

Max. 170 m<sup>3</sup>/h

# DC axial fans

□ 119 x 25 mm



- **Material:** Housing: GRP<sup>1)</sup> (PBT)  
Impeller: GRP<sup>1)</sup> (PA)
  - **Direction of air flow:** Exhaust over struts
  - **Direction of rotation:** Counterclockwise, looking towards rotor
  - **Connection:** Via single wires AWG 24, TR 64
  - **Highlights:** Ball bearings and sleeve bearings available
  - **Weight:** 175 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

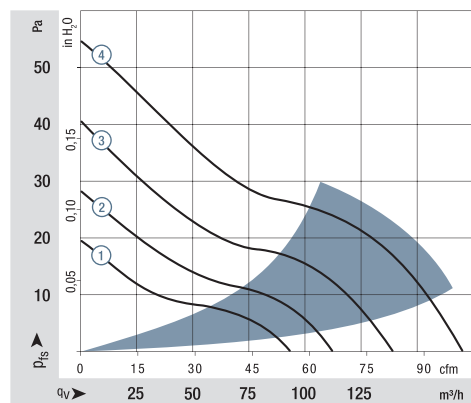
1) Fiberglass-reinforced plastic

Series 4400 F

Nominal data

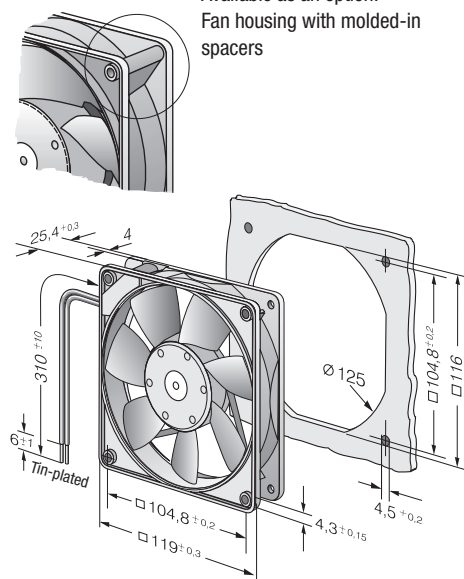
Type	Air flow		Nominal voltage	Voltage range	Sound pressure level	Sound power level	Sinter sleeve bearings Ball bearings	Power consumption	Nominal speed	Temperature range	Service life L <sub>10</sub> (40 °C) ebm-papst standard	Service life L <sub>10</sub> (T <sub>max</sub> ) ebm-papst standard	Life expectancy L <sub>10</sub> (IPC (40 °C) see page 17	Curve
	m <sup>3</sup> /h	cfm												
4412 FGL	94	55	12	7...14	26	3.9	□	1.3	1 600	-20...+75	80 000 / 32 500	135 000	①	
4412 FGML	114	67	12	7...12.6	32	4.3	□	2.0	1 950	-20...+75	75 000 / 30 000	127 500	②	
4412 FML	114	67	12	7...12.6	32	4.3	■	2.0	1 950	-20...+75	75 000 / 30 000	127 500	②	
4412 FGM	140	82	12	7...12.6	38	4.8	□	3.2	2 400	-20...+75	70 000 / 27 500	117 500	③	
4412 FM	140	82	12	7...12.6	38	4.8	■	3.2	2 400	-20...+75	70 000 / 27 500	117 500	③	
4412 FG	170	100	12	8...12.6	43	5.3	□	5.3	2 900	-20...+60	60 000 / 37 500	102 500	④	
4412 F	170	100	12	8...12.6	43	5.3	■	5.3	2 900	-20...+60	60 000 / 37 500	102 500	④	
4414 FL	94	55	24	18...28	26	3.9	■	1.2	1 600	-20...+75	80 000 / 32 500	135 000	①	
4414 FM	140	82	24	12...28	38	4.8	■	3.1	2 400	-20...+75	70 000 / 27 500	117 500	③	
4414 FG	170	100	24	12...28	43	5.3	□	5.0	2 900	-20...+60	60 000 / 37 500	102 500	④	
4414 F	170	100	24	12...28	43	5.3	■	5.0	2 900	-20...+60	60 000 / 37 500	102 500	④	
4418 FG	170	100	48	28...53	43	5.3	□	5.4	2 900	-20...+60	60 000 / 37 500	102 500	④	
4418 F	170	100	48	28...53	43	5.3	■	5.4	2 900	-20...+60	60 000 / 37 500	102 500	④	

Subject to change



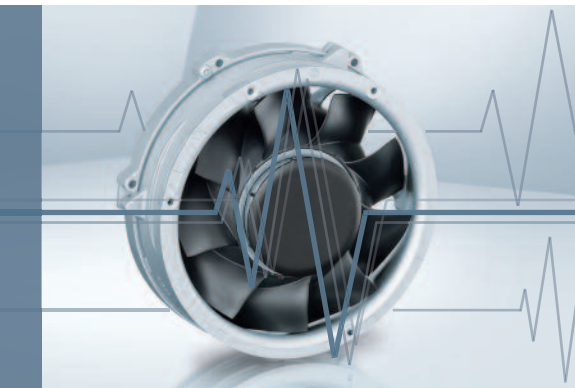
Air performance measured according to: ISO 5801.  
Installation category A, without contact protection.  
Noise: Total sound power level L<sub>WA</sub> ISO 103002 measured on a hemisphere with a radius of 2 m.  
Sound pressure level L<sub>pA</sub> measured at 1 m distance from fan axis.  
The values given are applicable only under the specified measuring conditions and may differ depending on the installation conditions.  
In the event of deviation from the standard configuration, the parameters must be checked after installation!  
For detailed information see <http://www.ebmpapst.com/general conditions>

Available as an option:  
Fan housing with molded-in spacers



# Alarm signal /39

## Go / NoGo alarm



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

Alarm signal data	Alarm output voltage $U_A$ Low			Alarm output voltage $U_A$ High			Alarm operating voltage $U_{BA}$ max.	Max. permissible Sink current $I_{sink}$	Alarm delay time $t_d$	Condition:	Speed limit $n_G$	Fan description Basic type
	Type	VDC	mA	VDC	mA	Condition: source						
412/39	$\leq 0.5$	$n > n_G$	2	$\leq 28$	$n = n_G$	0	28	10	$< 1$	*	0	33
612 F/39 H	$\leq 0.5$	$n > n_G$	2	$\leq 28$	$n = n_G$	0	28	10	$< 1$	*	0	36
614 N/39 M	$\leq 0.5$	$n > n_G$	2	$\leq 28$	$n = n_G$	0	28	10	$< 1$	*	0	39
618 N/39 N	$\leq 0.5$	$n > n_G$	2	$\leq 28$	$n = n_G$	0	28	10	$< 1$	*	0	39
3412 N/39 H	$\leq 0.5$	$n > n_G$	2	$\leq 28$	$n = n_G$	0	28	10	$< 1$	*	0	48
3414 N/39 HH	$\leq 0.5$	$n > n_G$	2	$\leq 28$	$n = n_G$	0	28	10	$< 1$	*	0	48
4412 F/39 GL	$\leq 0.5$	$n > n_G$	2	$\leq 28$	$n = n_G$	0	28	10	$< 1$	*	0	53
4412 F/39 M	$\leq 0.5$	$n > n_G$	2	$\leq 28$	$n = n_G$	0	28	10	$< 1$	*	0	53
4414 F/39	$\leq 0.5$	$n > n_G$	2	$\leq 28$	$n = n_G$	0	28	10	$< 1$	*	0	53
4414 FN/39 H	$\leq 0.4$	$n > n_G$	2	$\leq 30$	$n = n_G$	0	30	4	$< 1$	*	0	55

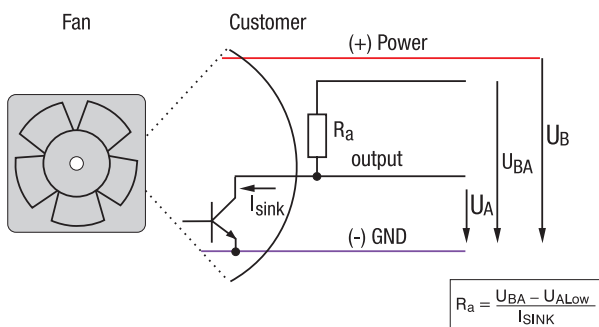
Subject to change

\* After switching on  $U_B$

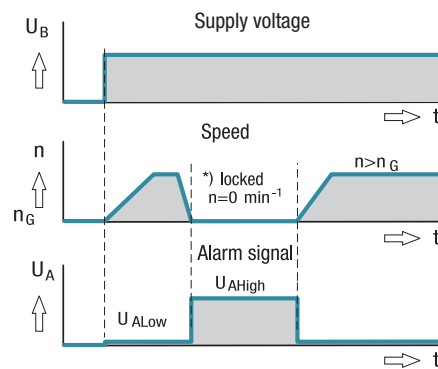
### Note:

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.

### Electrical hookup



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



\* Speed limit  $n_G = 0$  rpm