Max. 170 m³/h

DC axial fans

☐ 119 x 32 mm

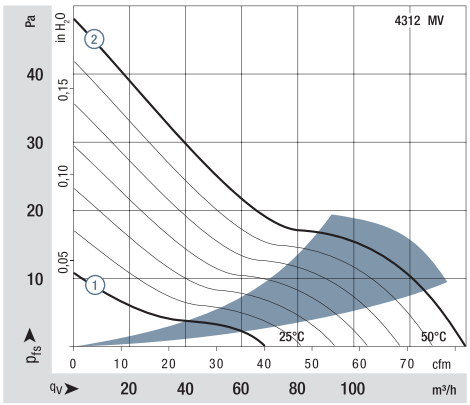
- Material: Housing: GRP[1)] (PBT)
  Impeller: GRP [1)] (PA)
- Direction of air flow: Exhaust over struts
- Direction of rotation: Clockwise, looking towards rotor
- Connection: Via single wires AWG 22, TR 64
- Highlights: Speed automatically adjusted to cooling requirement
- Weight: 220 g

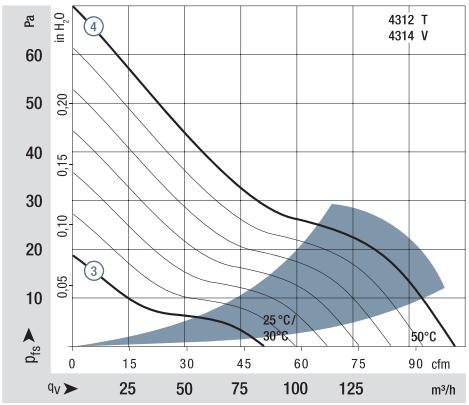
- Possible special versions:
  (See chapter DC fans - specials)
  - Speed signal
  - Go / NoGo alarm
  - Alarm with speed limit
  - External temperature sensor
  - Internal temperature sensor
  - PWM control input
  - Analog control input
  - Moisture protection

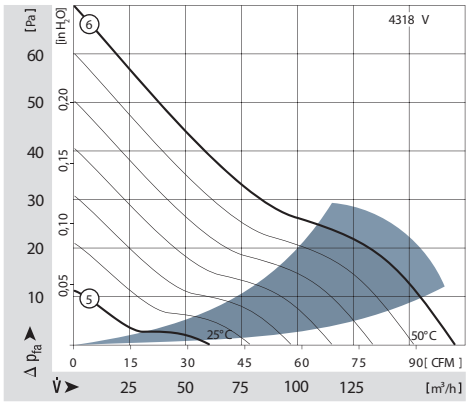
1) Fiberglass-reinforced plastic

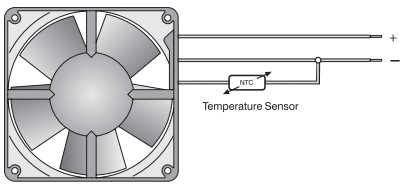
Series 4300 VARIOFAN Nominal data	Type	Air flow m ³/h	Air flow cfm	Nominal voltage VDC	Voltage range VDC	Sound pressure level dB(A)	Sound power level Bel(A)	Sintec sleeve bearings ☐ / Ball bearings ■	Power consumption Watts	Nominal speed rpm⁻¹	Temperature range °C	Service life L_{10} (40 °C) ebm-papst standard Service life L_{10} (T_{max}) ebm-papst standard Hours	Life expectancy $L_{10\Delta}$ (40 °C) see P. 15 Hours	Curve
25℃ ▼ 50℃	4312 MT	65 138	38 81	12	8...15	25 39	3.9 5.3	■	1.1 3.3	1 100 2 300	-20...+65	70 000 / 40 000	117 500	① ②
25℃ ▼ 50℃	4312 T	85 170	50 100	12	8...13.2	29 45	4.2 5.8	■	1.7 5.0	1 400 2 800	-20...+65	65 000 / 35 000	110 000	③ ④
30℃ ▼ 50℃	4314 T	85 170	50 100	24	18...32	29 45	4.2 5.8	■	1.6 4.8	1 400 2 800	-20...+65	65 000 / 35 000	110 000	③ ④
30℃ ▼ 50℃	4318 V	61 170	36 100	48	40...53	21 45	- 5.8	■	2.6 5.4	1 000 2 800	-20...+65	65 000 / 35 000	110 000	⑤ ⑥

Subject to change



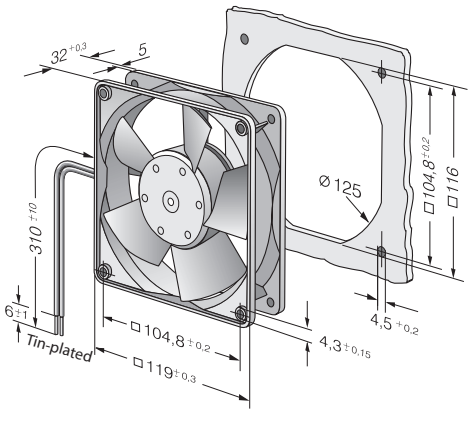




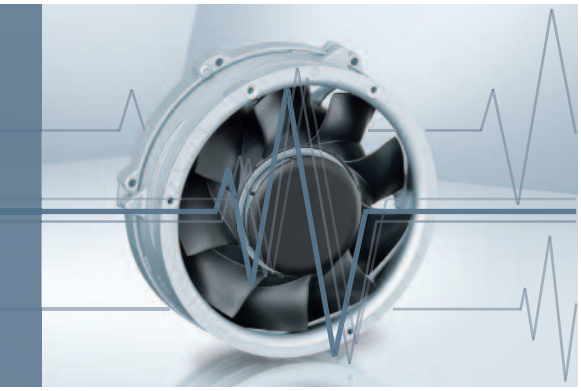


The temperature sensor for controlling the motor speed is not included in the scope of delivery.
For the temperature sensor LZ 370, see accessories.

Rotor protrusion max. 0.4 mm.



Alarm signal /17



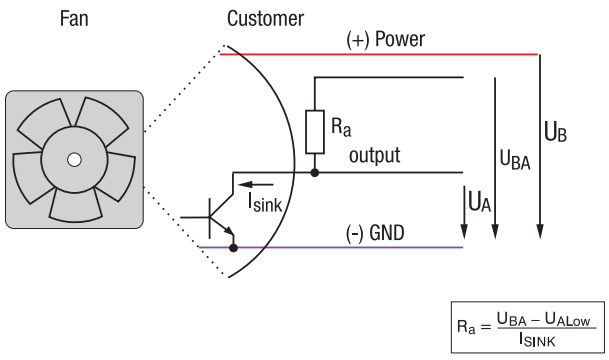
- Alarm signal for speed monitoring
- Signal output via open collector
- The fan emits a continuous high signal during trouble-free operation within the permissible voltage range.
- Low signal when speed limit is not reached
- After elimination of the fault, the fan returns to its setpoint speed; the alarm signal reverts to high.

Alarm signal data	Alarm output voltage U_A Low	Condition:	Condition: I_{sink} =	Alarm output voltage U_A High	Condition:	Condition: I_{source}	Alarm operating voltage U_{BA} max.	Max. permissible sink current	Alarm startup delay time t_6	Condition:	Speed limit n_G	Fan description Basic type
Type	**VDC**		**mA**	**VDC**		**mA**	**VDC**	**mA**	**s**		**min^{-1}**	**Page**
8318 /17	≤ 0.4	$n < n_G$	2	≤ 60	$n > n_G$	0	60	20	≤ 15	*	1500 ± 100	46
8318 /17 H	≤ 0.4	$n < n_G$	2	≤ 60	$n > n_G$	0	60	20	≤ 15	*	1500 ± 100	46
4318 /17	≤ 0.4	$n < n_G$	2	≤ 60	$n > n_G$	0	60	20	≤ 15	*	850 ± 100	56
4184 N /17 X	≤ 0.4	$n < n_G$	2	≤ 60	$n > n_G$	0	60	20	≤ 15	*	1500 ± 100	60

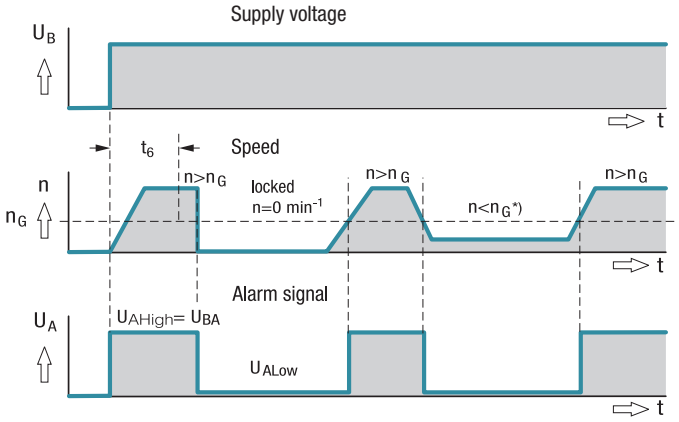
Subject to change

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.

Electrical hookup



All voltages measured to ground.
External load resistor R_a from U_A to U_{BA} required.



t_6 = Alarm signal suppression during startup.
* n < speed limit n_G by braking or locking.

ebmpapst

Available on request:

- Integrated signal storage for subsequent recognition of short-term faults (latch).
- Alarm circuit open collector or TTL.
- Electrically isolated for maximum device safety
  Defects in the power circuit do not affect the alarm circuit.

Alarm signaldata	Alarm output voltage U_{A} Low	Condition:	Condition: I_{sink} =	Alarm output voltage U_{A} High	Condition:	Condition: I_{source}	Alarm operating voltage U_{BA} max.	Max. permissible sink current	Alarm startup delay time t_{G}	Condition:	Speed limit n_{G}	Fan description Basic type
Type	**VDC**		**mA**	**VDC**		**mA**	**VDC**	**mA**	**s**		**min^{-1}**	**Page**
4312/17 MT VARIOFAN	≤ 0.4	$n < n_{G}$	2	≤ 60	$n > n_{G}$	0	60	20	≤ 15	*	1500 ± 100	57
4312/17 T VARIOFAN	≤ 0.4	$n < n_{G}$	2	≤ 60	$n > n_{G}$	0	60	20	≤ 15	*	1500 ± 100	57
4314/17 T VARIOFAN	≤ 0.4	$n < n_{G}$	2	≤ 60	$n > n_{G}$	0	60	20	≤ 15	*	1150 ± 100	57
4318/17 T VARIOFAN	≤ 0.4	$n < n_{G}$	2	≤ 60	$n > n_{G}$	0	60	20	≤ 15	*	850 ± 100	57
7214 N/17	≤ 0.4	$n < n_{G}$	2	≤ 60	$n > n_{G}$	0	60	15	≤ 15	*	1330 ± 60	70

Subject to change

* After switching on U_{B}

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.