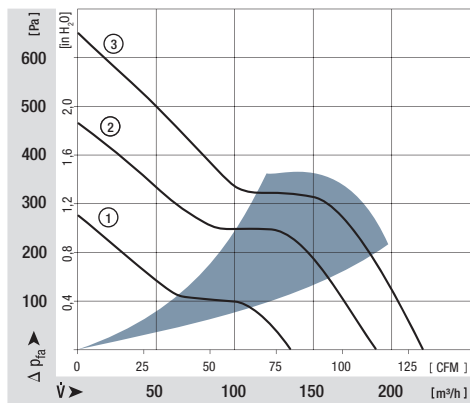
- Very rigid compression curve for high air flow at high back pressure.
- Innovative impeller with winglets for low noise.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation. Protected against reverse polarity and locking.
- Connection via single strands AWG 24 (H3 and H4: AWG 22), TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 160 g (H3 and H4: 200 g).

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (τ _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|-------------------------|----------|-------------------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | Type | m ³ /h | | | | | | | | | | | | | |
| 8212 JN | | 132 | 77,7 | 12 | 7...13,8 | 55 | 6,6 | ■ | 10 | 8400 | -20...+70 | 62 500 / 32 500 | 130 000 | 1 | /2 |
| 8212 JH3 <i>S-Force</i> | | 190 | 111,8 | 12 | 6...13,8 | 66 | 7,3 | ■ | 25 | 12 000 | -20...+70 | 55 000 / 27 500 | 110 000 | 2 | /2 |
| 8212 JH4 <i>S-Force</i> | | 222 | 130,7 | 12 | 6...13,8 | 71 | 7,8 | ■ | 39 | 14 000 | -20...+70 | 50 000 / 25 000 | 100 000 | 3 | /2 |
| 8214 JN | | 132 | 77,7 | 24 | 18...26,4 | 55 | 6,6 | ■ | 10 | 8400 | -20...+70 | 62 500 / 32 500 | 130 000 | 1 | /2 |
| 8214 JH3 <i>S-Force</i> | | 190 | 111,8 | 24 | 12...27,6 | 66 | 7,3 | ■ | 25 | 12 000 | -20...+70 | 55 000 / 27 500 | 110 000 | 2 | /2 |
| 8214 JH4 <i>S-Force</i> | | 222 | 130,7 | 24 | 12...27,6 | 71 | 7,8 | ■ | 38 | 14 000 | -20...+70 | 50 000 / 25 000 | 100 000 | 3 | /2 |
| 8218 JN | | 132 | 77,7 | 48 | 36...53 | 55 | 6,6 | ■ | 11 | 8400 | -20...+70 | 62 500 / 32 500 | 130 000 | 1 | /2 |
| 8218 JH3 <i>S-Force</i> | | 190 | 111,8 | 48 | 20...58 | 66 | 7,3 | ■ | 25 | 12 000 | -20...+70 | 55 000 / 27 500 | 110 000 | 2 | /2 |
| 8218 JH4 <i>S-Force</i> | | 222 | 130,7 | 48 | 20...58 | 71 | 7,8 | ■ | 36 | 14 000 | -20...+70 | 50 000 / 25 000 | 100 000 | 3 | /2 |

8200 JH3 and JH4 also as standard with PWM control input and speed signal.
Speed control range from 2000 RPM up to maximum nominal speed. Stationary at 0 % PWM, maximum speed at sensor break.



max. 102 m³/h

DC axial fans

Series 3400 N 92 x 92 x 25 mm



Highlights:

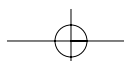
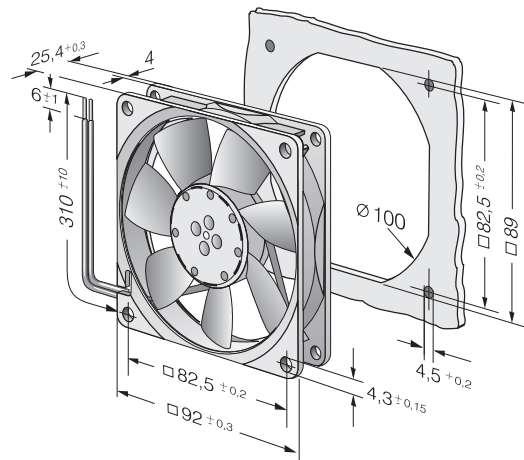
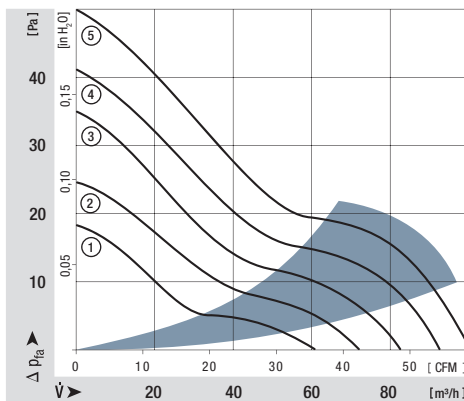
- Ball bearings and sleeve bearings available.
- Some models suitable for use at high ambient temperatures up to 85 °C.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 24, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 100 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinterc sleeve bearings | | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|---------------|-------------------|------|-----------------|---------------|----------------------|-------------------|-------------------------|-----|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | VDC | VDC | | | | | | | | |
| 3412 NGL | 61 | 35,9 | 12 | 8...15 | 23 | 4,0 | □ | ■ | 1,1 | 1 950 | -20...+80 | 80 000 / 30 000 | 160 000 | 1 | | |
| 3412 NLE | 61 | 35,9 | 12 | 8...15 | 23 | 4,0 | ■ | ■ | 0,8 | 1 950 | -20...+85 | 80 000 / 27 500 | 160 000 | 1 | | |
| 3412 NGME | 72 | 42,4 | 12 | 8...15 | 28 | 4,3 | □ | ■ | 1,6 | 2 300 | -20...+75 | 75 000 / 32 500 | 150 000 | 2 | | |
| 3412 NME | 72 | 42,4 | 12 | 8...15 | 28 | 4,3 | ■ | ■ | 1,1 | 2 300 | -20...+75 | 75 000 / 32 500 | 150 000 | 2 | /2 | |
| 3412 NG | 84 | 49,4 | 12 | 8...15 | 32 | 4,7 | □ | ■ | 2,2 | 2 700 | -20...+70 | 70 000 / 35 000 | 140 000 | 3 | /2 | |
| 3412 N | 84 | 49,4 | 12 | 8...15 | 32 | 4,7 | ■ | ■ | 2,2 | 2 700 | -20...+70 | 70 000 / 35 000 | 140 000 | 3 | /2 | |
| 3412 NGH | 94 | 55,3 | 12 | 8...15 | 36 | 5,0 | □ | ■ | 2,5 | 3 000 | -20...+70 | 70 000 / 35 000 | 140 000 | 4 | | |
| 3412 NH | 94 | 55,3 | 12 | 8...15 | 36 | 5,0 | ■ | ■ | 2,5 | 3 000 | -20...+70 | 70 000 / 35 000 | 140 000 | 4 | /39 | |
| 3412 NGHH | 102 | 60,0 | 12 | 8...13,2 | 39 | 5,1 | □ | ■ | 3,2 | 3 250 | -20...+60 | 70 000 / 45 000 | 150 000 | 5 | /2 | |
| 3412 NHH | 102 | 60,0 | 12 | 8...13,2 | 39 | 5,1 | ■ | ■ | 2,9 | 3 250 | -20...+60 | 70 000 / 45 000 | 150 000 | 5 | /2 | |
| 3412 NHH-379 | 102 | 60,0 | 12 | 8...15 | 39 | 5,1 | ■ | ■ | 2,7 | 3 250 | -20...+70 | 70 000 / 35 000 | 140 000 | 5 | | |
| 3414 NGL | 61 | 35,9 | 24 | 18...28 | 23 | 4,0 | □ | ■ | 1,4 | 1 950 | -20...+70 | 80 000 / 40 000 | 160 000 | 1 | | |
| 3414 NL | 61 | 35,9 | 24 | 18...28 | 23 | 4,0 | ■ | ■ | 1,4 | 1 950 | -20...+70 | 80 000 / 40 000 | 160 000 | 1 | | |
| 3414 NGM | 72 | 42,4 | 24 | 18...28 | 28 | 4,3 | □ | ■ | 1,8 | 2 300 | -20...+70 | 75 000 / 37 500 | 150 000 | 2 | | |
| 3414 NM | 72 | 42,4 | 24 | 18...28 | 28 | 4,3 | ■ | ■ | 1,8 | 2 300 | -20...+70 | 75 000 / 37 500 | 150 000 | 2 | | |
| 3414 NG | 84 | 49,4 | 24 | 18...28 | 32 | 4,7 | □ | ■ | 2,3 | 2 700 | -20...+70 | 70 000 / 35 000 | 140 000 | 3 | | |
| 3414 N | 84 | 49,4 | 24 | 18...28 | 32 | 4,7 | ■ | ■ | 2,3 | 2 700 | -20...+70 | 70 000 / 35 000 | 140 000 | 3 | /2 | |
| 3414 NGH | 94 | 55,3 | 24 | 18...26 | 36 | 5,0 | □ | ■ | 3,0 | 3 000 | -20...+70 | 70 000 / 35 000 | 140 000 | 4 | /2 | |
| 3414 NH | 94 | 55,3 | 24 | 18...26 | 36 | 5,0 | ■ | ■ | 3,0 | 3 000 | -20...+70 | 70 000 / 35 000 | 140 000 | 4 | | |
| 3414 NGHH | 102 | 60,0 | 24 | 18...26 | 39 | 5,1 | □ | ■ | 3,2 | 3 250 | -20...+70 | 70 000 / 35 000 | 140 000 | 5 | /2 | |
| 3414 NGHH-389 | 102 | 60,0 | 24 | 18...28 | 39 | 5,1 | □ | ■ | 3,2 | 3 250 | -20...+70 | 70 000 / 35 000 | 140 000 | 5 | | |
| 3414 NHH | 102 | 60,0 | 24 | 18...26 | 39 | 5,1 | ■ | ■ | 2,7 | 3 250 | -20...+70 | 70 000 / 35 000 | 140 000 | 5 | /39 | |
| 3414 NHH-386 | 102 | 60,0 | 24 | 18...28 | 39 | 5,1 | ■ | ■ | 2,7 | 3 250 | -20...+70 | 70 000 / 35 000 | 140 000 | 5 | | |
| 3418 N | 84 | 49,4 | 48 | 36...56 | 32 | 4,7 | ■ | ■ | 2,4 | 2 700 | -20...+70 | 70 000 / 35 000 | 140 000 | 3 | | |

Other 48 VDC models on request.



max. 84 m³/h

DC axial fans

Series 3400 N VARIOFAN 92 x 92 x 25 mm



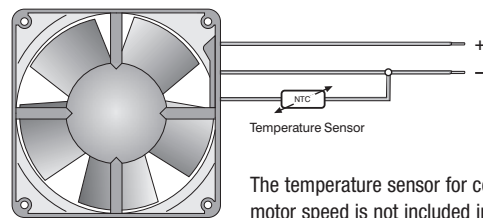
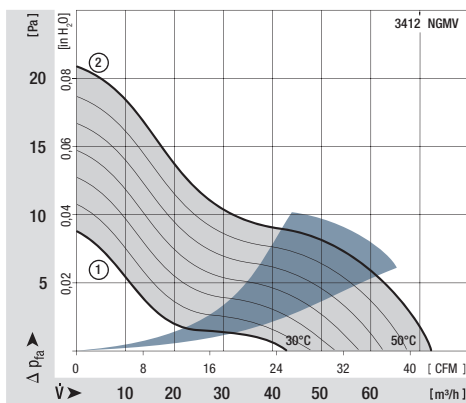
Highlights:

- Open loop speed control by means of external or internal temperature sensor.
- Automatic speed adjustment according to cooling requirements.

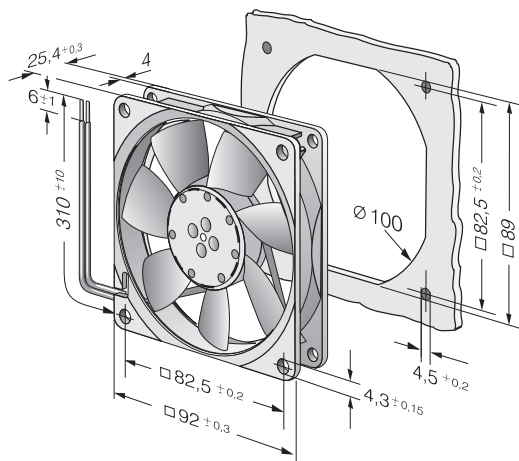
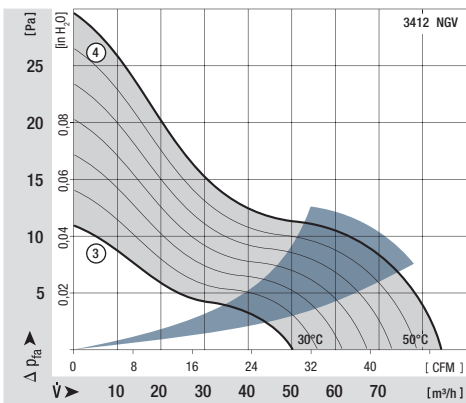
General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 24, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 100 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-----------|-------------------|----------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | □ / ■ | Watts | RPM | °C | Hours | Hours | | | P. 117 |
| 30°C 50°C | 3412 NGMV | 44 | 25,9 | 12 | 8...14 | 14 | 3,5 | □ | 1,5 | 1 400 | -20...+70 | 75 000 / 37 500 | 142 500 | | 1 | |
| | | 72 | 42,4 | | | 28 | 4,3 | | 2,0 | 2 300 | | | | | | |
| 30°C 50°C | 3412 NGV | 50 | 29,4 | 12 | 8...12,6 | 16 | 3,7 | □ | 1,6 | 1 600 | -20...+70 | 75 000 / 37 500 | 142 500 | | 3 | /37 |
| | | 84 | 49,4 | | | 32 | 4,7 | | 2,5 | 2 700 | | | | | | |



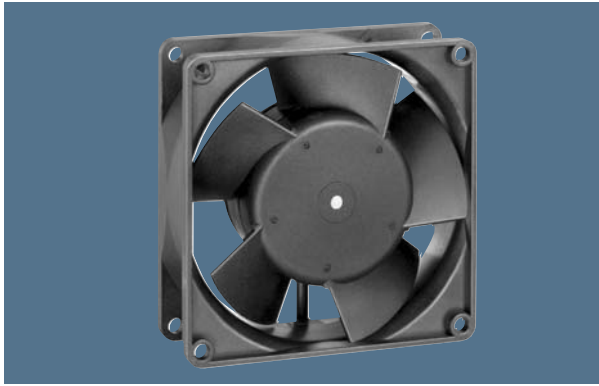
The temperature sensor for controlling the motor speed is not included in delivery. Temperature sensor LZ 370 see accessories.



max. 107 m³/h

DC axial fans

Series 3300 92 x 92 x 32 mm



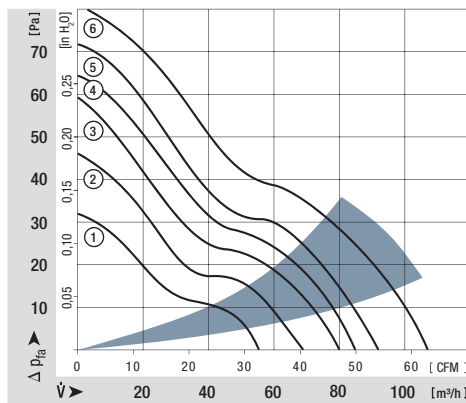
Highlights:

- Ball bearings and sleeve bearings available.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.

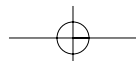
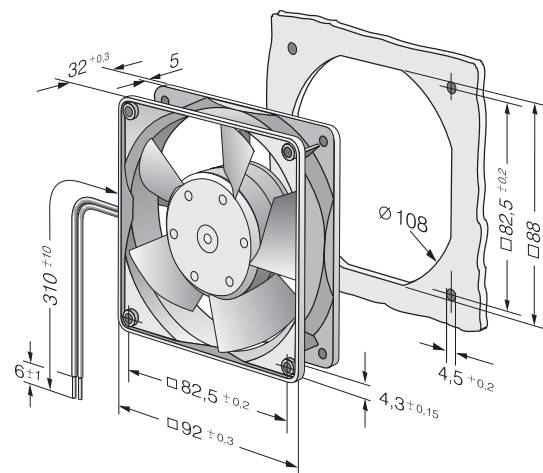
General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 190 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-------------------|------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 3312 L | 56 | 33,0 | 12 | 6...15 | 29 | 4,5 | ■ | 1,4 | 2 150 | -20...+75 | 80 000 / 35 000 | 147 500 | 1 | | |
| 3312 GM | 68 | 40,0 | 12 | 6...15 | 34 | 4,8 | □ | 1,7 | 2 600 | -20...+75 | 70 000 / 30 000 | 135 000 | 2 | | |
| 3312 M | 68 | 40,0 | 12 | 6...15 | 34 | 4,8 | ■ | 1,7 | 2 600 | -20...+75 | 70 000 / 30 000 | 135 000 | 2 | | |
| 3312 | 80 | 47,1 | 12 | 6...15 | 37 | 5,2 | ■ | 2,4 | 3 000 | -20...+75 | 70 000 / 30 000 | 135 000 | 3 | /2 | |
| 3312-177 | 93 | 54,7 | 12 | 6...15 | 43 | 5,7 | ■ | 3,5 | 3 500 | -20...+75 | 65 000 / 27 500 | 122 500 | 5 | | |
| 3314 G | 80 | 47,1 | 24 | 12...28 | 37 | 5,2 | □ | 2,6 | 3 000 | -20...+75 | 70 000 / 30 000 | 135 000 | 3 | | |
| 3314 | 80 | 47,1 | 24 | 12...28 | 37 | 5,2 | ■ | 2,6 | 3 000 | -20...+75 | 70 000 / 30 000 | 135 000 | 3 | /17 | |
| 3314-140 | 85 | 50,0 | 24 | 12...28 | 40 | 5,4 | ■ | 3,0 | 3 200 | -20...+75 | 70 000 / 30 000 | 135 000 | 4 | | |
| 3314 H | 107 | 63,0 | 24 | 12...28 | 47 | 6,0 | ■ | 5,3 | 4 000 | -20...+75 | 57 500 / 25 000 | 112 500 | 6 | /2 | |
| 3318 | 80 | 47,1 | 48 | 36...56 | 37 | 5,2 | ■ | 2,7 | 3 000 | -20...+75 | 70 000 / 30 000 | 135 000 | 3 | /2 | |
| 3318 H | 107 | 63,0 | 48 | 36...56 | 47 | 6,0 | ■ | 4,3 | 4 000 | -20...+60 | 57 500 / 35 000 | 112 500 | 6 | /2/17 | |



Rotor protrusion max. 0,4 mm.



max. 280 m³/h

DC axial fans

Series 3200 J 92 x 92 x 38 mm



Highlights:

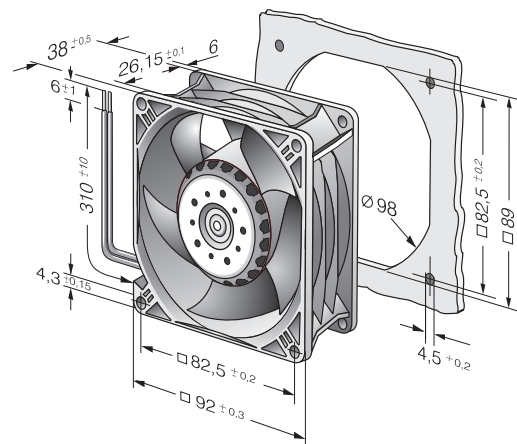
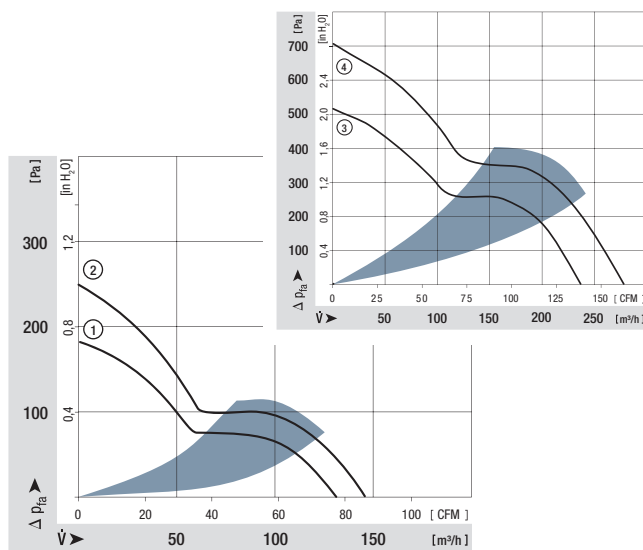
- Very rigid compression curve for high air flow at high back pressure.
- Innovative impeller with winglets for low noise.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation. Protected against reverse polarity and locking.
- Connection via single strands AWG 24 (H3 and H4: AWG 22), TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation clockwise, seen on rotor.
- Mass: 240 g (H3 and H4: 280 g).

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see p. 15 | Curve | Specials |
|-------------------------|----------|-------------------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | Type | m ³ /h | | | | | | | | | | | | | |
| 3212 JN | | 130 | 76,5 | 12 | 7...13,8 | 51 | 6,1 | ■ | 7,5 | 6 000 | -20 ...+70 | 70 000 / 35 000 | 140 000 | 1 | /2 |
| 3212 JH | | 146 | 86,0 | 12 | 7...15 | 55 | 6,4 | ■ | 9,0 | 6 800 | -20 ...+70 | 70 000 / 35 000 | 140 000 | 2 | /2 |
| 3212 JH3 <i>S-Force</i> | | 237 | 139,5 | 12 | 6...13,8 | 69 | 7,8 | ■ | 30,0 | 11 000 | -20 ...+70 | 65 000 / 32 500 | 130 000 | 3 | /2 |
| 3212 JH4 <i>S-Force</i> | | 280 | 164,8 | 12 | 6...13,8 | 73 | 8,2 | ■ | 50,0 | 13 000 | -20 ...+70 | 60 000 / 30 000 | 120 000 | 4 | /2 |
| 3214 JN | | 130 | 76,5 | 24 | 11...28 | 51 | 6,1 | ■ | 8,0 | 6 000 | -20 ...+70 | 70 000 / 35 000 | 140 000 | 1 | |
| 3214 JH | | 146 | 86,0 | 24 | 11...30 | 55 | 6,4 | ■ | 9,0 | 6 800 | -20 ...+70 | 70 000 / 35 000 | 140 000 | 2 | /2 |
| 3214 JH3 <i>S-Force</i> | | 237 | 139,5 | 24 | 12...27,6 | 69 | 7,8 | ■ | 30,0 | 11 000 | -20 ...+70 | 65 000 / 32 500 | 130 000 | 3 | /2 |
| 3214 JH4 <i>S-Force</i> | | 280 | 164,8 | 24 | 12...27,6 | 73 | 8,2 | ■ | 50,0 | 13 000 | -20 ...+70 | 60 000 / 30 000 | 120 000 | 4 | |
| 3218 JN | | 130 | 76,5 | 48 | 36...56 | 51 | 6,1 | ■ | 7,0 | 6 000 | -20 ...+70 | 70 000 / 35 000 | 140 000 | 1 | |
| 3218 JH | | 146 | 86,0 | 48 | 36...53 | 55 | 6,4 | ■ | 9,5 | 6 800 | -20 ...+70 | 70 000 / 35 000 | 140 000 | 2 | |
| 3218 JH3 <i>S-Force</i> | | 237 | 139,5 | 48 | 20...58,0 | 69 | 7,8 | ■ | 30,0 | 11 000 | -20 ...+70 | 65 000 / 32 500 | 130 000 | 3 | /2 |
| 3218 JH4 <i>S-Force</i> | | 280 | 164,8 | 48 | 20...58,0 | 73 | 8,2 | ■ | 50,0 | 13 000 | -20 ...+70 | 60 000 / 30 000 | 120 000 | 4 | |

3200 JH3 and JH4 also as standard with PWM control input and speed signal.
Speed control range from 2000 RPM up to maximum nominal speed. Stationary at 0 % PWM, maximum speed at sensor break.



max. 170 m³/h

DC axial fans

Series 4400 F 119 x 119 x 25 mm



Highlights:

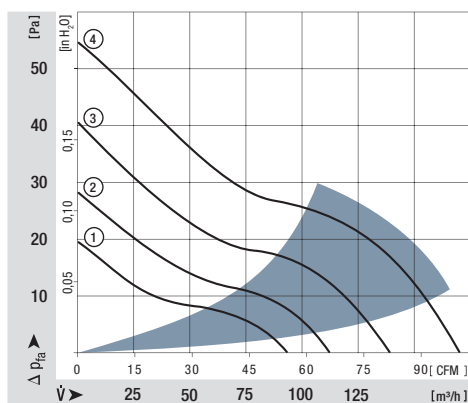
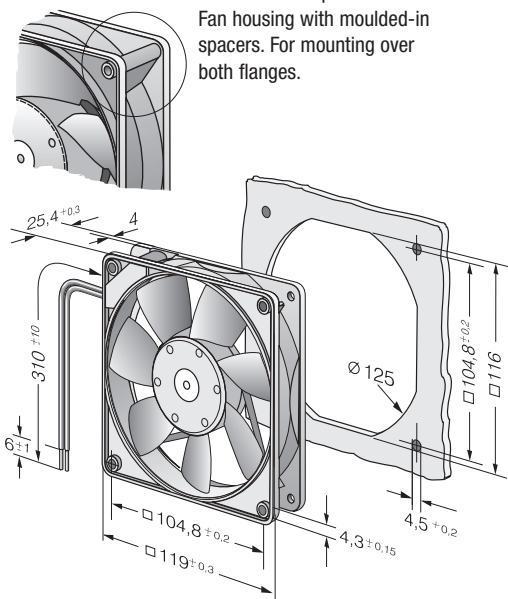
- Ball bearings and sleeve bearings available.
- Open loop speed control available on request.
- Alarm and speed signals available on request.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 24, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 175 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see p. 15 | Curve | Specials |
|--------------|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|--------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 4412 FGL | 94 | 55,3 | 12 | 7...14 | 26 | 3,9 | □ | 1,3 | 1 600 | -20...+75 | 80 000 / 35 000 | 157 500 | 1 | /2/39 | |
| 4412 FGML | 114 | 67,1 | 12 | 7...12,6 | 32 | 4,3 | □ | 2,0 | 1 950 | -20...+75 | 75 000 / 32 500 | 145 000 | 2 | /2 | |
| 4412 FML | 114 | 67,1 | 12 | 7...12,6 | 32 | 4,3 | ■ | 2,0 | 1 950 | -20...+75 | 75 000 / 32 500 | 145 000 | 2 | | |
| 4412 FGM | 140 | 82,4 | 12 | 7...12,6 | 38 | 4,8 | □ | 3,2 | 2 400 | -20...+75 | 70 000 / 30 000 | 135 000 | 3 | /12/39 | |
| 4412 FM | 140 | 82,4 | 12 | 7...12,6 | 38 | 4,8 | ■ | 3,2 | 2 400 | -20...+75 | 70 000 / 30 000 | 135 000 | 3 | /2 | |
| 4412 FG | 170 | 100,1 | 12 | 8...12,6 | 43 | 5,3 | □ | 5,3 | 2 900 | -20...+60 | 60 000 / 37 500 | 120 000 | 4 | | |
| 4412 F | 170 | 100,1 | 12 | 8...12,6 | 43 | 5,3 | ■ | 5,3 | 2 900 | -20...+60 | 60 000 / 37 500 | 120 000 | 4 | /2 | |
| 4414 FL | 94 | 55,3 | 24 | 18...28 | 26 | 3,9 | ■ | 1,0 | 1 600 | -20...+75 | 80 000 / 35 000 | 157 500 | 1 | /2 | |
| 4414 FM | 140 | 82,4 | 24 | 12...28 | 38 | 4,8 | ■ | 3,2 | 2 400 | -20...+75 | 70 000 / 30 000 | 135 000 | 3 | /2 | |
| 4414 FG | 170 | 100,1 | 24 | 12...28 | 43 | 5,3 | □ | 5,0 | 2 900 | -20...+60 | 60 000 / 37 500 | 120 000 | 4 | /2 | |
| 4414 F | 170 | 100,1 | 24 | 12...28 | 43 | 5,3 | ■ | 5,0 | 2 900 | -20...+60 | 60 000 / 37 500 | 120 000 | 4 | /2/39 | |
| 4418 FG | 170 | 100,1 | 48 | 28...53 | 43 | 5,3 | □ | 5,5 | 2 900 | -20...+60 | 60 000 / 37 500 | 120 000 | 4 | | |
| 4418 F | 170 | 100,1 | 48 | 28...53 | 43 | 5,3 | ■ | 5,5 | 2 900 | -20...+60 | 60 000 / 37 500 | 120 000 | 4 | /2/12 | |

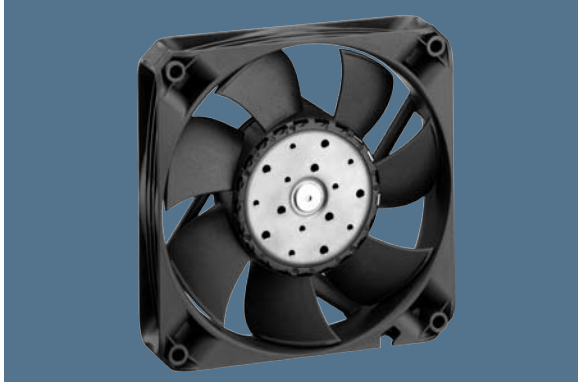
Available on request:
Fan housing with moulded-in
spacers. For mounting over
both flanges.



max. 225 m³/h

DC axial fans

Series 4400 FN 119 x 119 x 25 mm



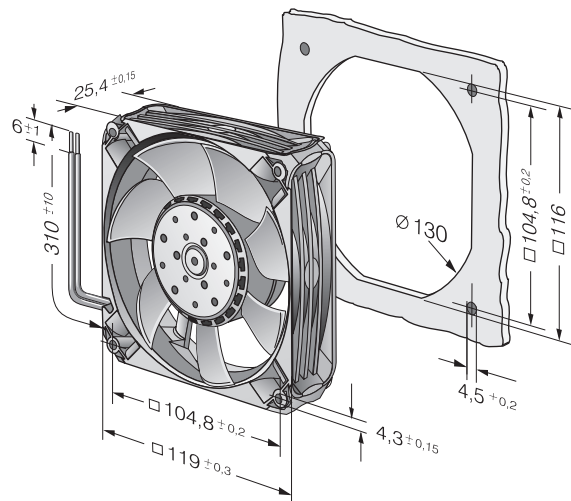
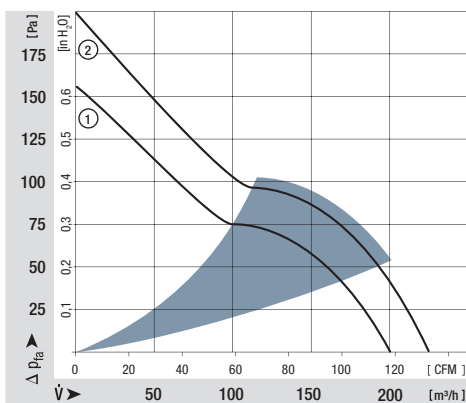
Highlights:

- Very rigid compression curve for high air flow at high back pressure.
- Innovative impeller with winglets for low noise.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 240 g.

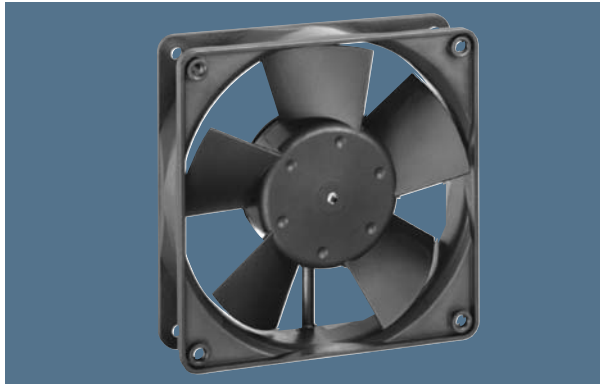
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|----------|-------------------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | Type | m ³ /h | | | | | | | | | | | | | |
| 4412 FNH | 225 | 132,4 | 12 | 7...13,2 | 55 | 6,7 | ■ | 12 | 5 400 | -20...+70 | 60 000 / 30 000 | 120 000 | 2 | /2 | |
| 4414 FNN | 200 | 117,7 | 24 | 14...28 | 52 | 6,5 | ■ | 8,5 | 4 850 | -20...+70 | 60 000 / 30 000 | 120 000 | 1 | /2 | |
| 4414 FNH | 225 | 132,4 | 24 | 18...26,4 | 55 | 6,7 | ■ | 12 | 5 400 | -20...+70 | 60 000 / 30 000 | 120 000 | 2 | /39 | |
| 4418 FNH | 225 | 132,4 | 48 | 36...53 | 55 | 6,7 | ■ | 12 | 5 400 | -20...+70 | 60 000 / 30 000 | 120 000 | 2 | | |



max. 204 m³/h

DC axial fans

Series 4300 119 x 119 x 32 mm



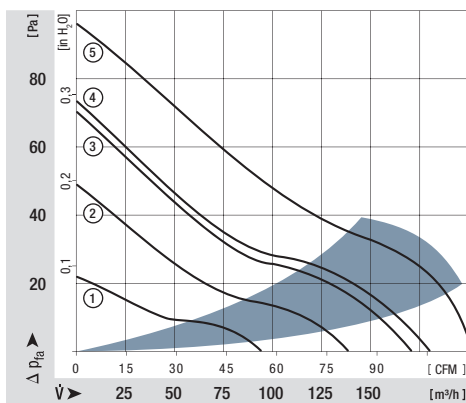
Highlights:

- Ball bearings and sleeve bearings available.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications

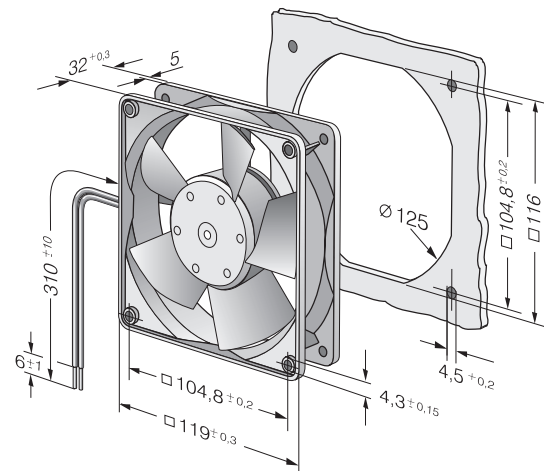
General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 220 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see p. 15 | Curve | Specials |
|--------------|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 4312 GL | 95 | 55,9 | 12 | 6...15 | 30 | 4,3 | □ | 1,2 | 1 550 | -20...+75 | 80 000 / 35 000 | 157 500 | 1 | | |
| 4312 L | 95 | 55,9 | 12 | 6...15 | 30 | 4,3 | ■ | 1,2 | 1 550 | -20...+75 | 80 000 / 35 000 | 157 500 | 1 | | |
| 4312 GM | 140 | 82,4 | 12 | 6...15 | 39 | 5,3 | □ | 2,6 | 2 300 | -20...+75 | 70 000 / 30 000 | 135 000 | 2 | | |
| 4312 M | 140 | 82,4 | 12 | 6...15 | 39 | 5,3 | ■ | 2,6 | 2 300 | -20...+75 | 70 000 / 30 000 | 135 000 | 2 | /12 | |
| 4312 G | 170 | 100,1 | 12 | 6...15 | 45 | 5,8 | □ | 5,0 | 2 800 | -20...+75 | 62 500 / 27 500 | 122 500 | 3 | | |
| 4312 | 170 | 100,1 | 12 | 6...15 | 45 | 5,8 | ■ | 5,0 | 2 800 | -20...+75 | 62 500 / 27 500 | 122 500 | 3 | /2/19 | |
| 4312-179 | 204 | 120,1 | 12 | 6...13,2 | 51 | 6,4 | ■ | 8,5 | 3 400 | -20...+75 | 47 500 / 20 000 | 90 000 | 5 | | |
| 4314 L | 95 | 55,9 | 24 | 12...28 | 30 | 4,3 | ■ | 1,2 | 1 550 | -20...+75 | 80 000 / 35 000 | 157 500 | 1 | | |
| 4314 M | 140 | 82,4 | 24 | 12...28 | 39 | 5,3 | ■ | 2,6 | 2 300 | -20...+75 | 70 000 / 30 000 | 135 000 | 2 | | |
| 4314 G | 170 | 100,1 | 24 | 12...28 | 45 | 5,8 | □ | 5,0 | 2 800 | -20...+75 | 62 500 / 27 500 | 122 500 | 3 | | |
| 4314 | 170 | 100,1 | 24 | 12...28 | 45 | 5,8 | ■ | 5,0 | 2 800 | -20...+75 | 62 500 / 27 500 | 112 500 | 3 | /2/12 | |
| 4314-147 | 180 | 105,9 | 24 | 12...28 | 47 | 6,1 | ■ | 5,8 | 3 000 | -20...+75 | 57 500 / 25 000 | 112 500 | 4 | | |
| 4314-180 | 204 | 120,1 | 24 | 12...26,5 | 51 | 6,4 | ■ | 9,5 | 3 400 | -20...+75 | 45 000 / 20 000 | 90 000 | 5 | | |
| 4318 M | 140 | 82,4 | 48 | 36...56 | 39 | 5,3 | ■ | 3,5 | 2 300 | -20...+75 | 70 000 / 30 000 | 135 000 | 2 | | |
| 4318 | 170 | 100,1 | 48 | 36...53 | 45 | 5,8 | ■ | 5,0 | 2 800 | -20...+75 | 62 500 / 27 500 | 112 500 | 3 | /2/17 | |



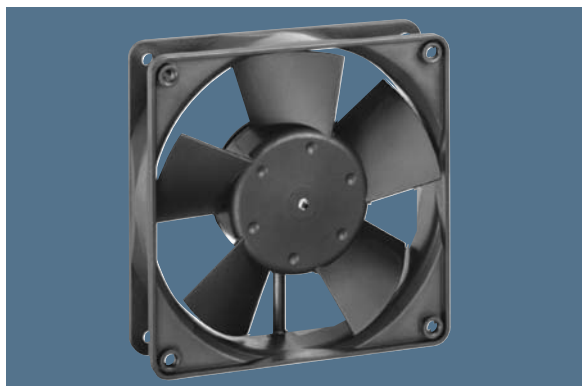
Rotor protrusion max. 0,4 mm.



max. 170 m³/h

DC axial fans

Series 4300 119 x 119 x 32 mm



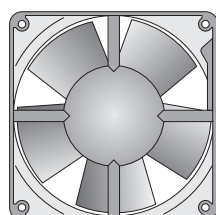
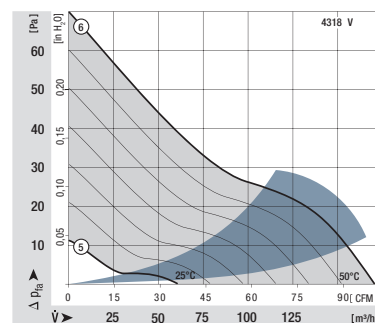
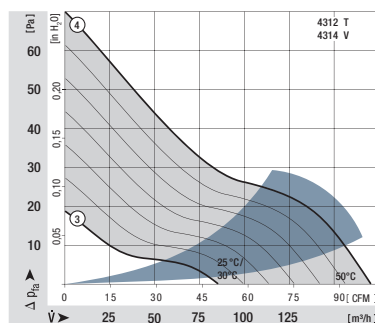
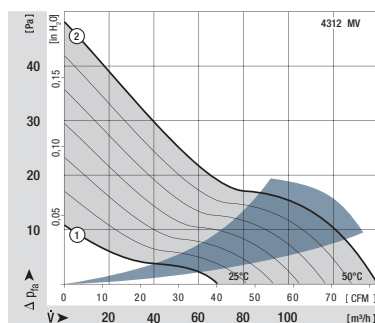
Highlights:

- Open loop speed control by means of external or internal temperature sensor.
- Automatic speed adjustment according to cooling requirements.

General characteristics:

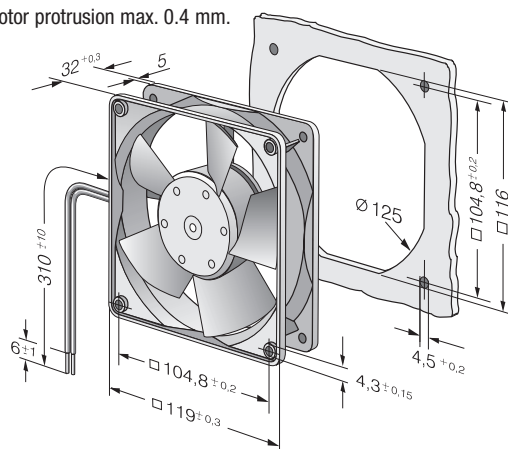
- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation clockwise, seen on rotor.
- Mass: 220 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinterc sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|---------|-------------------|----------|-----------------|---------------|----------------------|-------------------|--|-------------|---------------|-------------------|--|--|--|--------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | □ / ■ | Watts | RPM | °C | Hours | Hours | | P. 114 | |
| 25°C 50°C | 4312 MT | 65 | 38,2 | 12 | 8...15 | 25 | 3,9 | ■ | 1,1 | 1 100 | -20...+65 | 70 000 / 40 000 | 142 500 | 1 | /17 | |
| | | 138 | 81,2 | | | 39 | 5,3 | | 3,0 | 2 300 | | | | | | |
| 25°C 50°C | 4312 T | 85 | 50,0 | 12 | 8...13,2 | 29 | 4,2 | ■ | 2,4 | 1 400 | -20...+65 | 65 000 / 35 000 | 132 500 | 3 | /17 | |
| | | 170 | 100,1 | | | 45 | 5,8 | | 5,5 | 2 800 | | | | | | |
| 30°C 50°C | 4314 T | 85 | 50,0 | 24 | 18...32 | 29 | 4,2 | ■ | 1,6 | 1 400 | -20...+65 | 65 000 / 35 000 | 132 500 | 3 | /17 | |
| | | 170 | 100,1 | | | 45 | 5,8 | | 4,8 | 2 800 | | | | | | |
| 25°C 50°C | 4318 V | 61 | 35,9 | 48 | 40...53 | 21 | — | ■ | 2,6 | 1 000 | -20...+65 | 65 000 / 35 000 | 132 500 | 5 | /17 | |
| | | 170 | 100,0 | | | 45 | 5,8 | | 5,4 | 2 800 | | | | | | |



The temperature sensor for controlling the motor speed is not included in delivery. Temperature sensor LZ 370 see accessories.

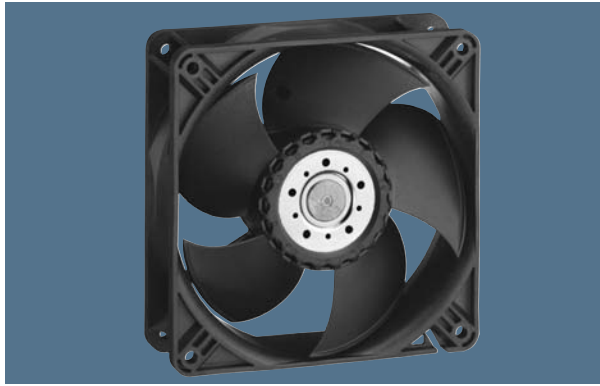
Rotor protrusion max. 0.4 mm.



max. 285 m³/h

DC axial fans

Series 4400 119 x 119 x 38 mm



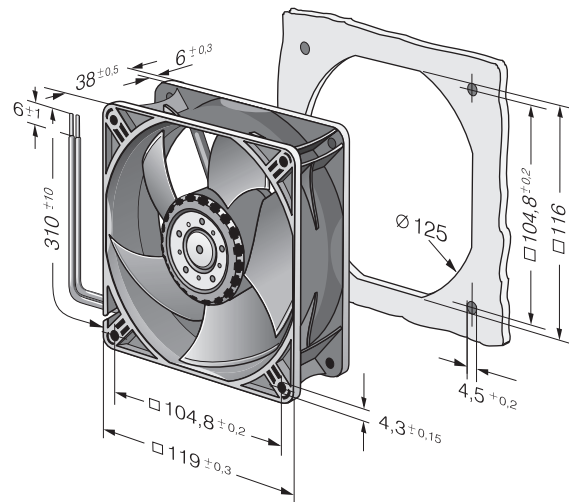
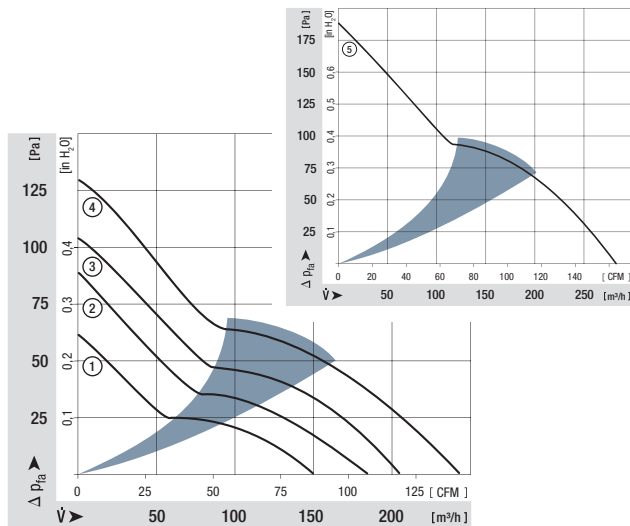
Highlights:

- Innovative impeller with winglets for low noise.
- Control inputs, alarm and speed signals available on request.
- High-speed version with 5000 rpm, standard models available with /2 and PWM.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 24, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation clockwise, seen on rotor.
- Mass: 270 g.

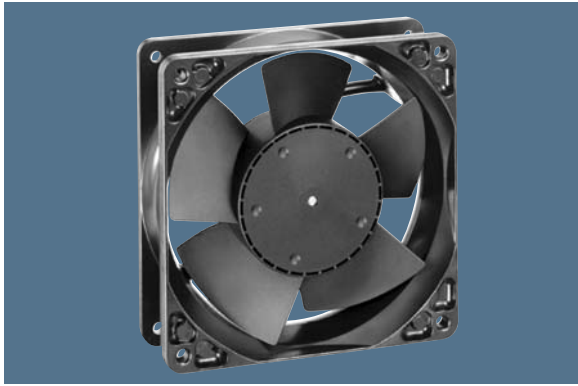
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinterc sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst standard | Service life L ₁₀ (T _{max}) ebm-papst standard | Life expectancy L _{10Δ} (40 °C) see P. 15 | Curve | Specials |
|--------------|----------|-------------------|-----------------|---------------|----------------------|-------------------|--|-------------|---------------|-------------------|--|--|---|-------|----------|
| | Type | m ³ /h | | | | | | | | | | | | | |
| 4412 L | 150 | 88,3 | 12 | 7...14 | 37 | 5,0 | ■ | 2,5 | 2 700 | -20...+70 | 67 500 / 35 000 | 140 000 | 1 | | |
| 4412 M | 184 | 108,3 | 12 | 7...14 | 42 | 5,3 | ■ | 4,2 | 3 300 | -20...+70 | 65 000 / 32 500 | 130 000 | 2 | | |
| 4412 N | 205 | 120,7 | 12 | 7...14 | 46 | 5,6 | ■ | 5,5 | 3 650 | -20...+70 | 62 500 / 30 000 | 120 000 | 3 | /2 | |
| 4412 H | 240 | 141,3 | 12 | 7...14 | 50 | 6,0 | ■ | 8,9 | 4 300 | -20...+70 | 57 500 / 27 500 | 110 000 | 4 | /2 | |
| 4412 /2 HHP | 285 | 167,7 | 12 | 7...14,5 | 55 | 6,4 | ■ | 13,0 | 5 000 | -20...+70 | 50 000 / 25 000 | 100 000 | 5 | /2 | |
| 4414 L | 150 | 88,3 | 24 | 18...28 | 37 | 5,0 | ■ | 2,5 | 2 700 | -20...+70 | 67 500 / 35 000 | 140 000 | 1 | | |
| 4414 M | 184 | 108,3 | 24 | 18...28 | 42 | 5,3 | ■ | 4,0 | 3 300 | -20...+70 | 65 000 / 32 500 | 130 000 | 2 | | |
| 4414 N | 205 | 120,7 | 24 | 18...28 | 46 | 5,6 | ■ | 5,2 | 3 650 | -20...+70 | 62 500 / 30 000 | 120 000 | 3 | | |
| 4414 H | 240 | 141,3 | 24 | 18...28 | 50 | 6,0 | ■ | 8,6 | 4 300 | -20...+70 | 57 500 / 27 500 | 110 000 | 4 | /2 | |
| 4414 HH | 285 | 164,8 | 24 | 16...28 | 55 | 6,4 | ■ | 14,0 | 5 000 | -20...+70 | 50 000 / 25 000 | 100 000 | 5 | | |
| 4414 /2 HHP | 285 | 167,7 | 24 | 18...28 | 55 | 6,4 | ■ | 12,0 | 5 000 | -20...+70 | 50 000 / 25 000 | 100 000 | 5 | /2 | |
| 4418 L | 150 | 88,3 | 48 | 36...60 | 37 | 5,0 | ■ | 2,5 | 2 700 | -20...+70 | 67 500 / 35 000 | 140 000 | 1 | | |
| 4418 M | 184 | 108,3 | 48 | 36...60 | 42 | 5,3 | ■ | 4,2 | 3 300 | -20...+70 | 65 000 / 32 500 | 130 000 | 2 | | |
| 4418 N | 205 | 120,7 | 48 | 36...60 | 46 | 5,6 | ■ | 5,2 | 3 650 | -20...+70 | 62 500 / 30 000 | 120 000 | 3 | | |
| 4418 H | 240 | 141,3 | 48 | 36...60 | 50 | 6,0 | ■ | 8,6 | 4 300 | -20...+70 | 57 500 / 27 500 | 110 000 | 4 | /2 | |
| 4418 /2 HHP | 285 | 167,7 | 48 | 36...60 | 55 | 6,4 | ■ | 13,5 | 5 000 | -20...+70 | 50 000 / 25 000 | 100 000 | 5 | /2 | |



max. 237 m³/h

DC axial fans

Series 4100 N 119 x 119 x 38 mm



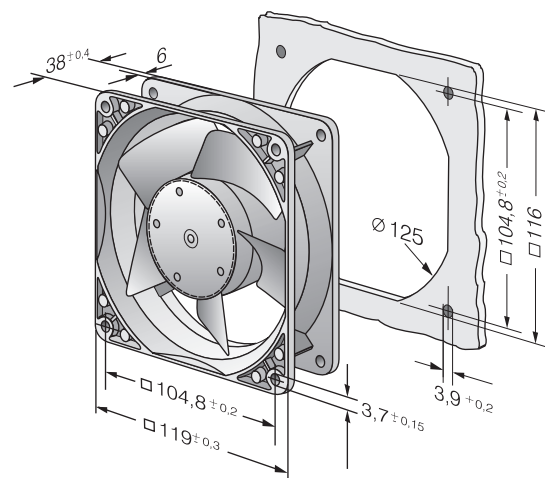
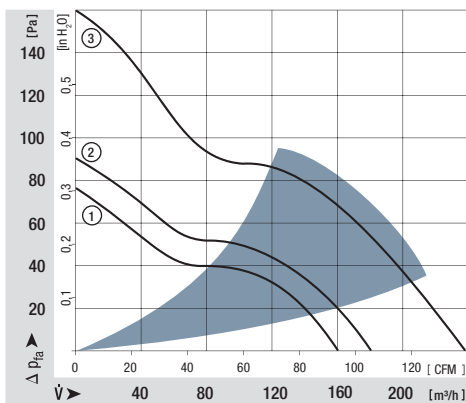
Highlights:

- Very rigid compression curve for high air flow at high back pressure.
- Low operating noise level at high back pressure.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.

General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx).
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Electrical connection with flat plugs, 2.8 x 0.5 mm. Optionally with strands.
- Air intake over struts. Direction of rotation clockwise, seen on rotor.
- Mass: 390 g.

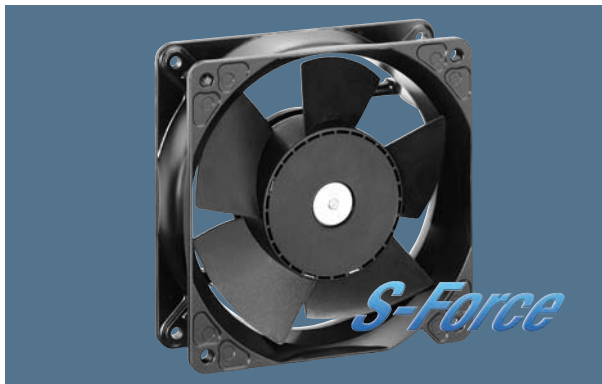
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 4182 NGX | 160 | 94,2 | 12 | 7...15 | 44 | 5,3 | □ | 3,5 | 2 800 | -10...+75 | 85 000 / 37 500 | 167 500 | 1 | /2 | |
| 4182 NX | 180 | 105,9 | 12 | 7...15 | 49 | 5,7 | ■ | 4,5 | 3 200 | -30...+75 | 85 000 / 37 500 | 167 500 | 2 | /2/12 | |
| 4182 NXH | 237 | 139,5 | 12 | 7...14 | 57 | 6,5 | ■ | 11,0 | 4 400 | -30...+55 | 70 000 / 50 000 | 142 500 | 3 | | |
| 4184 NGX | 160 | 94,2 | 24 | 12...30 | 44 | 5,3 | □ | 3,5 | 2 800 | -10...+75 | 85 000 / 37 500 | 167 500 | 1 | /2 | |
| 4184 NXM | 160 | 94,2 | 24 | 12...30 | 44 | 5,3 | ■ | 3,5 | 2 800 | -30...+75 | 85 000 / 37 500 | 167 500 | 1 | | |
| 4184 NX | 180 | 105,9 | 24 | 12...29 | 49 | 5,7 | ■ | 4,5 | 3 200 | -30...+75 | 85 000 / 37 500 | 167 500 | 2 | /2/17 | |
| 4184 NXH | 237 | 139,5 | 24 | 12...25 | 57 | 6,5 | ■ | 11,0 | 4 400 | -30...+55 | 70 000 / 50 000 | 142 500 | 3 | /2 | |
| 4188 NGX | 160 | 94,2 | 48 | 36...56 | 44 | 5,3 | □ | 3,8 | 2 800 | -10...+75 | 85 000 / 37 500 | 167 500 | 1 | | |
| 4188 NXM | 160 | 94,2 | 48 | 36...56 | 44 | 5,3 | ■ | 3,5 | 2 800 | -30...+75 | 85 000 / 37 500 | 167 500 | 1 | /12 | |



max. 440 m³/h

DC axial fans

Series 4100 N High Performance 119 x 119 x 38 mm



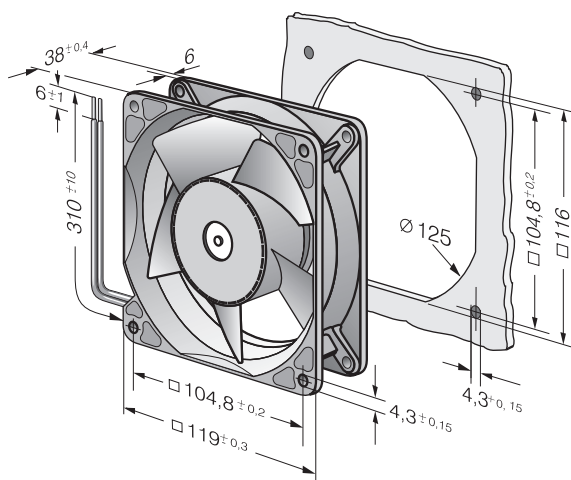
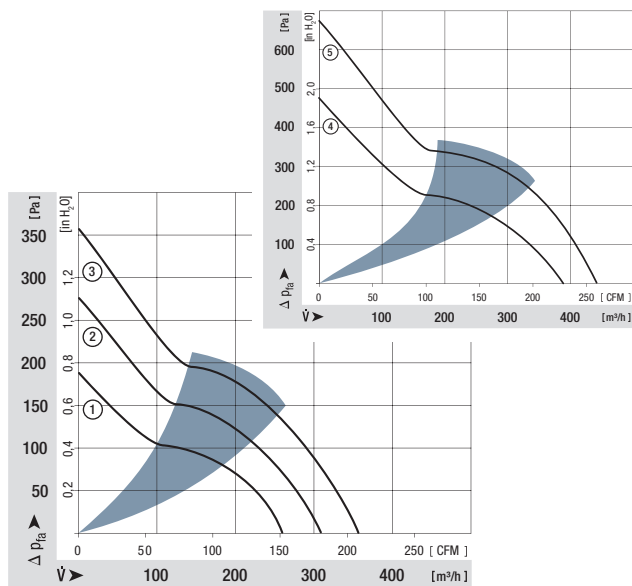
Highlights:

- Very rigid compression curve for high air flow at high back pressure.
- Low operating noise level at high back pressure.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.

General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx).
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 22, UL1007, TR 64, bared and tin-plated
- Air intake over struts. Direction of rotation clockwise, seen on rotor.
- Mass: 390 g.

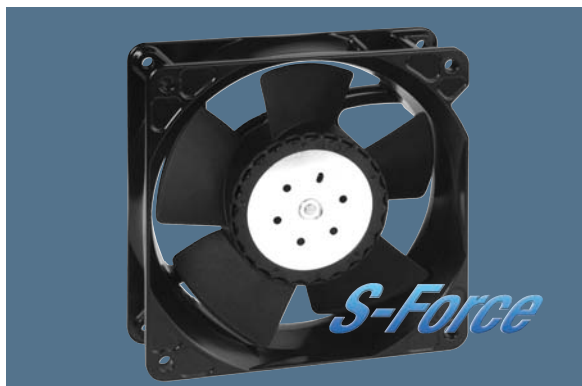
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see p. 15 | Curve | Specials |
|--------------|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 4112 NHH | 260 | 152,9 | 12 | 9...15 | 60 | 6,8 | ■ | 13,3 | 5 000 | -20...+65 | 70 000 / 55 000 | 147 500 | 1 | | |
| 4112 NH3 | 310 | 182,4 | 12 | 9...15 | 65 | 7,2 | ■ | 21,6 | 6 000 | -20...+65 | 65 000 / 37 500 | 132 500 | 2 | /2 | |
| 4112 NH4 | 355 | 208,9 | 12 | 9...14 | 67 | 7,4 | ■ | 32,0 | 6 800 | -20...+65 | 62 500 / 35 000 | 125 000 | 3 | /2 | |
| 4114 NHH | 260 | 152,9 | 24 | 16...30 | 60 | 6,8 | ■ | 12,4 | 5 000 | -20...+65 | 70 000 / 52 500 | 147 500 | 1 | /2 | |
| 4114 NH3 | 310 | 182,4 | 24 | 16...30 | 65 | 7,2 | ■ | 19,5 | 6 000 | -20...+65 | 65 000 / 37 500 | 132 500 | 2 | /2 | |
| 4114 NH4 | 355 | 208,9 | 24 | 16...30 | 67 | 7,4 | ■ | 30,0 | 6 800 | -20...+65 | 62 500 / 35 000 | 125 000 | 3 | /2 | |
| 4114 NH5 | 390 | 229,5 | 24 | 16...30 | 70 | 7,6 | ■ | 45,0 | 7 500 | -20...+65 | 62 500 / 35 000 | 125 000 | 4 | /2 | |
| 4114 NH6 | 440 | 259,0 | 24 | 16...30 | 73 | 8,1 | ■ | 65,0 | 8 400 | -20...+65 | 60 000 / 32 500 | 120 000 | 5 | /2 | |
| 4118 NHH | 260 | 152,9 | 48 | 36...60 | 60 | 6,8 | ■ | 12,0 | 5 000 | -20...+65 | 70 000 / 52 500 | 147 500 | 1 | /2 | |
| 4118 NH3 | 310 | 182,4 | 48 | 36...60 | 65 | 7,2 | ■ | 20,0 | 6 000 | -20...+65 | 65 000 / 37 500 | 132 500 | 2 | /2 | |
| 4118 NH4 | 355 | 208,9 | 48 | 36...60 | 67 | 7,4 | ■ | 28,0 | 6 800 | -20...+65 | 62 500 / 35 000 | 125 000 | 3 | /2 | |
| 4118 NH5 | 390 | 229,5 | 48 | 36...60 | 70 | 7,6 | ■ | 45,0 | 7 500 | -20...+65 | 62 500 / 35 000 | 125 000 | 4 | /2 | |
| 4118 NH6 | 440 | 259,0 | 48 | 36...60 | 73 | 8,1 | ■ | 62,0 | 8 400 | -20...+65 | 60 000 / 32 500 | 120 000 | 5 | /2 | |



max. 570 m³/h

DC axial fans

Series 4100 N High Performance 119 x 119 x 38 mm



Highlights:

- Very rigid compression curve for high air flow at high back pressure.
- Low operating noise level at high back pressure.
- Available as standard with PWM control input and speed signal, additional inputs and outputs on request. 3-phase fan drive with high degree of running smoothness.

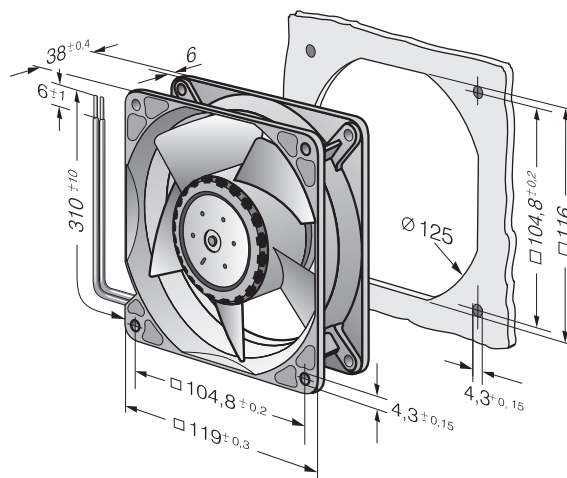
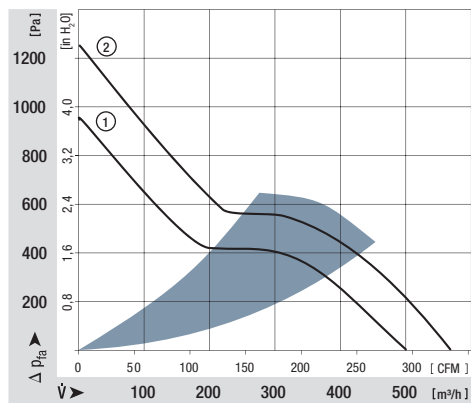
General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx).
- Protected against reverse polarity and locking.
- Connection via single strands AWG 20, sensor and control leads AWG 22, UL1007, TR 64. Bared and tin-plated.
- Air intake over struts. Direction of rotation clockwise, seen on rotor.
- Mass: 425 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 4114 N/2H7P | 500 | 294,2 | 24 | 16...30 | 76 | 8,5 | ■ | 90 | 9 500 | -20...+75 | 57 500 / 25 000 | 115 000 | 1 | /2 | |
| 4114 N/2H8P | 570 | 335,5 | 24 | 16...30 | 78 | 8,9 | ■ | 120 | 11 000 | -20...+75 | 55 000 / 22 500 | 110 000 | 2 | /2 | |
| 4118 N/2H7P | 500 | 294,2 | 48 | 36...60* | 76 | 8,5 | ■ | 90 | 9 500 | -20...+75 | 57 500 / 25 000 | 115 000 | 1 | /2 | |
| 4118 N/2H8P | 570 | 335,5 | 48 | 36...60* | 78 | 8,9 | ■ | 120 | 11 000 | -20...+75 | 55 000 / 22 500 | 110 000 | 2 | /2 | |

*36...72 VDC on request.

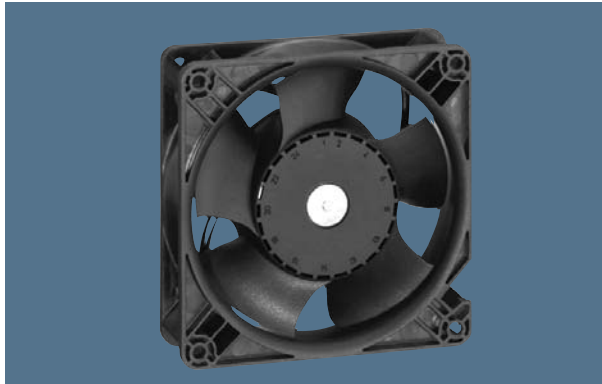
Speed control range from 500 RPM up to maximum nominal speed. Stationary at 0 % PWM, maximum speed at sensor break.
To attain the specified service life, an external capacitor must be wired between the plus and minus strands.
Please note the wiring suggestion on page 22.



max. 275 m³/h

DC diagonal fans

Series DV 4100 119 x 119 x 38 mm



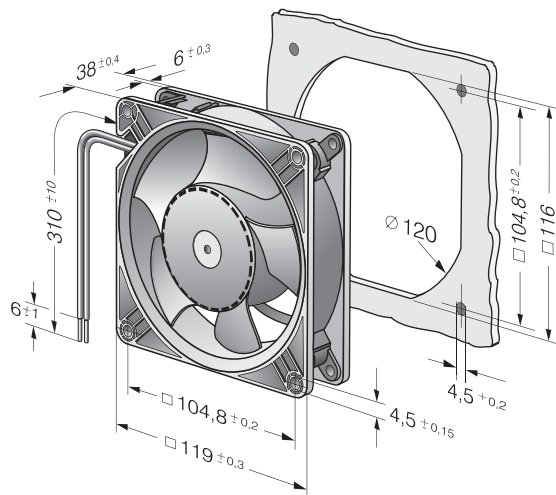
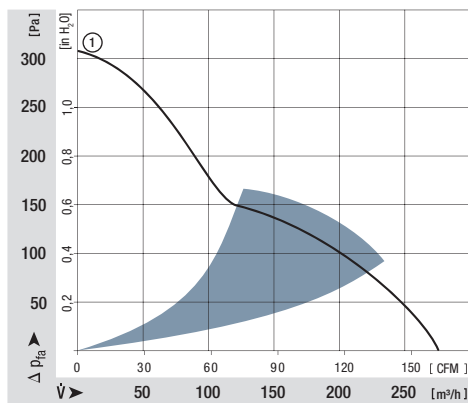
Highlights:

- Diagonal compact fan with low noise and high pressure saddle.
- Very rigid compression curve for high air flow at high back pressure.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.

General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx).
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 375 g (with aluminium housing : 455 g).

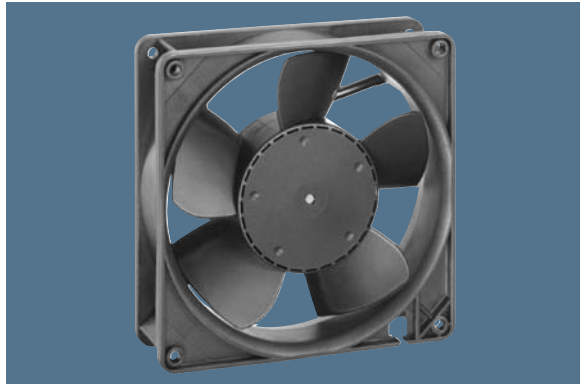
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| DV 4112 N | 280 | 164,7 | 12 | 9...15 | 61 | 6,9 | ■ | 21,0 | 6 000 | -20...+65 | 70 000 / 40 000 | 142 500 | 1 | | |
| DV 4114 N | 280 | 164,7 | 24 | 16...30 | 61 | 6,9 | ■ | 20,5 | 6 000 | -20...+65 | 70 000 / 40 000 | 142 500 | 1 | /2 | |
| DV 4118 N | 280 | 164,7 | 48 | 36...60 | 61 | 6,9 | ■ | 20,0 | 6 000 | -20...+65 | 70 000 / 40 000 | 142 500 | 1 | | |



max. 338 m³/h

DC axial fans

Series 5200 N 127 x 127 x 38 mm



Highlights:

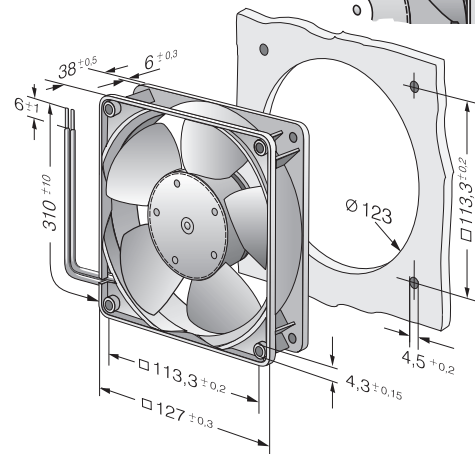
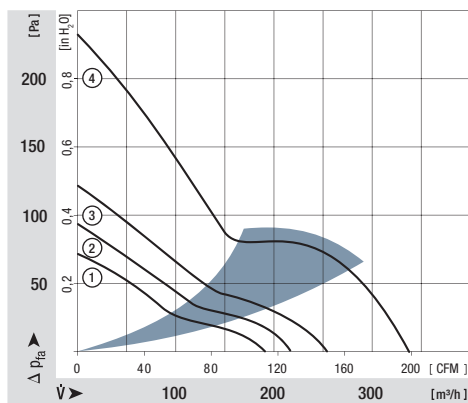
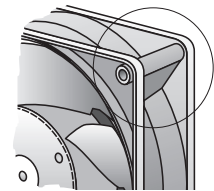
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.

General characteristics:

- Material: fibreglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 310 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see p. 15 | Curve | Specials |
|--------------|----------|-------------------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | Type | m ³ /h | | | | | | | | | | | | | |
| 5212 NM | 187 | 110,1 | 12 | 7...14,5 | 43 | 5,3 | ■ | 4,6 | 2 750 | -20...+75 | 62 500 / 27 500 | 122 500 | 1 | | |
| 5212 NN | 216 | 127,1 | 12 | 7...14 | 46 | 5,6 | ■ | 6,0 | 3 150 | -20...+75 | 57 500 / 25 000 | 112 500 | 2 | | |
| 5212 NH | 252 | 148,3 | 12 | 7...14 | 51 | 6,0 | ■ | 9,8 | 3 650 | -20...+70 | 45 000 / 22 500 | 90 000 | 3 | | |
| 5212 NHH* | 340 | 200,0 | 12 | 9...15 | 58 | 6,6 | ■ | 19,0 | 4 900 | -20...+65 | 45 000 / 25 000 | 90 000 | 4 | /2 | |
| 5214 NM | 187 | 110,1 | 24 | 12...28 | 43 | 5,3 | ■ | 4,6 | 2 750 | -20...+75 | 62 500 / 27 500 | 122 500 | 1 | | |
| 5214 NN | 216 | 127,1 | 24 | 12...28 | 46 | 5,6 | ■ | 6,0 | 3 150 | -20...+75 | 57 500 / 25 000 | 112 500 | 2 | /2 | |
| 5214 NH | 252 | 148,3 | 24 | 12...28 | 51 | 6,0 | ■ | 9,8 | 3 650 | -20...+70 | 45 000 / 22 500 | 90 000 | 3 | /2 | |
| 5214 NHH* | 340 | 200,0 | 24 | 16...30 | 58 | 6,6 | ■ | 17,5 | 4 900 | -20...+65 | 45 000 / 25 000 | 90 000 | 4 | /2 | |
| 5218 NM | 187 | 110,1 | 48 | 40...56 | 43 | 5,3 | ■ | 5,0 | 2 750 | -20...+75 | 62 500 / 27 500 | 122 500 | 1 | | |
| 5218 NN | 216 | 127,1 | 48 | 40...56 | 46 | 5,6 | ■ | 6,5 | 3 150 | -20...+65 | 57 500 / 32 500 | 112 500 | 2 | | |
| 5218 NH | 252 | 148,3 | 48 | 40...56 | 51 | 6,0 | ■ | 10,0 | 3 650 | -20...+55 | 45 000 / 32 500 | 90 000 | 3 | | |
| 5218 NHH* | 340 | 200,0 | 48 | 36...60 | 58 | 6,6 | ■ | 18,0 | 4 900 | -20...+65 | 45 000 / 25 000 | 90 000 | 4 | /2 | |

*Models NHH: Fan housing with moulded-in spacers.



max. 324 m³/h

DC diagonal fans

Series DV 5200 127 x 127 x 38 mm



Highlights:

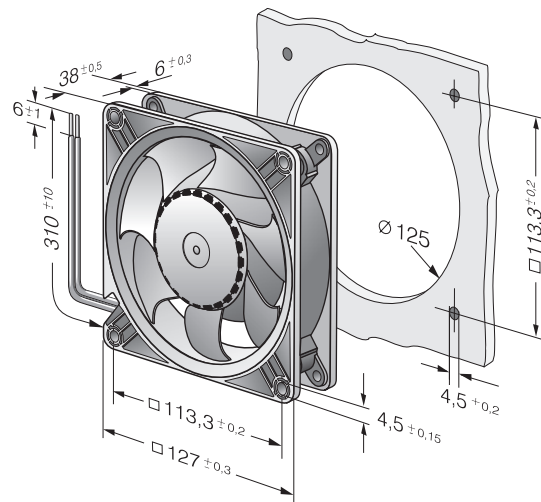
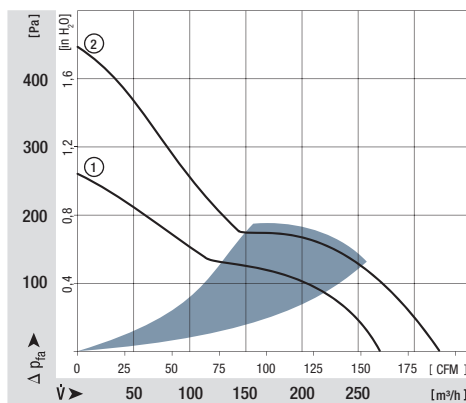
- Diagonal fan with lower operating noise at high pressures.
- Very rigid compression curve for high air flow at high back pressure.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- DV 5214 /2HP with PWM control input and speed signal, additional inputs and outputs on request.

General characteristics:

- Material: housing of fibreglass-reinforced plastic, optionally of aluminium. Metal flange. Impeller of fibreglass-reinforced plastic PA; housing with grounding lug for screw M4 x 8 (Torx).
- Fully integrated electronic commutation. Protected against reverse polarity and 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: 415 g (with metal housing: 490 g).

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|---|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| DV 5212 N | 270 | 158,9 | 12 | 9...15 | 56 | 6,4 | ■ | 21,0 | 5 000 | -20...+65 | 70 000 / 40 000 | 142 500 | 1 | /2 | |
| DV 5214 N | 270 | 158,9 | 24 | 16...30 | 56 | 6,4 | ■ | 20,4 | 5 000 | -20...+65 | 70 000 / 40 000 | 142 500 | 1 | /2 | |
| DV 5218 N | 270 | 158,9 | 48 | 36...60 | 56 | 6,4 | ■ | 18,5 | 5 000 | -20...+65 | 70 000 / 40 000 | 142 500 | 1 | /2 | |
| Model comes standard with speed signal and PWM control input. Other versions by request. | | | | | | | | | | | | | | | |
| DV 5214 /2HP | 320 | 188,2 | 24 | 16...30 | 62 | 7,2 | ■ | 38,5 | 6 000 | -20...+65 | 62 500 / 35 000 | 125 000* | 2 | | |

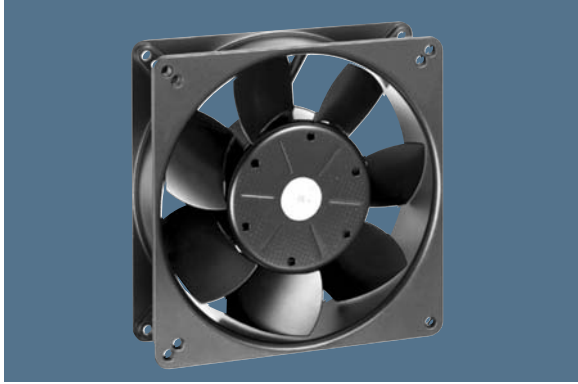
Speed control range from 1000 RPM up to maximum nominal speed. Stationary at 0 % PWM, maximum speed at sensor break.



max. 250 m³/h

DC axial fans

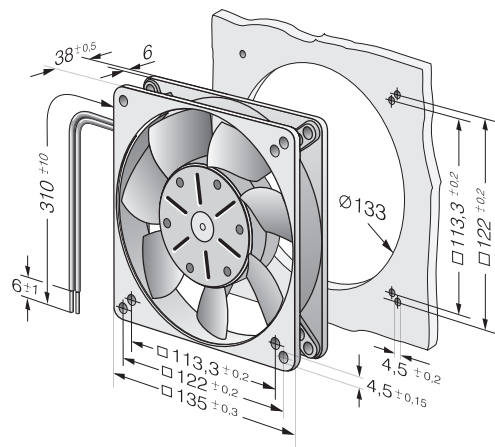
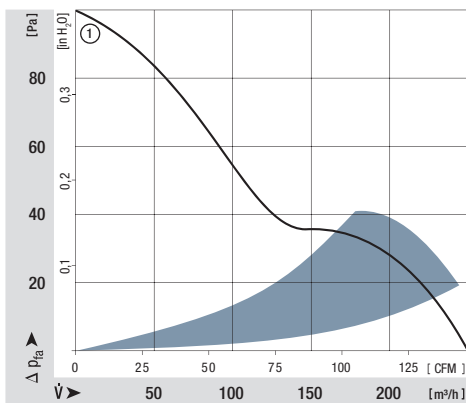
Series 5100 N 135 x 135 x 38 mm



General characteristics:

- Material for aluminium housing and impeller; housing with grounding lug for screw M4 x 8 (Torx). 48 V version incl. screws.
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 650 g.

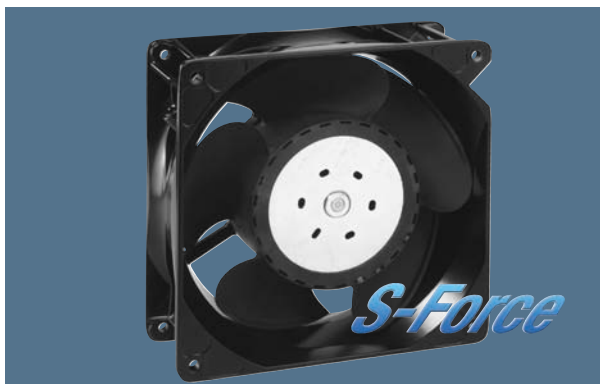
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 5112 N | 250 | 147,1 | 12 | 6...15 | 48 | 6,1 | ■ | 9,5 | 2 900 | -25...+72 | 80 000 / 37 500 | 157 500 | 1 | /2 | |
| 5114 N | 250 | 147,1 | 24 | 12...30 | 48 | 6,1 | ■ | 9,5 | 2 900 | -25...+72 | 80 000 / 37 500 | 157 500 | 1 | /2 | |
| 5118 N | 250 | 147,1 | 48 | 24...60 | 48 | 6,1 | ■ | 9,5 | 2 900 | -25...+72 | 80 000 / 37 500 | 157 500 | 1 | /2/12 | |



max. 338 m³/h

DC axial fans

Series 5300 140 x 140 x 51 mm



Highlights:

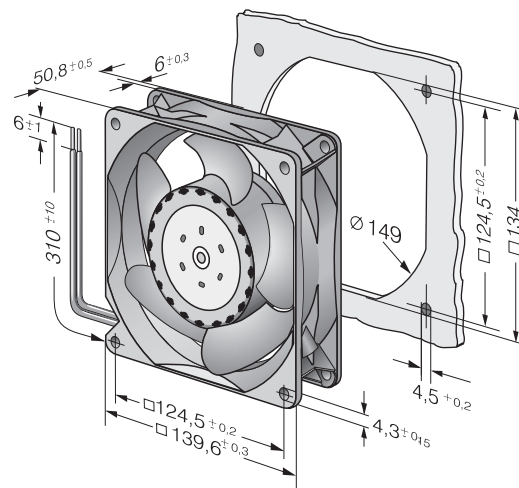
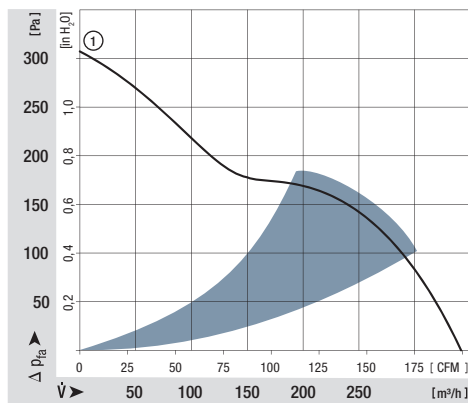
- Very rigid compression curve for high air flow at high back pressure.
- Low operating noise level at high back pressure.
- Available as standard with PWM control input and speed signal. Additional inputs and outputs on request.

General characteristics:

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

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-----------|-------------------|----------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | | | |
| NEW | 5314 /2HP | 340 | 200 | 24 | 16...28 | 64 | 7,2 | ■ | 28,4 | 5 000 | -20...+65 | 77 500/40 000 | 160 000 | 1 | | |
| NEW | 5318 /2HP | 340 | 200 | 48 | 36...72 | 64 | 7,2 | ■ | 27 | 5 000 | -20...+65 | 77 500/40 000 | 160 000 | 1 | | |

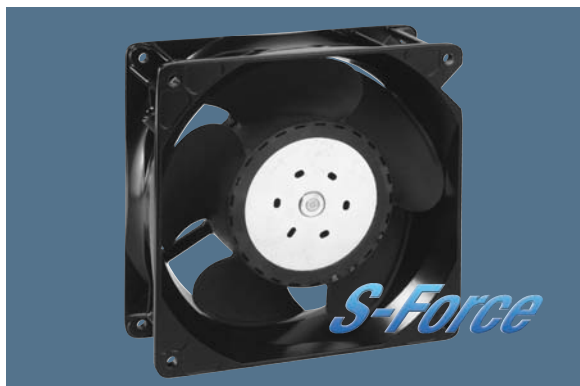
Speed control range from 700 RPM up to maximum nominal speed. Stationary at 0 % PWM, maximum speed at sensor break.



max. 670 m³/h

DC axial fans

Series 5300 TD 140 x 140 x 51 mm



Highlights:

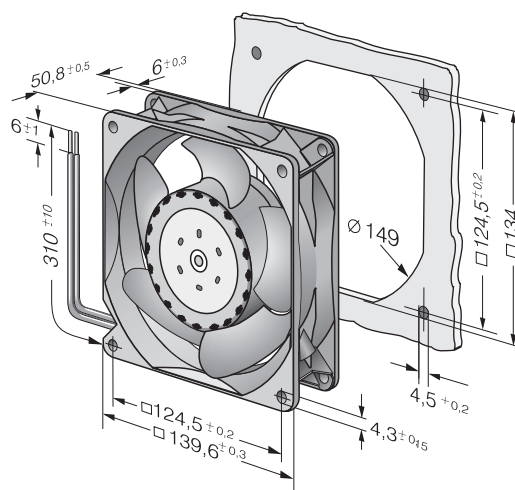
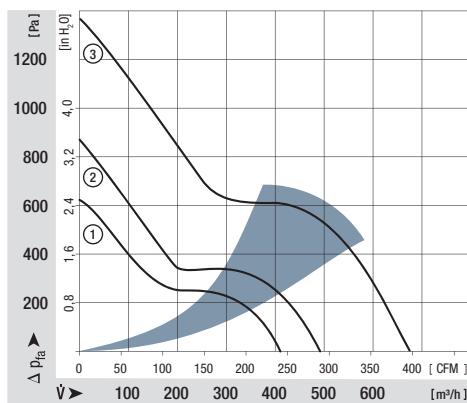
- 3-phase fan drive with high degree of running smoothness.
- Very rigid compression curve for high air flow at high back pressure.
- Low operating noise level at high back pressure.
- Standard with PWM control input and speed signal, additional inputs and outputs on request.

General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx).
- Protected against reverse polarity and locking.
- Connection via single strands AWG 20, TR 64. Bared and tin-plated.
- Air intake over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 900 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|---------------|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 5312 /2 TDHP | 410 | 241,3 | 12 | 8...16 | 70 | 7,7 | ■ | 43 | 6 000 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 1 | /2 |
| 5314 /2 TDHP | 410 | 241,3 | 24 | 16...36 | 70 | 7,7 | ■ | 42 | 6 000 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 1 | /2 |
| 5314 /2 TDHHP | 490 | 288,4 | 24 | 16...36 | 75 | 8,1 | ■ | 67 | 7 000 | -20...+70 | 62 500 / 30 000 | 120 000 | 120 000 | 2 | /2 |
| 5318 /2 TDHP | 410 | 241,3 | 48 | 36...72 | 70 | 7,7 | ■ | 42 | 6 000 | -20...+70 | 70 000 / 35 000 | 140 000 | 140 000 | 1 | /2 |
| 5318 /2 TDHHP | 490 | 288,4 | 48 | 36...72 | 75 | 8,1 | ■ | 66 | 7 000 | -20...+70 | 62 500 / 30 000 | 120 000 | 120 000 | 2 | /2 |
| 5318 /2 TDH4P | 670 | 394,3 | 48 | 36...72 | 79 | 8,8 | ■ | 149 | 9 200 | -20...+65 | 57 500 / 32 500 | 115 000 | 115 000 | 3 | /2 |

Speed control range from 1000 RPM up to maximum nominal speed. Stationary at 0 % PWM, maximum speed at sensor break.



max. 420 m³/h

DC axial fans

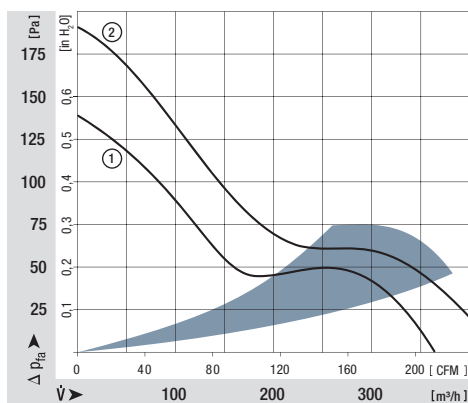
Series 7100 N 150 Ø x 38 mm



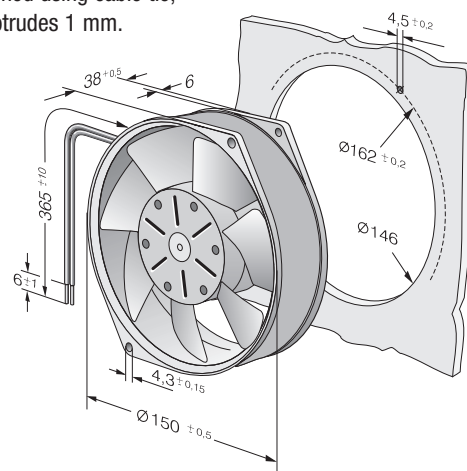
General characteristics:

- Material: Aluminium housing and impeller; housing with grounding lug for screw M4 x 8 (Torx).
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 22, TR 64, bared and tin-plated.
- Air intake over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 620 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C), see P. 15 | Curve | Specials |
|--------------|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 7112 N | 360 | 211,9 | 12 | 6...15 | 55 | 6,5 | ■ | 12,0 | 2 850 | -25...+72 | 80 000 / 37 500 | 157 500 | 1 | /2 | |
| 7114 N | 360 | 211,9 | 24 | 12...30 | 55 | 6,5 | ■ | 12,0 | 2 850 | -25...+72 | 80 000 / 37 500 | 157 500 | 1 | /2 | |
| 7114 NH | 420 | 247,2 | 24 | 12...26,5 | 59 | 7,0 | ■ | 19,0 | 3 350 | -25...+72 | 75 000 / 35 000 | 147 500 | 2 | | |
| 7118 N | 360 | 211,9 | 48 | 24...60 | 55 | 6,5 | ■ | 12,0 | 2 850 | -25...+72 | 80 000 / 37 500 | 157 500 | 1 | /2 | |



Strand fastened using cable tie;
cable tie protrudes 1 mm.



max. 360 m³/h

DC axial fans

Series 7200 N 150 Ø x 55 mm



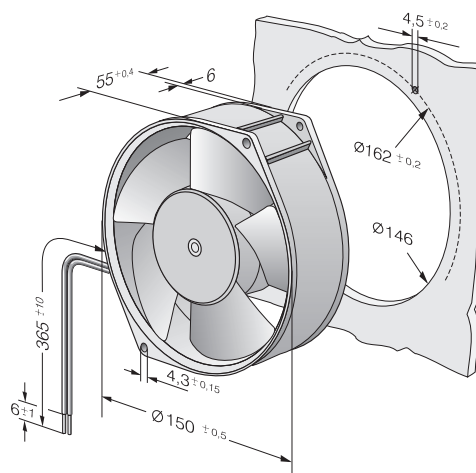
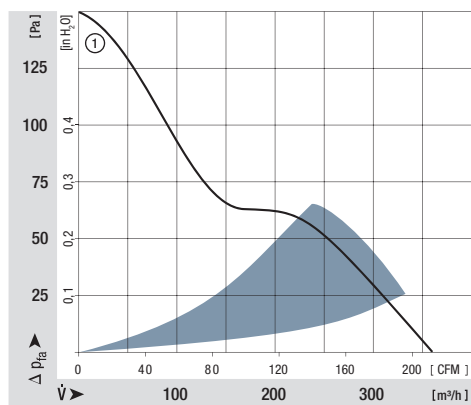
Highlights:

- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.

General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx).
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 725 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C), see P. 15 | Curve | Specials |
|--------------|----------|-------------------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-----------|----------|
| | Type | m ³ /h | | | | | | | | | | | | | |
| 7212 N | 360 | 211,9 | 12 | 6...15 | 53 | 6,2 | ■ | 12,0 | 3 050 | -25...+72 | 80 000 / 37 500 | 157 500 | 1 | /2 | |
| 7214 N | 360 | 211,9 | 24 | 12...30 | 53 | 6,2 | ■ | 12,0 | 3 050 | -25...+72 | 80 000 / 37 500 | 157 500 | 1 | /12/17/19 | |
| 7218 N | 360 | 211,9 | 48 | 24...60 | 53 | 6,2 | ■ | 12,0 | 3 050 | -25...+72 | 80 000 / 37 500 | 157 500 | 1 | | |



max. 350 m³/h

DC axial fans

Series 6100 N 172 x 160 x 52 mm



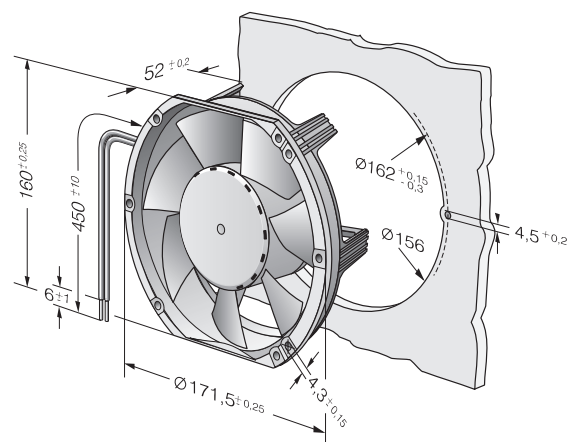
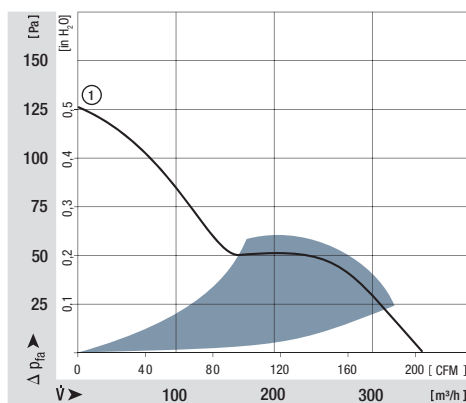
Highlights:

- Compact, lightweight plastic housing.
- VARIOFAN models available with external temperature sensor.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- Open loop speed control, sensor and alarm signal available on request.

General characteristics:

- Material: housing and impeller of fibreglass-reinforced PA.
- 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: 610 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C), see P. 15 | Curve | Specials |
|--------------|---------|-------------------|----------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| NEW | 6112 NM | 350 | 206 | 12 | 8...15 | 49 | 5,9 | ■ | 11 | 2 850 | -20...+70 | 80 000/37 500 | 157 500 | 1 | | |
| NEW | 6114 NM | 350 | 206 | 24 | 12...32 | 49 | 5,9 | ■ | 11 | 2 850 | -20...+70 | 80 000/37 500 | 157 500 | 1 | | |



max. 545 m³/h

DC axial fans

Series 6300 172 Ø x 51 mm



Highlights:

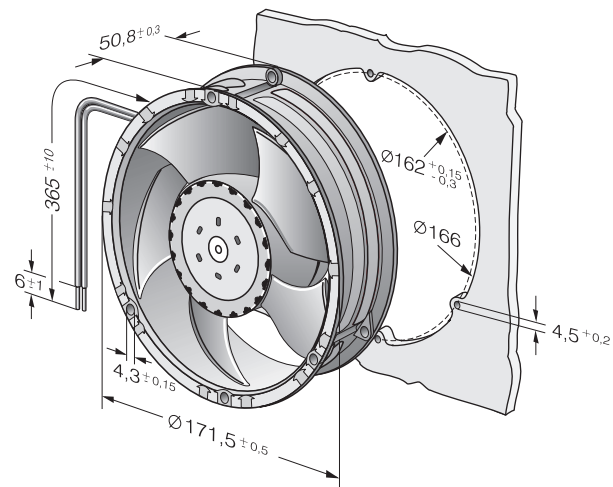
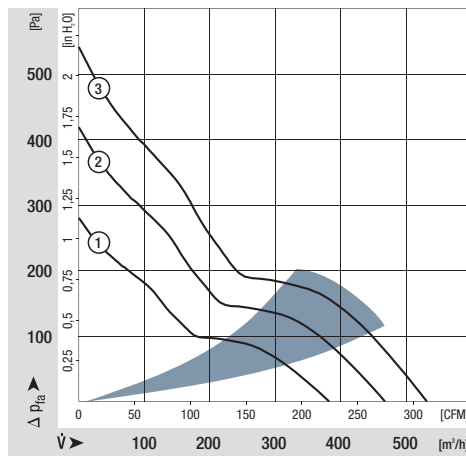
- Very rigid compression curve for high air flow at high back pressure.
- Low operating noise level at high back pressure.
- Available as standard with PWM control input and speed signal. Additional inputs and outputs on request.

General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx).
- Protected against reverse polarity and 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: 910 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sintec sleeve bearings | Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C), see P. 15 | Curve | Specials |
|--------------|-----------|-------------------|----------|-----------------|---------------|----------------------|-------------------|------------------------|---------------|-------------|---------------|-------------------|--|--|---|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | | |
| NEW | 6314 /2MP | 395 | 232,4 | 24 | 16...30 | 51 | 6,0 | ■ | 13 | 3 600 | -20...+75 | 82 500/32 500 | 165 000 | 1 | | | |
| NEW | 6314 /2NP | 470 | 276,5 | 24 | 16...30 | 56 | 6,5 | ■ | 23 | 4 400 | -20...+70 | 80 000/40 000 | 160 000 | 2 | | | |
| NEW | 6314 /2HP | 545 | 320,6 | 24 | 16...30 | 58 | 6,9 | ■ | 31 | 5 000 | -20...+65 | 77 500/42 500 | 155 000 | 3 | | | |
| NEW | 6318 /2HP | 545 | 320,6 | 48 | 36...72 | 58 | 6,9 | ■ | 32 | 5 000 | -20...+65 | 77 500/42 500 | 155 000 | 3 | | | |

Speed control range from 700 RPM up to maximum nominal speed. Stationary at 0 % PWM, maximum speed at sensor break.



max. 950 m³/h

DC axial fans

Series 6300 TD 172 Ø x 51 mm



Highlights:

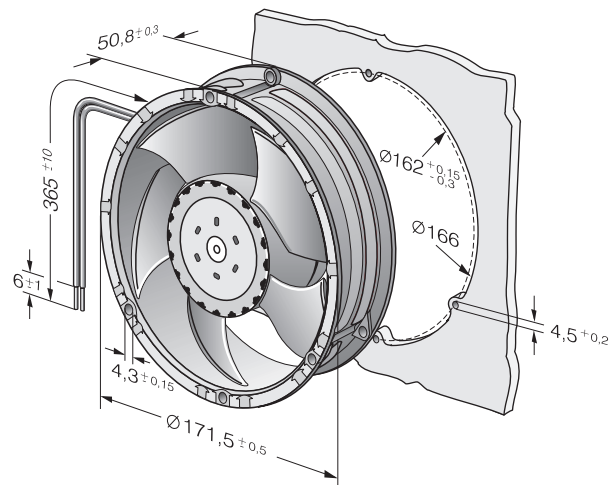
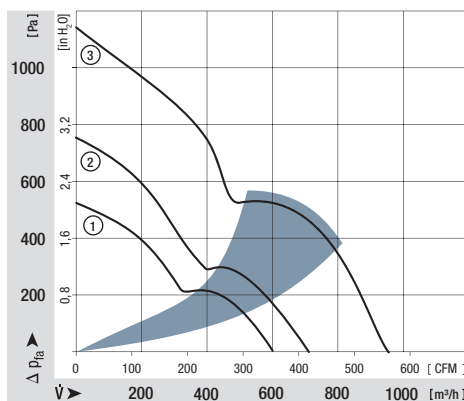
- 3-phase fan drive high degree of running smoothness.
- Very rigid compression curve for high air flow at high back pressure.
- Low operating noise level at high back pressure.
- Standard with PWM control input and speed signal, additional inputs and outputs on request.

General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx).
- Protected against reverse polarity and locking.
- Connection via single strands AWG 20, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 910 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|---------------------|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 6312 /2TDHP | 600 | 353,1 | 12 | 8...16 | 60 | 7,3 | ■ | 40 | 5 500 | -20...+70 | 75 000 / 37 500 | 150 000 | 1 | /2 | |
| NEW 6314 /2TDHP-298 | 600 | 353,1 | 24 | 16...28 | 60 | 7,3 | ■ | 42 | 5 500 | -20...+65 | 75 000 / 42 500 | 150 000 | 1 | | |
| NEW 6314 /2TDHP | 600 | 353,1 | 24 | 16...36 | 60 | 7,3 | ■ | 40 | 5 500 | -20...+70 | 75 000 / 37 500 | 150 000 | 1 | /2 | |
| 6314 /2TDHHP | 710 | 417,9 | 24 | 16...36 | 69 | 7,9 | ■ | 67 | 7 000 | -20...+70 | 62 500 / 30 000 | 120 000 | 2 | /2 | |
| NEW 6318 /2TDHP-299 | 600 | 353,1 | 48 | 36...56 | 60 | 7,3 | ■ | 42 | 5 500 | -20...+65 | 75 000 / 42 500 | 150 000 | 1 | | |
| NEW 6318 /2TDHP | 600 | 353,1 | 48 | 36...72 | 60 | 7,3 | ■ | 40 | 5 500 | -20...+70 | 75 000 / 37 500 | 150 000 | 1 | /2 | |
| 6318 /2TDHHP | 710 | 417,9 | 48 | 36...72 | 69 | 7,9 | ■ | 67 | 7 000 | -20...+70 | 62 500 / 30 000 | 120 000 | 2 | /2 | |
| 6318 /2TDH4P | 950 | 559,1 | 48 | 36...72 | 75 | 8,4 | ■ | 150 | 9 200 | -20...+65 | 52 500 / 30 000 | 107 500 | 3 | /2 | |

Speed control range from 1000 RPM up to maximum nominal speed. Stationary at 0 % PWM, maximum speed at sensor break.



max. 950 m³/h

DC axial fans

Series 6300 TD 172 x 160 x 51 mm



Highlights:

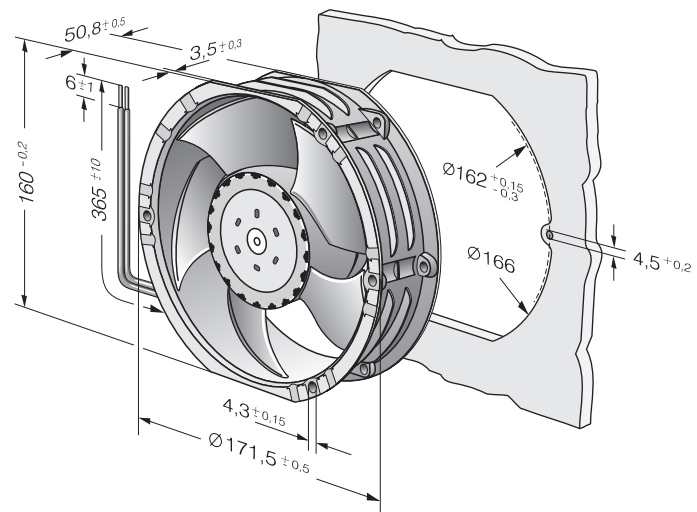
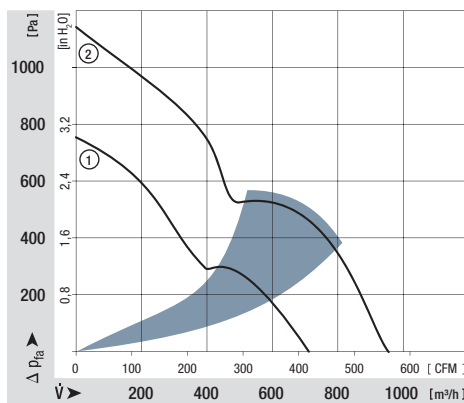
- 3-phase fan drive with high degree of running smoothness.
- Very rigid compression curve for high air flow at high back pressure.
- Low operating noise level at high back pressure.
- Standard with PWM control input and speed signal, additional inputs and outputs on request.

General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx).
- Protected against reverse polarity and locking.
- Connection via single strands AWG 20, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 910 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) | Curve | Specials |
|--------------|------------------|-------------------|----------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | □ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| NEW | 6314 /2TDHHP-015 | 710 | 415,0 | 24 | 16...36 | 69 | 7,9 | ■ | 67 | 7 000 | -20...+70 | 62 500 / 30 000 | 120 000 | 1 | | |
| NEW | 6318 /2TDH4P-007 | 950 | 560,0 | 48 | 36...72 | 75 | 8,4 | ■ | 150 | 9 200 | -20...+65 | 52 500 / 30 000 | 107 500 | 2 | | |

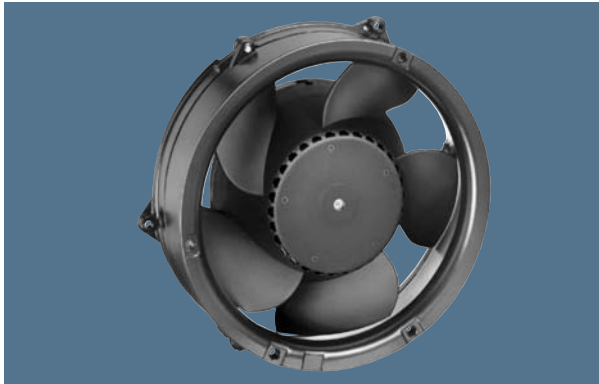
Speed control range from 1000 RPM up to maximum nominal speed. Stationary at 0 % PWM, maximum speed at sensor break.



max. 540 m³/h

DC diagonal fans

Series DV 6200 172 Ø x 51 mm



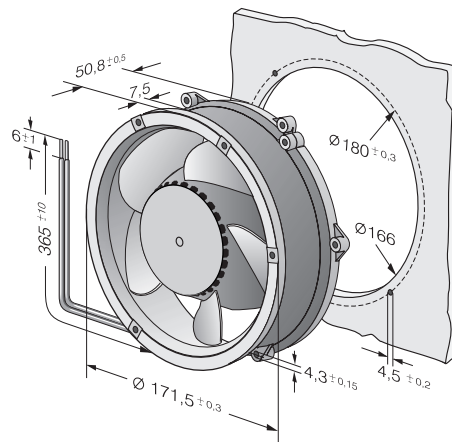
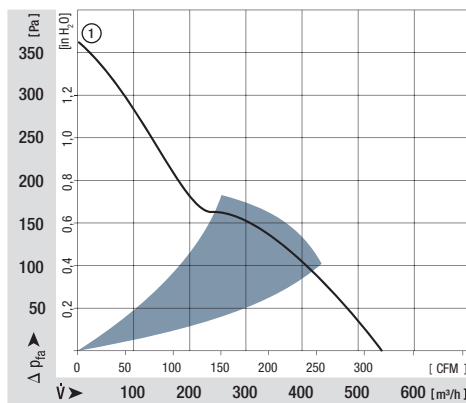
Highlights:

- Diagonal compact fan with low noise and high pressure saddle.
- Very rigid compression curve for high air flow at high back pressure.

General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx). 48 V version incl. screws.
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 820 g.

| Nominal data | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-------------------|----------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|------------|
| Type | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | | | P. 110/112 |
| DV 6224 | 540 | 317,8 | 24 | 16...28 | 63 | 7,1 | ■ | 40,0 | 4 300 | -20...+75 | 90 000 / 40 000 | 180 000 | | 1 | /2/12 |
| DV 6248 | 540 | 317,8 | 48 | 28...60 | 63 | 7,1 | ■ | 40,0 | 4 300 | -20...+75 | 90 000 / 40 000 | 180 000 | | 1 | |



max. 700 m³/h

DC diagonal fans

Series DV 6200 TD TURBOFAN 172 Ø x 51 mm



Highlights:

- Diagonal compact fan with low noise and high pressure saddle.
- 3-phase fan drive with high degree of running smoothness.
- Very rigid compression curve for high air flow at high back pressure.
- Control inputs, alarm and speed signals available on request.

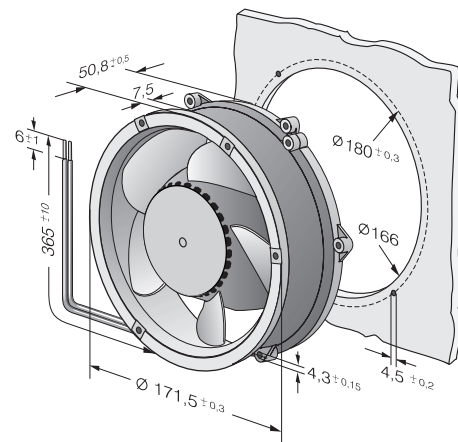
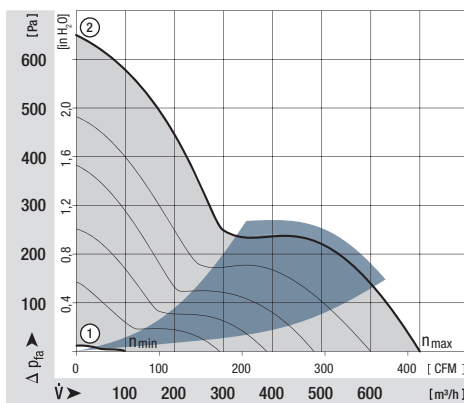
General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx). 48 V version incl. screws.
- Fully integrated electronic commutation.
- 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: 820 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C), see P. 15 | Curve | Specials |
|--------------|---------------|-------------------|----------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-----------------------------------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | □ / ■ | Watts | RPM | °C | Hours | Hours | Hours | P. | |
| DV 6224 TD | | 700 | 421,0 | 24 | 16...36 | 69 | 7,8 | ■ | 89,0 | 5 500 | -20...+60 | 65 000 / 40 000 | 130 000 | 2 | | |
| DV 6248 TD | | 700 | 421,0 | 48 | 40...55 | 69 | 7,8 | ■ | 89,0 | 5 500 | -20...+60 | 65 000 / 40 000 | 130 000 | 2 | | |
| min max | DV 6224 TD... | 100 | 58,9 | 24 | 16...36 | 29 | — | ■ | 2,0 | 800 | -20...+60 | 65 000 | 130 000 | 1 | P. 110-116 and 120, 121,123 | |
| | | 700 | 421,0 | | | 69 | 7,8 | | 89,0 | 5 500 | | | | 2 | | |
| min max | DV 6248 TD... | 100 | 58,9 | 48 | 40...55* | 29 | — | ■ | 2,0 | 800 | -20...+60 | 65 000 / 40 000 | 130 000 | 1 | P. 110-116 and 120, 121,123 | |
| | | 700 | 421,0 | | | 69 | 7,8 | | 89,0 | 5 500 | | | | 2 | | |

*Fan with extended voltage range available on request.

Models DV 6224 TD... and DV 6248 TD... are available in customer-specific, custom-developed variants only. The data specified here are technically feasible benchmark values. The fans can be specially adapted to your application with signal outputs and control inputs. For details of the technical possibilities, refer to the chapters on the sensor signal, alarm signal and control inputs beginning on page 107.



max. 480 m³/h

DC axial fans

Series 6400 172 x 150 x 51 mm



Highlights:

- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.

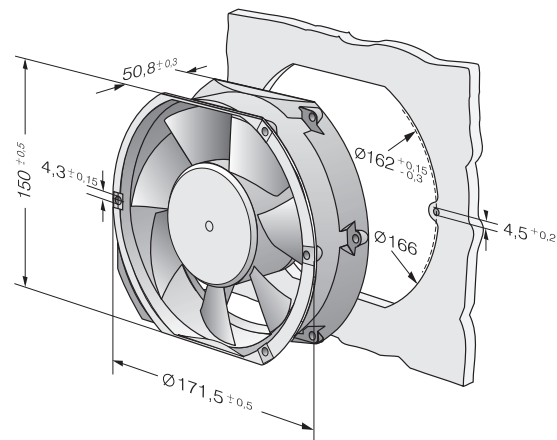
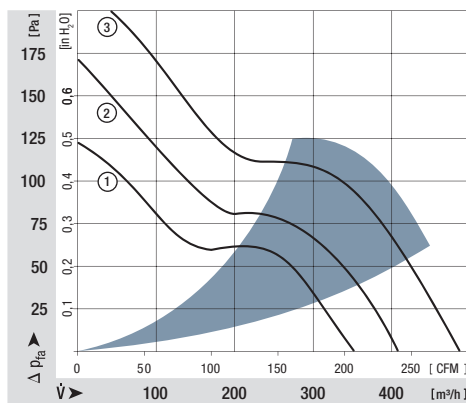
General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx). 48 V version incl. screws.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Electrical connection with flat plugs 3 x 0.5 mm.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 760 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C), see P. 15 | Curve | Specials |
|--------------|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| 6412 M | 350 | 206,0 | 12 | 8...15 | 52 | 6,0 | ■ | 12,0 | 2 850 | -20...+72 | 80 000 / 37 500 | 157 500 | 1 | | |
| 6424 M | 350 | 206,0 | 24 | 12...32 | 52 | 6,0 | ■ | 12,0 | 2 850 | -20...+72 | 80 000 / 37 500 | 157 500 | 1 | | |
| 6424 | 410 | 241,3 | 24 | 12...28 | 57 | 6,4 | ■ | 18,0 | 3 400 | -20...+72 | 75 000 / 35 000 | 125 000 | 2 | /2 | |
| 6424 H | 480 | 282,5 | 24 | 12...28 | 63 | 7,1 | ■ | 26,0 | 4 000 | -20...+55* | 70 000 / 50 000 | 110 000 | 3 | /12 | |
| 6448 | 410 | 241,3 | 48 | 28...60 | 57 | 6,4 | ■ | 17,0 | 3 400 | -20...+72 | 75 000 / 35 000 | 125 000 | 2 | | |
| 6448 H* | 480 | 282,5 | 48 | 28...60 | 63 | 7,1 | ■ | 26,0 | 4 000 | -20...+55** | 70 000 / 50 000 | 110 000 | 3 | | |

* Leads 310 mm.

** 72 °C upon request.



max. 900 m³/h

DC axial fans

Series 6400 TD TURBOFAN 172 x 150 x 51 mm



Highlights:

- 3-phase fan drive with high degree of running smoothness.
- Very rigid compression curve for high air flow at high back pressure.
- Control inputs, alarm and speed signals available on request.
- Optionally available with reversible speed.

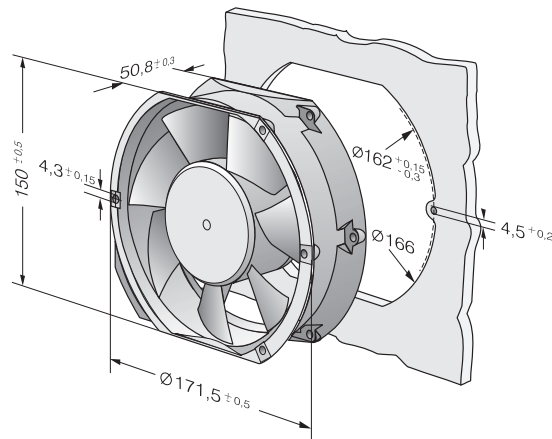
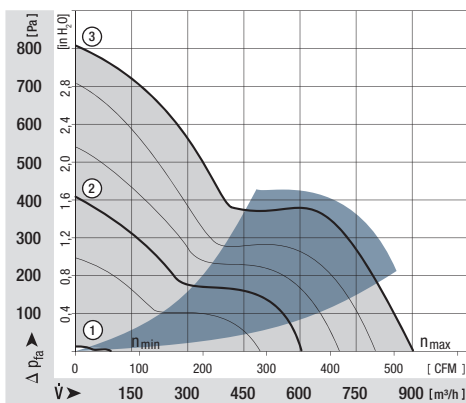
General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx). 48 V version incl. screws.
- Fully integrated electronic commutation.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor. Direction of rotation reversible.
- Mass: 760 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|--------------|-------------------|----------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|-----------------------------------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | □ / ■ | Watts | RPM | °C | Hours | Hours | | P. | |
| min max | 6424 TD... | 90 | 53,0 | 24 | 16...28 | 18 | — | ■ | 2,0 | 800 | -20...+60 | 70 000 / 45 000 | 110 000 | 1 | 2 | |
| | | 600 | 353,1 | | | 65 | 7,4 | | 50,0 | 5 100 | | | | | | |
| min max | 6448 TD... | 90 | 53,0 | 48 | 40...55* | 18 | — | ■ | 2,0 | 800 | -20...+60 | 70 000 / 45 000 | 110 000 | 1 | 2 | P. 110-116 and 120, 121,123 |
| | | 600 | 353,1 | | | 65 | 7,4 | | 50,0 | 5 100 | | | | | | |
| min max | 6448 TDHH... | 90 | 53,0 | 48 | 36...72 | 18 | — | ■ | 2,0 | 800 | -20...+60 | 70 000 / 45 000 | 110 000 | 1 | 3 | P. 110-116 and 120, 121,123 |
| | | 900 | 529,7 | | | 78 | 8,6 | | 163,0 | 7500 | | | | | | |

*Fan with extended voltage range available on request.

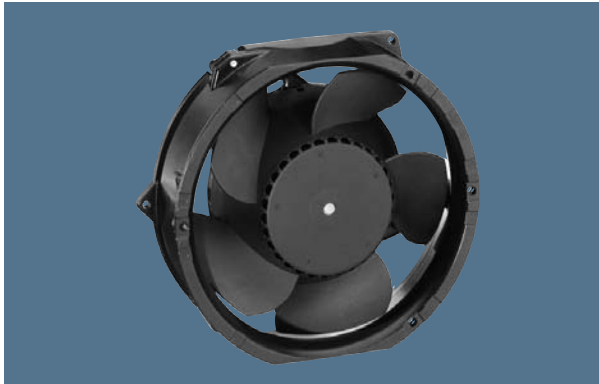
Models DV 6224 TD... and DV 6248 TD... are available in customer-specific, custom-developed variants only. The data specified here are technically feasible benchmark values. The fans can be specially adapted to your application with signal outputs and control inputs. For details of the technical possibilities, refer to the chapters on the sensor signal, alarm signal and control inputs beginning on page 108.



max. 530 m³/h

DC diagonal fans

Series DV 6400 172 x 160 x 51 mm



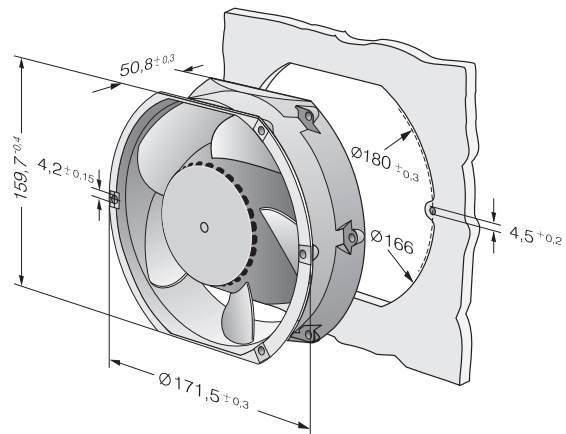
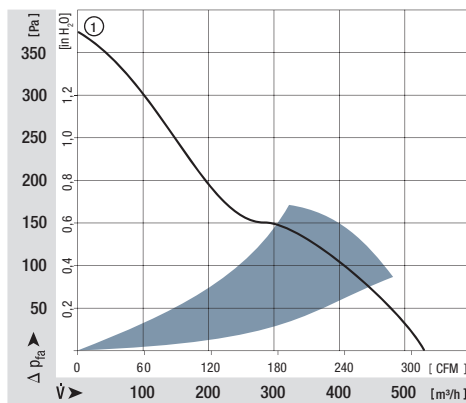
Highlights:

- Diagonal compact fan with low noise and high pressure saddle.
- Very rigid compression curve for high air flow at high back pressure.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.

General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx). 48 V version incl. screws.
- Fully integrated electronic commutation.
- Protected against reverse polarity and 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: 820 g.

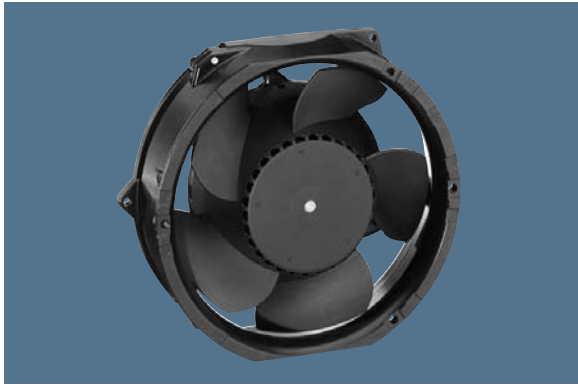
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| DV 6424 | 530 | 311,9 | 24 | 16...28 | 65 | 7,3 | ■ | 40,0 | 4 300 | -20...+75 | 90 000 / 45 000 | 180 000 | 1 | /12 | |
| DV 6448 | 530 | 311,9 | 48 | 28...60 | 65 | 7,3 | ■ | 40,0 | 4 300 | -20...+75 | 90 000 / 45 000 | 180 000 | 1 | /12 | |



max. 680 m³/h

DC diagonal fans

Series DV 6400 TD TURBOFAN 172 x 160 x 51 mm



Highlights:

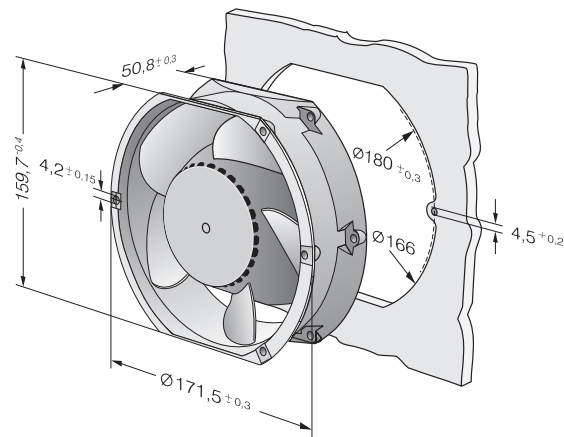
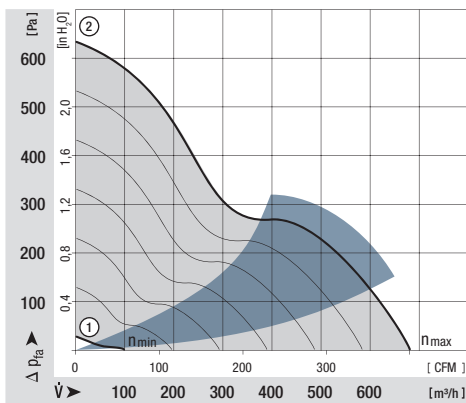
- Diagonal compact fan with low noise and high pressure saddle.
- 3-phase fan drive with high degree of running smoothness.
- Very rigid compression curve for high air flow at high back pressure.
- Control inputs, plus alarm and speed signals available on request.
- Optionally available with reversible speed.

General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8 (Torx). 48 V version incl. screws.
- Fully integrated electronic commutation.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor. Direction of rotation reversible.
- Mass: 820 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|---------------|-------------------|----------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-----------------------------------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | P. | |
| DV 6424 TD | | 680 | 400,2 | 24 | 16...28 | 71 | 7,9 | ■ | 91,0 | 5 500 | -20...+60 | 65 000 / 40 000 | 130 000 | 2 | | |
| min max | DV 6424 TD... | 100 | 58,9 | 24 | 16...28 | 29 | — | ■ | 2,0 | 800 | -20...+60 | 65 000 / 40 000 | 130 000 | 1 | P. 110-116 and 120, 121,123 | |
| | | 680 | 400,2 | | | 71 | 7,9 | | 91,0 | 5 500 | | | | 2 | | |
| min max | DV 6448 TD... | 100 | 58,9 | 48 | 40...55 | 29 | — | ■ | 2,0 | 800 | -20...+60 | 65 000 / 40 000 | 130 000 | 1 | P. 110-116 and 120, 121,123 | |
| | | 680 | 400,2 | | | 71 | 7,9 | | 86,0 | 5 500 | | | | 2 | | |

Models DV 6424 TD... and DV 6448 TD... are available in customer-specific, custom-developed variants only. The data specified here are technically feasible benchmark values. The fans can be specially adapted to your application with signal outputs and control inputs. For details of the technical possibilities, refer to the chapters on the sensor signal, alarm signal and control inputs beginning on page 108.



max. 1220 m³/h

DC axial fans

Series 2200 FTD 220 x 200 x 51 mm



Highlights:

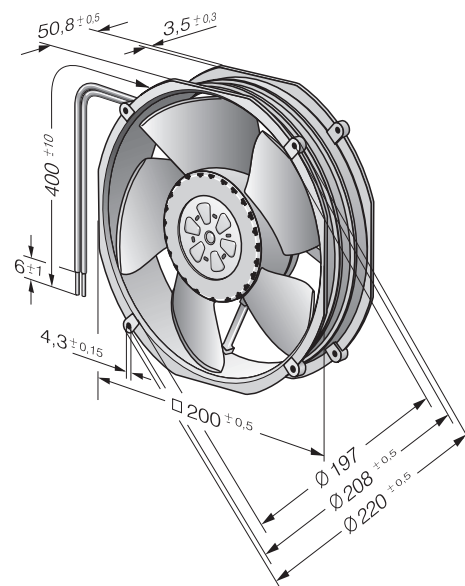
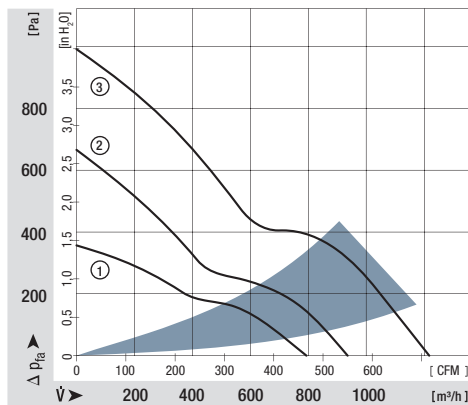
- High- performance 200 mm fan with compact overall height.
- Low operating noise level at high back pressure.
- 3-phase fan drive high degree of running smoothness and high efficiency.
- Standard with speed signal and PWM (P) or 0-10VDC / PWM (O) speed control.

General characteristics:

- Material: aluminium housing, fibreglass-reinforced PA impeller; housing with grounding lug for screw M4 x 8.
- Electronic commutation fully integrated.
- Protected against reverse polarity and locking.
- Connection via single strands AWG 20, UL 1007 / AWG 22, UL 1061, bared and tin-plated.
- Air exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Mass: 1000 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) | Curve | Specials |
|-------------------|-------------------|-------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | | |
| NEW 2214 F/2TDHO | 790 | 464,7 | 24 | 16...30 | 62 | 7,1 | ■ | 35,0 | 4250 | -25...+75 | 90 000 / 42 500 | 180 000 | 1 | /2 | |
| NEW 2214 F/2TDHHO | 940 | 552,9 | 24 | 16...36 | 66 | 7,4 | ■ | 35,0 | 5000 | -25...+70 | 85 000 / 42 500 | 170 000 | 2 | /2 | |
| NEW 2218 F/2TDHO | 790 | 464,7 | 48 | 36...57 | 62 | 7,1 | ■ | 48,0 | 4250 | -25...+75 | 90 000 / 42 500 | 180 000 | 1 | /2 | |
| NEW 2218 F/2TDHHO | 940 | 552,9 | 48 | 36...72 | 66 | 7,4 | ■ | 48,0 | 5000 | -25...+70 | 85 000 / 42 500 | 170 000 | 2 | /2 | |
| NEW 2218 F/2TDH4P | 1220 | 717,6 | 48 | 36...72 | 72 | 8,2 | ■ | 103,0 | 6500 | -20...+65 | 70 000 / 40 000 | 140 000 | 3 | /2 | |

Speed control range from 1000 RPM up to maximum nominal speed. Stationary at 0 % PWM / 0 V,
Type O: stationary at sensor break; Type P: maximum speed at sensor break.



max. 1090 m³/h

DC axial fans

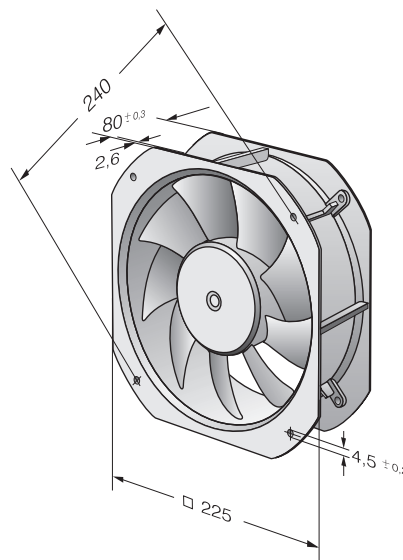
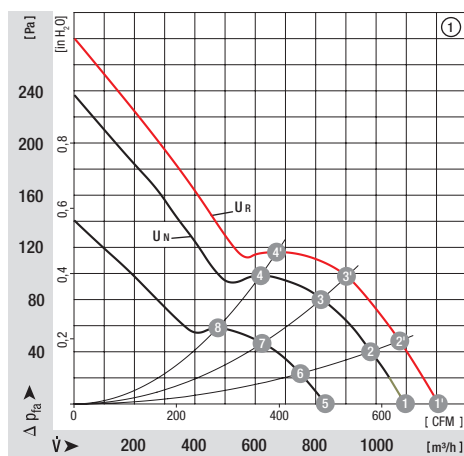
W1G 200 225 x 225 x 80 mm



- Material: Die-cast aluminium wall ring, 9 sheet steel blades. Blades and rotor coated in black.
- Protected against reverse polarity and locking.
- Direction of air flow: "V", exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Type of protection: IP 42. Insulation class: "B".
- Maintenance-free ball bearings.
- Control input 0-10 V DC / PWM and tach output.
- Electrical connection with terminal strip.
- Continuous operation (S1).
- Mass: 2.1 kg.

| Nominal data | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Curve |
|-----------------|-------------------|----------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|-------|
| Type | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | | |
| W1G 200-HH77-52 | 1090 | 641,6 | 24 | 16...28 | 60 | — | ■ | 55,0 | 2 950 | -25...+60 | 57 000 / 42 000 | | 1 |
| W1G 200-HH01-52 | 1090 | 641,6 | 48 | 36...57 | 60 | — | ■ | 55,0 | 2 950 | -25...+60 | 57 000 / 42 000 | | 1 |

| | n [RPM] | P ₁ [W] | L _{pA} [dB(A)] |
|-----|------------|-----------------------|----------------------------|
| ① ① | 2300 | 73 | 63 |
| ① ② | 2970 | 77 | 62 |
| ① ③ | 3100 | 80 | 63 |
| ① ④ | 2970 | 80 | 66 |
| ① ⑤ | 2950 | 55 | 60 |
| ① ⑥ | 2890 | 58 | 60 |
| ① ⑦ | 2800 | 61 | 61 |
| ① ⑧ | 2780 | 63 | 64 |
| ① ⑨ | 2270 | 27 | 55 |
| ① ⑩ | 2230 | 28 | 54 |
| ① ⑪ | 2170 | 29 | 54 |
| ① ⑫ | 2130 | 30 | 57 |



max. 1245 m³/h

DC diagonal module

K1G 200 225 x 225 x 80 mm



- Material: Housing made of fibreglass-reinforced PA6 plastic, seven blades made of fibre-glass-reinforced PA6 plastic. Rotor coated in black
- Protected against reverse polarity and locking.
- Direction of air flow "V". Direction of rotation CW, seen on rotor.
- Type of protection: IP 20 (... 02); IP 44 (... 04). Insulation class: "B".
- Maintenance-free ball bearings.
- Control input 0-10 VDC / PWM and tach output.
- Electrical connection via connection line AWG 20, 4x brass lead tips crimped.
- Continuous operation (S1).
- Mass: 1.7 kg.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Current draw | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Curve |
|--------------|-----------------|-------------------|----------|-----------------|---------------|--------------|-------------------|---|-------------|---------------|-------------------|--|--|-------|
| Type | | m ³ /h | CFM | VDC | VDC | A | dB(A) | ■ / ■ | Watts | RPM | °C | Hours | | |
| NEW | K1G 200-AD65-04 | 1020 | 600,3 | 24 | 16...28 | 4,7 | 76 | ■ | 95 | 3 400 | -25...+60 | 67 000 / 33 000 | | 1 |
| NEW | K1G 200-AD31-02 | 1045 | 614,9 | 24 | 16...28 | 5,3 | 77 | ■ | 107 | 3 520 | -25...+70 | 100 000 / 50 000 | | 2 |
| NEW | K1G 200-AD49-04 | 1095 | 644,4 | 48 | 36...57 | 3,4 | 77 | ■ | 120 | 3 650 | -25...+60 | 80 000 / 32 000 | | 3 |
| NEW | K1G 200-AD37-02 | 1245 | 732,7 | 48 | 36...57 | 5,6 | 81 | ■ | 183 | 4 140 | -25...+70 | 75 000 / 30 000 | | 4 |

| | n | P ₁ | I | Lw _A |
|-----|-------|----------------|------|-----------------|
| | [RPM] | [W] | [A] | [dB(A)] |
| ① ① | 3400 | 95 | 4,70 | 76 |
| ① ② | 3410 | 116 | 5,61 | 74 |
| ① ③ | 3410 | 119 | 5,75 | 74 |
| ① ④ | 3410 | 117 | 5,62 | 76 |
| ② ① | 3520 | 107 | 5,30 | 77 |
| ② ② | 3520 | 127 | 6,24 | 75 |
| ② ③ | 3520 | 129 | 6,31 | 76 |
| ② ④ | 3520 | 126 | 6,18 | 76 |
| ③ ① | 3650 | 120 | 3,40 | 77 |
| ③ ② | 3650 | 141 | 3,90 | 75 |
| ③ ③ | 3650 | 145 | 3,99 | 76 |
| ③ ④ | 3650 | 141 | 3,88 | 78 |
| ④ ① | 4140 | 183 | 5,60 | 81 |
| ④ ② | 4090 | 212 | 6,46 | 79 |
| ④ ③ | 4060 | 213 | 6,52 | 79 |
| ④ ④ | 4110 | 211 | 6,43 | 80 |

Air performance measured as per: ISO 5801, Installation category A, without protection against accidental contact

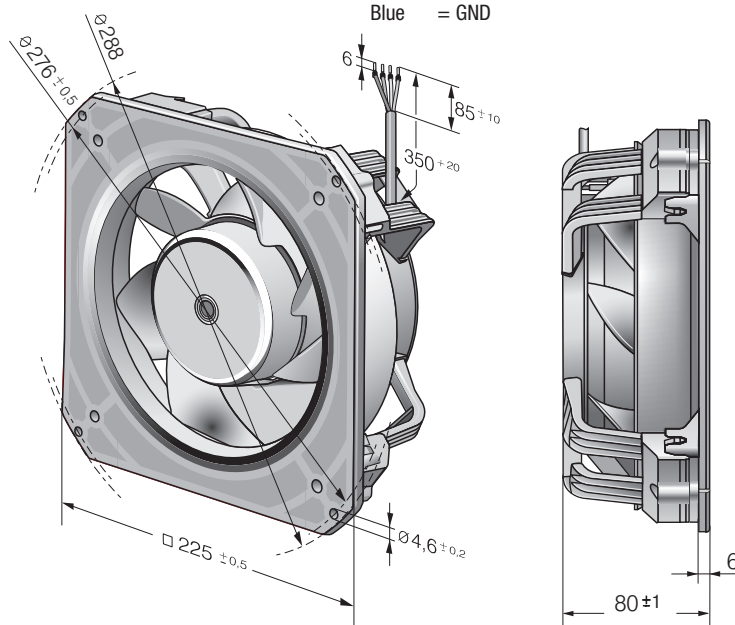
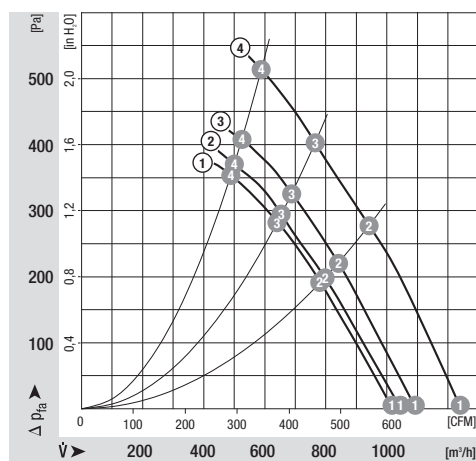
Suction-side noise levels: Lw_A as per ISO 13347

The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation.

With any deviation to the standard setup, the specific values have to be checked and re-viewed once installed or fitted!

Cable assignment:

- Red = UN
- Yellow = 0-10 VDC
- White = Speed monitoring output
- Blue = GND



max. 1640 m³/h

DC diagonal module

K3G 200 225 x 225 x 89 mm



- Material: Housing made of fibreglass-reinforced PA6 plastic, seven blades made of fibre-glass-reinforced PA6 plastic. Rotor coated in black
- Protected against reverse polarity and locking.
- Direction of air flow "V". Direction of rotation CW, seen on rotor.
- Type of protection: IP 20 (... 02); IP 44 (... 04). Insulation class: "B".
- Maintenance-free ball bearings.
- Control input 0-10 VDC / PWM and tach output.
- Electrical connection via connection line AWG 16, 4x crimped core-end sleeves.
- Continuous operation (S1).
- Mass: 2.2 kg.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Current draw | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Curve |
|--------------|-----------------|-------------------|----------|-----------------|---------------|--------------|-------------------|---|-------------|---------------|-------------------|--|--|-------|
| Type | | m ³ /h | CFM | VDC | VDC | A | dB(A) | ■ / ■ | Watts | RPM | °C | Hours | | |
| NEW | K3G 200-BDA3-04 | 1215 | 716,0 | 24 | 16...28 | 7,7 | 81 | ■ | 185 | 4 060 | -25...+60 | 55 000 / 31 000 | | 1 |
| NEW | K3G 200-BDA1-02 | 1215 | 716,0 | 24 | 16...28 | 7,7 | 81 | ■ | 185 | 4 060 | -25...+65 | 60 000 / 32 000 | | 1 |
| NEW | K3G 200-BDA4-04 | 1550 | 911,0 | 48 | 36...57 | 7,1 | 86 | ■ | 339 | 5 140 | -25...+60 | 52 000 / 32 000 | | 2 |
| NEW | K3G 200-BDA2-02 | 1640 | 965,0 | 48 | 36...57 | 8,7 | 87 | ■ | 418 | 5 480 | -25...+60 | 40 000 / 22 000 | | 3 |

| | n | P ₁ | I | Lw _A |
|-----|-------|----------------|------|-----------------|
| | [RPM] | [W] | [A] | [dB(A)] |
| ① ① | 4060 | 185 | 7,70 | 81 |
| ① ② | 4010 | 204 | 8,48 | 78 |
| ① ③ | 4010 | 209 | 8,70 | 78 |
| ① ④ | 4020 | 208 | 8,66 | 79 |
| ② ① | 5140 | 339 | 7,10 | 86 |
| ② ② | 5070 | 373 | 7,78 | 83 |
| ② ③ | 5060 | 385 | 8,01 | 83 |
| ② ④ | 5080 | 380 | 7,91 | 84 |
| ③ ① | 5480 | 418 | 8,70 | 87 |
| ③ ② | 5250 | 421 | 8,77 | 84 |
| ③ ③ | 5190 | 422 | 8,78 | 83 |
| ③ ④ | 5240 | 421 | 8,77 | 85 |

Air performance measured as per: ISO 5801, Installation category A, without protection against accidental contact

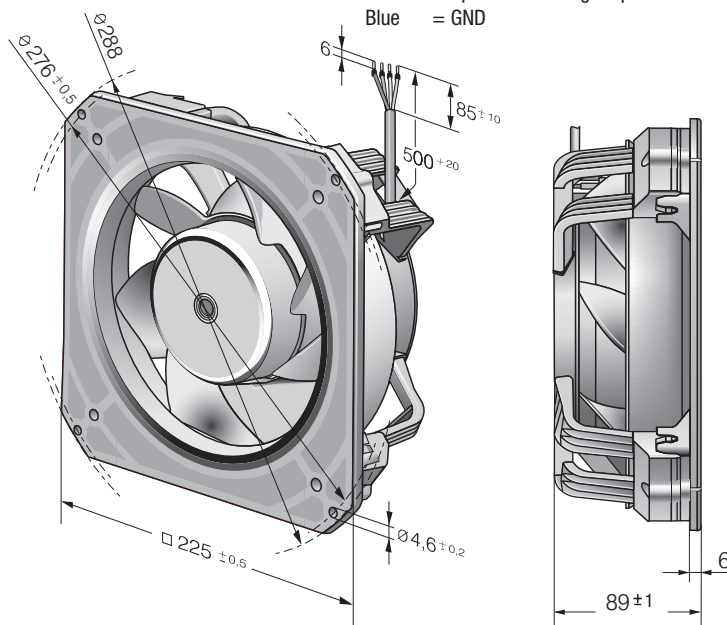
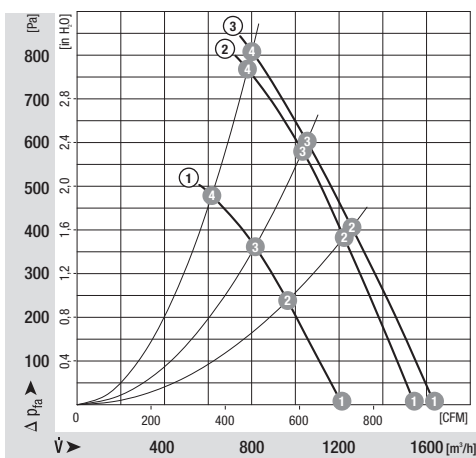
Suction-side noise levels: Lw_A as per ISO 13347

The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation.

With any deviation to the standard setup, the specific values have to be checked and re-viewed once installed or fitted!

Cable assignment:

- Red = UN
- Yellow = 0-10 VDC
- White = Speed monitoring output
- Blue = GND



max. 1920 m³/h

DC axial fans

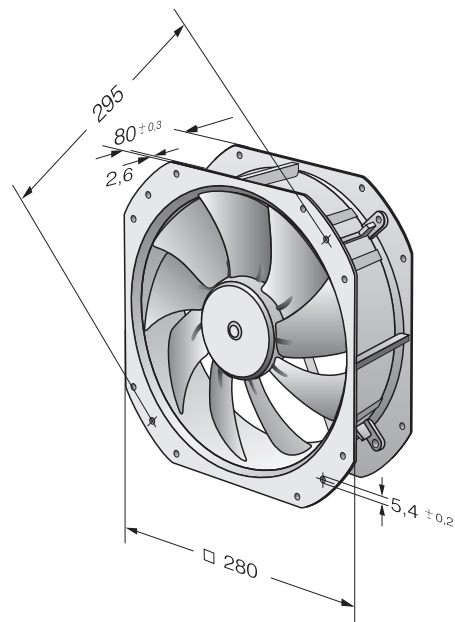
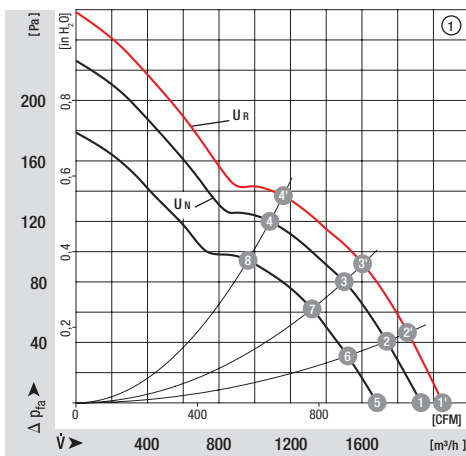
W1G 250 280 x 280 x 80 mm



- Material: Die-cast aluminium wall ring, 7 sheet steel blades. Blades and rotor coated in black.
- Protected against reverse polarity and locking.
- Direction of air flow: "V", exhaust over struts. Direction of rotation counter-clockwise, seen on rotor.
- Type of protection: IP 42. Insulation class: "B".
- Maintenance-free ball bearings.
- Control input 0-10 V DC / PWM and tach output.
- Electrical connection with terminal strip.
- Continuous operation (S1).
- Mass: 2.4 kg.

| Nominal data | Air flow | Air flow | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Curve |
|-----------------|-------------------|----------|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|-------|
| Type | m ³ /h | CFM | VDC | VDC | dB(A) | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | | |
| W1G 250-HH37-52 | 1920 | 1130,1 | 24 | 16...28 | 70 | — | ■ | 105,0 | 2 750 | -25...+60 | 57 000 / 38 000 | | 1 |
| W1G 250-HH67-52 | 1920 | 1130,1 | 48 | 36...57 | 70 | — | ■ | 105,0 | 2 750 | -25...+60 | 57 000 / 38 000 | | 1 |

| | n [RPM] | P ₁ [W] | L _{pA} [dB(A)] |
|-----|---------|--------------------|-------------------------|
| ① ① | 2920 | 129 | 71 |
| ① ② | 2800 | 132 | 72 |
| ① ③ | 2680 | 135 | 71 |
| ① ④ | 2600 | 139 | 72 |
| ① ⑤ | 2750 | 105 | 70 |
| ① ⑥ | 2630 | 110 | 69 |
| ① ⑦ | 2520 | 111 | 69 |
| ① ⑧ | 2440 | 114 | 70 |
| ① ⑨ | 2610 | 73 | 66 |
| ① ⑩ | 2320 | 75 | 67 |
| ① ⑪ | 2230 | 78 | 67 |
| ① ⑫ | 2170 | 80 | 68 |



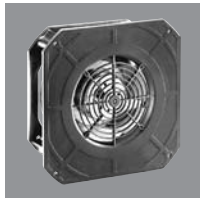
DC centrifugal fans

| | |
|-----------------------------|-----|
| DC centrifugal fan overview | 77 |
| DC centrifugal fans | 79 |
| DC tangential fans | 105 |



DC fans

Technical information



Product line

Our centrifugal product line includes fans for every application. Whether as free-running impellers with a diameter between 97 mm and 225 mm or as assemblies in a ready-to-install, compact housing with inlet nozzle with an edge length between 51 mm and 270 mm. Of course, all models feature high-efficiency, brushless motor technology.



Electronic protection against reverse polarity

ebm-papst DC fans have electronically commutated drives with electronic protection against reverse polarity. The electronics are conveniently located in the fan hub.

Product life expectancy

A distinctive feature of DC fan technology is the convincingly high product life expectancy. Thanks to the excellent efficiency of the brushless drives, the thermal load of the bearings is reduced, thus considerably increasing the life expectancy of the fans.

Protection class

DC fans with sleeve and ball bearings are powered by Class E insulated motors. All ebm-papst fans conform to the requirements of Protection Class IP 20. Fans conforming to IP 54 and special protection classes are also available.

Voltage range

Many of our DC fans can be operated on voltages that are up to 50% lower and 25% higher than their nominal voltage (see Voltage range in the technical tables). This enables the air performance to be adapted to the cooling requirements and allows the noise to be reduced, even if the fan does not have a control input.

Closed-loop speed control and monitoring

Closed-loop speed control and function monitoring are becoming increasingly important in many applications. ebm-papst offers many fans in the standard design with a control input and open collector speed signal.

S-Force centrifugal – RadiCal

The new S-Force centrifugal fans provide peak performance among fans of this type. With air flow capacity at over 1500 m³/h and a pressure build-up of up to 1000 pascals, the highest heat flows are manageable. In addition, the models are extremely efficient due to the multi-pole, electronically commutated drive motors and can be adapted individually to every application thanks to intelligent motor features. Some models use our new, highly efficient RadiCal impellers.

Centrifugal fans for DC operation

Overview of air performance

| Dimensions | Series | Air flow | Page |
|---------------------|-------------|-------------------|------|
| mm | | m ³ /h | |
| 105 x 59 x 79 | RV 40 | 18...24 | 79 |
| □ 51 x 15 | RLF 35 | 9,6 | 80 |
| □ 76 x 27 | RL 48 | 22...28 | 81 |
| 97 x 93,5 x 33 | RL 65 | 56...61 | 82 |
| □ 121 x 37 | RL 90 N | 40...55 | 83 |
| □ 127 x 25 | RLF 100 | 64...80 | 84 |
| □ 135 x 38 | RG 90 N | 55 | 85 |
| □ 180 x 40 | RG 125 N | 60...137 | 86 |
| □ 220 x 56 | RG 160 N | 139...209 | 87 |
| □ 220 x 56 | RG 160 NTD | 59...370 | NEW |
| □ 225 x 85 | RG 190 TD | 630...930 | NEW |
| □ 270 x 99 | RG 220 TD | 1090...1280 | NEW |
| □ 270 x 119 | RG 225 TD | 1040...1210 | NEW |
| ∅ 97 x 41 | RET 97 TD | 220 | NEW |
| ∅ 104 x 25 | REF 100 | 86...104 | 93 |
| ∅ 101 x 52 | RER 101 | 190 | 94 |
| ∅ 120 x 54 | RER 120 TD | 320...390 | NEW |
| ∅ 138 x 35 | RER 125 N | 74...166 | 96 |
| ∅ 133 x 91 | RER 133 TD | 460...565 | NEW |
| ∅ 165 x 51 | RER 160 N | 255 | 98 |
| ∅ 165 x 51 | RER 160 NTD | 66...354 | NEW |
| ∅ 175 x 55 | REF 175 TD | 800 | NEW |
| ∅ 175 x 69 | RER 175 TD | 600...980 | NEW |
| ∅ 190 x 69 | RER 190 TD | 650...970 | NEW |
| ∅ 220 x 71 | RER 220 TD | 1090...1280 | NEW |
| ∅ 225 x 99 | RER 225 TD | 1080...1600 | NEW |
| 201...413 x 50 x 48 | QG 030 | 75...155 | 105 |



Information

DC axial fans

DC centrifugal fans

DC fans - specials

ACmaxx / i-maxx

AC axial fans

AC centrifugal fans

Accessories

Representatives

Centrifugal fans for DC operation

Overview of technically feasible designs

| Centrifugal fans | | V | Pc | Tr | li | pm | A | ⊙ | HP | IP54 | Sp | Page | | |
|------------------|---------------------|--------------|-------------------------------|--------|------------------|------------------------|-----------------------------|-----------------------------|-------------------|------------------------|----------------------------|---------------------|------------|---------------------------|
| Series | mm | VDE, UL, CSA | Sleeve bearings/half bearings | Sensor | Go / No-go alarm | Alarm with limit speed | External temperature sensor | Internal temperature sensor | PMW control input | Analogue control input | Multi-option control input | Humidity protection | IP >= IP54 | Salt spray fog protection |
| RV 40 | 105 x 59 x 79 | yes ■ | — | ● | — | — | — | — | — | — | — | — | — | 79 |
| RLF 35 | 51 x 51 x 15 | * ■ | ● | — | — | — | — | — | — | — | — | — | — | 80 |
| RL 48 | 76 x 76 x 27 | yes ■ | ● | ● | — | — | — | — | — | — | — | — | — | 81 |
| RL 65 | 97 x 93,5 x 33 | * ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 82 |
| RL 90 N | 121 x 121 x 37 | yes □/■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 83 |
| RLF 100 | 127 x 127 x 25 | yes ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 84 |
| RG 90 N | 135 x 135 x 38 | yes □/■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 85 |
| RG 125 N | 180 x 180 x 40 | yes ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 86 |
| RG 160 N | 220 x 220 x 56 | yes ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 87 |
| NEW RG 160 NTD | 220 x 220 x 56 | yes ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 88 |
| NEW RG 190 TD | 225 x 225 x 85 | yes ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 89 |
| NEW RG 220 TD | 270 x 270 x 99 | yes ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 90 |
| NEW RG 225 TD | 270 x 270 x 132 | yes ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 91 |
| NEW RET 97 TD | 97 Ø x 41 | * ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 92 |
| REF 100 | 100 Ø x 25 | yes ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 93 |
| RER 101 | 101 Ø x 52 | * ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 94 |
| NEW RER 120 TD | 120 Ø x 54 | * ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 95 |
| RER 125 N | 138 Ø x 35 | yes ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 96 |
| NEW RER 133 TD | 133 Ø x 91 | * ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 97 |
| RER 160 N | 165 Ø x 51 | yes ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 98 |
| NEW RER 160 NTD | 165 Ø x 51 | yes ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 99 |
| NEW REF 175 TD | 175 Ø x 55 | * ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 100 |
| NEW RER 175 TD | 175 Ø x 69 | * ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 101 |
| NEW RER 190 TD | 190 Ø x 69 | * ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 102 |
| NEW RER 220 TD | 220 Ø x 71 | * ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 103 |
| NEW RER 225 TD | 225 Ø x 99 | * ■ | ● | ● | ● | ● | ● | ● | — | — | — | — | — | 104 |
| QG 030 | 201...413 x 50 x 48 | yes ■ | ● | — | — | — | — | — | — | — | — | — | — | 105 |

* approvals applied for
 — not yet available
 ● available
 □ Sleeve Bearings
 ■ Ball Bearings

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. As a rule they are not available off the shelf and are tied to minimum volumes. Please consult your customer support representative about the feasibility of your special variant.

Optional special versions / Information pictograms (see page 20)

On the catalogue pages and in the overview on page 20, the pictograms shown provide information about the special designs that are technically feasible in the fan series. 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.

max. 24 m³/h

DC centrifugal fans

Series RV 40 105 x 59 x 79 mm



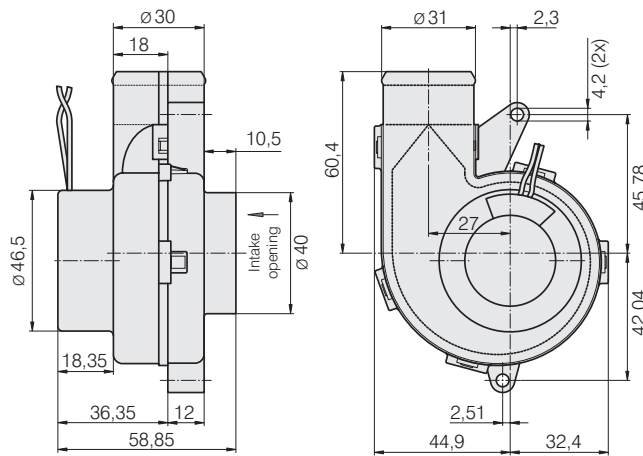
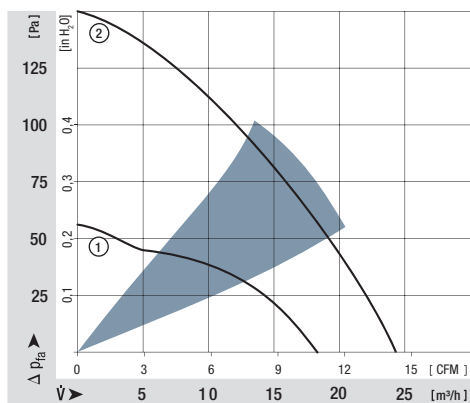
Highlights:

- Pressure-optimised blower.
- Motor with very low structure-borne noise properties.
- Forward curved impeller.

General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 26, TR 64. Bared and tin-plated.
- Mass: 100 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|---------------|-------------------|------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | |
| RV 40-18/12 L | 18 | 10,6 | 12 | 9...16 | 4,0 | ■ | 2,0 | 3 900 | -20...+70 | 70 000 / 35 000 | 110 000 | 1 | | |
| RV 40-18/12 H | 24 | 14,1 | 12 | 9...16 | 5,0 | ■ | 4,5 | 4 800 | -20...+70 | 50 000 / 25 000 | 80 000 | 2 | | |



max. 9,6 m³/h

DC centrifugal fans

Series RLF 35 51 x 51 x 15 mm



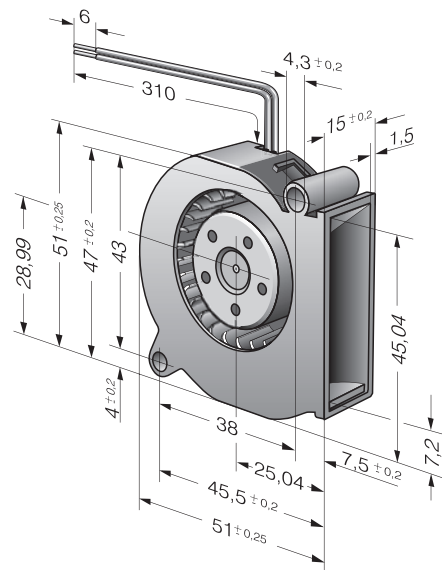
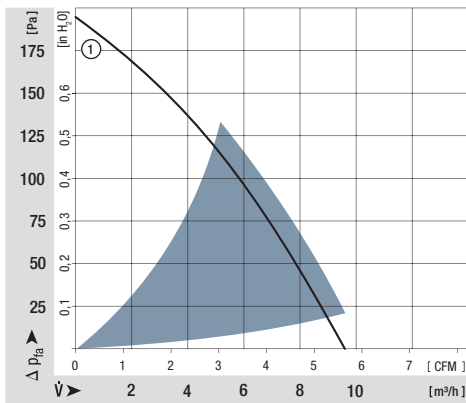
Highlights:

- Noise-optimised air outlet in scroll housing.
- Very flat and powerful centrifugal fan.
- Forward curved impeller.

General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 26, TR 64. Bared and tin-plated.
- Mass: 40 g.

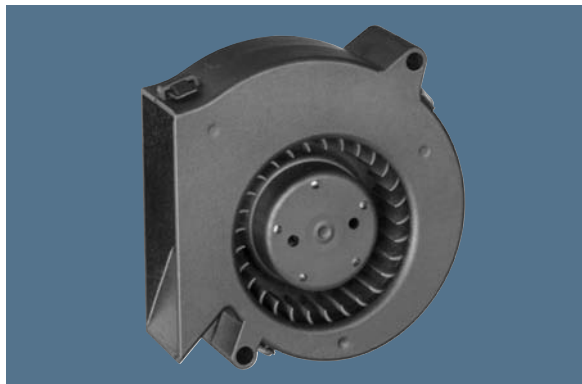
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|---------------|-------------------|-----|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | |
| RLF 35-8/12 N | 9,6 | 5,7 | 12 | 8...13,2 | 5,5 | ■ | 3,5 | 6 700 | -20...+70 | 60 000 / 30 000 | 120 000 | 1 | | |
| RLF 35-8/14 N | 9,6 | 5,7 | 24 | 14...28 | 5,5 | ■ | 4,3 | 6 700 | -20...+70 | 60 000 / 30 000 | 120 000 | 1 | | |



max. 28 m³/h

DC centrifugal fans

Series RL 48 76 x 76 x 27 mm



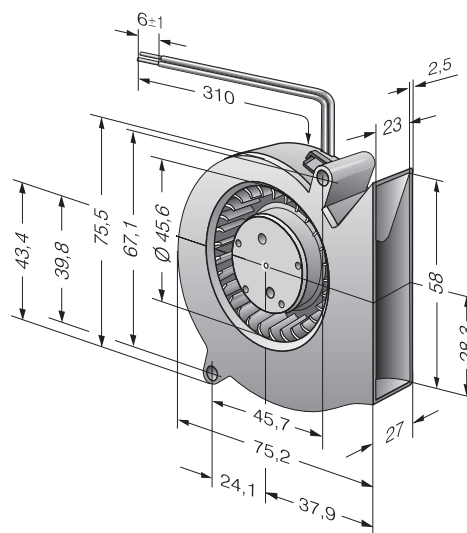
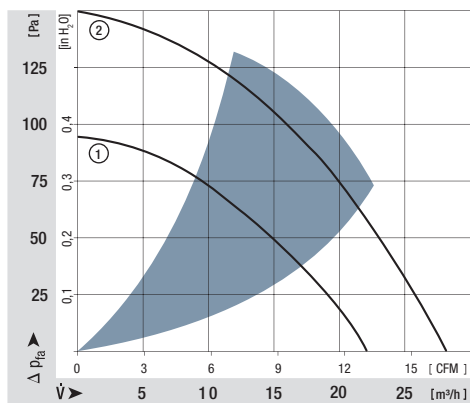
Highlights:

- Pressure-optimised blower.
- Noise-optimised air outlet in scroll housing.
- Forward curved impeller.

General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 26, TR 64. Bared and tin-plated.
- Mass: 75 g.

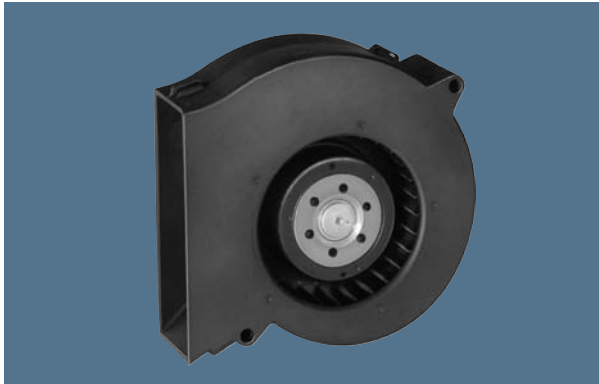
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|----------------|----------|-------------------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | Type | m ³ /h | | | | | | | | | | | | |
| RL 48-19/12 ML | 22 | 12,9 | 12 | 8...15 | 5,3 | ■ | 2,9 | 3 500 | -20...+70 | 70 000 / 35 000 | 140 000 | 1 | | |
| RL 48-19/12 | 28 | 16,5 | 12 | 8...13,5 | 5,7 | ■ | 5,0 | 4 400 | -20...+70 | 60 000 / 30 000 | 120 000 | 2 | /2 | |
| RL 48-19/14 ML | 22 | 12,9 | 24 | 18...28 | 5,3 | ■ | 2,9 | 3 500 | -20...+70 | 70 000 / 35 000 | 140 000 | 1 | | |
| RL 48-19/14 | 28 | 16,5 | 24 | 18...26,4 | 5,7 | ■ | 5,0 | 4 400 | -20...+70 | 60 000 / 30 000 | 120 000 | 2 | /2 | |



max. 61 m³/h

DC centrifugal fans

Series RL 65 97 x 93,5 x 33 mm



Highlights:

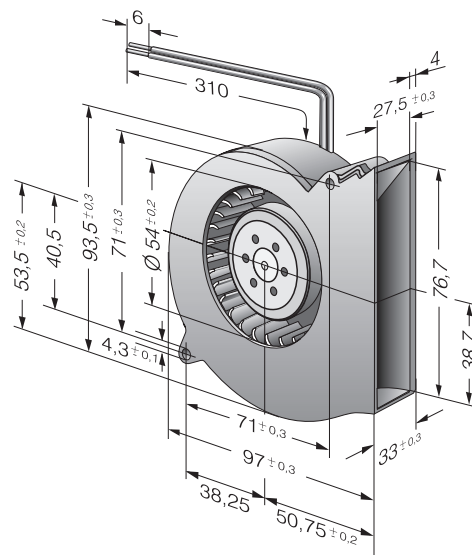
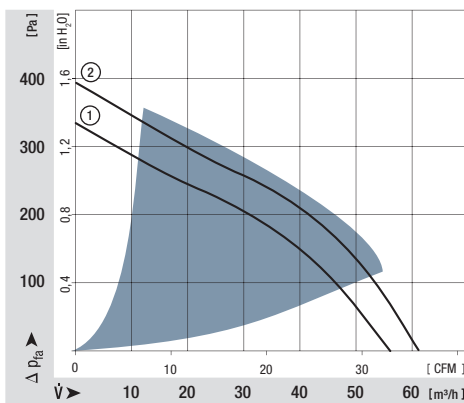
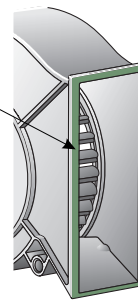
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- Pressure-optimised blower. Noise-optimised air outlet in scroll housing.
- Forward curved impeller.
- Integrated snap-in fins for easy assembly.

General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 26, TR 64. Bared and tin-plated.
- Mass: 170 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound power level | Sintec sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-------------------|------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | |
| RL 65-21/12 | 56 | 33,0 | 12 | 6,8...13,8 | 6,6 | ■ | 15,0 | 4 500 | -20...+70 | 60 000 / 30 000 | 120 000 | 1 | /2 | |
| RL 65-21/12H | 61 | 35,9 | 12 | 6,8...13,2 | 6,8 | ■ | 19,2 | 4 900 | -20...+55 | 55 000 / 37 500 | 105 000 | 2 | | |
| RL 65-21/14 | 56 | 33,0 | 24 | 12...26,4 | 6,6 | ■ | 14,0 | 4 500 | -20...+70 | 60 000 / 30 000 | 120 000 | 1 | | |
| RL 65-21/14H | 61 | 35,9 | 24 | 12...26,4 | 6,8 | ■ | 18,0 | 4 900 | -20...+60 | 55 000 / 35 000 | 105 000 | 2 | | |

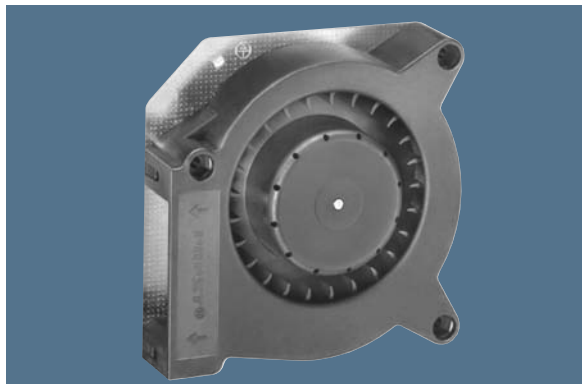
Snap-in fins for easy assembly



max. 55 m³/h

DC centrifugal fans

Series RL 90 N 121 x 121 x 37 mm



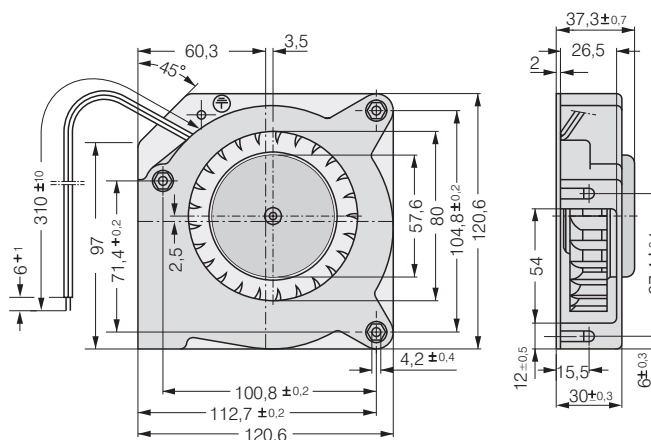
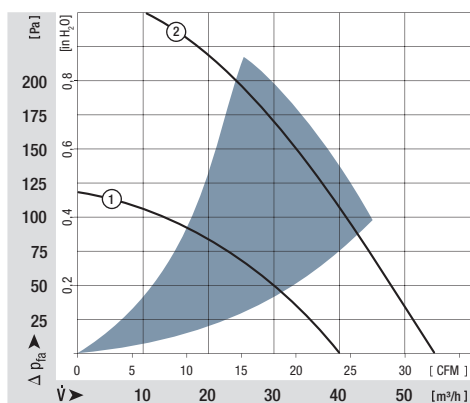
Highlights:

- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- Forward curved impeller.

General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller; Housing base of steel plate.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Mass: 420 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L _{10Δ} (40 °C) see P. 15 | Curve | Specials |
|----------------|-------------------|------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | |
| RL 90-18/12 N | 40 | 23,5 | 12 | 7...15 | 5,8 | ■ | 5,5 | 2 500 | -30...+75 | 62 500 / 27 500 | 112 500 | 1 | /2 | |
| RL 90-18/14 NG | 40 | 23,5 | 24 | 12...28 | 5,8 | □ | 5,0 | 2 500 | -10...+75 | 62 500 / 27 500 | 112 500 | 1 | | |
| RL 90-18/14 N | 40 | 23,5 | 24 | 12...28 | 5,8 | ■ | 5,0 | 2 500 | -30...+75 | 62 500 / 27 500 | 112 500 | 1 | /2 | |
| RL 90-18/18 NH | 55 | 32,4 | 48 | 40...53 | 6,9 | ■ | 15,0 | 3 500 | -30...+55 | 32 500 / 22 500 | 62 500 | 2 | | |

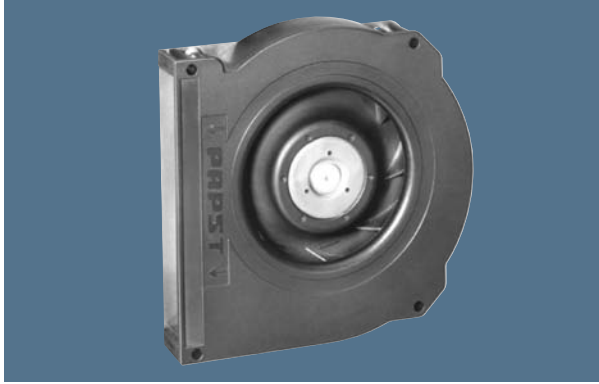


Screw clip M4 or 8-32UNC. Screw-in depth max. 12.5 min. 9.0

max. 80 m³/h

DC centrifugal fans

Series RLF 100 127 x 127 x 25 mm



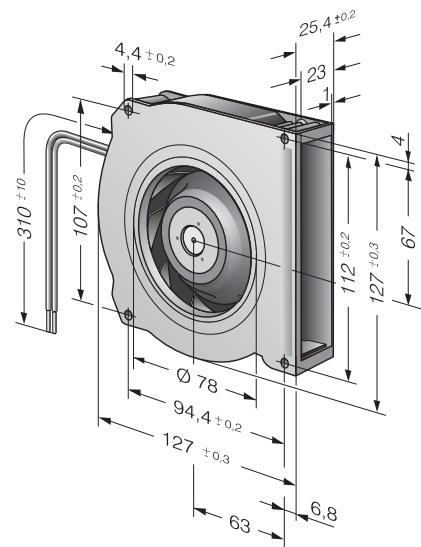
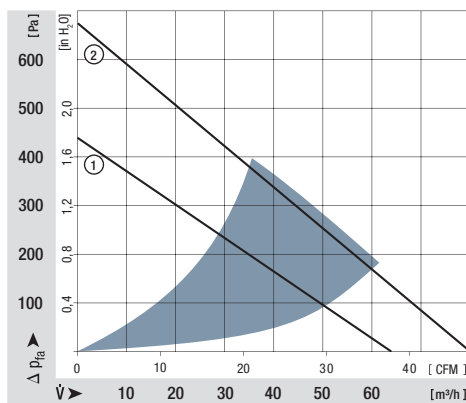
Highlights:

- Very flat and powerful centrifugal fan. Pressure-optimised blower.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- Some models available as standard with PWM control input and speed signal.
- Backward curved impeller.

General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller. Housing base of galvanised steel plate.
- Fully integrated electronic commutation. Protected against reverse polarity and locking.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Mass: 320 g.

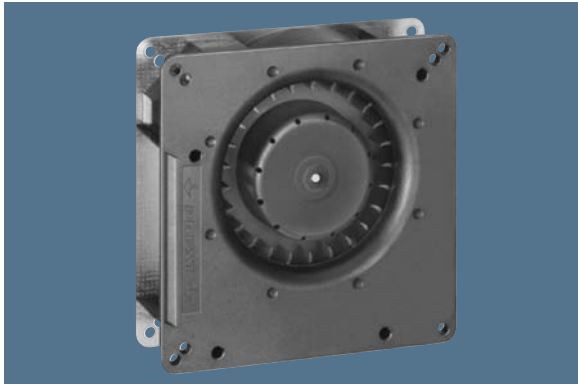
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--|-------------------|------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | |
| RLF 100-11/12 | 64 | 37,7 | 12 | 8...15 | 6,4 | ■ | 8,0 | 5 100 | -20...+75 | 80 000 / 30 000 | 150 000 | 1 | /2 | |
| RLF 100-11/14 | 64 | 37,7 | 24 | 16...30 | 6,4 | ■ | 8,0 | 5 100 | -20...+75 | 80 000 / 30 000 | 150 000 | 1 | /19 | |
| RLF 100-11/18 | 64 | 37,7 | 48 | 36...60 | 6,4 | ■ | 8,6 | 5 100 | -20...+75 | 80 000 / 30 000 | 150 000 | 1 | | |
| High speed models with Open Collector Tacho and PWM speed control. | | | | | | | | | | | | | | |
| RLF 100-11/12/2HP-200 | 80 | 47,1 | 12 | 10...13,2 | 7,5 | ■ | 18,6 | 6 400 | -20...+60 | 72 500 / 45 000 | 112 500 | 2 | /2 | |
| RLF 100-11/18/2HP-182 | 80 | 47,1 | 48 | 43...53 | 7,5 | ■ | 17,0 | 6 400 | -20...+70 | 72 500 / 35 000 | 112 500 | 2 | /2 | |



max. 55 m³/h

DC centrifugal fans

Series RG 90 N 135 x 135 x 38 mm



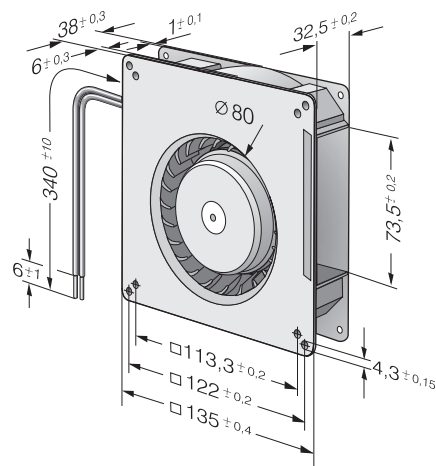
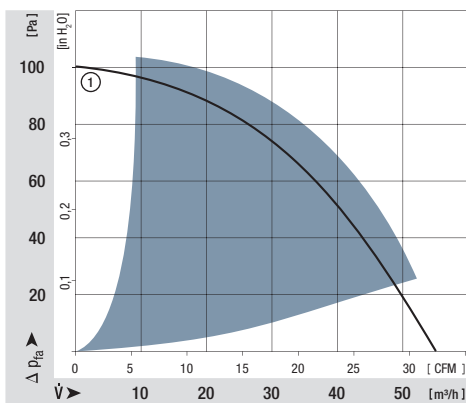
Highlights:

- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- Backward curved impeller.

General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller; Housing base of steel plate.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- 48 V Model: Flat plug 6.3 x 0.8 mm for protective earth.
- Mass: 440 g.

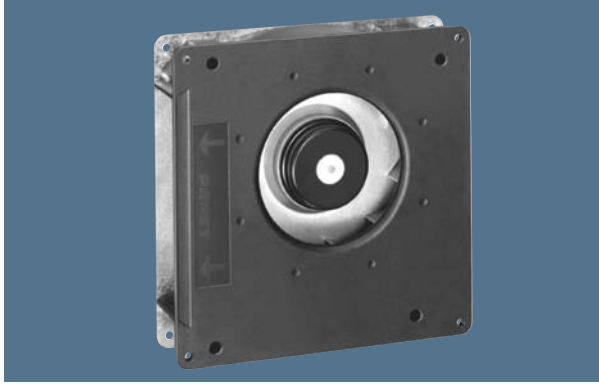
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|----------------|-------------------|------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | |
| RG 90-18/12 N | 55 | 32,4 | 12 | 7...15 | 5,5 | ■ | 6,0 | 2 200 | -30...+75 | 62 500 / 27 500 | 112 500 | 1 | | |
| RG 90-18/14 NG | 55 | 32,4 | 24 | 12...28 | 5,5 | □ | 5,5 | 2 200 | -10...+75 | 62 500 / 27 500 | 112 500 | 1 | | |
| RG 90-18/14 N | 55 | 32,4 | 24 | 12...28 | 5,5 | ■ | 5,5 | 2 200 | -30...+75 | 62 500 / 27 500 | 112 500 | 1 | | |
| RG 90-18/18 N | 55 | 32,4 | 48 | 36...56 | 5,5 | ■ | 5,5 | 2 200 | -30...+75 | 62 500 / 27 500 | 112 500 | 1 | | |



max. 137 m³/h

DC centrifugal fans

Series RG 125 N 180 x 180 x 40 mm



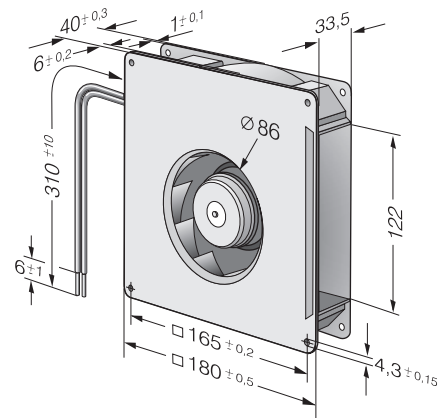
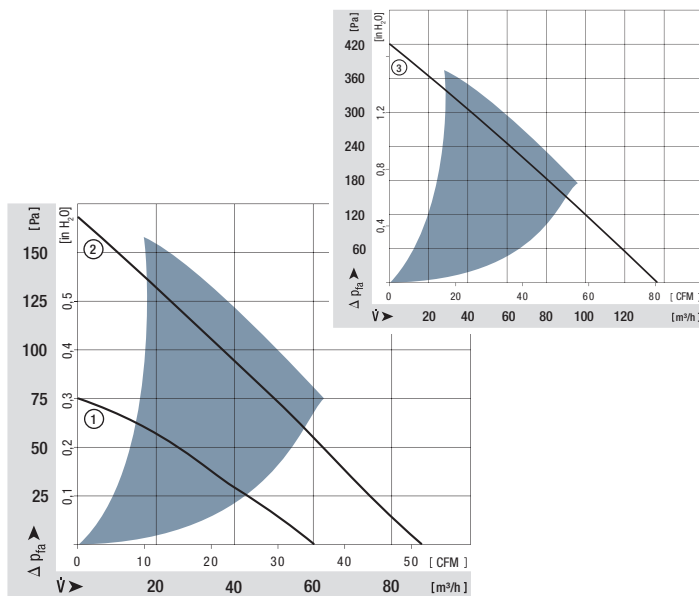
Highlights:

- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- Backward curved impeller.

General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller; Housing base of steel plate.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
48 V Model: Flat plug 6.3 x 0.8 mm for protective earth.
- Mass: 730 g.

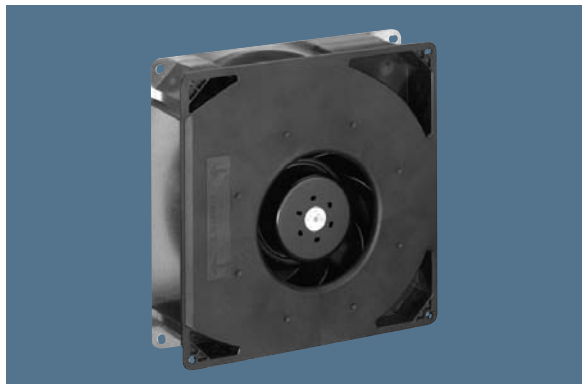
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|-----------------|-------------------|------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | |
| RG 125-19/12 NM | 60,0 | 35,3 | 12 | 7...15 | 4,8 | ■ | 2,0 | 1 750 | -30...+75 | 70 000 / 30 000 | 135 000 | 1 | | |
| RG 125-19/12 N | 87,5 | 51,5 | 12 | 7...15 | 5,8 | ■ | 5,0 | 2 550 | -30...+75 | 62 500 / 27 500 | 125 000 | 2 | /2/12 | |
| RG 125-19/14 NM | 60,0 | 35,3 | 24 | 12...28 | 4,8 | ■ | 2,0 | 1 750 | -30...+75 | 70 000 / 30 000 | 135 000 | 1 | | |
| RG 125-19/14 N | 87,5 | 51,5 | 24 | 12...28 | 5,8 | ■ | 5,0 | 2 550 | -30...+75 | 62 500 / 27 500 | 125 000 | 2 | /2 | |
| RG 125-19/18 N | 87,5 | 51,5 | 48 | 36...56 | 5,8 | ■ | 5,0 | 2 550 | -30...+75 | 62 500 / 27 500 | 125 000 | 2 | | |
| RG 125-19/18 NH | 137 | 80,6 | 48 | 36...56 | 7,0 | ■ | 19,0 | 4 000 | -20...+70 | 55 000 / 27 500 | 110 000 | 3 | | |



max. 209 m³/h

DC centrifugal fans

Series RG 160 N 220 x 220 x 56 mm



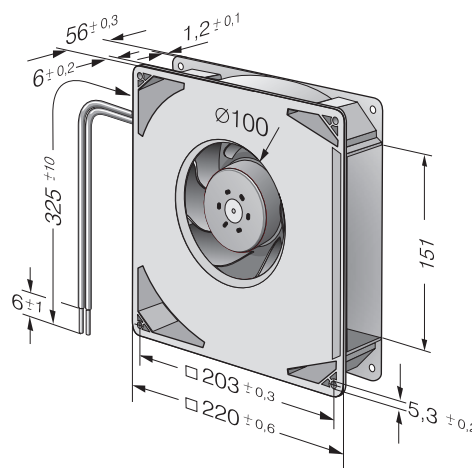
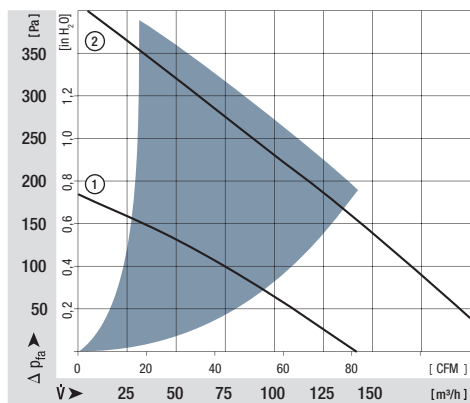
Highlights:

- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- Backward curved impeller.

General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller; Housing base of steel plate.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- 48 V Model: Flat plug 6.3 x 0.8 mm for protective earth.
- Mass: 1.4 kg.

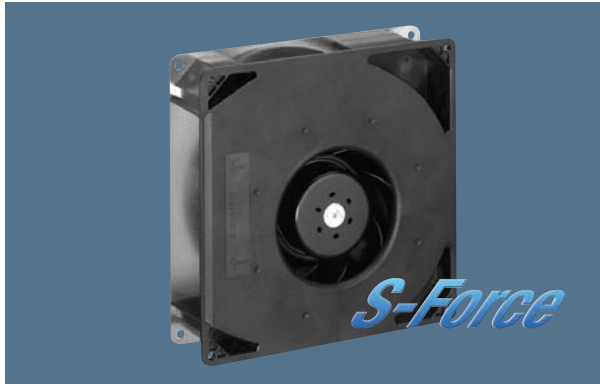
| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|-----------------|-------------------|-------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | |
| RG 160-28/12 NM | 139 | 81,1 | 12 | 7...14 | 5,6 | ■ | 7,5 | 1 900 | -20...+70 | 80 000 / 40 000 | 160 000 | 1 | | |
| RG 160-28/12 N | 209 | 123,0 | 12 | 7,5...14 | 6,6 | ■ | 21,0 | 2 850 | -20...+70 | 70 000 / 35 000 | 140 000 | 2 | /12 | |
| RG 160-28/14 NM | 139 | 81,1 | 24 | 12...28 | 5,6 | ■ | 7,0 | 1 900 | -20...+70 | 80 000 / 40 000 | 120 000 | 1 | | |
| RG 160-28/14 N | 209 | 123,0 | 24 | 12...28 | 6,6 | ■ | 20,0 | 2 850 | -20...+70 | 70 000 / 35 000 | 120 000 | 2 | | |
| RG 160-28/18 N | 209 | 123,0 | 48 | 28...60 | 6,6 | ■ | 20,0 | 2 850 | -20...+70 | 70 000 / 35 000 | 120 000 | 2 | /12 | |



max. 444 m³/h

DC centrifugal fans

Series RG 160 NTD 220 x 220 x 56 mm



Highlights:

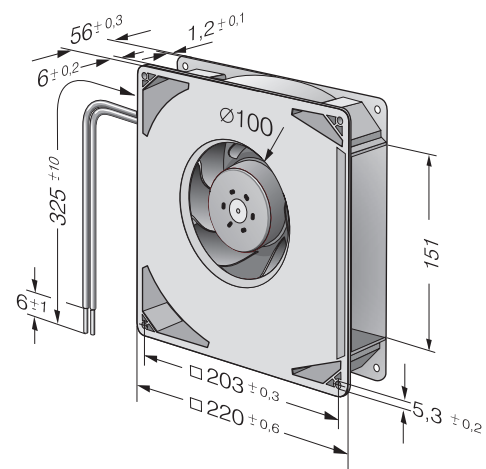
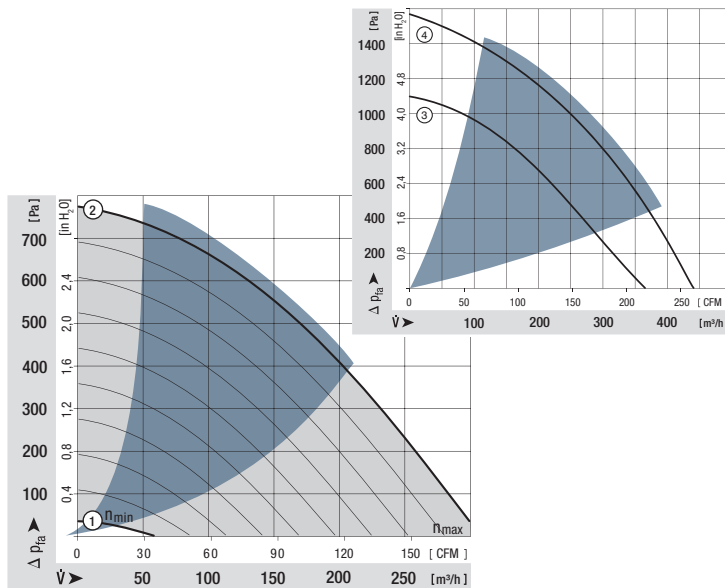
- Control inputs, alarm and speed signals available on request.
- 3-phase fan drive with high degree of running smoothness.
- Very high pressure build-up.
- Backward curved impeller.

General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller; Housing base of sheet steel.
- Fully integrated electronic commutation.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- 48 V Model: Flat plug 6.3 x 0.8 mm for protective earth.
- Mass: 1.4 kg.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|----------------------------|-------------------|----------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | P | |
| min. max. | RG 160-28/14 NTD... | 59 | 16,4 | 24 | 16...28 | — | ■ | 2,0 | 800 | -20...+60 | 55 000 / 27 500 | 110 000 | 1 | — | |
| | | 308 | 85,6 | | | | | | | | | | | | 7,5 |
| | RG 160-28/14 NTD | 308 | 85,6 | 24 | 16...28 | 7,5 | ■ | 64,0 | 4 200 | -20...+60 | 55 000 / 35 000 | 110 000 | 2 | | |
| | RG 160-28/14 NTDH | 370 | 217,8 | 24 | 16...28 | 7,8 | ■ | 101,0 | 5 000 | -20...+60 | 50 000 / 32 500 | 102 500 | 3 | | |
| min. max. | RG 160-28/18 NTD... | 59 | 16,4 | 48 | 38...57 | — | ■ | 2,0 | 800 | -20...+70 | 55 000 / 27 500 | 110 000 | 1 | — | |
| | | 308 | 85,6 | | | | | | | | | | | | 7,5 |
| | NEW RG 160-28/18/ 2NTDHHP* | 444 | 261,2 | 48 | 36...60 | 8,5 | ■ | 159 | 6 000 | -20...+65 | 40 000 / 22 500 | 80 000 | 4 | | |

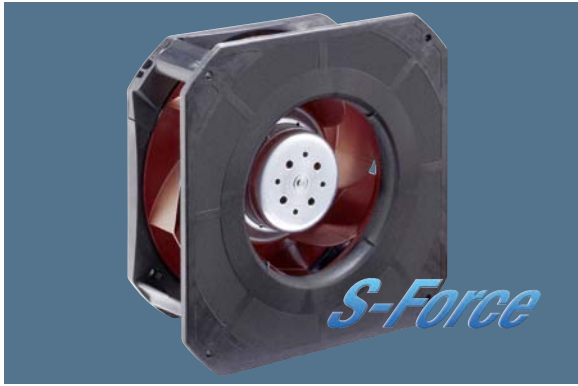
Models RG 160-28/14 NTD... and RG 160-28/18 NTD... are available in customer-specific, custom-developed variants only. The data specified here are technically feasible benchmark values. The fans can be specially adapted to your application with signal outputs and control inputs.
*The specific service life is valid when an external capacitor is wired between the plus and minus strands. Please note the wiring suggestion.



max. 930 m³/h

DC centrifugal fans

Series RG 190 TD 225 x 225 x 85 mm



Highlights:

- 3-phase fan drive with high degree of running smoothness. Very high pressure build-up.
- Backward-curved RadiCal impeller with high efficiency.
- Standard models available with multifunctional control input for analogue, PWM and speed signal.
- Compact design with integrated mounting plate and optimised inlet nozzle.

General characteristics:

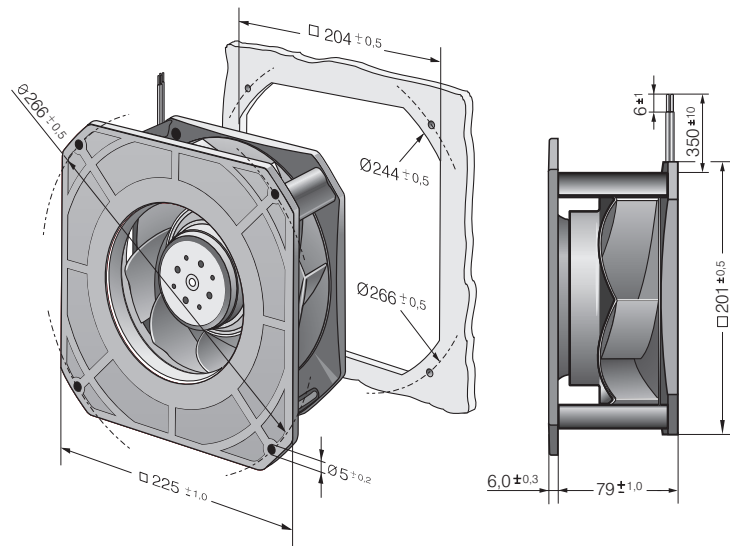
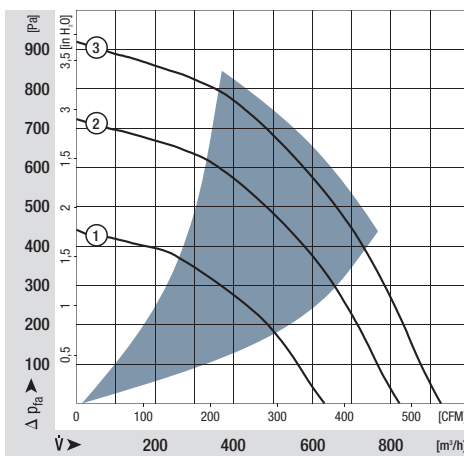
- Housing and impeller of fibreglass-reinforced plastic.
- Fully integrated electronic commutation.
- Direction of rotation: CW seen on rotor.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 18, 20 or AWG 22, TR 64, speed signal and control input AWG 22, bared and tin-plated.
- Mass: 1210 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|----------------------|-------------------|----------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| NEW | RG 190-39/14/2 TDMLO | 630 | 370,6 | 24 | 16...30 | 7,6 | ■ | 54 | 3 000 | -20...+60 | 55 000 / 35 000 | 110 000 | 1 | | |
| NEW | RG 190-39/14/2 TDMO | 820 | 482,4 | 24 | 16...36 | 7,9 | ■ | 100 | 3 900 | -20...+65 | 52 500 / 30 000 | 105 000 | 2 | | |
| NEW | RG 190-39/18/2 TDMLO | 630 | 370,6 | 48 | 36...57 | 7,6 | ■ | 52 | 3 000 | -20...+65 | 55 000 / 35 000 | 110 000 | 1 | | |
| NEW | RG 190-39/18/2 TDMO | 820 | 482,4 | 48 | 36...72 | 7,9 | ■ | 100 | 3 900 | -20...+65 | 52 500 / 30 000 | 105 000 | 2 | | |
| NEW | RG 190-39/18/2 TDO | 930 | 547,1 | 48 | 36...72 | 8,3 | ■ | 135 | 4 400 | -20...+65 | 40 000 / 25 000 | 80 000 | 3 | | |

Speed control range from 800 rpm at 7 % PWM up to nominal speed at > 90 % PWM. Standstill at 0 % PWM, standstill if control cable is interrupted.



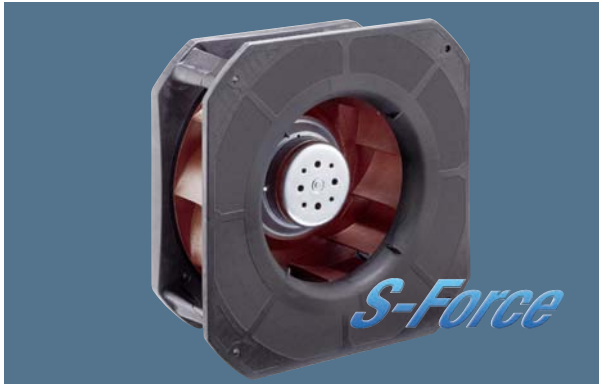
For suitable guard grilles, see page 176.



max. 1280 m³/h

DC centrifugal fans

Series RG 220 TD 270 x 270 x 99 mm



Highlights:

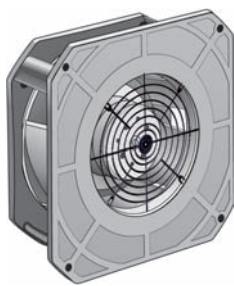
- 3-phase fan drive with high degree of running smoothness. Very high pressure build-up.
- Backward-curved impeller.
- Standard models available with multifunctional control input for analogue, PWM and speed signal.
- Compact design with integrated mounting plate and optimised inlet nozzle.

General characteristics:

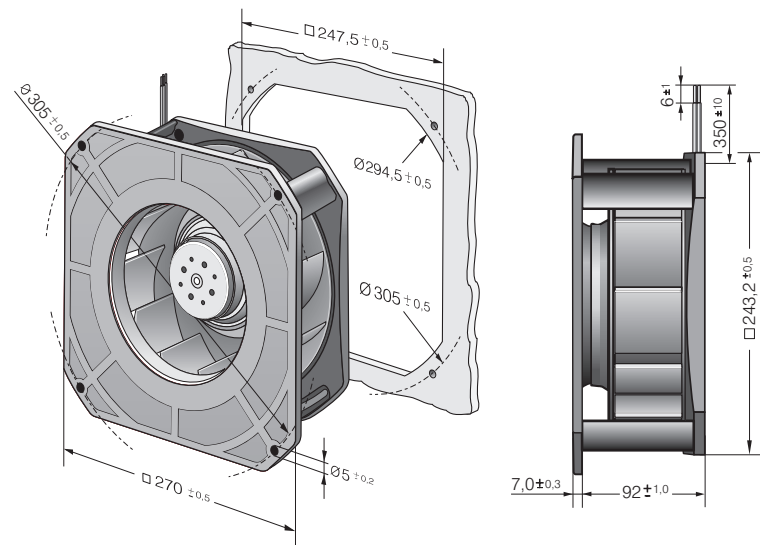
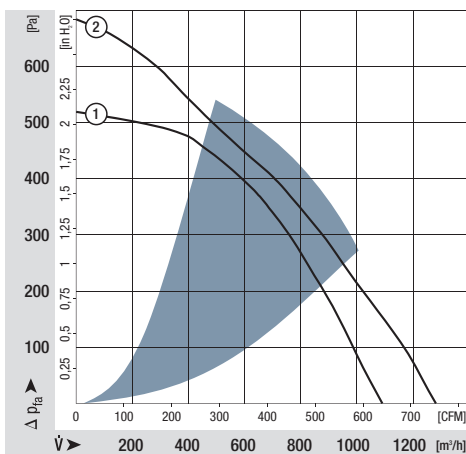
- Housing and impeller of fibreglass-reinforced plastic.
- Fully integrated electronic commutation.
- Direction of rotation: CW seen on rotor.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 18, 20 or AWG 22, TR 64, speed signal and control input AWG 22, bared and tin-plated.
- Mass: 1870 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see p. 15 | Curve | Specials |
|--------------|--------------------|-------------------|----------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| NEW | RG 220-44/14/2TDMO | 1090 | 641,2 | 24 | 16...36 | 7,7 | ■ | 82 | 3 000 | -20...+55 | 75 000 / 52 500 | 150 000 | 150 000 | 1 | |
| NEW | RG 220-44/18/2TDMO | 1090 | 641,2 | 48 | 36...72 | 7,7 | ■ | 80 | 3 000 | -20...+55 | 75 000 / 52 500 | 150 000 | 150 000 | 1 | |
| NEW | RG 220-44/18/2TDO | 1280 | 752,9 | 48 | 36...72 | 8,0 | ■ | 140 | 3 500 | -20...+55 | 55 000 / 40 000 | 110 000 | 110 000 | 2 | |

Speed control range from 800 rpm at 7 % PWM up to nominal speed at > 90 % PWM. Standstill at 0 % PWM, standstill if control cable is interrupted.



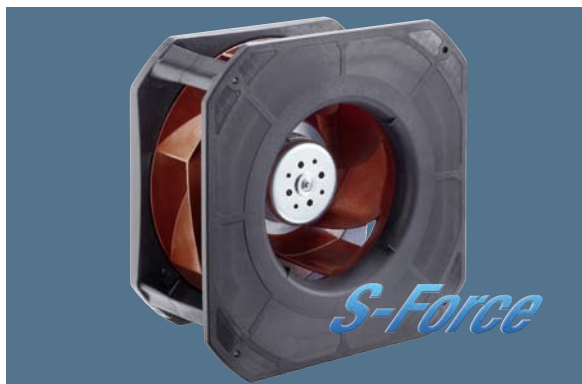
For suitable guard grilles, see page 176.



max. 1210 m³/h

DC centrifugal fans

Series RG 225 TD 270 x 270 x 119 mm



Highlights:

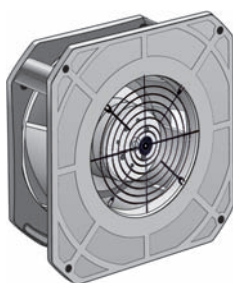
- 3-phase fan drive with high degree of running smoothness. Very high pressure build-up.
- Backward-curved RadiCal impeller with high efficiency.
- Standard models available with multifunctional control input for analogue, PWM and speed sign.
- Compact design with integrated mounting plate and optimised inlet nozzle.

General characteristics:

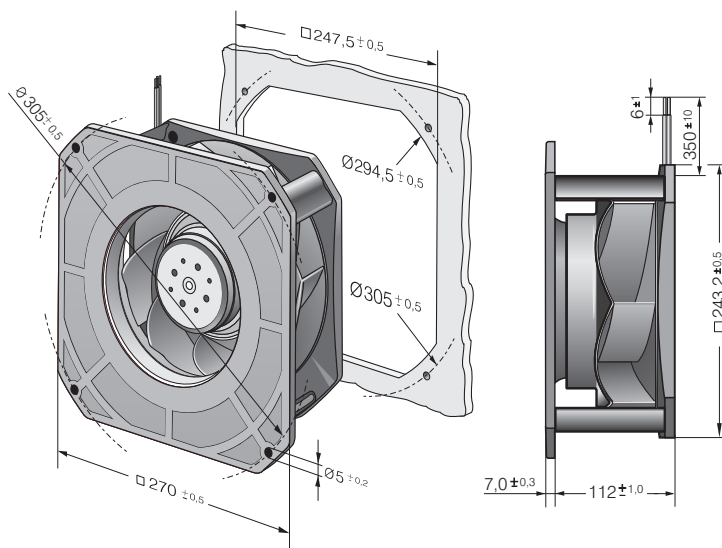
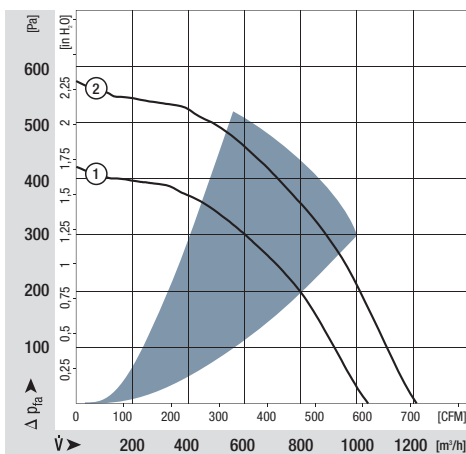
- Housing and impeller of fibreglass-reinforced plastic.
- Fully integrated electronic commutation.
- Direction of rotation: CW seen on rotor.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 18, 20 or AWG 22, TR 64, speed signal and control input AWG 22, bared and tin-plated.
- Mass: 1750 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see p. 15 | Curve | Specials |
|--------------|---------------------|-------------------|----------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| NEW | RG 225-55/14/2TDMLO | 1040 | 611,8 | 24 | 16...36 | 7,3 | ■ | 65 | 2 400 | -20...+55 | 72 500 / 52 500 | 145 000 | 1 | | |
| NEW | RG 225-55/18/2TDMLO | 1040 | 611,8 | 48 | 36...72 | 7,3 | ■ | 65 | 2 400 | -20...+55 | 72 500 / 52 500 | 145 000 | 1 | | |
| NEW | RG 225-55/18/2TDMO | 1210 | 711,8 | 48 | 36...72 | 7,9 | ■ | 116 | 2 800 | -20...+55 | 55 000 / 40 000 | 110 000 | 2 | | |

Speed control range from 800 rpm at 7 % PWM up to nominal speed at > 90 % PWM. Standstill at 0 % PWM, standstill if control cable is interrupted.
The specific service life is valid when an external capacitor is wired between the plus and minus strands.
Please note the wiring suggestion.



For suitable guard grilles, see page 176.



max. 220 m³/h

DC centrifugal fans

Series RET 97 TD 97 Ø x 41 mm



Highlights:

- 3-phase fan drive with high degree of running smoothness.
- Very high pressure build-up.
- Forward curved impeller.
- Available as standard with PWM control input and speed signal. Additional inputs and outputs on request.

General characteristics:

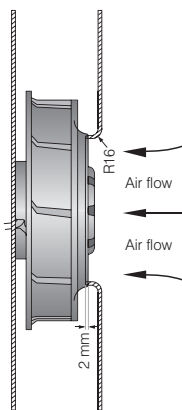
- Impeller of galvanised steel plate.
- Fully integrated electronic commutation.
- Direction of rotation: CW seen on rotor.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Mass: 430 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|--------------------|-------------------|----------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| NEW | RET 97-25/14/2TDP* | 220 | 129 | 24 | 16...36 | 8,1 | ■ | 72 | 6 000 | -20...+60 | 80 000 / 50 000 | 160 000 | 1 | | |
| NEW | RET 97-25/18/2TDP | 220 | 129 | 48 | 36...60 | 8,1 | ■ | 72 | 6 000 | -20...+60 | 80 000 / 50 000 | 160 000 | 1 | | |

* Preliminary

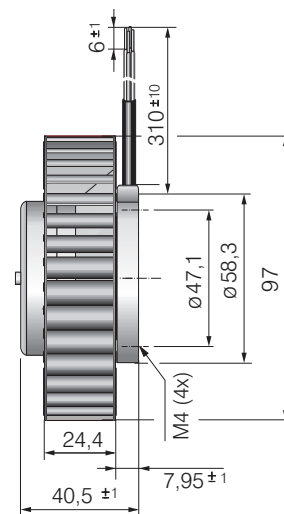
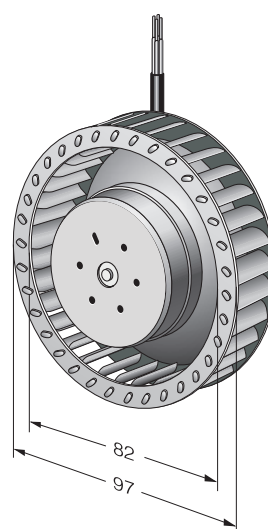
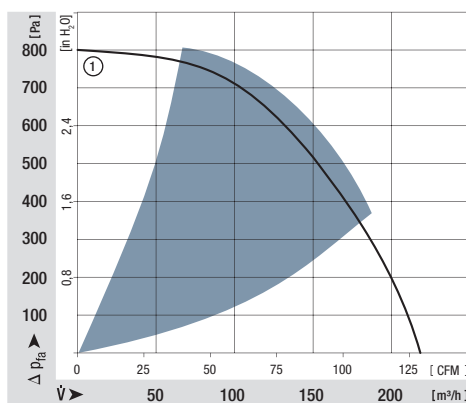
Speed control range from 800 rpm at 7 % PWM up to nominal speed at > 90 % PWM. Standstill at 0 % PWM, maximum speed at sensor break.

To attain the specified service life, an external capacitor must be wired between the plus and minus strands. Please note the wiring suggestion on page.



The air flow and noise level of fans without external housing depends 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 116 x 116 mm.
Cover plate 116 x 116 mm with an air inlet of Ø 80 mm, concentric to the impeller.



max. 104 m³/h

DC centrifugal fans

Series REF 100 104 Ø x 25 mm



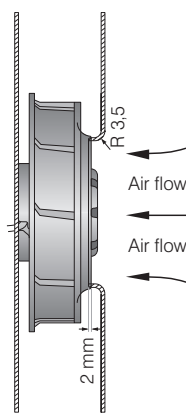
Highlights:

- Pressure-optimised blower.
- Very flat and powerful centrifugal fan.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- Backward curved impeller.

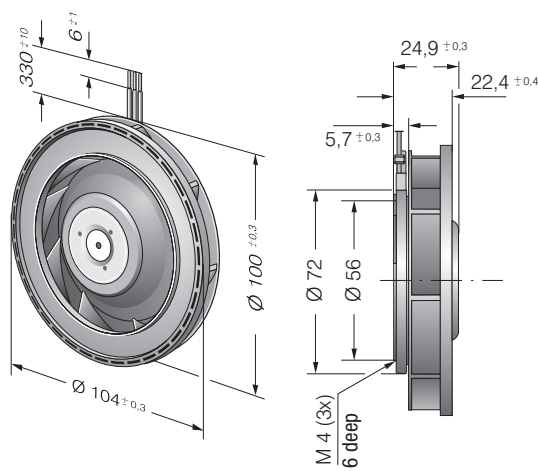
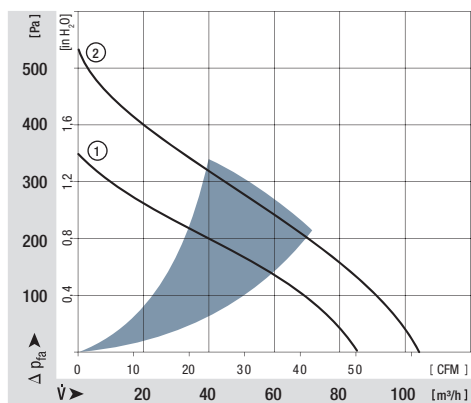
General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Direction of air flow radial, direction of rotation clockwise, seen on rotor.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Mass: 160 g

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|-----------------|-------------------|------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | |
| REF 100-11/12 | 86 | 50,6 | 12 | 8...15 | 6,3 | ■ | 7,5 | 5 400 | -20...+75 | 80 000 / 30 000 | 135 000 | 1 | /2 | |
| REF 100-11/14 | 86 | 50,6 | 24 | 16...30 | 6,3 | ■ | 7,5 | 5 400 | -20...+75 | 80 000 / 30 000 | 135 000 | 1 | /2 | |
| REF 100-11/18 | 86 | 50,6 | 48 | 36...60 | 6,3 | ■ | 7,5 | 5 400 | -20...+75 | 80 000 / 30 000 | 135 000 | 1 | /2 | |
| REF 100-11/18 H | 104 | 61,2 | 48 | 36...56 | 6,9 | ■ | 14,8 | 6 700 | -20...+70 | 67 500 / 30 000 | 120 000 | 2 | | |



The air flow and noise level of fans without external housing depends 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 127 x 127 mm.
Cover plate 127 x 127 mm with an air inlet of Ø 70 mm, concentric to the impeller.



max. 190 m³/h

DC centrifugal fans

Series RER 101 101 Ø x 52 mm

Highlights:

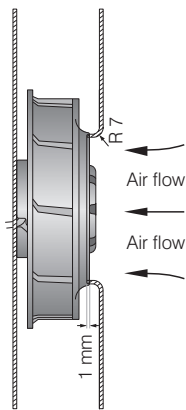
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- Backward curved impeller.

General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Direction of air flow radial, direction of rotation clockwise, seen on rotor.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Mass: 305 g.

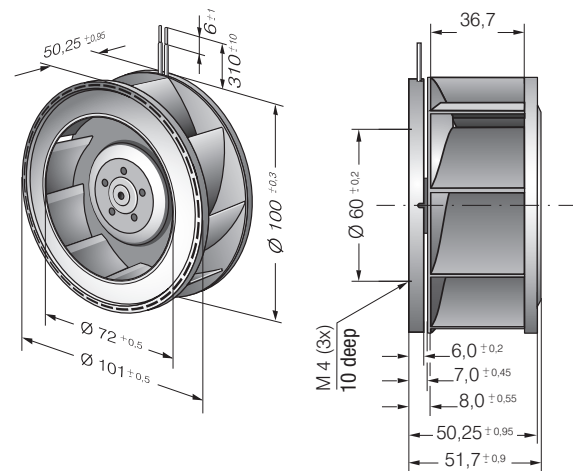
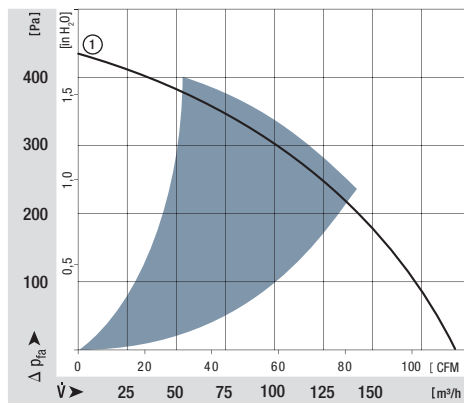


| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|------------------|-------------------|-------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | |
| RER 101-36/12NHH | 190 | 111,8 | 12 | 9..13,6 | 7,2 | ■ | 20,5 | 5 900 | -20...+70 | 60 000 / 30 000 | 120 000 | 1 | | |
| RER 101-36/14NHH | 190 | 111,8 | 24 | 18..27,2 | 7,2 | ■ | 20,0 | 5 900 | -20...+70 | 60 000 / 30 000 | 120 000 | 1 | | |
| RER 101-36/18NHH | 190 | 111,8 | 48 | 43...52 | 7,2 | ■ | 19,0 | 5 900 | -20...+70 | 60 000 / 30 000 | 120 000 | 1 | /19 | |



The air flow and noise level of fans without external housing depends 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 148 x 148 mm.
Cover plate 148 x 148 mm with an air inlet of Ø 66 mm, concentric to the impeller.



max. 390 m³/h

DC centrifugal fans

Series RER 120 TD 120 Ø x 54 mm



Highlights:

- 3-phase fan drive with high degree of running smoothness.
- Very high pressure build-up.
- Backward curved impeller.
- Available as standard with PWM control input and speed signal. Additional inputs and outputs on request.

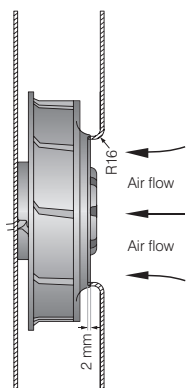
General characteristics:

- Impeller of fibreglass-reinforced plastic.
- Fully integrated electronic commutation.
- Direction of rotation: CW seen on rotor.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Mass: 430 g.

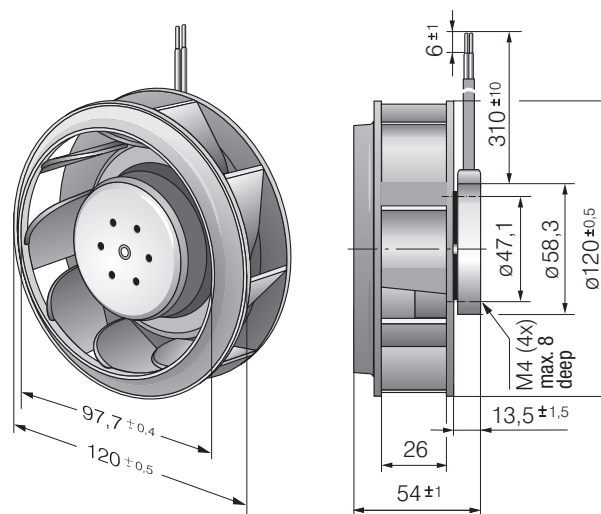
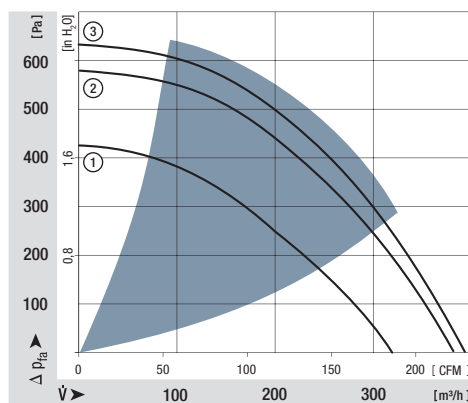
| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-----------------------|-------------------|----------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| NEW | RER 120-26/14/2 TDMP* | 320 | 188,2 | 24 | 16...32 | tbd | ■ | 51 | 5 200 | -20...+60 | 60 000 / 37 500 | 120 000 | 1 | | |
| NEW | RER 120-26/14/2 TDP | 377 | 221,9 | 24 | 16...32 | 8,2 | ■ | 78 | 6 100 | -20...+60 | 55 000 / 35 000 | 110 000 | 2 | | |
| NEW | RER 120-26/18/2 TDMP* | 320 | 188,2 | 48 | 36...60 | tbd | ■ | 51 | 5 200 | -20...+60 | 57 500 / 35 000 | 115 000 | 1 | | |
| NEW | RER 120-26/18/2 TDP | 390 | 229,5 | 48 | 36...60 | 8,3 | ■ | 92 | 6 300 | -20...+60 | 50 000 / 30 000 | 100 000 | 3 | | |

*Preliminary

Speed control range from 800 rpm at 7 % PWM up to nominal speed at > 90 % PWM. Standstill at 0 % PWM, max. speed if control cable is interrupted.
The specific service life is valid when an external capacitor is wired between the plus and minus strands. Please note the wiring suggestion.



The air flow and noise level of fans without external housing depends 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 140 x 140 mm.
Cover plate 140 x 140 mm with an air inlet of Ø 96 mm, concentric to the impeller.



max. 166 m³/h

DC centrifugal fans

Series RER 125 N 138 Ø x 35 mm



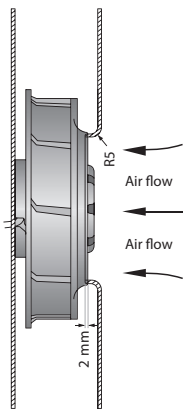
Highlights:

- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- Backward curved impeller.

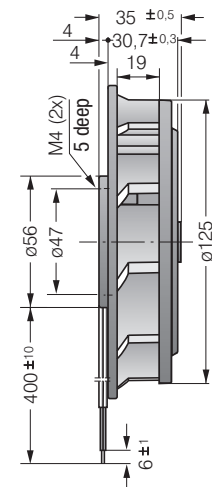
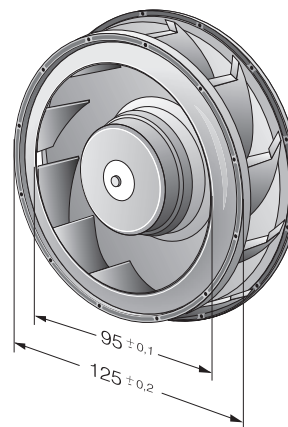
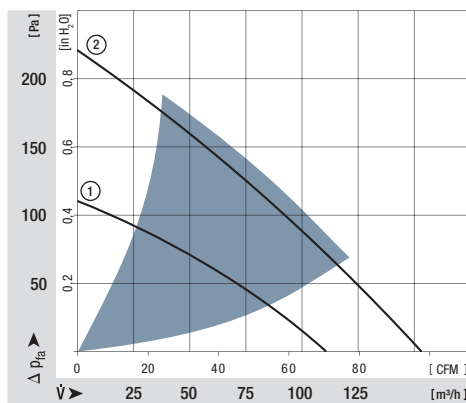
General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Direction of air flow radial, direction of rotation clockwise, seen on rotor.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Mass: 320 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|------------------|----------|-------------------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | Type | m ³ /h | | | | | | | | | | | | |
| RER 125-19/12 N | 110 | 64,7 | 12 | 7...15 | 5,7 | ■ | 4,5 | 2 650 | -30...+75 | 62 500 / 27 500 | 125 000 | 1 | /12 | |
| RER 125-19/14 N | 110 | 64,7 | 24 | 12...28 | 5,7 | ■ | 4,5 | 2 650 | -30...+75 | 62 500 / 27 500 | 125 000 | 1 | | |
| RER 125-19/14 NH | 166 | 97,7 | 24 | 12...28 | 7,0 | ■ | 13,0 | 4 000 | -20...+70 | 55 000 / 27 500 | 110 000 | 2 | | |
| RER 125-19/18 N | 110 | 64,7 | 48 | 36...56 | 5,7 | ■ | 5,0 | 2 650 | -30...+75 | 62 500 / 27 500 | 125 000 | 1 | | |



The air flow and noise level of fans without external housing depends 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. 565 m³/h

DC centrifugal fans

Series RER 133 TD 133 Ø x 91 mm



Highlights:

- 3-phase fan drive with high degree of running smoothness.
- Very high pressure build-up.
- Backward curved impeller.
- Available as standard with PWM control input and speed signal. Additional inputs and outputs on request.

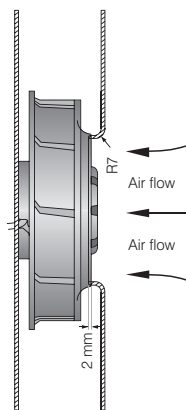
General characteristics:

- Impeller of fibreglass-reinforced plastic.
- Fully integrated electronic commutation.
- Direction of rotation: CW seen on rotor.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Mass: 890 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-----------------------|-------------------|----------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| NEW | RER 133-41/14/2 TDMP | 460 | 270,6 | 24 | 16...30 | tbd | ■ | 53 | 5 000 | -20...+65 | 72 500 / 40 000 | 145 000 | 1 | | |
| NEW | RER 133-41/14/2 TDP* | 565 | 332,4 | 24 | 16...36 | tbd | ■ | 90 | 6 000 | -20...+65 | 70 000 / 37 500 | 140 000 | 2 | | |
| NEW | RER 133-41/18/2 TDMP* | 460 | 270,6 | 48 | 36...57 | tbd | ■ | 50 | 5 000 | -20...+65 | 72 500 / 40 000 | 145 000 | 1 | | |
| NEW | RER 133-41/18/2 TDP | 565 | 332,4 | 48 | 36...72 | 8,2 | ■ | 87 | 6 000 | -20...+65 | 70 000 / 37 500 | 140 000 | 2 | | |

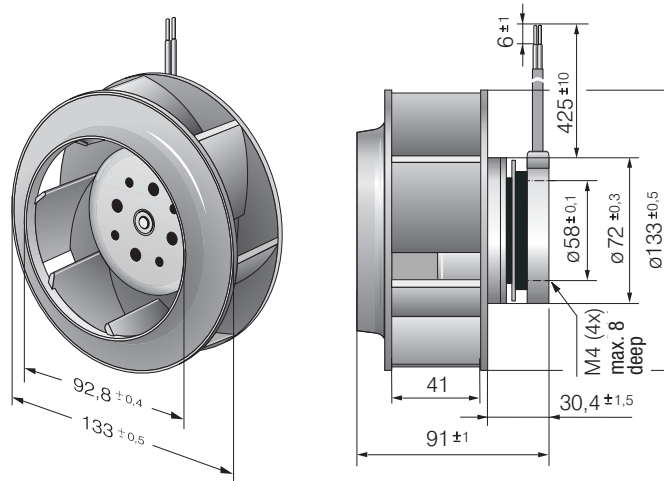
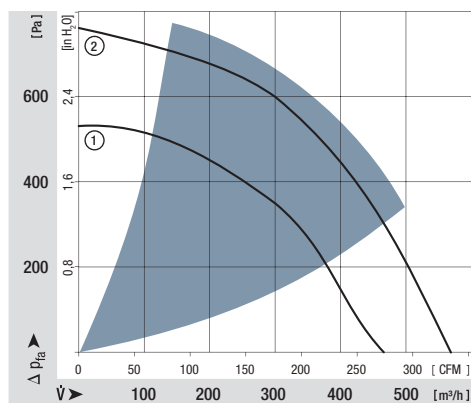
*Preliminary

Speed control range from 800 rpm at 7 % PWM up to nominal speed at > 90 % PWM. Standstill at 0 % PWM, max. speed if control cable is interrupted.



The air flow and noise level of fans without external housing depends 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 140 x 140 mm.
Cover plate 140 x 140 mm with an air inlet of Ø 87 mm, concentric to the impeller.



max. 255 m³/h

DC centrifugal fans

Series RER 160 N 165 Ø x 51 mm



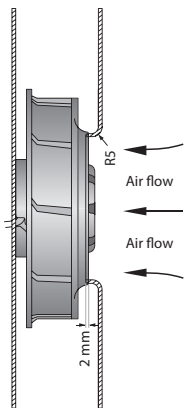
Highlights:

- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- Backward curved impeller.

General characteristics:

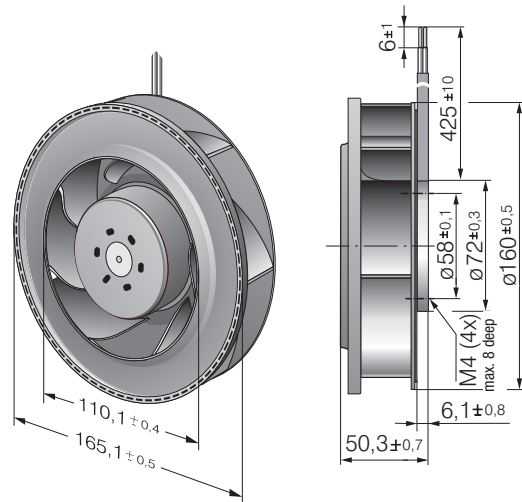
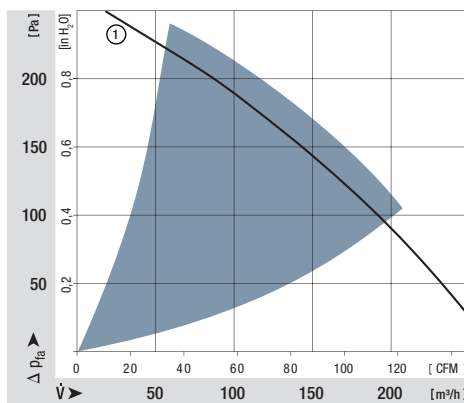
- Fibreglass-reinforced plastic scroll housing and impeller.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Direction of air flow radial, direction of rotation clockwise, seen on rotor.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Mass: 590 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L _{10Δ} (40 °C) see P. 15 | Curve | Specials |
|-----------------|-------------------|-------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | |
| RER 160-28/12 N | 255 | 150,1 | 12 | 7...14 | 6,4 | ■ | 19,0 | 3 000 | -20...+70 | 75 000 / 35 000 | 140 000 | 1 | /12 | |
| RER 160-28/14 N | 255 | 150,1 | 24 | 12...28 | 6,4 | ■ | 19,0 | 3 000 | -20...+70 | 75 000 / 35 000 | 140 000 | 1 | | |
| RER 160-28/18 N | 255 | 150,1 | 48 | 28...60 | 6,4 | ■ | 19,0 | 3 000 | -20...+70 | 75 000 / 35 000 | 140 000 | 1 | /12 | |



The air flow and noise level of fans without external housing depends 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.



max. 505 m³/h

DC centrifugal fans

Series RER 160 NTD 165 Ø x 51 mm



Highlights:

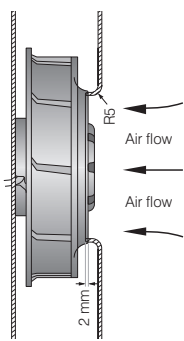
- Control inputs, alarm and speed signals available on request.
- 3-phase fan drive with high degree of running smoothness.
- High pressure build-up.
- Backward curved impeller.

General characteristics:

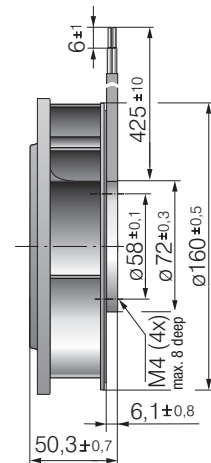
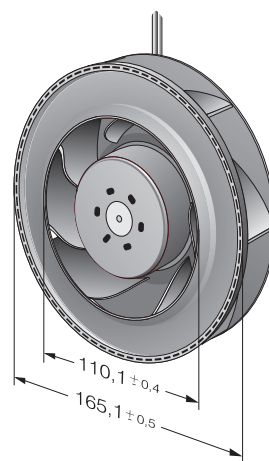
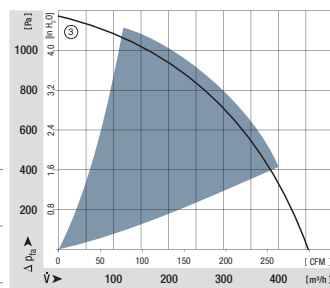
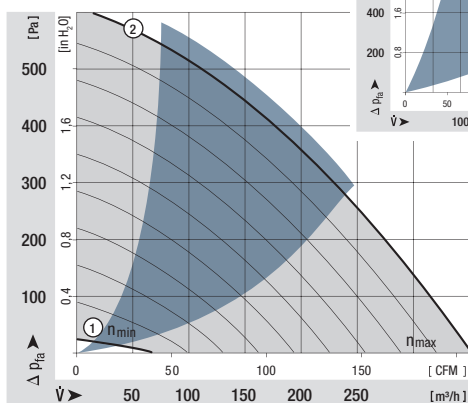
- Fibreglass-reinforced plastic scroll housing and impeller; Housing base of steel plate.
- Fully integrated electronic commutation.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- Mass: 590 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|------------------------|-------------------|----------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | P. | |
| NEW | RER 160-28/14N/2TDA | 370 | 217 | 24 | 16...28 | 7,4 | ■ | 51 | 4 200 | -20...+60 | 55 000 / 27 500 | 110 000 | 2 | | |
| NEW | RER 160-28/18N/2TDHHP* | 505 | 297,5 | 48 | 36...60 | 8,5 | ■ | 142 | 6 000 | -20...+65 | 40 000 / 22 500 | 80 000 | 3 | | |
| min. max. | RER 160-28/18 NTD... | 66 | 18,3 | 48 | 38...57 | — | ■ | 2,0 | 800 | -20...+70 | 55 000 / 27 500 | 110 000 | 1 | | |
| | | 354 | 98,3 | | | | | 43,0 | | | | | 2 | | |

Model RER 160-28/18 NTD... is available in customer-specific, custom-developed variant only.
 The data specified here are technically feasible benchmark values. The fans can be specially adapted to your application with signal outputs and control inputs.
 *The specific service life is valid when an external capacitor is wired between the plus and minus strands.
 Please note the wiring suggestion.



The air flow and noise level of fans without external housing depends 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.



max. 800 m³/h

DC centrifugal fans

Series REF 175 TD 175 Ø x 55 mm



Highlights:

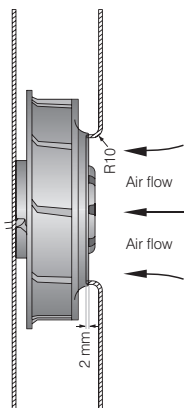
- 3-phase fan drive with high degree of running smoothness.
- Very high pressure build-up. Backward curved impeller.
- Available as standard with PWM control input and speed signal. Additional inputs and outputs on request.

General characteristics:

- Impeller of galvanised steel plate.
- Fully integrated electronic commutation.
- Direction of rotation: CW seen on rotor.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 20, TR 64, speed signal and control input AWG 22, bared and tin-plated.
- Mass: 930 g.

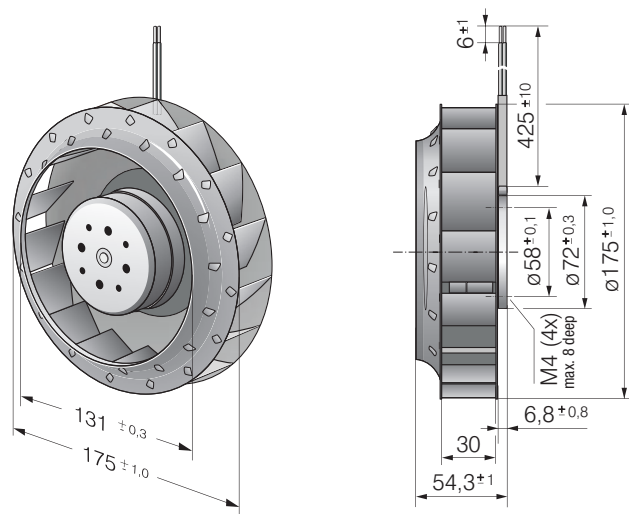
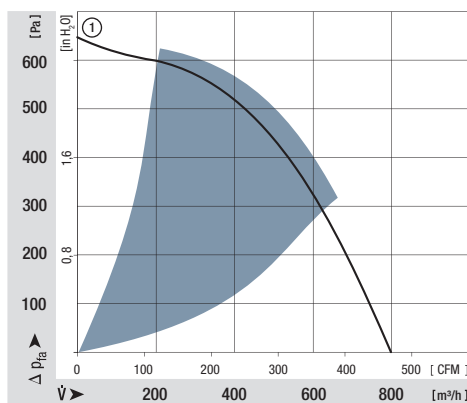
| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|--------------------|-------------------|----------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| NEW | REF 175-30/18/2TDP | 800 | 470 | 48 | 36 ... 72 | 8,3 | ■ | 121 | 4 400 | -20...+60 | 65 000 / 37 500 | 130 000 | 1 | | |

Speed control range from 800 rpm at 7 % PWM up to nominal speed at > 90 % PWM. Standstill at 0 % PWM, max. speed if control cable is interrupted.



The air flow and noise level of fans without external housing depends 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 180 x 180 mm.
Cover plate 180 x 180 mm with an air inlet of Ø 125,5 mm, concentric to the impeller.



max. 980 m³/h

DC centrifugal fans

Series RER 175 TD 175 Ø x 69 mm



Highlights:

- 3-phase fan drive with high degree of running smoothness.
- Very high pressure build-up. Backward curved impeller.
- Available as standard with PWM control input and speed signal. Additional inputs and outputs on request.

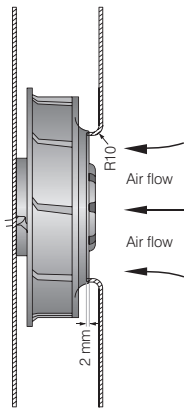
General characteristics:

- Impeller of fibreglass-reinforced plastic.
- Fully integrated electronic commutation.
- Direction of rotation: CW seen on rotor.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 18, 20 or AWG 22, TR 64, speed signal and control input AWG 22, bared and tin-plated.
- Mass: 775 g.

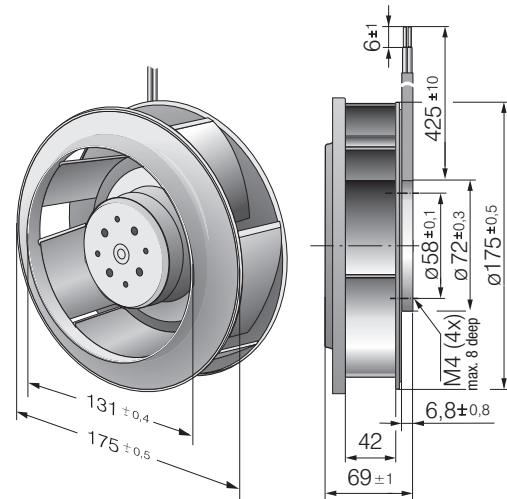
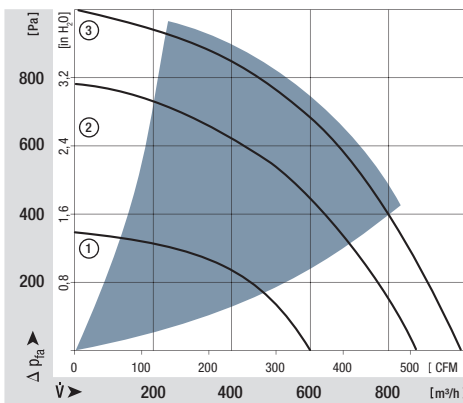
| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|-----------------------|-------------------|----------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| NEW | RER 175-42/14/2 TDMLP | 600 | 353,0 | 24 | 16...30 | 7,3 | ■ | 45 | 3 400 | -20...+65 | 72 500 / 45 000 | 145 000 | 1 | | |
| NEW | RER 175-42/14/2 TDMP | 865 | 508,8 | 24 | 16...36 | 8,2 | ■ | 110 | 4 800 | -20...+65 | 70 000 / 40 000 | 140 000 | 2 | | |
| NEW | RER 175-42/18/2 TDMLP | 600 | 353,0 | 48 | 36...57 | 7,3 | ■ | 46 | 3 400 | -20...+65 | 72 500 / 45 000 | 145 000 | 1 | | |
| NEW | RER 175-42/18/2 TDMP* | 865 | 508,8 | 48 | 36...72 | 8,2 | ■ | 110 | 4 800 | -20...+65 | 70 000 / 40 000 | 140 000 | 2 | | |
| NEW | RER 175-42/18/2 TDP | 980 | 576,8 | 48 | 36...72 | 8,5 | ■ | 166 | 5 400 | -20...+65 | 60 000 / 32 500 | 115 000 | 3 | | |

* preliminary data

Speed control range from 800 rpm at 7 % PWM up to nominal speed at > 90 % PWM. Standstill at 0 % PWM, max. speed if control cable is interrupted.



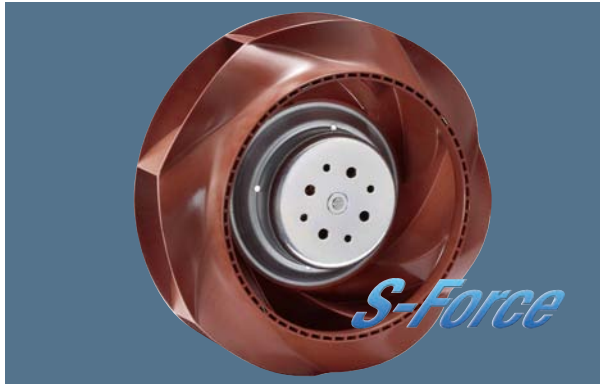
The air flow and noise level of fans without external housing depends on the installation conditions. The stated air flow and noise levels have been measured under the following conditions:
Centrifugal fan mounted on a base plate 180 x 180 mm.
Cover plate 180 x 180 mm with an air inlet of Ø 125,5 mm, concentric to the impeller.



max. 970 m³/h

DC centrifugal fans

Series RER 190 TD 190 Ø x 69 mm



Highlights:

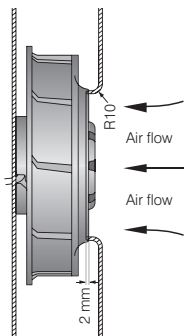
- 3-phase fan drive with high degree of running smoothness.
- Very high pressure build-up.
- Backward curved RadiCal impeller with maximum efficiency.
- Standard models available with multifunctional control input for analogue, PWM and speed signal.

General characteristics:

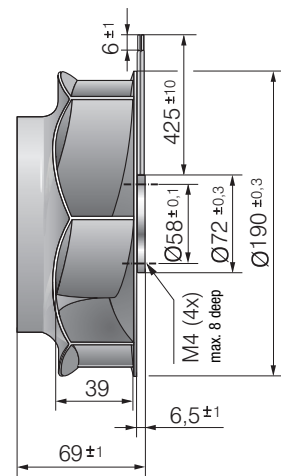
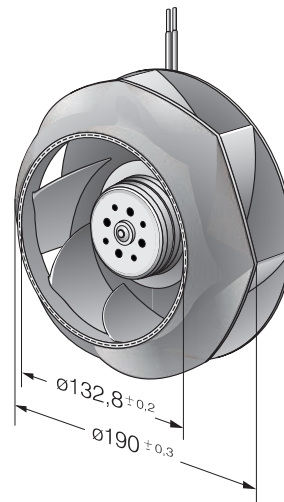
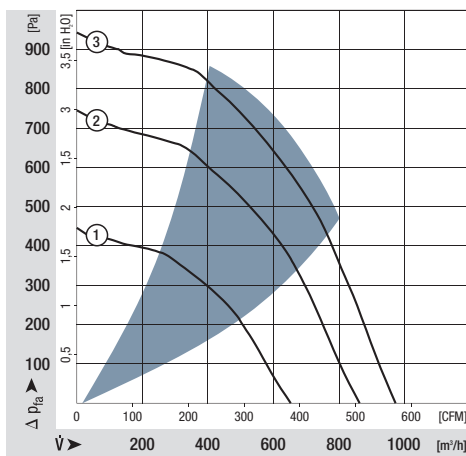
- Impeller of fibreglass-reinforced plastic.
- Fully integrated electronic commutation.
- Direction of rotation: CW seen on rotor.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 18, 20 or AWG 22, TR 64, speed signal and control input AWG 22, bared and tin-plated.
- Mass: 870 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|----------------------|-------------------|----------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| NEW | RER 190-39/14/2TDMLO | 650 | 382,4 | 24 | 16...30 | 7,6 | ■ | 58 | 3 000 | -20...+60 | 55 000 / 35 000 | 110 000 | 1 | | |
| NEW | RER 190-39/14/2TDMO | 860 | 505,9 | 24 | 16...36 | 7,9 | ■ | 110 | 3 900 | -20...+65 | 52 500 / 30 000 | 105 000 | 2 | | |
| NEW | RER 190-39/18/2TDMLO | 650 | 382,4 | 48 | 36...57 | 7,6 | ■ | 56 | 3 000 | -20...+65 | 55 000 / 35 000 | 110 000 | 1 | | |
| NEW | RER 190-39/18/2TDMO | 860 | 505,9 | 48 | 36...72 | 7,9 | ■ | 105 | 3 900 | -20...+65 | 52 500 / 30 000 | 105 000 | 2 | | |
| NEW | RER 190-39/18/2TDO | 970 | 570,6 | 48 | 36...72 | 8,3 | ■ | 148 | 4 400 | -20...+65 | 40 000 / 22 500 | 80 000 | 3 | | |

Speed control range from 800 rpm at 7 % PWM up to nominal speed at > 90 % PWM. Standstill at 0 % PWM, standstill if control cable is interrupted.



The air flow and noise level of fans without external housing depends 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 195 x 195 mm.
Cover plate 195 x 195 mm with an air inlet of Ø 125,5 mm, concentric to the impeller.



max. 1280 m³/h

DC centrifugal fans

Series RER 220 TD 221 Ø x 71 mm



Highlights:

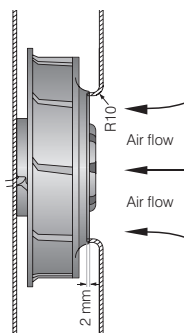
- 3-phase fan drive with high degree of running smoothness.
- Very high pressure build-up.
- Backward curved impeller.
- Standard models available with multifunctional control input for analogue, PWM and speed sign.

General characteristics:

- Impeller of fibreglass-reinforced plastic.
- Fully integrated electronic commutation.
- Direction of rotation: CW seen on rotor.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 18, 20 or AWG 22, TR 64, speed signal and control input AWG 22, bared and tin-plated.
- Mass: 940 g.

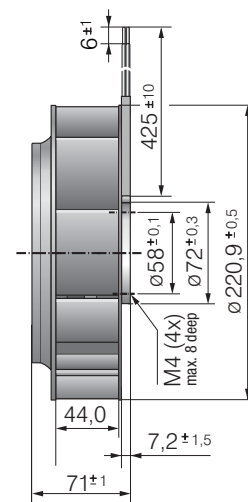
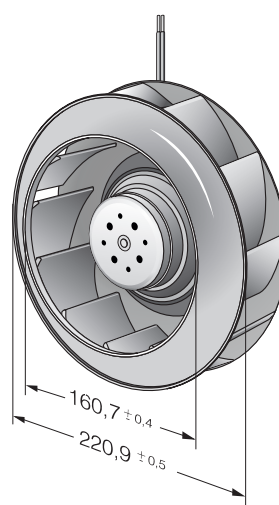
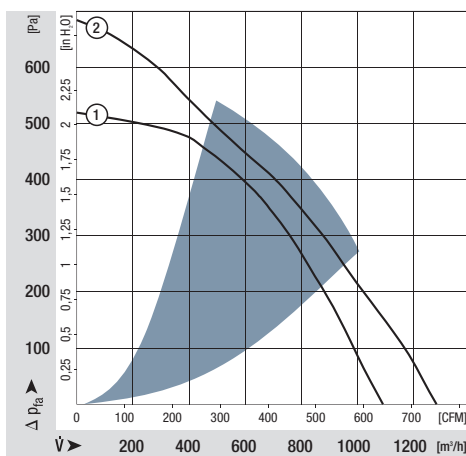
| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|--------------|---------------------|-------------------|----------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|--|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | | | |
| NEW | RER 220-44/14/2TDMO | 1090 | 641,2 | 24 | 16...36 | 7,7 | ■ | 82 | 3 000 | -20...+55 | 75 000 / 52 500 | 150 000 | 1 | | |
| NEW | RER 220-44/18/2TDMO | 1090 | 641,2 | 48 | 36...72 | 7,7 | ■ | 80 | 3 000 | -20...+55 | 75 000 / 52 500 | 150 000 | 1 | | |
| NEW | RER 220-44/18/2TDO | 1280 | 752,9 | 48 | 36...72 | 8,0 | ■ | 140 | 3 500 | -20...+55 | 55 000 / 40 000 | 110 000 | 2 | | |

Speed control range from 800 rpm at 7 % PWM up to nominal speed at > 90 % PWM. Standstill at 0 % PWM, standstill if control cable is interrupted.



The air flow and noise level of fans without external housing depends 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 230 x 230 mm.
Cover plate 230 x 230 mm with an air inlet of Ø 146 mm, concentric to the impeller.



max. 1600 m³/h

DC centrifugal fans

Series RER 225 TD 225 Ø x 99 mm



Highlights:

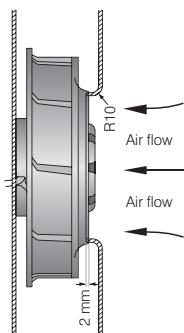
- 3-phase fan drive with high degree of running smoothness.
- Very high pressure build-up.
- TDM and TDML model with backward-curved RadiCal impeller with maximum efficiency.
- Standard models available with multifunctional control input for analogue, PWM and speed signal.

General characteristics:

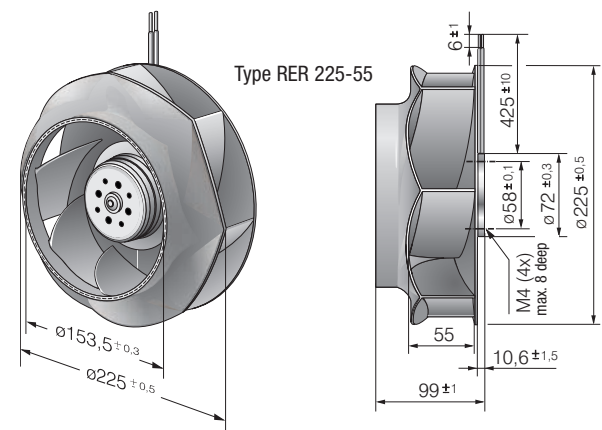
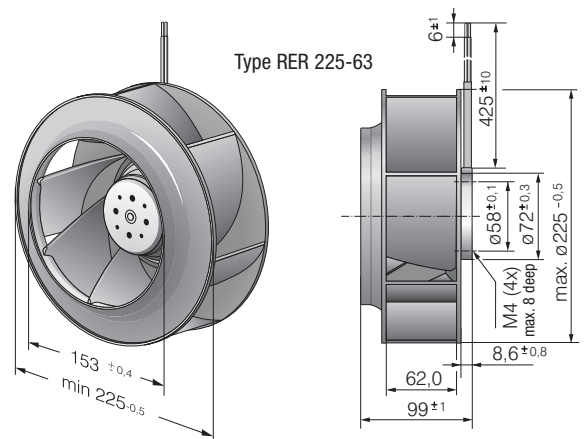
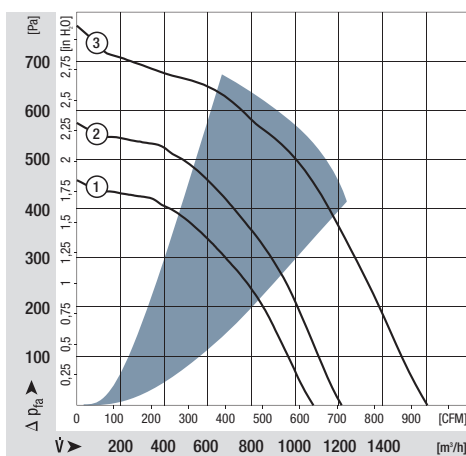
- Impeller of fibreglass-reinforced plastic.
- Fully integrated electronic commutation.
- Direction of rotation: CW seen on rotor.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 18, 20 or AWG 22, TR 64, speed signal and control input AWG 22, bared and tin-plated.
- Mass: 1030 g.

| Nominal data | | Air flow | Air flow | Nominal voltage | Voltage range | Sound power level | Sinter sleeve bearings Ball bearings | Power input | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ ^Δ (40 °C) see p. 15 | Curve | Specials |
|--------------|------------------------|-------------------|----------|-----------------|---------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|----------|
| Type | | m ³ /h | CFM | VDC | VDC | Bel(A) | ■ / ■ | Watts | RPM | °C | Hours | Hours | Hours | | |
| NEW | RER 225-55/18/2TDMLO | 1080 | 635,4 | 48 | 36...72 | 7,5 | ■ | 82 | 2 500 | -20...+55 | 70 000 / 50 000 | 140 000 | 1 | | |
| NEW | RER 225-55/18/2TDMO | 1210 | 711,9 | 48 | 36...72 | 7,9 | ■ | 120 | 2 800 | -20...+55 | 55 000 / 40 000 | 110 000 | 2 | | |
| NEW | RER 225-63/18/2TDP-402 | 1600 | 941,3 | 48 | 36...72 | 8,1 | ■ | 165 | 3 300 | -20...+55 | 52 500 / 37 500 | 105 000 | 3 | | |

Speed control range from 800 rpm at 7 % PWM up to nominal speed at > 90 % PWM. Standstill at 0% PWM, Type O: standstill at sensor break. Type P: maximum speed at sensor break.



The air flow and noise level of fans without external housing depends 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 230 x 230 mm. Cover plate 230 x 230 mm with an air inlet of Ø 146 mm, concentric to the impeller.



max. 155 m³/h

DC tangential fan

Series QG 030 201...413 x 50 x 48 mm



Highlights:

- Tangential fans with high air flow.
- Large air outlet.

General characteristics:

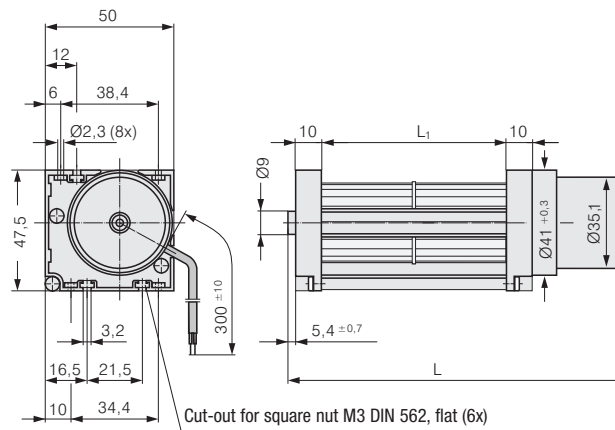
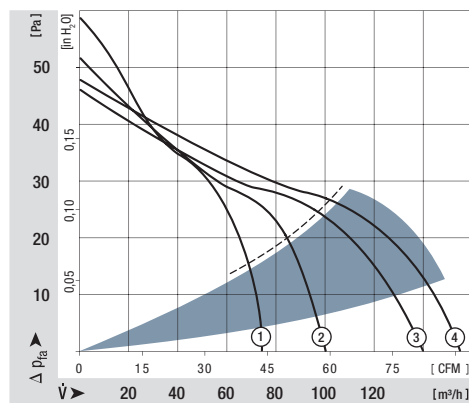
- Motor with ball bearing system. Impeller mounting plate with sleeve bearings.
- Fan housing and impeller of aluminium. Plastic housing side parts.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Air exhaust out of the outlet.
- Connection via single strands. Bared and tin-plated.
- Mass: 235 / 290 / 380 / 415 g.

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sleeve bearings Ball bearings | Power input | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ Δ (40 °C) see P. 15 | Curve | Specials |
|---------------|-------------------|------|-----------------|---------------|----------------------|-------------------|----------------------------------|-------------|-------------------|--|--|--|-------|----------|
| | m ³ /h | CFM | | | | | | | | | | | | |
| QG 030-148/12 | 75 | 44,1 | 12 | 8...14 | 49 | 5,7 | □/■ | 6,2 | -20...+60 | 30 000 / 10 000 | | 32 500 | 1 | |
| QG 030-198/12 | 100 | 58,9 | 12 | 8...14 | 51 | 5,8 | □/■ | 8,0 | -20...+60 | 30 000 / 10 000 | | 32 500 | 2 | |
| QG 030-303/12 | 140 | 82,4 | 12 | 8...14 | 51 | 5,8 | □/■ | 8,7 | -20...+60 | 30 000 / 10 000 | | 32 500 | 3 | |
| QG 030-353/12 | 155 | 91,3 | 12 | 8...14 | 51 | 5,9 | □/■ | 9,6 | -20...+60 | 30 000 / 10 000 | | 32 500 | 4 | |
| QG 030-148/14 | 75 | 44,1 | 24 | 16...28 | 49 | 5,7 | □/■ | 6,2 | -20...+60 | 30 000 / 10 000 | | 32 500 | 1 | |
| QG 030-198/14 | 100 | 58,9 | 24 | 16...28 | 51 | 5,8 | □/■ | 8,0 | -20...+60 | 30 000 / 10 000 | | 32 500 | 2 | |
| QG 030-303/14 | 140 | 82,4 | 24 | 16...28 | 51 | 5,8 | □/■ | 8,7 | -20...+60 | 30 000 / 10 000 | | 32 500 | 3 | |
| QG 030-353/14 | 155 | 91,3 | 24 | 16...28 | 51 | 5,9 | □/■ | 9,6 | -20...+60 | 30 000 / 10 000 | | 32 500 | 4 | |

Tangential fans are only suitable for operation with high rate and low back pressure.

| Type | Dimension: | L | L ₁ |
|----------------|------------|---------------------|----------------|
| QG 030-148/ .. | | 201 ^{+1,5} | 148 |
| QG 030-198/ .. | | 258 ^{+1,5} | 198 |
| QG 030-303/ .. | | 363 ^{+1,5} | 303 |
| QG 030-353/ .. | | 413 ^{+1,5} | 353 |

The service life values refer to horizontal installation of the fan.



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