

max. 137 m<sup>3</sup>/h

# DC centrifugal fans

Series RG 125 N 180 x 180 x 40 mm

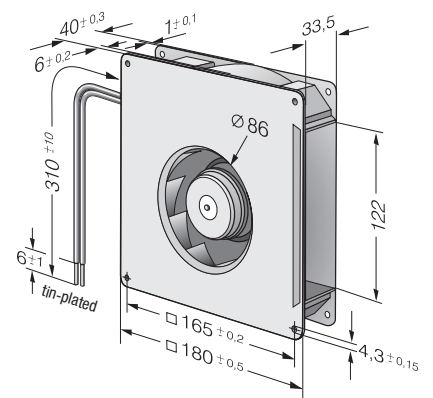
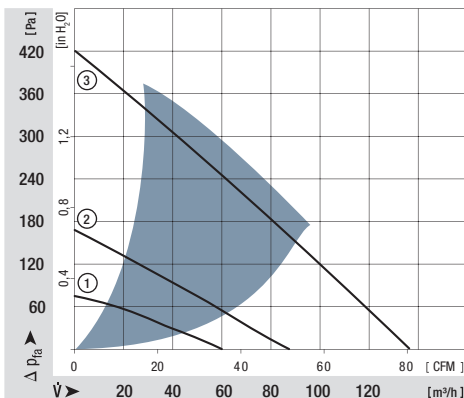


- **Material:** Scroll housing: GRP<sup>1)</sup>  
Impeller: GRP<sup>1)</sup>  
Housing base: Sheet steel
  - **Direction of air flow:** Axial: Intake  
Centrifugal: Exhaust
  - **Connection:** Via single wires AWG 22, TR 64  
48 V model: Flat plug  
6.3 x 0.8 mm for protective earth
  - **Highlights:** Backwards-curved impeller
  - **Mass:** 730 g
- **Possible special versions:**  
(See chapter DC fans - specials)
    - Speed signal
    - Go / No-go alarm
    - Alarm with limit speed
    - External temperature sensor
    - Internal temperature sensor
    - PWM control input
    - Analogue control input
    - Protection against moisture
    - Protection against salt fog
    - Type of protection: IP 54 / IP 68

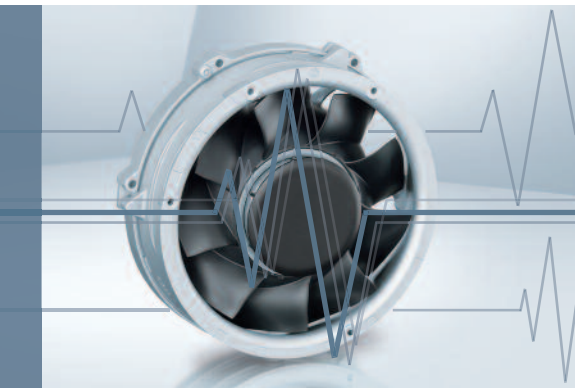
1) Fibreglass-reinforced plastic

Nominal data	Air flow		Nominal voltage	Voltage range	Sound power level	Sinter sleeve bearings Ball bearings	Input power	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											
RG 125-19/12 NM	60,0	35,3	12	7...15	4,8	■	2,0	1 750	-30...+75	70 000 / 30 000	117 500	①	
RG 125-19/12 N	87,5	51,5	12	7...15	5,8	■	5,2	2 550	-30...+75	62 500 / 27 500	105 000	②	
RG 125-19/14 NM	60,0	35,3	24	12...28	4,8	■	2,0	1 750	-30...+75	70 000 / 30 000	117 500	①	
RG 125-19/14 N	87,5	51,5	24	12...28	5,8	■	4,9	2 550	-30...+75	62 500 / 27 500	105 000	②	
RG 125-19/18 N	87,5	51,5	48	36...56	5,8	■	4,8	2 550	-30...+75	62 500 / 27 500	105 000	②	
RG 125-19/18 NH	137	80,6	48	36...56	7,0	■	19,0	4 000	-20...+70	55 000 / 27 500	92 500	③	

Subject to alternations

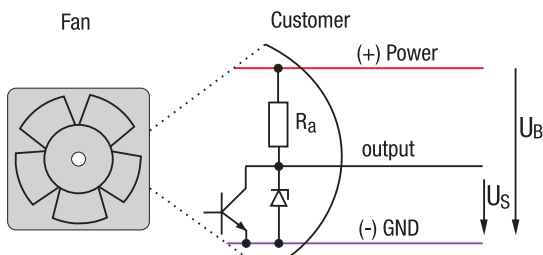


# Speed signal /12



- Speed-proportional, square-wave signal for external monitoring of the fan motor speed
- 2, 3, or 6 pulses per revolution
- TTL-compatible
- Integrated pull-up resistor
- 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.

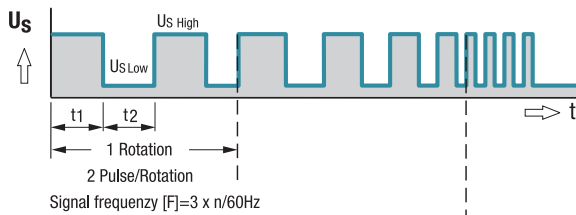
## Electrical hookup



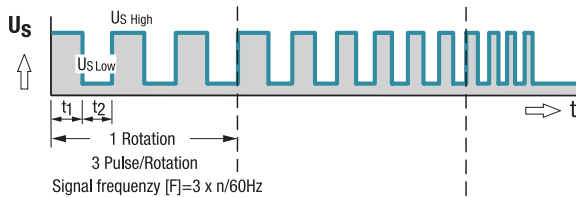
All voltages measured to ground.

## Signal output voltage

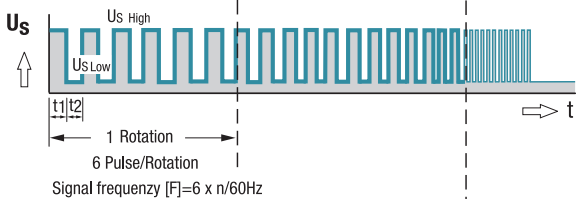
Standard signal for all models (exceptions see below)



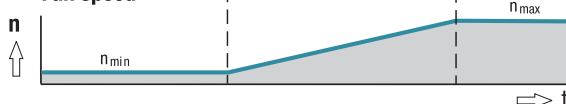
For multi options control input and 4100 NH7 and NH8



All TD Fans e.g. 6300 TD



## Fan speed



Signal data	Speed signal $U_{S\text{Low}}$	Condition: $I_{\text{sink}}$	Speed signal $U_{S\text{High}}$	Condition: $I_{\text{source}}$	Admissible sink current $I_{\text{sink max}}$	Fan description Basic type
Type	VDC	mA	VDC	mA	mA	Page
614 N/12 GM	$\leq 0.4$	1	2.5–5.5	1	1	39
618 N/12 N	$\leq 0.4$	1	2.5–5.5	1	1	39
8412 N/12 H	$\leq 0.4$	1	2.5–5.5	1	1	44
4412 F/12 GM	$\leq 0.4$	1	2.5–5.5	1	1	53
4418 F/12	$\leq 0.4$	1	2.5–5.5	1	1	53
4312 /12 M	$\leq 0.4$	1	2.5–5.5	1	1	56
4314 /12	$\leq 0.4$	1	2.5–5.5	1	1	56
4182 N/12 X	$\leq 0.4$	1	2.5–5.5	1	1	60

Subject to change

## Note:

With these fan options, deviations in regard to temperature range, voltage range and power consumption are possible compared with standard fan data.

**Available on request:**

- Electrically isolated speed signal circuit
- Varying voltage potentials for power and logic circuit

Signal data		Speed signal U <sub>S</sub> Low	Condition: I <sub>sink</sub>	Speed signal U <sub>S</sub> High	Condition: I <sub>source</sub>	Admissible sink current I <sub>sink</sub> max.	Fan description Basic type
Type	VDC	mA	VDC	mA	mA	Page	
7214 N/12	≤0.4	2	2.5–5.5	1	≤20	70	
6424/12 H	≤0.4	2	2.5–5.5	1	≤20	71	
DV 6424/12	≤0.4	2	4.5–5.25	2	≤12	73	
DV 6448/12	≤0.4	2	4.5–5.25	2	≤12	73	
RG 125-19/12 N/12	≤0.4	1	2.5–5.5	1	≤1	103	
RG 160-28/12 N/12	≤0.4	2	2.5–5.5	1	≤5	104	
RG 160-28/18 N/12	≤0.4	2	2.5–5.5	1	≤20	104	
RER 125-19/12 N/12	≤0.4	1	2.5–5.5	1	≤1	116	
RER 160-28/12 N/12	≤0.4	2	2.5–5.5	1	≤5	118	
RER 160-28/18 N/12	≤0.4	2	2.5–5.5	1	≤20	118	

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.