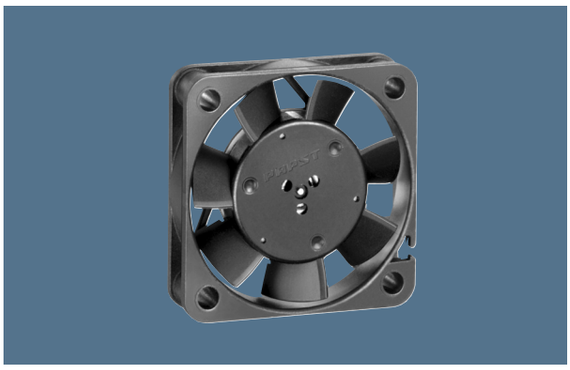
max. 9 $m^3/h$

# DC axial fans

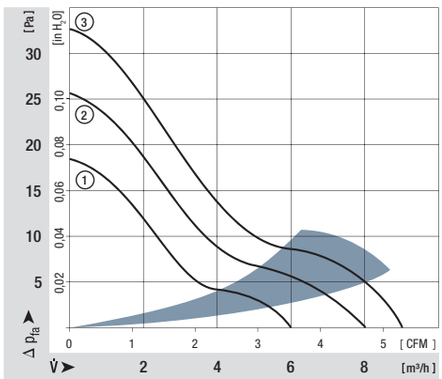
## Series 400 F 40 x 40 x 10 mm

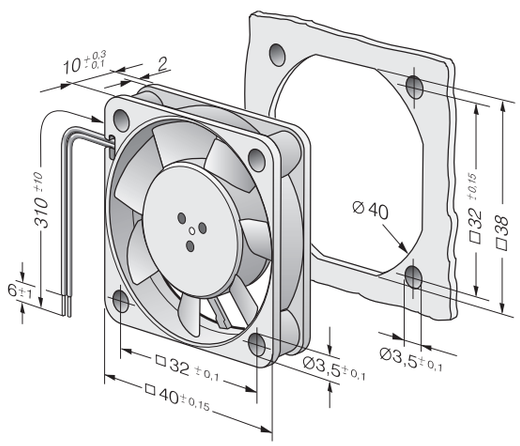


**Highlights:**
- Compact fan with low power consumption.
- Some models suitable for use at high ambient temperatures.

**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 | 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 $L_{10}$ (20 °C) ebm-papst Standard / Service life (60 °C) ebm-papst Standard | Life expectancy $L_{10}$ (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** | |
| 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 |

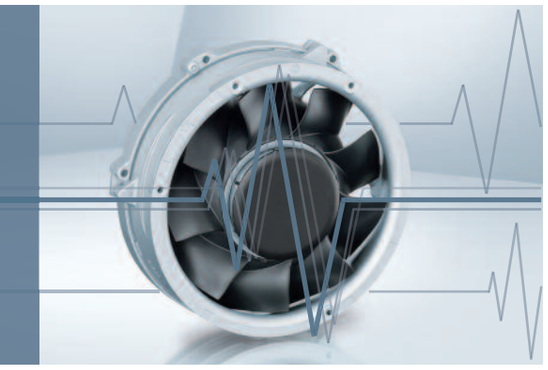




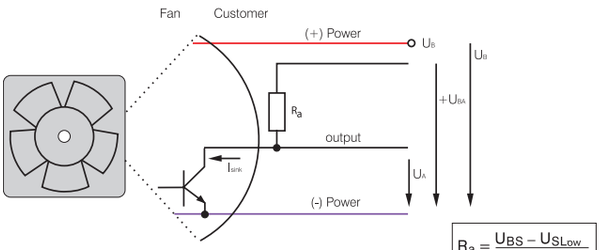

ebmpapst

# Speed signal /2



- Speed-proportional, square-wave signal for external monitoring of the fan motor speed
- 2, 3, or 6 pulses per revolution
- Open-collector signal output
- Extremely wide operating voltage range
- Easy adaptation to user interface
- Connection via separate cable
- The sensor signal also serves as a major comparison variable for setting and maintaining the setpoint speed for interactive or controlled cooling with one or more interconnected fans.

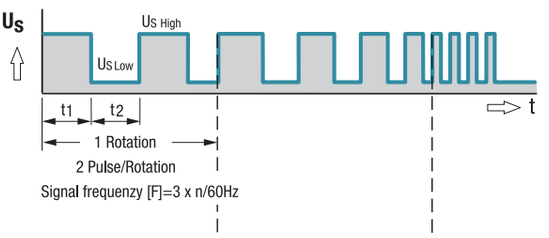
## Electrical hookup



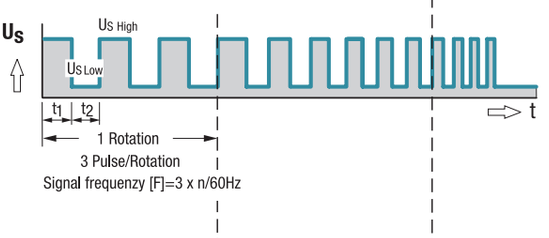

$$R_a = \frac{U_{BS} - U_{SLow}}{I_{SINK}}$$

All voltages measured to ground.
External load resistor $R_a$ / $U_S$ / $U_{BS}$ required.

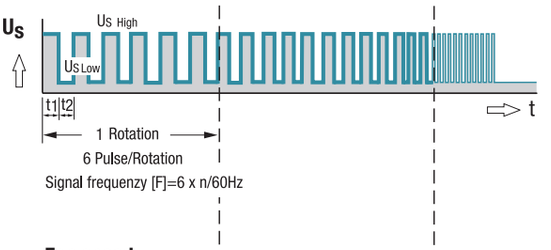
**Signal output voltage**
Standard signal for all models (exceptions see below)



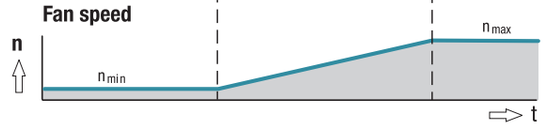

For multi options control input and 4100 NH7 and NH8




All TD Fans e.g. 6300 TD




**Fan speed**




| Signal data | Speed signal $U_{S\,Low}$ | Condition: $I_{sink}$ | Speed signal $U_{S\,High}$ | Condition: $I_{source}$ | Tach operating voltage $U_{BS\,max.}$ | Admissible sink current $I_{sink\,max.}$ | Pulses per revolution | Fan description Basic type |
|---|---|---|---|---|---|---|---|---|
| **Type** | **VDC** | **mA** | **VDC** | **mA** | **VDC** | **mA** | | **Page** |
| 250 | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 2 | 2 | 31 |
| 400 F | ≤ 0.4 | 1 | ≤ 30 | 0 | 30 | 2 | 2 | 32 |
| 400 | ≤ 0.4 | 1 | ≤ 30 | 0 | 30 | 2 | 2 | 33 |
| 420 J | ≤ 0.4 | 2 | ≤ 15 | 0 | 15 | 4 | 2 | 34 |
| 500 F | ≤ 0.4 | 1 | ≤ 30 | 0 | 30 | 2 | 2 | 35 |
| 600 F | ≤ 0.4 | 1 | ≤ 30 | 0 | 30 | 2 | 2 | 36 |
| 620 | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 37 |
| 630 U | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 38 |
| 600 N | ≤ 0.4 | 2 | ≤ 28 | 0 | 28 | 4 | 2 | 39 |
| 600 J | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 41 |
| 700 F | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 42 |
| 8450 | ≤ 0.4 | 2 | ≤ 28 | 0 | 28 | 4 | 2 | 43 |
| 8400 N | ≤ 0.4 | 2 | ≤ 28 | 0 | 28 | 4 | 2 | 44 |
| 8400 N VARIOFAN | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 45 |
| 8300 | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 46 |
| 8200 J | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 47 |
| 3400 N | ≤ 0.4 | 2 | ≤ 28 | 0 | 28 | 4 | 2 | 48 |
| 3400 N VARIOFAN | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 49 |
| 3300 N | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 50 |
| 3212 J / 3214 J | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 51 |
| 3218 J | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 4 | 2 | 51 |
| 3250 J | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 4 | 3 | 52 |
| 4412 F / 4414 F | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 53 |
| 4418 F | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 4 | 2 | 53 |
| 4400 FN | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 55 |
| 4312 / 4314 | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 56 |
| 4318 | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 4 | 2 | 56 |
| 4312 / 4314 VARIOFAN | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 57 |
| 4318 VARIOFAN | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 4 | 2 | 57 |
| 4400 | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 58/59 |
| 4100 N | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 60 |
| 4100 NHH...NH6 | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 10 | 2 | 61 |
| 4100 NH7...NH8 | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 3 | 62 |
| DV 4100 | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 63 |
| 5200 N | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 64 |
| DV 5200 | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 65 |

Subject to change

**Available on request:**
- Electrically isolated speed signal circuit
- Varying voltage potentials for power and logic circuit

| Signal data | Speed signal $U_{S\ Low}$ | Condition: $I_{sink}$ | Speed signal $U_{S\ High}$ | Condition: $I_{source}$ | Tach operating voltage $U_{BS\ max.}$ | Admissible sink current $I_{sink\ max.}$ | Pulses per revolution | Fan description Basic type |
|---|---|---|---|---|---|---|---|---|
| **Type** | **VDC** | **mA** | **VDC** | **mA** | **VDC** | **mA** | | **Page** |
| 5112 N | ≤ 0.4 | 2 | ≤ 15 | 0 | 5 | 20 | 2 | 66 |
| 5114 N / 5118 N | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 2 | 66 |
| 5300 | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 4 | 2 | 67 |
| 5300 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 68 |
| 7112 N / 7118 N | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 2 | 69 |
| 7114 N | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 20 | 2 | 69 |
| 7200 N | ≤ 0.4 | 2 | ≤ 15 | 0 | 15 | 20 | 2 | 70 |
| 6400 | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 2 | 71 |
| 6300 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 75 |
| 6300 N | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 76 |
| 6300 NTD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 77 |
| 6300 | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 2 | 78 |
| DV 6300 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 80 |
| 2200 FTD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 81 |
| RL 48 | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 97 |
| RL 65 | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 98 |
| RL 90 N | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 99 |
| RLF 100 | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 100 |
| RG 90 N | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 101 |
| RG 125 N | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 102 |
| RG 140 N | ≤ 0.4 | 3 | ≤ 60 | 0 | 60 | 4 | 2 | 103 |
| RG 160 N | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 20 | 2 | 104 |
| RG 160 NTD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 105 |
| RG 190 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 106 |
| RG 220 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 107 |
| RG 225 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 108 |
| RET 97 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 109 |
| REF 100 | ≤ 0.4 | 2 | ≤ 30 | 0 | 30 | 4 | 2 | 110 |
| RER 120 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 112 |
| RER 133 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 117 |
| RER 160 NTD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 119 |
| REF 175 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 120 |
| RER 175 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 121 |
| RER 190 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 122 |
| RER 220 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 128 |
| RER 225 TD | ≤ 0.4 | 2 | ≤ 60 | 0 | 60 | 20 | 6 | 129 |

Subject to change

**Note:**
Fans that come with these fan specials could have variations with respect to the temperature range, voltage range, and power consumption compared to standard fans without specials.

# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

***Click to view similar products for*** DC Fans ***category:***

***Click to view products by*** ebm papst ***manufacturer:***

Other Similar products are found below :

614R AUB0612L AFB0948HH-S687 G2E085-AA05-10 4318/12T AUB0912H-F00 3412N/2ME W2G110-AM39-01 8412GLV 8412NGL-12 6448-384 4114N/17-251 622/2N 4318/2R 4412F/2D 424JMU 4414/2HH 4112 N/12GL-175 9GA0912F402 9GA0812B20011 AFB0824SHBAV1 DV5214/2NP-230 9GA0912H4021 THC1548MGDJJ GFB1224SHG 8500NU DC0401012V2B-3T0 7F.20.9.024.3100 ASFP12391 ASFP12392 ASFP80372 ASFP92391 MF92251V3-1000U-G99 3254J/2HPU 9A0612G402 AD5012HB-C71 AD5012MB-C71 ASFP84372 ASFP64372 026758A 3258J/2H3PU???? 412/2H 4292 MF60152V1-1000U-G99 3610KL-04W-B50-D00 109P0412K3023 EE92251B1-000U-F99 8218J/2H4P PE60251B1-000U-G99 PF60381B1-000U-S99