## $Max. 80 \text{ m}^3/\text{h}$

# DC centrifugal fans

□ 127 x 25 mm



Scroll housing: GRP1) Material: Impeller: GRP1)

Base plate: Sheet steel

Direction of air flow: Axial: Intake,

Centrifugal: Exhaust

**Connection:** via single wires AWG 22, TR 64 **Highlights:** Optional protective cap for

outlet opening

Backward-curved impeller

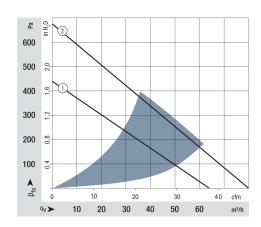
Weight: 320 g - Possible special versions:

(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
- Degree of protection: IP 54

1) Fiberglass-reinforced plastic

	Series RLF 100			ltage	e e	ır level	e bearings s	nmption	pe	range	L <sub>10</sub> (40 °C) standard L <sub>10</sub> (T <sub>max</sub> ) standard	icy L <sub>10IPC</sub> age 17	
	Nominal data	Air flow	Air flow	Nominal voltage	Voltage range	Sound power level	Sintec sleeve b Ball bearings	Power consumption	Nominal speed	Temperature	Service life L <sub>1</sub> ebm-papst sta Service life L <sub>1</sub> ebm-papst sta	Life expectancy L (40 °C) see page	Curve
	Туре	m³/h	cfm	VDC	VDC	Bel(A)	■/■	Watts	rpm <sup>-1</sup>	°C	Hours	Hours	
	RLF 100-11/12	64	37.7	12	815	6.4	•	8.0	5 100	-20+75	80 000 / 30 000	135 000	1
	RLF 100-11/14	64	37.7	24	1630	6.4	•	8.0	5 100	-20+75	80 000 / 30 000	135 000	1
	RLF 100-11/18	64	37.7	48	3660	6.4	•	8.6	5 100	-20+75	80 000 / 30 000	135 000	1
High speed models with open-collector tachometer and PWM speed control.													
	RLF 100-11/12/2 HP-200	80	47.1	12	1013.2	7.5	-	18.6	6 400	-20+60	72 500 / 45 000	122 500	2
	RLF 100-11/18/2 HP-182	80	47.1	48	4353	7.5	-	17.0	6 400	-20+70	72 500 / 35 000	122 500	2
	Subject to change												



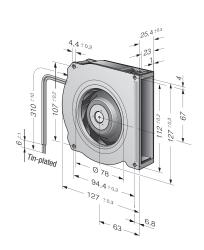
Air performance measured according to: ISO 5801. Installation category A, without contact protection. Noise: Total sound power level  $L_WA$  ISO 103002 measured on a hemisphere with a radius of 2 m. Sound pressure level LpA measured at 1 m distance

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



2016-01

# Alarm signal /19



- 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 UA Low	Condition:	Condition:  sink =	Alarm output voltage U <sub>A</sub> High	Condition:	Condition:  source	Alarm operating voltage UBA max.	Max. permissible sink current	Alarm startup delay time t <sub>6</sub>	Condition:	Speed limit n <sub>G</sub>	Fan description Basic type
Туре	VDC		mA	VDC		mA	VDC	mA	s		min⁻¹	Page
8314/19 H	≤0.4	$n > n_{G}$	2	≤60	n < n <sub>G</sub>	0	60	20	≤15	*	1500 ± 100	46
4312/19	.0.4	n v n	2	.60	n an	0	60	20	≤15	*	1500 ± 100	56
4312/19	≤0.4	n > n <sub>G</sub>	2	≤60	n < n <sub>G</sub>	U	00	20	≤ 10		1000 ± 100	30
7214 N/19	≤0.4	n > n <sub>G</sub>	2	≤60	$n < n_G$	0	60	10	≤15	*	1800 ± 20	70
RLF 100-11/14/19	≤0.4	$n > n_{G}$	2	≤28	$n < n_{G}$	0	28	10	≤15	*	$1900 \pm 100$	100
RER 101-36/18N/19 HH	≤0.4	$n > n_{G}$	2	≤28	$n < n_{G}$	0	28	10	≤15	*	1900 ±100	111
Subject to change										* After	switching on U <sub>B</sub>	

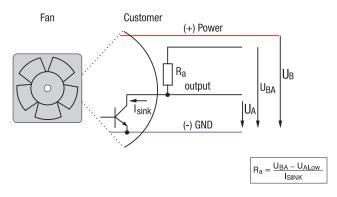
#### Note

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.

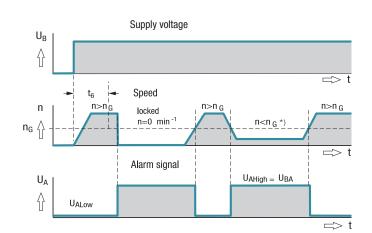
### Available on request:

- 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.

### **Electrical hookup**



All voltages measured to ground External load resistor  ${\rm R}_{\rm A}$  from  ${\rm U}_{\rm A}$  to  ${\rm U}_{\rm BA}$  required.



 $t_6 = \mbox{Alarm signal suppression during startup.} \\ ^* \ n < \mbox{speed limit } \ n_G \ \mbox{by braking or locking.} \\$ 

2016-01