

max. 184 m<sup>3</sup>/h

# DC Axial Fans

Series 4200 119 x 119 x 38 mm



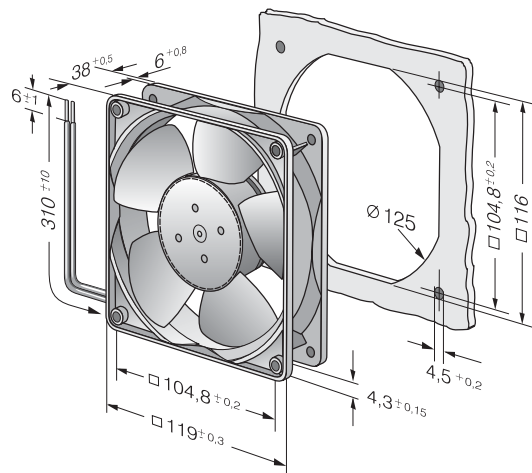
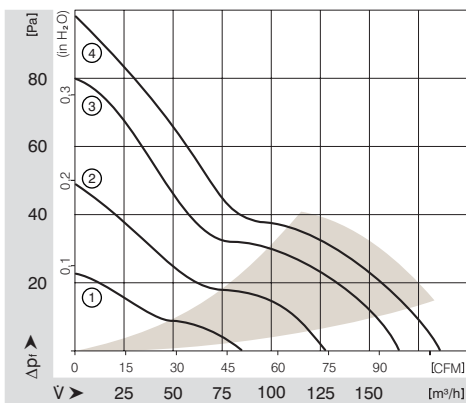
### Highlights:

- Ball bearings and sleeve bearings available.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.

### General characteristics:

- Material: fiberglass-reinforced plastic. Impeller PA, housing PBT.
- Fully integrated electronic commutation.
- Protected against reverse polarity and blocking.
- Electrical connection via single leads AWG 22, TR 64. Stripped and tinned ends.
- Blowing over struts. Rotational direction CCW looking at rotor.
- Mass: 290 g.

Nominal Data	Air Flow		Nominal Voltage	Voltage Range	Noise	Sound Power	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> Δ (40 °C)	Curve	Specials
	m <sup>3</sup> /h	CFM													
4212 L	86	50.6	12	7...14.5	29	4.2	■	1.2	1 600	-20...+75	80 000 / 35 000	112 500	1		
4212 M	127	74.7	12	7...14.5	38	4.9	■	2.2	2 350	-20...+75	70 000 / 30 000	112 500	2		
4212	165	97.1	12	7...14.5	45	5.6	■	4.3	3 050	-20...+75	62 500 / 27 500	122 500	3	/2;/12	
4212 H	184	108.3	12	7...14.5	49	5.9	■	5.3	3 400	-20...+65	60 000 / 32 500	115 000	4	/2;/12	
4214 L	86	50.6	24	12...28	29	4.2	■	1.2	1 600	-20...+75	80 000 / 35 000	112 500	1		
4214 G	165	97.1	24	12...28	45	5.6	□	4.3	3 050	-20...+75	62 500 / 27 500	90 000	3		
4214	165	97.1	24	12...28	45	5.6	■	4.3	3 050	-20...+75	62 500 / 27 500	122 500	3	/2;/12;/17	
4214 H	184	108.3	24	12...28	49	5.9	■	5.3	3 400	-20...+65	60 000 / 32 500	115 000	4	/2;/12;/39	
4218	165	97.1	48	36...56	45	5.6	■	4.3	3 050	-20...+75	62 500 / 27 500	112 500	3	/2;/12	
4218 H	184	108.3	48	36...56	49	5.9	■	5.6	3 400	-20...+65	60 000 / 32 500	115 000	4	/12;/39	

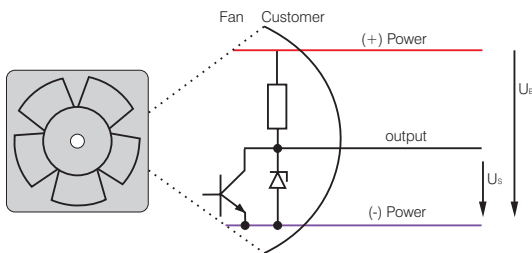


# Sensor signal /12



- 2 pulses per revolution / 6 pulses per revolution with TURBOFANS.
- TTL-compatible.
- Integrated pull-up resistor.
- Connection via separate lead.
- The sensor signal also serves as a major comparison variable for setting and maintaining the desired speed for interactive or controlled cooling with one or more interconnected fans.

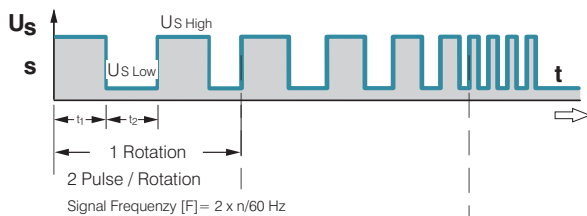
## Electrical Connection



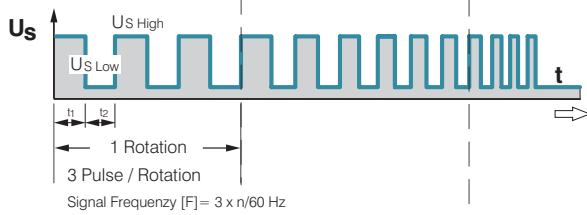
All voltages measured to ground.

## Signal output voltage

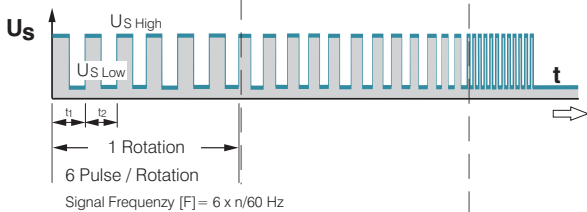
Standard signal for all models (exemptions see below)



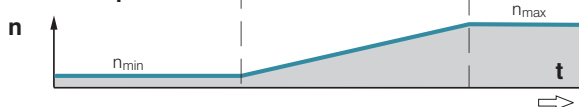
only for 4100 NH7 and NH8



6200 NTD, 6400 TD, DV 6200 TD, DV 6400 TD, RER / RG 160 NTD



## Fan Speed



Signal data	Sensor signal $U_{S, Low}$	Condition: $I_{sink}$	Sensor signal $U_{S, High}$	Condition: $I_{source}$	Perm. sink current $I_{sink, max}$	Fan description
Type	V DC	mA	V DC	mA	mA	Page
614 N/12 GM	$\leq 0.4$	1	2.5–5.5	1	1	28
618 N/12 N	$\leq 0.4$	1	2.5–5.5	1	1	28
8412 N/12 H	$\leq 0.4$	1	2.5–5.5	1	1	33
8312 /12	$\leq 0.4$	1	2.5–5.5	1	1	35
8314 /12	$\leq 0.4$	1	2.5–5.5	1	1	35
8314 /12 H	$\leq 0.4$	1	2.5–5.5	1	1	35
8318 /12 HL	$\leq 0.4$	1	2.5–5.5	1	1	35
8318 /12 H	$\leq 0.4$	1	2.5–5.5	1	1	35
3318 /12 H	$\leq 0.4$	1	2.5–5.5	1	1	39
4412 F/12 GM	$\leq 0.4$	1	2.5–5.5	1	1	41
4414 F/12	$\leq 0.4$	1	2.5–5.5	1	1	41
4418 F/12	$\leq 0.4$	1	2.5–5.5	1	1	41
4312 /12 M	$\leq 0.4$	1	2.5–5.5	1	1	44
4314 /12	$\leq 0.4$	1	2.5–5.5	1	1	44
4212 /12	0.4	1	2.5–5.5	1	1	47
4212 /12 H	$\leq 0.4$	1	2.5–5.5	1	1	47
4214 /12	$\leq 0.4$	1	2.5–5.5	1	1	47
4214 /12 H	$\leq 0.4$	1	2.5–5.5	1	1	47
4218 /12	$\leq 0.4$	1	2.5–5.5	1	1	47
4218 /12 H	$\leq 0.4$	1	2.5–5.5	1	1	47
4182 N/12 X	$\leq 0.4$	1	2.5–5.5	1	1	48
4188 N/12 XM	0.4	1	2.5–5.5	1	1	48
5214 N/12 H	$\leq 0.4$	1	2.5–5.5	1	$\leq 1$	52

## Attention:

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:**

- Galvanically separated sensor and signal circuit.
- Varying voltage potentials for power and logic circuit.

Signal data	Sensor signal $U_{S, Low}$	Condition: $I_{Sink}$	Sensor signal $U_{S, High}$	Condition: $I_{Source}$	Perm. sink current $I_{Sink, max.}$	Fan description
Type	V DC	mA	V DC	mA	mA	Page
5118 N/12	≤0.4	2	2.5–5.5	1	≤20	54
7118 N/12	≤0.4	2	2.5–5.5	1	≤20	56
7214 N/12	≤0.4	2	2.5–5.5	1	≤20	57
6224 N/12 M	≤0.4	2	2.5–5.5	1	≤20	59
6224 N/12	≤0.4	2	2.5–5.5	1	≤20	59
6248 N/12	≤0.4	2	2.5–5.5	1	≤20	59
DV 6224 /12	≤0.4	2	4.5–5.25	2	≤12	61
DV 6248 /12	≤0.4	2	4.5–5.25	2	≤12	61
6424 /12 H	≤0.4	2	2.5–5.5	1	≤20	63
DV 6424 /12	≤0.4	2	4.5–5.25	2	≤12	65
DV 6448 /12	≤0.4	2	4.5–5.25	2	≤12	65
RG 125-19/12N/12	≤0.4	1	2.5–5.5	1	≤1	78
RG 160-28/12N/12	≤0.4	2	2.5–5.5	1	≤5	79
RG 160-28/18N/12	≤0.4	2	2.5–5.5	1	≤20	79
RER 125-19/12N/12	≤0.4	1	2.5–5.5	1	≤1	83
RER 160-28/12N/12	≤0.4	2	2.5–5.5	1	≤5	84
RER 160-28/18N/12	≤0.4	2	2.5–5.5	1	≤20	84

**Attention:**

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