

FAN OPTIONS



Fan Bearing

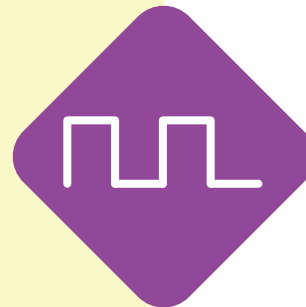
Akasa offer two types of bearings: Two ball bearing and Sleeve Bearing

bearing	life expectancy	order code
Two ball	80,000 hrs	B
sleeve / HD / EBR	40,000 hrs	S

* Life expectancy is tested at 25°C RH60% ±20%

Pulse Width Modulation

The speed of the fan can be selectively controlled via a PWM signal. This option is switched via its own wire at the fan.



TACHO OUTPUT (FG)

The electronics of the fan supply a signal that varies with speed, akin to a square wave signal, through an additional wire. This signal serves for general monitoring purposes or specifically for monitoring the speed.

- Intel®
- AMD
- Fan Filter & Fan Guard
- DC Fan
- DC Blower Fan
- Micro Fans and Blowers
- PWM Fan Cable & Fan Accessories
- Thermal Interface
- M.2 SSD Cooling

FAN OPTIONS

Intel®

AMD

Fan Filter & Fan Guard

DC Fan

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Micro Fans and Blowers

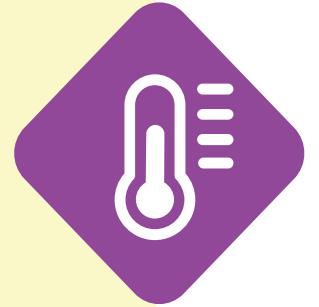
PWM Fan Cable & Fan Accessories

Thermal Interface

M.2 SSD Cooling

Temperature Sensor Control

A speed control that depends on the ambient air temperature is possible



MTBF

Mean Time Between Failure (MTBF) is the DC fan lifespan statistically but relies on accurate operational data and customer feedback for application, making it advisable to use MTBF as a reference rather than a sole metric due to data consistency challenges.

Compliance

Akasa fans come as standard with CE and UKCA compliance. We can work with third party laboratories for additional compliance such as VDE, TUL, UL and cUL.



Ingress Protection

IP solutions which provides protection against dust and water either in the form of a coating on the bearing or the electronics part of the fan is fully encapsulated.

The IP code, consist of the letters "IP" followed by two digits (e.g., IP68). The first digit represents protection against solids, while the second digit indicates protection against liquids.

IP Ratings



First Code Digit	Protection Against Ingress of Solids	Second Code Digit	Protect Against Ingress of Water
0	No protection	0	No protection
1	Protection against solids with a diameter of >50mm	1	Protection against vertically dripping water
2	Protection against solids with a diameter of >12.5mm	2	Protection against vertically dripping water when tilted up to 15°
3	Protection against solids with a diameter of >2.5mm	3	Protection against spraying water up to an angle of 60°
4	Protection against solids with a diameter of >1mm	4	Protection against splashes of water from all directions
5	Protection against dust	5	Protection against low pressure
6	Dust tight protection	6	Protection against high pressure jetting water
		7	Protection against immersion in water between 150mm-1m deep for 30 minutes
		8	Protection against permanent immersion



How to order

Add the bearing type code (B or S) after the DF in the fan model number

Fan model number scheme explanation

DF **B** **4010** **12** **H**

B Bearing Type :
B = Two ball S = sleeve / HD / EBR

4010 Fan Frame Size :
eg. 4010 = 40 × 40 × 10 mm

12 DC Voltage :
eg. 12 = DC 12V

H Fan Speed :
H = high M = medium L = low

2CM Series

25 x 25 x 10 mm



model no.		DF□2510□H		DF□2510□M		DF□2510□L	
		5	12	5	12	5	12
voltage	V	5	12	5	12	5	12
current	AMPS	0.14	0.065	0.11	0.05	0.075	0.04
power consumption	W	0.7	0.78	0.55	0.6	0.38	0.48
rated speed	RPM	10,000		8,500		7,000	
airflow	CFM	2.8		2.4		2	
air pressure	mm-H2O	5.3		4.5		3.7	
sound	dB(A)	26		22.5		18	
weight	g	7.5		7.5		7.5	

4CM Series

40 x 40 x 10 mm



model no.		DF□4010□H			DF□4010□M			DF□4010□L		
		5	12	24	5	12	24	5	12	24
voltage	V	5	12	24	5	12	24	5	12	24
current	AMPS	0.17	0.075	0.07	0.13	0.065	0.06	0.09	0.045	0.05
power consumption	W	0.85	0.90	1.68	0.65	0.78	1.44	0.45	0.54	1.2
rated speed	RPM	6,500			5,500			4,500		
airflow	CFM	6.6			5.6			4.5		
air pressure	mm-H2O	4.1			2.9			2.0		
sound	dB(A)	29			26.5			21.5		
weight	g	15			15			15		

40 x 40 x 20 mm



model no.		DF□4020□H			DF□4020□M			DF□4020□L		
		5	12	24	5	12	24	5	12	24
voltage	V	5	12	24	5	12	24	5	12	24
current	AMPS	0.53	0.14	0.07	0.35	0.10	0.05	0.25	0.07	0.04
power consumption	W	2.65	1.68	1.68	1.75	1.20	1.20	1.25	0.84	0.96
rated speed	RPM	7,600			6,300			5,000		
airflow	CFM	9.0			7.2			5.7		
air pressure	mm-H2O	6.4			5.2			3.2		
sound	dB(A)	29.5			25.5			20.0		
weight	g	24			24			24		

5CM Series



50 x 50 x 10 mm

model no.		DF□5010□H		DF□5010□M		DF□5010□L	
		5	12	5	12	5	12
voltage	V	5	12	5	12	5	12
current	AMPS	0.24	0.18	0.14	0.10	0.085	0.06
power consumption	W	1.20	2.16	0.70	1.20	0.43	0.72
rated speed	RPM	5,500		4,500		3,500	
airflow	CFM	13.5		10.9		8.30	
air pressure	mm-H2O	3.2		2.0		1.0	
sound	dB(A)	31.7		27.3		21.8	
weight	g	18		18		18	



50 x 50 x 15 mm

model no.		DF□501512H	DF□501512M	DF□501512L
		voltage	V	12
current	AMPS	0.17	0.13	0.085
power consumption	W	2.04	1.56	1.02
rated speed	RPM	5,000	4,500	3,800
airflow	CFM	15.5	13.1	12.0
air pressure	mm-H2O	3.6	3.2	2.0
sound	dB(A)	31.5	30.0	24.5
weight	g	27	27	27

6CM Series



60 x 60 x 10 mm

model no.		DF□601012H	DF□601012M	DF□601012L
		voltage	V	12
current	AMPS	0.24	0.17	0.14
power consumption	W	2.88	2.04	1.68
rated speed	RPM	5,200	4,500	3,800
airflow	CFM	23.3	21.0	17.3
air pressure	mm-H2O	4.0	3.0	2.1
sound	dB(A)	41.0	38.0	33.0
weight	g	26	26	26



60 x 60 x 15 mm

model no.		DF□6015□H		DF□6015□M		DF□6015□L	
		5	12	5	12	5	12
voltage	V	5	12	5	12	5	12
current	AMPS	0.36	0.13	0.20	0.10	0.13	0.07
power consumption	W	1.80	1.56	1.0	1.20	0.65	0.84
rated speed	RPM	4,800		4,100		3,300	
airflow	CFM	20.9		18.0		14.1	
air pressure	mm-H2O	3.9		3.0		2.0	
sound	dB(A)	33.0		28.4		22.0	
weight	g	33.5		33.5		33.5	

Intel®

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Thermal Interface

M.2 SSD Cooling

6CM Series



60 x 60 x 20 mm

model no.		DF□602012H	DF□602012M	DF□602012L
voltage	V	12	12	12
current	AMPS	0.16	0.11	0.08
power consumption	W	1.92	1.32	0.96
rated speed	RPM	4,200	3,600	3,000
airflow	CFM	22.9	20.0	17.0
air pressure	mm-H2O	4.4	3.4	2.4
sound	dB(A)	35.0	30.0	26.0
weight	g	44	44	44



60 x 60 x 25 mm

model no.		DF□6025□H		DF□6025□M		DF□6025□L	
voltage	V	12	24	12	24	12	24
current	AMPS	0.12	0.075	0.08	0.055	0.05	0.035
power consumption	W	1.44	1.80	0.96	1.32	0.60	0.84
rated speed	RPM	5,100		4,100		3,000	
airflow	CFM	24.5		19.7		14.4	
air pressure	mm-H2O	9.3		7.5		5.0	
sound	dB(A)	36.0		31.0		25.0	
weight	g	56		56		56	



60 x 60 x 38 mm

model no.		DF□6038□H			DF□6038□M			DF□6038□L		
voltage	V	12	24	48	12	24	48	12	24	48
current	AMPS	0.45	0.25	0.13	0.26	0.17	0.09	0.19	0.11	0.07
power consumption	W	5.40	6.00	6.24	3.12	4.08	4.32	2.28	2.64	3.36
rated speed	RPM	6,500			5,500			4,500		
airflow	CFM	38.5			32.6			26.7		
air pressure	mm-H2O	16.5			12.2			8.1		
sound	dB(A)	51			47			41		
weight	g	115.6			115.6			115.6		

7CM Series



70 x 70 x 10 mm

model no.		DF□701012H	DF□701012M	DF□701012L
voltage	V	12	12	12
current	AMPS	0.24	0.17	0.13
power consumption	W	2.88	2.04	1.56
rated speed	RPM	4,800	4,300	3,700
airflow	CFM	31	27.8	23.9
air pressure	mm-H2O	4.8	4.3	3.7
sound	dB(A)	37.0	34.5	31.0
weight	g	35	35	35



70 x 70 x 15 mm

model no.		DF□701512H	DF□701512M	DF□701512L
voltage	V	12	12	12
current	AMPS	0.28	0.19	0.155
power consumption	W	3.36	2.28	1.86
rated speed	RPM	4,800	4,300	3,800
airflow	CFM	35.3	31.6	27.9
air pressure	mm-H2O	5.4	4.4	3.4
sound	dB(A)	41.5	39.0	34.0
weight	g	54	54	54

7CM Series



70 x 70 x 25 mm

model no.		DF□702512H	DF□702512M	DF□702512L
voltage	V	12	12	12
current	AMPS	0.30	0.17	0.09
power consumption	W	3.60	2.04	1.08
rated speed	RPM	5,000	4,000	3,000
airflow	CFM	40.5	33.1	25.0
air pressure	mm-H2O	7.2	5.0	3.0
sound	dB(A)	41	34.5	29
weight	g	82	82	82

8CM Series



80 x 80 x 10 mm

model no.		DF□801012H	DF□801012M
voltage	V	12	12
current	AMPS	0.19	0.14
power consumption	W	2.28	1.68
rated speed	RPM	3,000	2,500
airflow	CFM	26.53	19.68
air pressure	mm-H2O	1.81	1.31
sound	dB(A)	30.1	26.25
weight	g	43	43



80 x 80 x 15 mm

model no.		DF□801512H	DF□801512M	DF□801512L
voltage	V	12	12	12
current	AMPS	0.19	0.10	0.07
power consumption	W	2.28	1.20	0.84
rated speed	RPM	3,200	2,600	2,100
airflow	CFM	35.8	29.1	23.5
air pressure	mm-H2O	2.7	1.9	1.4
sound	dB(A)	33.0	27.0	19.0
weight	g	50.0	50.0	50.0



80 x 80 x 20 mm

model no.		DF□8020□H		DF□8020□M		DF□8020□L	
voltage	V	12	24	12	24	12	24
current	AMPS	0.15	0.10	0.11	0.066	0.10	0.05
power consumption	W	1.8	2.4	1.32	1.58	1.20	1.20
rated speed	RPM	3,100		2,600		2,100	
airflow	CFM	36.9		31.0		23.3	
air pressure	mm-H2O	3.2		2.2		1.4	
sound	dB(A)	33.5		27.0		22.9	
weight	g	85		85		85	



80 x 80 x 25 mm

model no.		DF□802512H	DF□802512M	DF□802512L
voltage	V	12	12	12
current	AMPS	0.33	0.26	0.18
power consumption	W	3.96	3.12	2.16
rated speed	RPM	5,000	4,400	3,800
airflow	CFM	62.3	55.7	47.4
air pressure	mm-H2O	11.3	9.0	6.8
sound	dB(A)	46.7	43.5	39.5
weight	g	103.5	103.5	103.5

8CM Series



80 x 80 x 38 mm

model no.		DF□8038□H			DF□8038□M			DF□8038□L		
		12	24	48	12	24	48	12	24	48
voltage	V	12	24	48	12	24	48	12	24	48
current	AMPS	1.55	0.73	0.36	0.95	0.45	0.27	0.55	0.30	0.20
power consumption	W	18.60	17.52	17.28	11.40	10.80	12.96	6.60	7.20	9.60
rated speed	RPM	11,000			9,000			7,000		
airflow	CFM	87.1			70.9			55.2		
air pressure	mm-H2O	63.0			39.6			23.3		
sound	dB(A)	60.8			56.0			50.0		
weight	g	220			220			220		

9CM Series



92 x 92 x 25 mm

model no.		DF□922512H	DF□922512M	DF□922512L
voltage	V	12	12	12
current	AMPS	0.23	0.16	0.10
power consumption	W	2.76	1.92	1.20
rated speed	RPM	2,800	2,400	1,900
airflow	CFM	63.7	50.8	40.2
air pressure	mm-H2O	3.0	2.4	1.7
sound	dB(A)	37.5	33.0	25.0
weight	g	100	100	100



92 x 92 x 38mm

model no.		DF□9238□H			DF□9238□M			DF□9238□L		
		12	24	48	12	24	48	12	24	48
voltage	V	12	24	48	12	24	48	12	24	48
current	AMPS	1.10	0.54	0.28	0.60	0.32	0.18	0.27	0.18	0.08
power consumption	W	13.20	12.96	13.44	7.20	7.68	8.64	3.24	4.32	3.84
rated speed	RPM	8,000			6,000			4,000		
airflow	CFM	113.6			84.6			56.6		
air pressure	mm-H2O	48.9			29.1			13.2		
sound	dB(A)	57.5			51.5			39.5		
weight	g	233			233			233		

12CM Series



120 x 120 x 15 mm

model no.		DF□121512L
voltage	V	12
current	AMPS	0.16
power consumption	W	1.92
rated speed	RPM	700-2,000
airflow	CFM	41.59
air pressure	mm-H2O	1.41
sound	dB(A)	31.5
weight	g	127.5



120 x 120 x 25 mm

model no.		DF□1225□H	DF□1225□M	DF□1225□L
voltage	V	12	12	12
current	AMPS	0.46	0.29	0.18
power consumption	W	5.52	3.48	2.16
rated speed	RPM	2,600	2,200	1,800
airflow	CFM	106.1	87.8	73.0
air pressure	mm-H2O	5.8	3.9	2.6
sound	dB(A)	44.0	40.5	34.0
weight	g	160	160	160

12CM Series



120 x 120 x 25mm

model no.		DF□1225□H			DF□1225□M			DF□1225□L		
voltage	V	12	24	48	12	24	48	12	24	48
current	AMPS	0.55	0.32	0.18	0.22	0.13	0.085	0.13	0.085	0.06
power consumption	W	6.60	7.68	8.64	2.64	3.12	4.08	1.56	2.04	2.88
rated speed	RPM	4,400			2,800			2,000		
airflow	CFM	127.9			81.8			56.5		
air pressure	mm-H2O	14.1			6.0			3.1		
sound	dB(A)	51.4			39.1			29.3		
weight	g	205			205			205		



120 x 120 x 38mm

model no.		DF□1238□H			DF□1238□M			DF□1238□L		
voltage	V	12	24	48	12	24	48	12	24	48
current	AMPS	3.5	1.7	0.80	2.2	0.95	0.55	1.2	0.68	0.37
power consumption	W	42.0	40.80	38.40	26.40	22.8	26.40	14.40	16.32	17.76
rated speed	RPM	6,000			5,000			4,000		
airflow	CFM	236.4			194.0			155.8		
air pressure	mm-H2O	48.1			30.8			19.3		
sound	dB(A)	64.9			60.4			54.0		
weight	g	425			425			425		



120 x 120 x 30mm

model no.		DF□123012L
voltage	V	12
current	AMPS	0.16
power consumption	W	1.92
rated speed	RPM	1,600
airflow	CFM	64.8
air pressure	mm-H2O	1.21
sound	dB(A)	27.5
weight	g	176

Industrial Series

- IP68 rated rotor technology
- Three-phase motor - 4 poles, 6 slots
- 4-5% heat dissipation efficiency
- Patented anti-vibration structure



- S-flow blade design for high air flow optimisation



- Sickle flow blade design for static pressure optimisation



120 x 120 x 25 mm

blade design		S-Flow	Sickle Flow
voltage	V	12	12
current	AMPS	0.16	0.21A
power consumption	W	1.92	2.52
rated speed	RPM	0-2,000	0-2,000
airflow	CFM	97.02	95.68
air pressure	mm-H2O	3.59	3.84
sound	dB(A)	7.1-31.7	7.1-30.2
fan life expectancy	hours	80,000	80,000