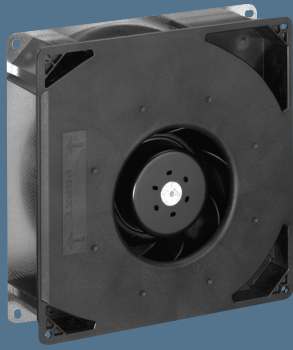


max. 209 m<sup>3</sup>/h

# DC centrifugal fans

Series RG 160 N 220 x 220 x 56 mm



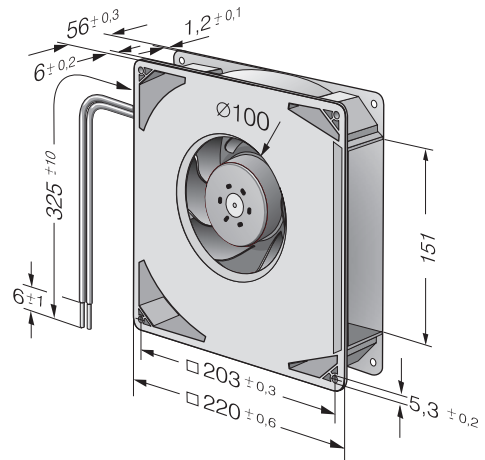
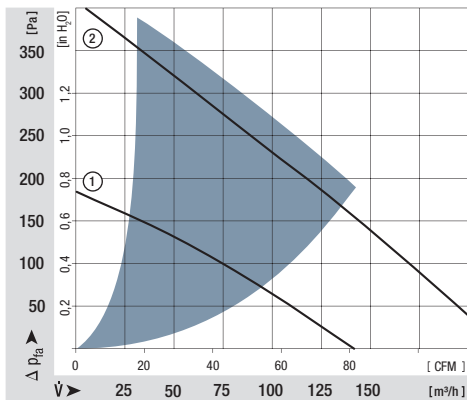
### Highlights:

- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- Backward curved impeller.

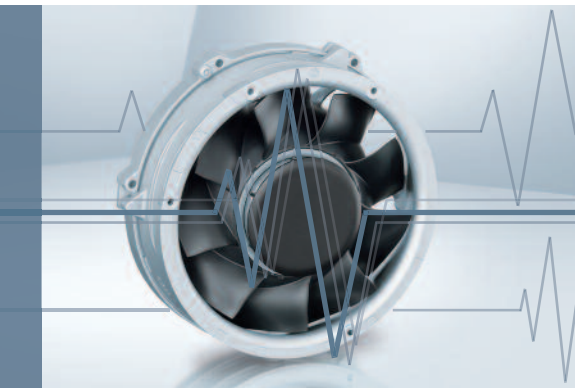
### General characteristics:

- Fibreglass-reinforced plastic scroll housing and impeller; Housing base of steel plate.
- Fully integrated electronic commutation.
- Protected against reverse polarity and locking.
- Direction of air flow: axial air intake, centrifugal air exhaust out of the outlet.
- Connection via single strands AWG 22, TR 64. Bared and tin-plated.
- 48 V Model: Flat plug 6.3 x 0.8 mm for protective earth.
- Mass: 1.4 kg.

Nominal data		Air flow	Air flow	Nominal voltage	Voltage range	Sound power level	Sinter sleeve bearings Ball bearings	Power input	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> <sup>Δ</sup> (40 °C) see P. 15	Curve	Specials
Type		m <sup>3</sup> /h	CFM	VDC	VDC	Bel(A)	■ / ■	Watts	RPM	°C	Hours	Hours			P. 112
RG 160-28/12 NM		139	81,1	12	7...14	5,6	■	7,5	1 900	-20...+70	80 000 / 40 000	160 000	1		
RG 160-28/12 N		209	123,0	12	7,5...14	6,6	■	21,0	2 850	-20...+70	70 000 / 35 000	140 000	2	/12	
RG 160-28/14 NM		139	81,1	24	12...28	5,6	■	7,0	1 900	-20...+70	80 000 / 40 000	120 000	1		
RG 160-28/14 N		209	123,0	24	12...28	6,6	■	20,0	2 850	-20...+70	70 000 / 35 000	120 000	2		
RG 160-28/18 N		209	123,0	48	28...60	6,6	■	20,0	2 850	-20...+70	70 000 / 35 000	120 000	2	/12	

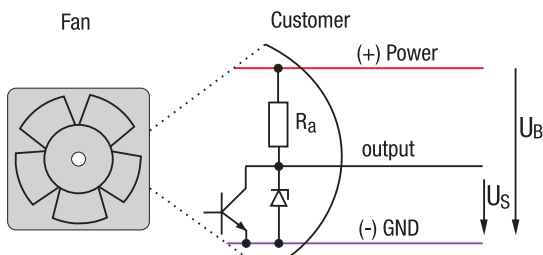


# Speed signal /12



- 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.

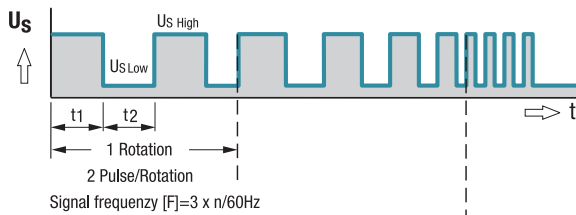
## Electrical hookup



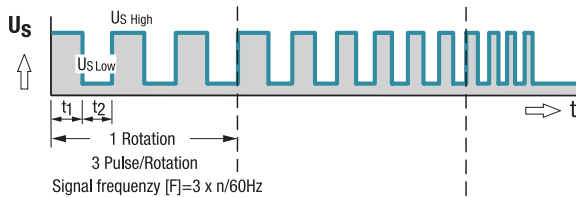
All voltages measured to ground.

## Signal output voltage

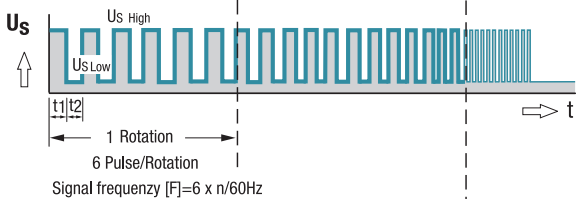
Standard signal for all models (exceptions see below)



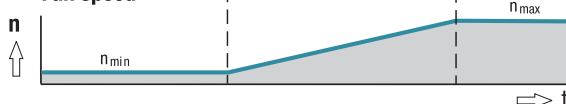
For multi options control input and 4100 NH7 and NH8



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.