

# BOYD

TRUSTED INNOVATION

## Thermal Fans and Blowers



# Table of Contents

## Fan Description

Company Profile .....	1
Product Check List .....	3
Pulse Sensor/ Tachometer Signal/ FG .....	4
Lock Sensor/Rotation Detector .....	4
Auto Restart Protection/Current Limit Protection ..	4
PWM Control Signal.....	4
Temperature Sensor .....	4
General Specifications.....	5
IP Protection Grade.....	6
Management System Certificates .....	6
Safety Approvals.....	6
Introducing Three Series.....	7
Explanation of Fan Model Numbers.....	8

## PA Series

PA Series-4010 .....	9
PA Series-5010 .....	10
PA Series-6010 .....	11
PA Series-6015 .....	12
PA Series-6025 .....	13
PA Series-7010 .....	14
PA Series-8010 .....	15
PA Series-8015 .....	16
PA Series-8025 .....	17
PA Series-9225 .....	18

## PS Series

PS Series-4010 .....	19
PS Series-5010 .....	20
PS Series-6010 .....	21
PS Series-6015 .....	22
PS Series-6025 .....	23
PS Series-7010 .....	24
PS Series-8010 .....	25
PS Series-8015 .....	26
PS Series-8025 .....	27
PS Series-9225 .....	28
PS Series-A225.....	29
PS Series-A238.....	30

## PE Series

PE Series-4028 .....	31
PE Series-6025 .....	32
PE Series-8025 .....	33
PE Series-8038 .....	34
PE Series-9225 .....	35
PE Series-9238 .....	36
PE Series-A238.....	37

## Customization

Customized Notebook / Netbook / AIO Blower.....	38
Customized Fan & Blower.....	38
Customized Spindle Motor .....	38

## Accessories

Metal Finger Guard .....	39
3-IN-1 Plastic Filter .....	39

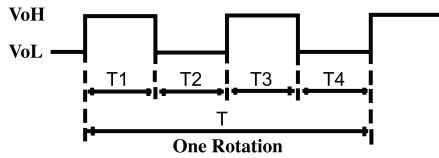
## Product Check List

DIMENSION	Series	VDC				BEARING TYPE			OPTIONAL DEVICE				SAFETY			WEIGHT
		5	12	24	48	SLEEVE	Ball	Restart	FG	RD	PWM	UL/CUL	TUV	CE	g	
40x40x10	PA	V	V			V	V	V	V			V	V	V	14.4	
	PS	V	V				V	V	V		V	V	V	V	17.2	
40x40x28	PE		V				V	V	V	V	V	V	V	V	47.0	
50x50x10	PA	V	V			V	V	V	V			V	V	V	18.2	
	PS	V	V				V	V	V		V	V	V	V	20.7	
60x60x10	PA	V	V			V	V	V	V			V	V	V	27.5	
	PS	V	V				V	V	V	V	V	V	V	V	28.0	
60x60x15	PA	V	V	V		V	V	V	V			V	V	V	40.9	
	PS	V	V				V	V	V	V	V	V	V	V	41.2	
60x60x25	PA		V	V		V	V	V	V			V	V	V	68.0	
	PS		V	V			V	V	V	V	V	V	V	V	79.0	
	PE		V	V	V		V	V	V	V	V	V	V	V	85.0	
70x70x10	PA	V	V			V	V	V	V			V	V	V	35.0	
	PS	V	V				V	V	V	V	V	V	V	V	37.3	
80x80x10	PA	V	V			V	V	V	V			V	V	V	42.6	
	PS	V	V				V	V	V	V	V	V	V	V	42.6	
80x80x15	PA	V	V	V		V	V	V	V			V	V	V	63.5	
	PS	V	V				V	V	V	V	V	V	V	V	59.2	
80x80x25	PA		V	V		V	V	V	V			V	V	V	78.0	
	PS		V	V			V	V	V	V	V	V	V	V	91.6	
	PE		V	V	V		V	V	V	V	V	V	V	V	90.5	
80x80x38	PE		V	V	V		V	V	V	V	V	V	V	V	215	
92x92x25	PA		V	V		V	V	V	V			V	V	V	88.0	
	PS		V	V			V	V	V	V	V	V	V	V	106	
	PE		V	V	V		V	V	V	V	V	V	V	V	98.5	
92x92x38	PE		V	V	V		V	V	V	V	V	V	V	V	230	
120x120x25	PS		V	V	V		V	V	V	V	V	V	V	V	230	
120x120x38	PS		V	V	V		V	V	V	V	V	V	V	V	375	
	PE		V	V	V		V	V	V	V	V	V	V	V	415	

## Pulse Sensor / Tachometer Signal /FG

Pulse Sensor is for detecting the rotational speed of the fan motor. At locked rotor condition, the signal stops cycling and the output is fixed at VH or VL.

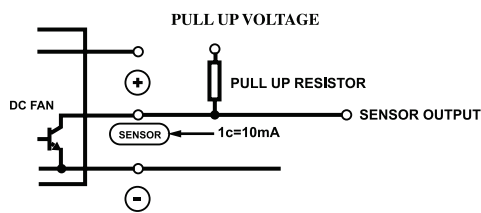
Output Waveform



$$T_{1-4} = (1/4)T$$

$$N = \text{Fan Rotational Speed}(\text{min}^{-1})$$

FG Signal Output Circuit: Open Collector

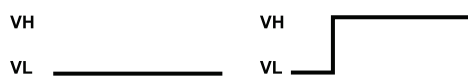


## Lock Sensor / Rotation Detector

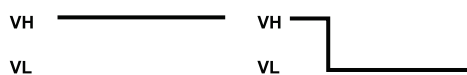
Lock Sensor is used to detect if the fan motor is operating or stopped.

Output Waveform

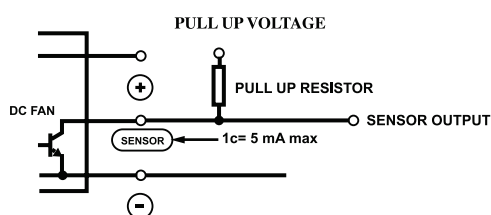
Alarm High: The output will be logical low when fan is operating and be logical high when fan motor is locked.



Alarm Low: The output will be logical high when fan is operating and be logical low when fan motor is locked.

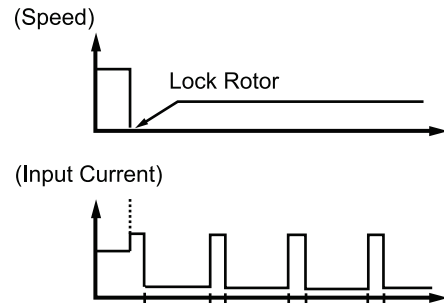


RD Signal Output Circuit: Open Collector



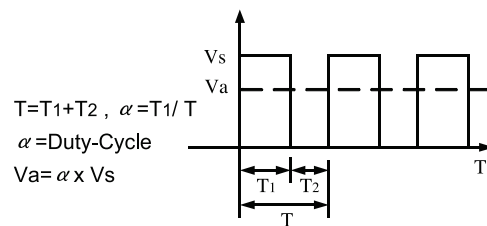
## Auto Restart Protection / Current Limit Protection

When the fan motor is locked, the device will cut off the drive current within two to six seconds and restart automatically after a few seconds. If the lock situation is continued, the device will work on a repeated cycle of cut-off and restart until the lock is released.



## PWM Control Signal

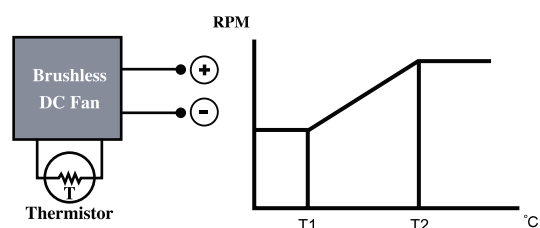
A speed control lead can be provided that will accept a PWM signal from the customer circuit to vary the speed of the fan. The change in speed is linear by changing the Duty-Cycle of the PWM.



Open collector type and pull-up voltage is changed by maximum operating voltage and sink current by consuming current.

## Temperature Sensor

Boyd uses a thermistor to sense temperature in the thermally controlled fan. The thermistor can be controlled on board or off board with special length leads. The RPM and temperature range is subject to custom request.



## General Specifications

### Operating Temperature

Ball Bearings..... -10°C to + 70°C / 15%~60%RH

### Bearing System Life

2 Ball Bearings ..... 70,000 hours @ 45°C

Sleeve Bearings..... 30,000 hours @ 45°C

### Impeller/Frame

Material ..... PBT + Glass Fiber

Flammability ..... UL94V-0

Color..... Black is standard

### Storage Temperature

All ..... -40°C to + 70°C

### Lead Wires

Rating ..... UL 1061, UL 1007, or UL 1430

AWG..... 24~28

2 Wire Standard..... Red (+) , Black (-)

Wire Options ..... Yellow

Pulse Sensor / Tachometer Signal / FG  
White

Locked rotor alarm/Rotation Detector

Blue

PWM speed control

### Insulation Resistance

Standard ..... 10 MΩ at 500VDC minimum  
between frame and (+) terminal

### Dielectric Strength

Standard ..... 5mA max. at 500VAC 60 Hz 1 minute  
between frame and (+) terminal

### Noise Data

Noise measurements are performed in an Anechoic Chamber with less than 19 dBA background noise in compliance with ISO7779 standards 1m from inlet side.

# IP Protection Grade

IP Code, the first figure indicates the degree of protection against touching live parts and/or ingress of solid objects. The second figure indicates the degree of protection against the ingress of water.

## IP X X

First Figure		Second Figure	
Degree	Description	Degree	Description
0	No Protection	0	No Protection
1	Protection against touching by hand or 50mm dimension objects	1	Protection against vertical water droplets
2	Protection against touching by finger or 12mm dimension objects	2	Protection against showering at 15°C
3	Protection against touching by tools, wire, or 5mm dimension objects	3	Protection against showering at 60°C
4	Protection against touching by tools, wire, or 1mm dimension objects	4	Protection against splashing from any direction
5	Total touch protection or no harmful dust ingress	5	Protection against water jets from any direction
6	Total touch protection or no dust ingress	6	Protection against large volumes of water and no water ingress
		7	Protection against the temporary immersion in water up to 1 meter deep
		8	Protection against the permanent submersion at specified depths

### Management System Certificates

ISO:  
 ISO9001 (SGS Certificate: CN09/31713)  
 ISO14001 (CGW Register No.:00909E10017R1M)

### Safety Approvals

TUV: 28804, 75381  
 UL/CUL: E181279, E342448  
 CE



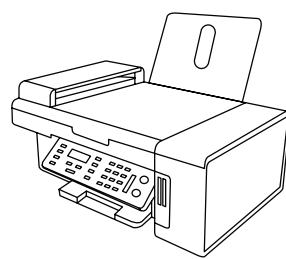
# Introducing Three Series



## PA

**High Duration / Full Dimensions**

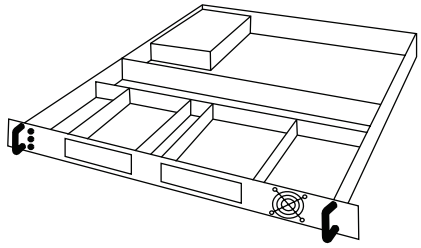
Boyd's Bearing structure increases the fan life efficiency by 30% compared to the sleeve bearing.



## PS

**High PQ / Powerful Function**

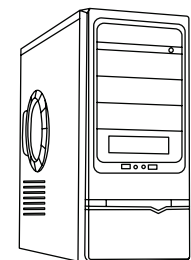
Boyd provides multi-function options of ball bearing and bearings to meet your needs.



## PE

**High PQ / Low Power Consumption / High Reliability**

Boyd provides both functionality and performance applicable to various needs of rapid cooling and high-end products.





## Explanation of Fan Model Numbers

PA    A    D    0    40    10    B    L       XXXX  
 [1]   [2]   [3]   [4]   [5]   [6]   [7]   [8]   [9]   [10]

### [1] PRODUCT CATEGORY

PA: Advance Series  
 PS: Superior Series  
 PE: Excellence Series

### [2] PRODUCT TYPE

A: Axial Fan  
 B: Blower  
 M: Motor

### [3] POWER TYPE

D: DC  
 A: AC

### [4] VOLTAGE TYPE

DC		AC	
0:	5V	5:	110V
1:	12V	6:	115V
2:	24V	7:	230V
3:	36V		
4:	48V		

### [5] FRAME DIMENSION

20:	20mm x 20mm	65:	65mm x 65mm
25:	25mm x 25mm	70:	70mm x 70mm
30:	30mm x 30mm	75:	75mm x 75mm
35:	35mm x 35mm	80:	80mm x 80mm
40:	40mm x 40mm	92:	92mm x 92mm
45:	45mm x 45mm	97:	97mm x 97mm
50:	50mm x 50mm	A2:	120mm x 120mm
52:	52mm x 52mm	A3:	135mm x 135mm
60:	60mm x 60mm	A7:	172mm x 172mm

### [6] FRAME HEIGHT

06:	04-06mm	28:	28mm
07:	07mm	32:	29-32mm
08:	08mm	35:	33-37mm
10:	09-12mm	38:	38-42mm
15:	13-17mm	45:	43-47mm
20:	18-22mm	51:	48-52mm
25:	23-27mm	61:	53-61mm

### [7] BEARING TYPE

S: Sleeve Bearing  
 B: Two Ball Bearing

### [8] FAN SPEED

L: Low Speed  
 M: Middle Speed  
 H: High Speed

### [9] SPACE

Blank

### [10] FUNCTION CODES

0000: no function  
 P000: restart protection  
 F000: FG signal  
 PF00: restart protection + FG signal  
 PR00: restart protection + RG signal  
 M000: restart protection + PWM signal  
 MF00: restart protection + PWM + FG signal  
 MR00: restart protection + PWM + RD signal

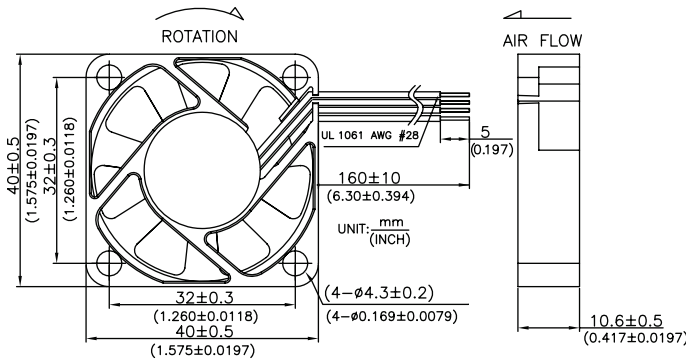


# Advance Series (PA) 40mm x 40mm x 10mm

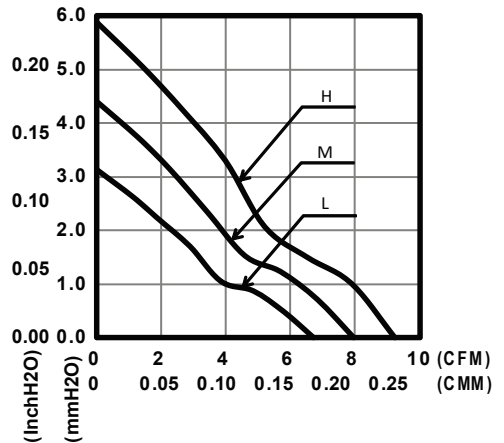


- » Bearing Type: Sleeve, Ball Bearing
- » Function Type (Optional): FG Signal
- » Protection (Optional) :  
Auto Restart Protection
- » Lead Wire:  
UL 1061 AWG #28 or Equivalent  
Red Wire: Positive (+)  
Black Wire: Negative (-)  
Yellow Wire: FG Signal

## DIMENSIONS DRAWING



## PERFORMANCE CURVES



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt	RPM	CMM	CFM	mmH <sub>2</sub> O	InH <sub>2</sub> O	dBA
PAAD04010SL	0000/F000	5	4~5.75	0.16	0.11	0.55	5600	0.19	6.72	3.14	0.12	26.5
PAAD04010SM	P000/PF00	5	4~5.75	0.19	0.16	0.80	6600	0.23	7.97	4.41	0.17	31.0
PAAD14010SL	0000/F000 P000/PF00	12	6~13.8	0.14	0.08	0.96	5600	0.19	6.72	3.14	0.12	26.5
PAAD14010SM		12	6~13.8	0.16	0.10	1.20	6600	0.23	7.97	4.41	0.17	31.0
PAAD14010SH		12	6~13.8	0.18	0.12	1.44	7700	0.26	9.22	5.88	0.23	35.5
PAAD04010BL	0000/F000	5	4~5.75	0.16	0.11	0.55	5600	0.19	6.72	3.14	0.12	25.0
PAAD04010BM	P000/PF00	5	4~5.75	0.19	0.16	0.80	6700	0.23	7.97	4.41	0.17	29.5
PAAD14010BL	0000/F000 P000/PF00	12	6~13.8	0.14	0.08	0.96	5600	0.19	6.72	3.14	0.12	25.0
PAAD14010BM		12	6~13.8	0.16	0.10	1.20	6600	0.23	7.97	4.41	0.17	29.5
PAAD14010BH		12	6~13.8	0.18	0.12	1.44	7700	0.26	9.22	5.88	0.23	34.0

\* Specifications are subject to change without notice

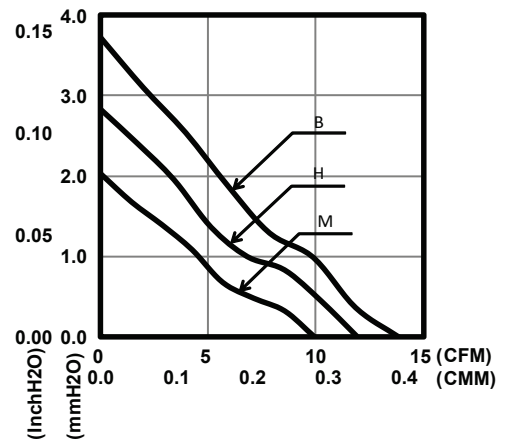
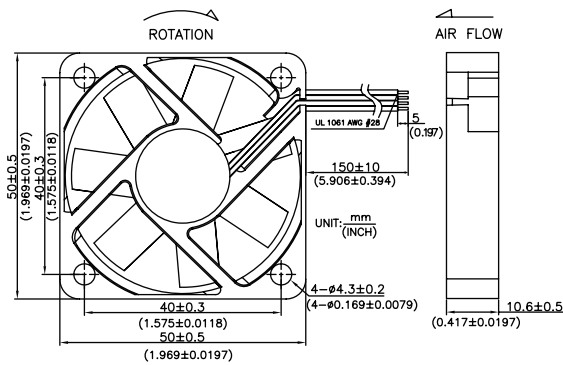
# Advance Series (PA) 50mm x 50mm x 10mm



- » Bearing Type: Sleeve, Ball Bearing
- » Function Type (Optional): FG Signal
- » Protection (Optional) :  
Auto Restart Protection
- » Lead Wire:  
UL 1061 AWG #28 or Equivalent  
Red Wire: Positive (+)  
Black Wire: Negative (-)  
Yellow Wire: FG Signal

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		CMM	CFM	mmH2O	InH2O	
PAAD05010SM	0000/F000	5	4~5.75	0.24	0.11	0.55	4000	0.28	9.93	2.03	0.08	24.0
PAAD05010SH		5	4~5.75	0.30	0.18	0.90	4700	0.34	11.93	2.83	0.11	28.0
PAAD15010SM	0000/F000 P000/PF00	12	6~13.8	0.11	0.08	0.96	4000	0.28	9.93	2.03	0.08	24.0
PAAD15010SH		12	6~13.8	0.14	0.10	1.20	4700	0.34	11.93	2.83	0.11	28.0
PAAD15010SB		12	6~13.8	0.21	0.12	1.44	5400	0.39	13.85	3.72	0.15	31.5
PAAD05010BM	0000/F000	5	4~5.75	0.24	0.11	0.55	4000	0.28	9.93	2.03	0.08	23.5
PAAD05010BH		5	4~5.75	0.30	0.18	0.90	4700	0.34	11.93	2.83	0.11	28.5
PAAD15010BM	0000/F000 P000/PF00	12	6~13.8	0.11	0.08	0.96	4000	0.28	9.93	2.03	0.08	23.5
PAAD15010BH		12	6~13.8	0.14	0.10	1.20	4700	0.34	11.93	2.83	0.11	28.5
PAAD15010BB		12	6~13.8	0.21	0.12	1.44	5400	0.39	13.85	3.72	0.15	32.5

\* Specifications are subject to change without notice

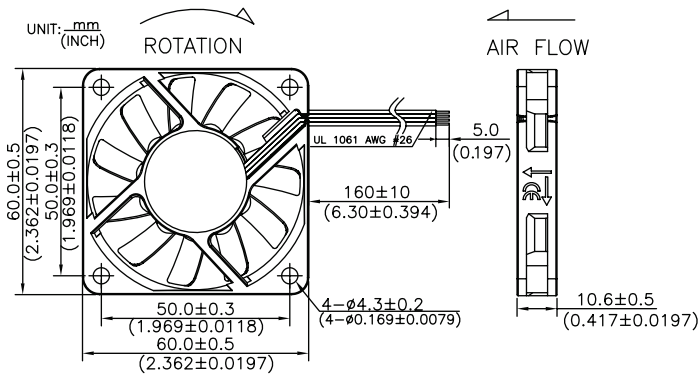
# Advance Series (PA) 60mm x 60mm x 10mm



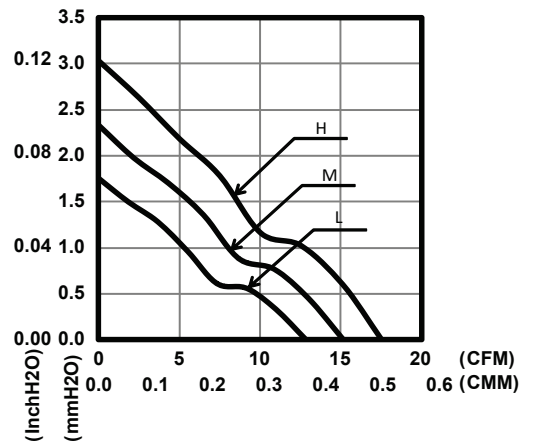
- » Bearing Type: Sleeve, Ball Bearing
- » Function Type (Optional): FG Signal
- » Protection (Optional):  
Auto Restart Protection
- » Lead Wire:  
UL 1061 AWG #26 or Equivalent  
Red Wire: Positive (+)  
Black Wire: Negative (-)  
Yellow Wire: FG Signal

PA SERIES 6010

## DIMENSIONS DRAWING



## PERFORMANCE CURVES



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt	RPM	CMM	CFM	mmH <sub>2</sub> O	InH <sub>2</sub> O	
PAAD06010SL	0000/F000 P000/PF00	5	4~5.75	0.35	0.11	0.55	3000	0.36	12.8	1.76	0.07	23.0
PAAD06010SM		5	4~5.75	0.45	0.18	0.90	3600	0.43	15.2	2.33	0.09	28.0
PAAD06010SH		5	4~5.75	0.55	0.30	1.50	4100	0.50	17.5	3.04	0.12	31.5
PAAD16010SM	0000/F000 P000/PF00	12	6~13.8	0.20	0.11	1.32	3600	0.43	15.2	2.33	0.09	28.0
PAAD16010SH		12	6~13.8	0.25	0.14	1.68	4100	0.50	17.5	3.04	0.12	31.5
PAAD06010BL	0000/F000 P000/PF00	5	4~5.75	0.35	0.11	0.55	3100	0.38	13.5	1.87	0.07	25.5
PAAD06010BM		5	4~5.75	0.45	0.18	0.90	3700	0.45	15.9	2.47	0.10	29.0
PAAD06010BH		5	4~5.75	0.55	0.30	1.50	4200	0.51	18.1	3.14	0.12	32.5
PAAD16010BM	0000/F000 P000/PF00	12	6~13.8	0.20	0.11	1.32	3700	0.45	15.9	2.47	0.10	29.0
PAAD16010BH		12	6~13.8	0.25	0.14	1.68	4200	0.51	18.1	3.14	0.12	32.5

\* Specifications are subject to change without notice

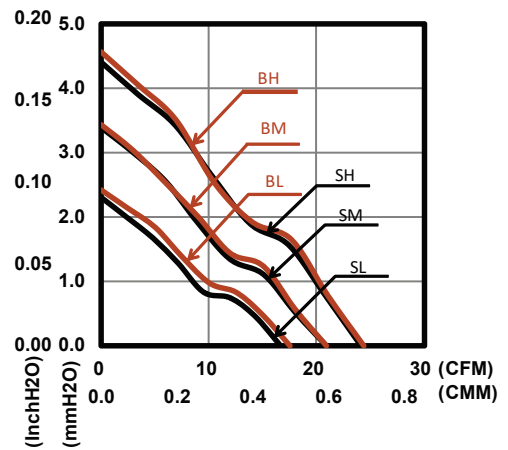
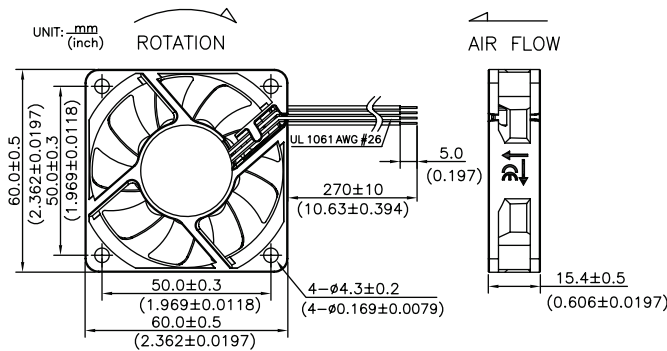
# Advance Series (PA) 60mm x 60mm x 15mm



- » Bearing Type: Sleeve, Ball Bearing
- » Function Type (Optional): FG Signal
- » Protection (Optional) :  
Auto Restart Protection
- » Lead Wire:  
UL 1061 AWG #26 or Equivalent  
Red Wire: Positive (+)  
Black Wire: Negative (-)  
Yellow Wire: FG Signal

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH <sub>2</sub> O	
PAAD06015SL	0000/F000 P000/PF00	5	4~5.75	0.55	0.16	0.80	3200	0.47	16.6	2.31	0.09	24.5
PAAD06015SM		5	4~5.75	0.70	0.22	1.10	3900	0.59	20.9	3.39	0.13	30.0
PAAD06015SH		5	4~5.75	0.85	0.35	1.75	4500	0.68	24.1	4.41	0.17	33.0
PAAD16015SL	0000/F000 P000/PF00	12	6~13.8	0.15	0.08	0.96	3200	0.47	16.6	2.31	0.09	24.5
PAAD16015SM		12	6~13.8	0.25	0.12	1.44	3900	0.59	20.9	3.39	0.13	30.0
PAAD16015SH		12	6~13.8	0.35	0.16	1.92	4500	0.68	24.1	4.41	0.17	33.0
PAAD26015SH	0000/F000 P000/PF00	24	12~27.6	0.20	0.09	2.16	4500	0.68	24.1	4.41	0.17	33.0
PAAD06015BL	0000/F000 P000/PF00	5	4~5.75	0.55	0.16	0.80	3300	0.50	17.5	2.42	0.10	24.5
PAAD06015BM		5	4~5.75	0.70	0.22	1.10	4000	0.59	20.9	3.43	0.14	30.5
PAAD06015BH		5	4~5.75	0.85	0.35	1.75	4600	0.69	24.4	4.56	0.18	34.5
PAAD16015BL	0000/F000 P000/PF00	12	6~13.8	0.15	0.08	0.96	3300	0.50	17.5	2.42	0.10	24.5
PAAD16015BM		12	6~13.8	0.25	0.12	1.44	4000	0.59	20.9	3.43	0.14	30.5
PAAD16015BH		12	6~13.8	0.35	0.16	1.92	4600	0.69	24.4	4.56	0.18	34.5
PAAD26015BH	0000/F000 P000/PF00	24	12~27.6	0.20	0.09	2.16	4600	0.69	24.4	4.56	0.18	34.5

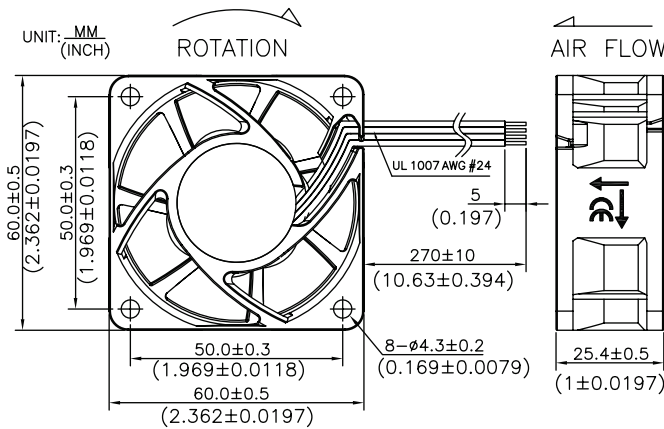
\* Specifications are subject to change without notice

# Advance Series (PA) 60mm x 60mm x 25mm

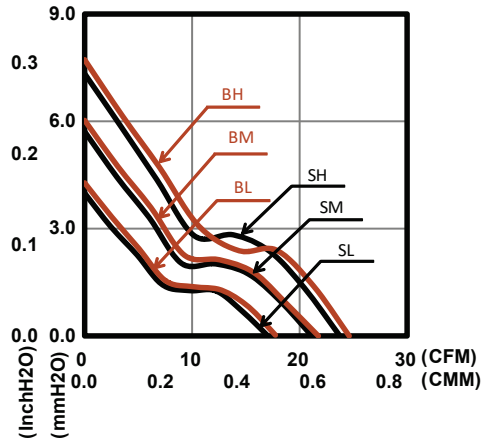


- » Bearing Type: Sleeve, Ball Bearing
- » Function Type (Optional): FG Signal
- » Protection (Optional):  
Auto Restart Protection
- » Lead Wire:  
UL 1007 AWG #24 or Equivalent  
Red Wire: Positive (+)  
Black Wire: Negative (-)  
Yellow Wire: FG Signal

## DIMENSIONS DRAWING



## PERFORMANCE CURVES



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH <sub>2</sub> O	
PAAD16025SL	0000/F000 P000/PF00	12	6~13.8	0.15	0.08	1.96	3300	0.49	17.1	3.99	0.16	26.0
PAAD16025SM		12	6~13.8	0.20	0.11	1.32	4000	0.60	21.2	5.73	0.23	30.5
PAAD16025SH		12	6~13.8	0.25	0.14	1.68	4600	0.67	23.8	7.32	0.29	34.0
PAAD26025SL(-)	0000/F000 P000/PF00	24	12~27.6	0.12	0.06	1.44	3300	0.49	17.1	3.99	0.16	26.0
PAAD26025SM(-)		24	12~27.6	0.14	0.07	1.68	4000	0.60	21.2	5.73	0.23	30.5
PAAD26025SH(-)		24	12~27.6	0.16	0.08	1.92	4600	0.67	23.8	7.32	0.29	34.0
PAAD16025BL	0000/F000 P000/PF00	12	6~13.8	0.15	0.08	0.96	3500	0.50	17.8	4.28	0.17	28.0
PAAD16025BM		12	6~13.8	0.20	0.10	1.20	4200	0.62	21.8	6.04	0.24	32.5
PAAD16025BH		12	6~13.8	0.25	0.13	1.56	4800	0.70	24.6	7.73	0.30	35.5
PAAD26025BL(-)	0000/F000 P000/PF00	24	12~27.6	0.12	0.05	1.20	3500	0.50	17.8	4.28	0.17	28.0
PAAD26025BM(-)		24	12~27.6	0.14	0.06	1.44	4200	0.62	21.8	6.04	0.24	32.5
PAAD26025BH(-)		24	12~27.6	0.16	0.07	1.68	4800	0.70	24.6	7.73	0.30	35.5

\* Specifications are subject to change without notice

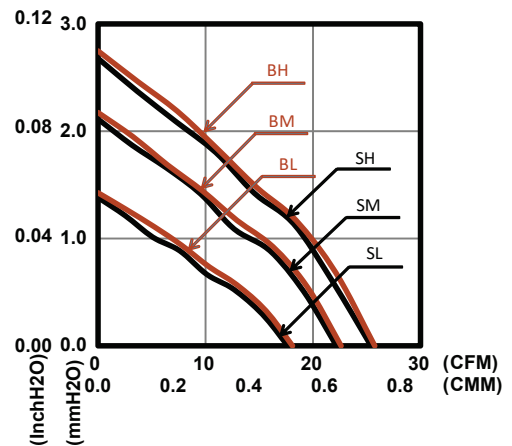
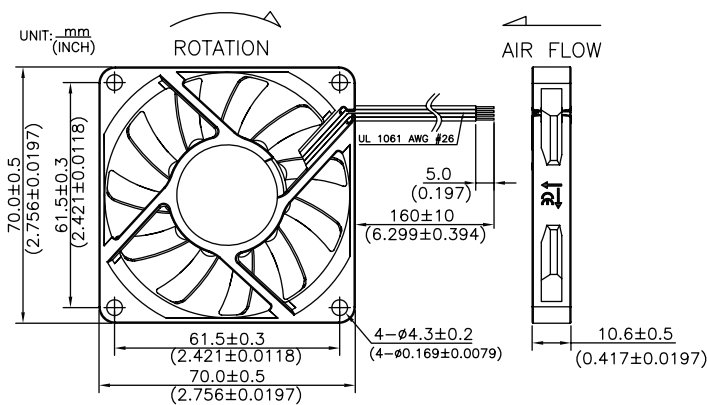
# Advance Series (PA) 70mm x 70mm x 10mm



- » Bearing Type: Sleeve, Ball Bearing
- » Function Type (Optional): FG Signal
- » Protection (Optional) :  
Auto Restart Protection
- » Lead Wire:  
UL 1061 AWG #26 or Equivalent  
Red Wire: Positive (+)  
Black Wire: Negative (-)  
Yellow Wire: FG Signal

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		CMM	CFM	mmH <sub>2</sub> O	InH <sub>2</sub> O	
PAAD07010SL	0000/F000 P000/PF00	5	4~5.75	0.20	0.16	0.80	2500	0.50	17.7	1.38	0.06	24.0
PAAD07010SM		5	4~5.75	0.33	0.26	1.30	3100	0.63	22.2	2.11	0.08	29.5
PAAD07010SH		5	4~5.75	0.43	0.34	1.70	3500	0.72	25.4	2.68	0.11	32.5
PAAD17010SL	0000/F000 P000/PF00	12	6~13.8	0.20	0.08	0.96	2500	0.50	17.7	1.38	0.06	24.0
PAAD17010SM		12	6~13.8	0.25	0.12	1.44	3100	0.63	22.2	2.11	0.08	29.5
PAAD17010SH		12	6~13.8	0.30	0.19	2.28	3500	0.72	25.4	2.68	0.11	32.5
PAAD07010BL	0000/F000 P000/PF00	5	4~5.75	0.20	0.16	0.80	2600	0.51	18.1	1.42	0.06	24.5
PAAD07010BM		5	4~5.75	0.33	0.26	1.30	3200	0.64	22.6	2.18	0.09	30.5
PAAD07010BH		5	4~5.75	0.43	0.34	1.70	3600	0.73	25.8	2.75	0.11	33.5
PAAD17010BL	0000/F000 P000/PF00	12	6~13.8	0.20	0.08	0.96	2600	0.51	18.1	1.42	0.06	24.5
PAAD17010BM		12	6~13.8	0.25	0.12	1.44	3200	0.64	22.6	2.18	0.09	30.5
PAAD17010BH		12	6~13.8	0.30	0.19	2.28	3600	0.73	25.8	2.75	0.11	33.5

\* Specifications are subject to change without notice

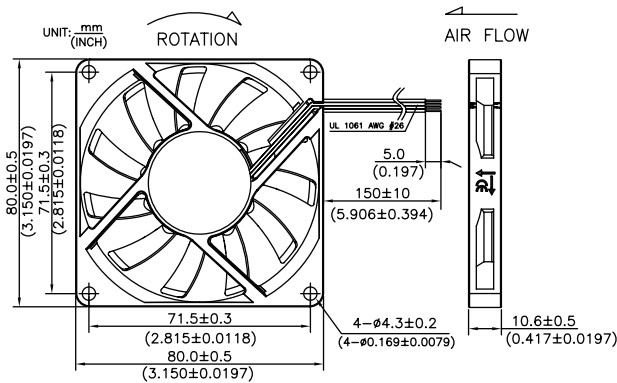


# Advance Series (PA) 80mm x 80mm x 10mm

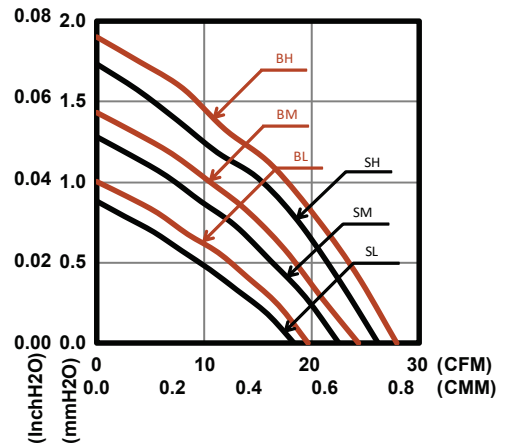


- » Bearing Type: Sleeve, Ball Bearing
- » Function Type (Optional): FG Signal
- » Protection (Optional):  
Auto Restart Protection
- » Lead Wire:  
UL 1061 AWG #26 or Equivalent  
Red Wire: Positive (+)  
Black Wire: Negative (-)  
Yellow Wire: FG Signal

## DIMENSIONS DRAWING



## PERFORMANCE CURVES



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt	RPM	CMM	CFM	mmH <sub>2</sub> O	InH <sub>2</sub> O	
PAAD08010SL	0000/F000 P000/PF00	5	4~5.75	0.15	0.12	0.60	1900	0.52	18.4	0.88	0.04	22.0
PAAD08010SM		5	4~5.75	0.23	0.22	1.10	2300	0.64	22.6	1.28	0.05	26.5
PAAD08010SH		5	4~5.75	0.46	0.40	2.00	2700	0.74	26.2	1.73	0.07	30.0
PAAD18010SL(-)	0000/F000 P000/PF00	12	6~13.8	0.11	0.09	1.08	1900	0.52	18.4	0.88	0.04	22.0
PAAD18010SM(-)		12	6~13.8	0.16	0.13	1.56	2300	0.64	22.6	1.28	0.05	26.5
PAAD18010SH(-)		12	6~12.6	0.25	0.20	2.40	2700	0.74	26.2	1.73	0.07	30.0
PAAD08010BL	0000/F000 P000/PF00	5	4~5.75	0.15	0.12	0.60	2000	0.56	19.7	1.00	0.04	22.5
PAAD08010BM		5	4~5.75	0.28	0.22	1.10	2400	0.69	24.4	1.44	0.06	28.0
PAAD08010BH		5	4~5.75	0.50	0.40	2.00	2800	0.79	28.0	1.90	0.08	32.0
PAAD18010BL(-)	0000/F000 P000/PF00	12	6~13.8	0.11	0.09	1.08	2000	0.56	19.7	1.00	0.04	22.5
PAAD18010BM(-)		12	6~13.8	0.17	0.13	1.56	2400	0.69	24.4	1.44	0.06	28.0
PAAD18010BH(-)		12	6~12.6	0.25	0.20	2.40	2800	0.79	28.0	1.90	0.08	32.0

\* Specifications are subject to change without notice



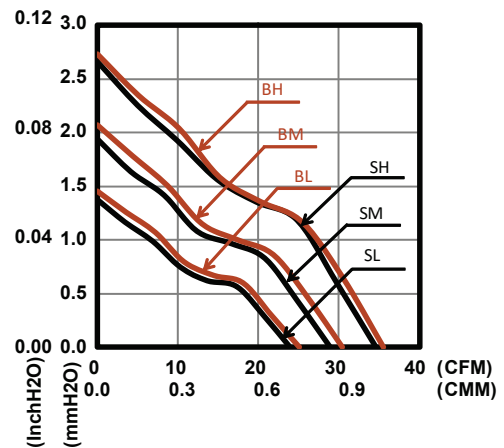
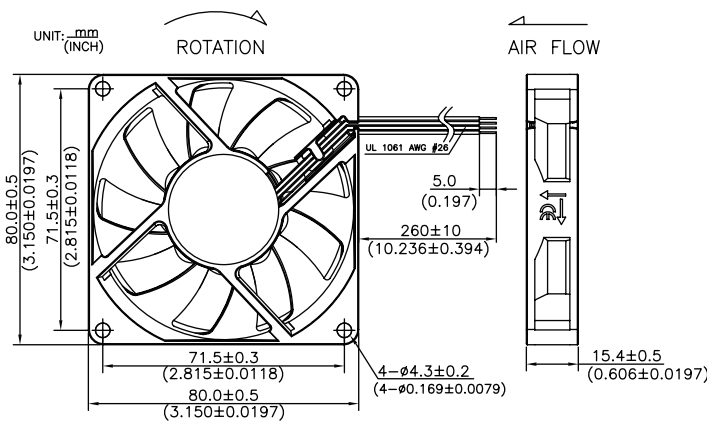
# Advance Series (PA) 80mm x 80mm x 15mm



- » Bearing Type: Sleeve, Ball Bearing
- » Function Type (Optional): FG Signal
- » Protection (Optional):  
Auto Restart Protection
- » Lead Wire:  
UL 1061 AWG #26 or Equivalent  
Red Wire: Positive (+)  
Black Wire: Negative (-)  
Yellow Wire: FG Signal

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH2O	
PAAD08015SL	0000/F000 P000/PF00	5	4~5.75	0.18	0.14	0.70	2000	0.68	23.9	1.37	0.05	22.5
PAAD08015SM		5	4~5.75	0.27	0.19	0.95	2400	0.82	28.9	1.94	0.08	26.5
PAAD08015SH		5	4~5.75	0.42	0.33	1.65	2800	0.98	34.6	2.66	0.11	31.5
PAAD18015SL(-)	0000/F000 P000/PF00	12	6~13.8	0.15	0.06	0.72	2000	0.68	23.9	1.37	0.05	22.5
PAAD18015SM(-)		12	6~13.8	0.25	0.10	1.20	2400	0.82	28.9	1.94	0.08	26.5
PAAD18015SH(-)		12	6~13.8	0.35	0.16	1.92	2800	0.98	34.6	2.66	0.11	31.5
PAAD28015SM(-)	0000/F000 P000/PF00	24	12~27.6	0.15	0.06	1.44	2400	0.82	28.9	1.94	0.08	26.5
PAAD28015SH(-)		24	12~27.6	0.25	0.11	2.64	2800	0.98	34.6	2.66	0.11	31.5
PAAD08015BL	0000/F000 P000/PF00	5	4~5.75	0.18	0.14	0.70	2100	0.71	25.1	1.46	0.06	22.5
PAAD08015BM		5	4~5.75	0.27	0.19	0.95	2500	0.86	30.4	2.07	0.08	26.5
PAAD08015BH		5	4~5.75	0.42	0.33	1.65	2900	1.01	35.5	2.73	0.11	31.5
PAAD18015BL(-)	0000/F000 P000/PF00	12	6~13.8	0.15	0.07	0.84	2100	0.71	25.1	1.46	0.06	22.5
PAAD18015BM(-)		12	6~13.8	0.25	0.10	1.20	2500	0.86	30.4	2.07	0.08	26.5
PAAD18015BH(-)		12	6~13.8	0.35	0.14	1.68	2900	1.01	35.5	2.73	0.11	31.5
PAAD28015BM(-)	0000/F000 P000/PF00	24	12~27.6	0.15	0.06	1.44	2500	0.86	30.4	2.07	0.08	26.5
PAAD28015BH(-)		24	12~27.6	0.25	0.11	2.64	2900	1.01	35.5	2.73	0.11	31.5

\* Specifications are subject to change without notice

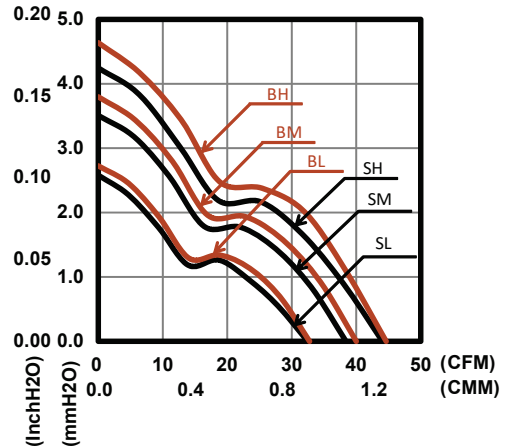
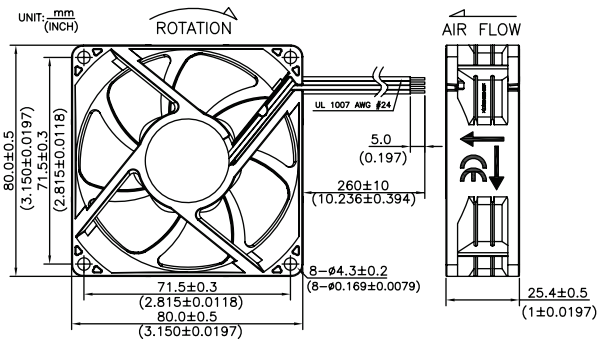
# Advance Series (PA) 80mm x 80mm x 25mm



- » Bearing Type: Sleeve, Ball Bearing
- » Function Type (Optional): FG Signal
- » Protection (Optional):  
Auto Restart Protection
- » Lead Wire:  
UL 1007 AWG #24 or Equivalent  
Red Wire: Positive (+)  
Black Wire: Negative (-)  
Yellow Wire: FG Signal

## PERFORMANCE CURVES

### DIMENSIONS DRAWING



### SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH <sub>2</sub> O	
PAAD18025SL	0000/F000	12	6~13.8	0.14	0.09	0.96	2400	0.92	32.7	2.58	0.10	25.5
PAAD18025SM		12	6~13.8	0.19	0.12	1.44	2900	1.09	38.4	3.51	0.14	31.0
PAAD18025SH		12	6~13.8	0.24	0.18	2.16	3300	1.25	44.2	4.24	0.17	34.0
PAAD18025SL-	P000/PF00	12	6~13.8	0.14	0.08	0.96	2400	0.92	32.7	2.58	0.10	25.5
PAAD18025SM-		12	6~13.8	0.19	0.12	1.44	2900	1.09	38.4	3.51	0.14	31.0
PAAD18025SH-		12	6~13.8	0.30	0.18	2.16	3300	1.25	44.2	4.24	0.17	34.0
PAAD28025SL	0000/F000	24	12~27.6	0.08	0.05	1.20	2400	0.92	32.7	2.58	0.10	25.5
PAAD28025SM		24	12~27.6	0.10	0.07	1.68	2900	1.09	38.4	3.51	0.14	31.0
PAAD28025SH		24	12~27.6	0.12	0.09	2.16	3300	1.25	44.2	4.24	0.17	34.0
PAAD28025SL-	P000/PF00	24	12~27.6	0.07	0.05	1.20	2400	0.92	32.7	2.58	0.10	25.5
PAAD28025SM-		24	12~27.6	0.12	0.07	1.68	2900	1.09	38.4	3.51	0.14	31.0
PAAD28025SH-		24	12~27.6	0.14	0.09	2.16	3300	1.25	44.2	4.24	0.17	34.0
PAAD18025BL	0000/F000	12	6~13.8	0.14	0.08	0.96	2500	0.93	32.9	2.72	0.11	26.5
PAAD18025BM		12	6~13.8	0.19	0.11	1.32	3000	1.13	40.0	3.80	0.15	32.5
PAAD18025BH		12	6~13.8	0.24	0.17	2.04	3400	1.26	44.6	4.64	0.18	35.0
PAAD18025BL-	P000/PF00	12	6~13.8	0.14	0.08	0.96	2500	0.93	32.9	2.72	0.11	26.5
PAAD18025BM-		12	6~13.8	0.19	0.11	1.32	3000	1.13	40.0	3.80	0.15	32.5
PAAD18025BH-		12	6~13.8	0.30	0.17	2.04	3400	1.26	44.6	4.64	0.18	35.0
PAAD28025BL	0000/F000	24	12~27.6	0.08	0.05	1.20	2500	0.93	32.9	2.72	0.11	26.5
PAAD28025BM		24	12~27.6	0.10	0.07	1.68	3000	1.13	40.0	3.80	0.15	32.5
PAAD28025BH		24	12~27.6	0.12	0.08	1.92	3400	1.26	44.6	4.64	0.18	35.0
PAAD28025BL-	P000/PF00	24	12~27.6	0.07	0.05	1.20	2500	0.93	32.9	2.72	0.11	26.5
PAAD28025BM-		24	12~27.6	0.12	0.07	1.68	3000	1.13	40.0	3.80	0.15	32.5
PAAD28025BH-		24	12~27.6	0.14	0.08	1.92	3400	1.26	44.6	4.64	0.18	35.0

\* Specifications are subject to change without notice

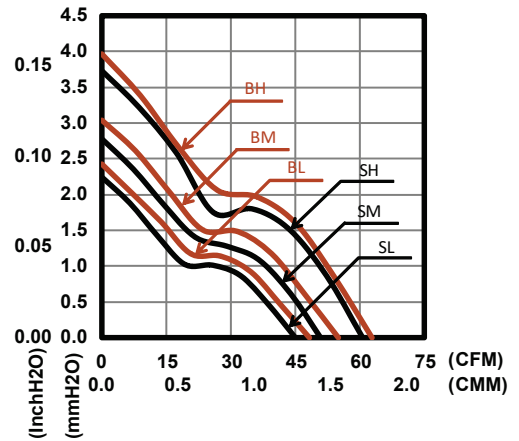
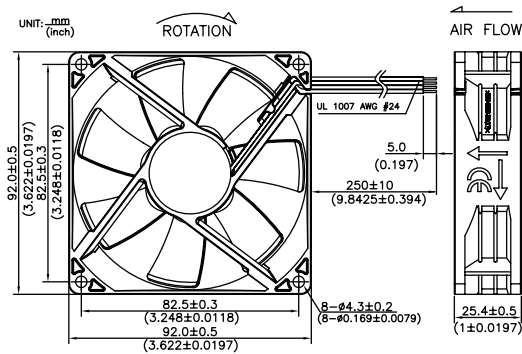
# Advance Series (PA) 92mm x 92mm x 25mm



- » Bearing Type: Sleeve, Ball Bearing
- » Function Type (Optional): FG Signal
- » Protection (Optional):  
Auto Restart Protection
- » Lead Wire:  
UL 1007 AWG #24 or Equivalent  
Red Wire: Positive (+)  
Black Wire: Negative (-)  
Yellow Wire: FG Signal

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		CMM	CFM	mmH2O	InH2O	
PAAD19225SL(-)	0000/F000 P000/PF00	12	6~13.8	0.24	0.09	1.08	2000	1.28	45.0	2.25	0.09	27.0
PAAD19225SM(-)		12	6~13.8	0.28	0.14	1.68	2300	1.44	50.9	2.78	0.11	32.0
PAAD19225SH(-)		12	6~13.8	0.32	0.20	2.40	2700	1.72	60.7	3.73	0.15	35.0
PAAD29225SL(-)	0000/F000 P000/PF00	24	12~27.6	0.10	0.06	1.44	2000	1.28	45.0	2.25	0.09	27.0
PAAD29225SM(-)		24	12~27.6	0.14	0.09	2.16	2300	1.44	50.9	2.78	0.11	32.0
PAAD29225SH(-)		24	12~27.6	0.18	0.10	2.40	2700	1.72	60.7	3.73	0.15	35.0
PAAD19225BL(-)	0000/F000 P000/PF00	12	6~13.8	0.24	0.09	1.08	2100	1.37	48.4	2.42	0.10	29.0
PAAD19225BM(-)		12	6~13.8	0.28	0.14	1.68	2400	1.56	55.1	3.27	0.12	32.5
PAAD19225BH(-)		12	6~13.8	0.32	0.19	2.28	2800	1.78	63.0	3.97	0.16	36.5
PAAD29225BL(-)	0000/F000 P000/PF00	24	12~27.6	0.10	0.05	1.20	2100	1.37	48.4	2.42	0.10	29.0
PAAD29225BM(-)		24	12~27.6	0.14	0.08	1.92	2400	1.56	55.1	3.27	0.12	32.5
PAAD29225BH(-)		24	12~27.6	0.18	0.10	2.40	2800	1.78	63.0	3.97	0.16	36.5

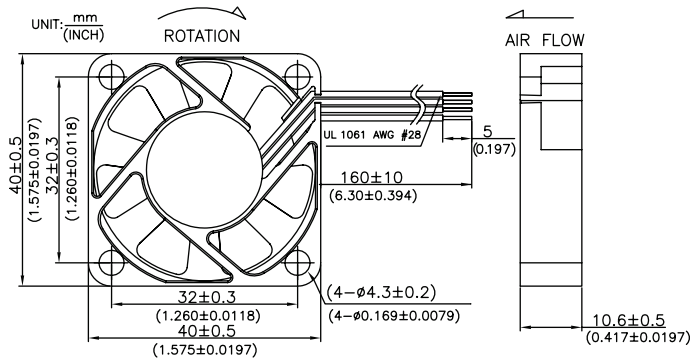
\* Specifications are subject to change without notice

# Superior Series (PS) 40mm x 40mm x 10mm

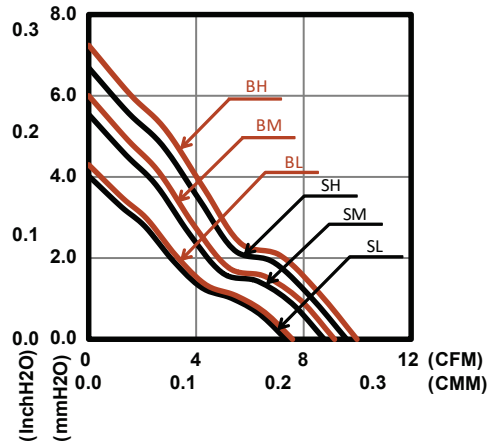


- » Bearing Type: Ball Bearing
- » Function Type (Optional) : FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1061 AWG #28 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## DIMENSIONS DRAWING



## PERFORMANCE CURVES



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		CMM	CFM	mmH <sub>2</sub> O	InH <sub>2</sub> O	
PSAD04010SL	P000/PF00 M000/MF00	5	4~5.75	0.12	0.08	0.40	6200	0.21	7.36	4.03	0.16	29.0
PSAD04010SM		5	4~5.75	0.18	0.13	0.65	7200	0.25	8.78	5.53	0.22	32.5
PSAD04010SH		5	4~5.75	0.24	0.18	0.90	7900	0.27	9.60	6.68	0.26	35.5
PSAD14010SL	P000/PF00 M000/MF00	12	6~13.8	0.07	0.06	0.66	6200	0.21	7.36	4.03	0.16	29.0
PSAD14010SM		12	6~13.8	0.09	0.07	0.84	7200	0.25	8.78	5.53	0.22	32.5
PSAD14010SH		12	6~13.8	0.13	0.10	1.20	7900	0.27	9.60	6.68	0.26	35.5
PSAD04010BL	P000/PF00 M000/MF00	5	4~5.75	0.12	0.08	0.40	6400	0.22	7.60	4.29	0.17	28.5
PSAD04010BM		5	4~5.75	0.18	0.13	0.65	7500	0.26	9.15	6.00	0.24	33.0
PSAD04010BH		5	4~5.75	0.24	0.16	0.80	8300	0.28	10.00	7.24	0.29	35.5
PSAD14010BL	P000/PF00 M000/MF00	12	6~13.8	0.07	0.06	0.66	6400	0.22	7.60	4.29	0.17	28.5
PSAD14010BM		12	6~13.8	0.09	0.07	0.84	7500	0.26	9.15	6.00	0.24	33.0
PSAD14010BH		12	6~13.8	0.13	0.10	1.20	8300	0.28	10.00	7.24	0.29	35.5

\* Specifications are subject to change without notice

# Superior Series (PS) 50mm x 50mm x 10mm



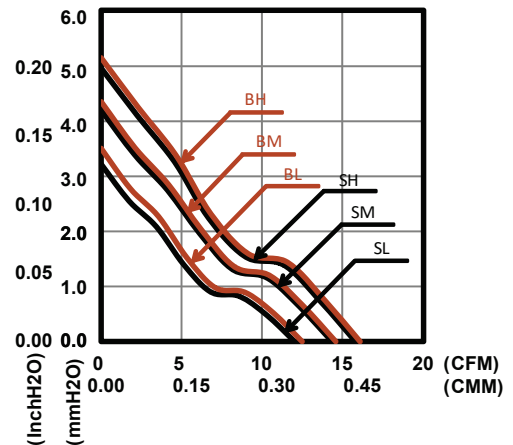
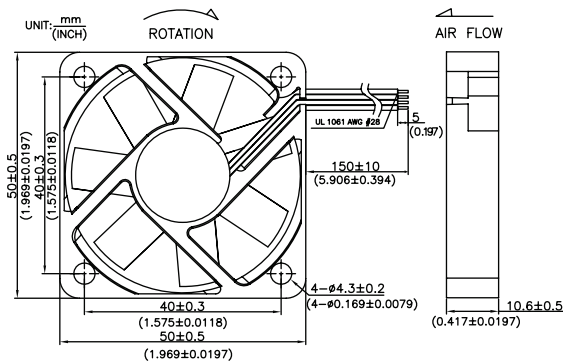
- » Bearing Type: Ball Bearing Function Type
- » (Optional): FG Signal, PWM Protection:
- » Auto Restart Protection
- » Polarity Reverse Protection Lead

Wire:

- » UL 1061 AWG #28 or Equivalent
- » Red Wire: Positive (+)
- » Black Wire: Negative (-)
- » Yellow Wire: FG Signal
- » White Wire: RD Signal
- » Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH <sub>2</sub> O	
PSAD05010SL	P000/PF00 M000/MF00	5	4~5.75	0.14	0.10	0.50	4700	0.34	12.0	3.22	0.13	28.0
PSAD05010SM		5	4~5.75	0.22	0.16	0.80	5500	0.41	14.3	4.19	0.17	32.0
PSAD05010SH		5	4~5.75	0.28	0.21	1.05	6000	0.45	15.8	4.97	0.20	35.5
PSAD15010SL	P000/PF00 M000/MF00	12	6~13.8	0.09	0.07	0.84	4700	0.34	12.0	3.22	0.13	28.0
PSAD15010SM		12	6~13.8	0.11	0.09	1.08	5500	0.41	14.3	4.19	0.17	32.0
PSAD15010SH		12	6~13.8	0.14	0.11	1.32	6000	0.45	15.8	4.97	0.20	35.5
PSAD05010BL	P000/PF00 M000/MF00	5	4~5.75	0.14	0.10	0.50	4900	0.35	12.5	3.50	0.14	30.0
PSAD05010BM		5	4~5.75	0.22	0.16	0.80	5600	0.41	14.6	4.34	0.17	33.5
PSAD05010BH		5	4~5.75	0.28	0.21	1.05	6100	0.46	16.1	5.15	0.20	36.0
PSAD15010BL	P000/PF00 M000/MF00	12	6~13.8	0.09	0.07	0.84	4900	0.35	12.5	3.50	0.14	30.0
PSAD15010BM		12	6~13.8	0.11	0.09	1.08	5600	0.41	14.6	4.34	0.17	33.5
PSAD15010BH		12	6~13.8	0.14	0.11	1.32	6100	0.46	16.1	5.15	0.20	36.0

\* Specifications are subject to change without notice



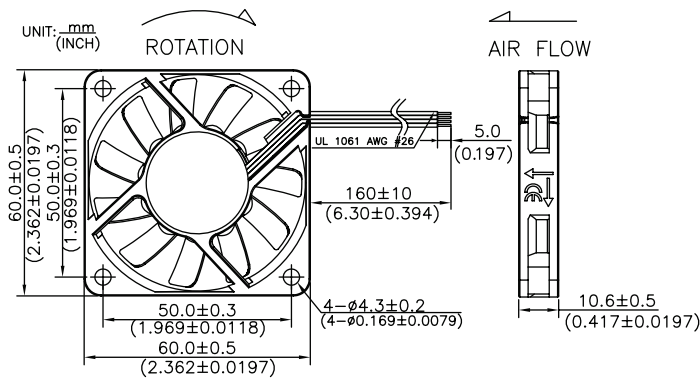
# Superior Series (PS) 60mm x 60mm x 10mm



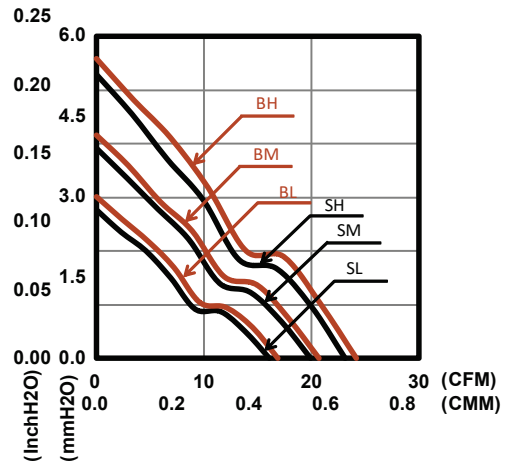
- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1061 AWG #26 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

PS SERIES 6010

## DIMENSIONS DRAWING



## PERFORMANCE CURVES



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt	RPM	CMM	CFM	mmH <sub>2</sub> O	InH <sub>2</sub> O	
PSAD06010SL	P000/PF00 PR00/M000 MF00/MR00	5	4.5~5.5	0.23	0.18	0.90	3800	0.46	16.1	2.77	0.11	29.5
PSAD16010SL	P000/PF00	12	6~13.8	0.11	0.09	1.08	3800	0.46	16.1	2.77	0.11	29.5
PSAD16010SM	PR00/M000	12	6~13.8	0.18	0.14	1.68	4600	0.56	19.9	3.92	0.15	34.5
PSAD16010SH	MF00/MR00	12	6~13.8	0.26	0.21	2.52	5300	0.66	23.2	5.28	0.21	38.5
PSAD06010BL	P000/PF00 PR00/M000 MF00/MR00	5	4.5~5.5	0.23	0.18	0.90	4000	0.48	16.9	3.01	0.12	31.0
PSAD16010BL	P000/PF00	12	6~13.8	0.11	0.09	1.08	4000	0.48	16.9	3.01	0.12	31.0
PSAD16010BM	PR00/M000	12	6~13.8	0.18	0.15	1.80	4800	0.59	20.7	4.16	0.16	36.0
PSAD16010BH	MF00/MR00	12	6~13.8	0.26	0.20	2.40	5500	0.69	24.2	5.58	0.22	40.0

\* Specifications are subject to change without notice

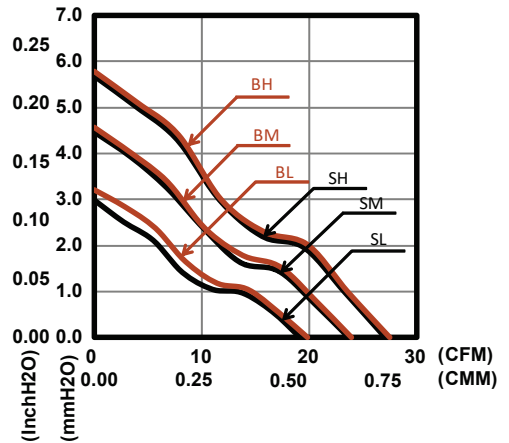
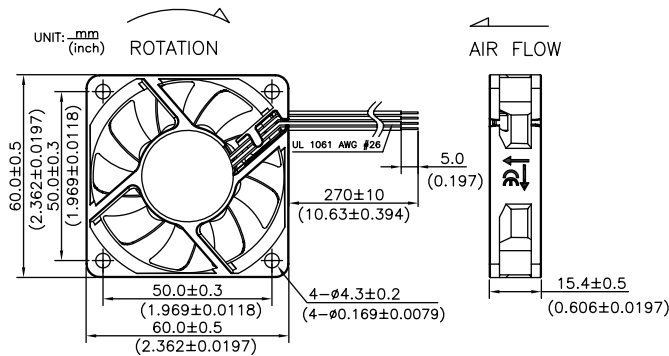
# Superior Series (PS) 60mm x 60mm x 15mm



- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection (Optional):
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1061 AWG #26 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH <sub>2</sub> O	
PSAD06015SL	P000/PF00	5	4.5~5.5	0.22	0.17	0.85	3600	0.54	19.2	2.99	0.12	27.5
PSAD06015SM	PR00/M000	5	4.5~5.5	0.36	0.28	1.40	4400	0.67	23.7	4.47	0.18	32.5
PSAD16015SL	MF00/MR00	12	6~13.8	0.13	0.10	1.20	3600	0.54	19.2	2.99	0.12	27.5
PSAD16015SM	P000/PF00	12	6~13.8	0.17	0.13	1.56	4400	0.67	23.7	4.47	0.18	32.5
PSAD16015SH	PR00/M000	12	6~13.8	0.22	0.17	2.04	5000	0.77	27.1	5.67	0.22	36.0
PSAD06015BL	MF00/MR00	5	4.5~5.5	0.22	0.17	0.85	3700	0.56	19.8	3.20	0.13	28.5
PSAD06015BM	P000/PF00	5	4.5~5.5	0.36	0.29	1.45	4500	0.68	24.0	4.57	0.18	34.0
PSAD16015BL	PR00/M000	12	6~13.8	0.13	0.08	0.96	3700	0.56	19.8	3.20	0.13	28.5
PSAD16015BM	P000/PF00	12	6~13.8	0.17	0.13	1.56	4500	0.68	24.0	4.57	0.18	34.0
PSAD16015BH	PR00/M000	12	6~13.8	0.22	0.17	2.04	5100	0.78	27.5	5.78	0.23	37.5

\* Specifications are subject to change without notice



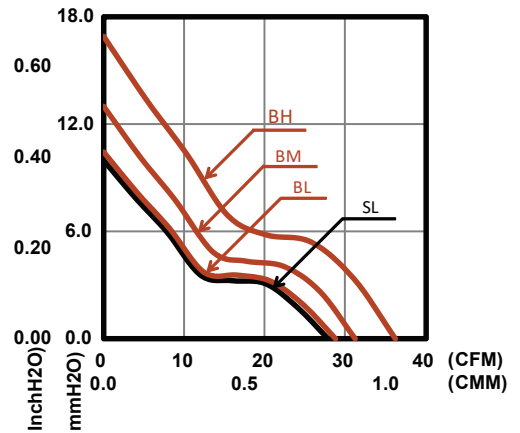
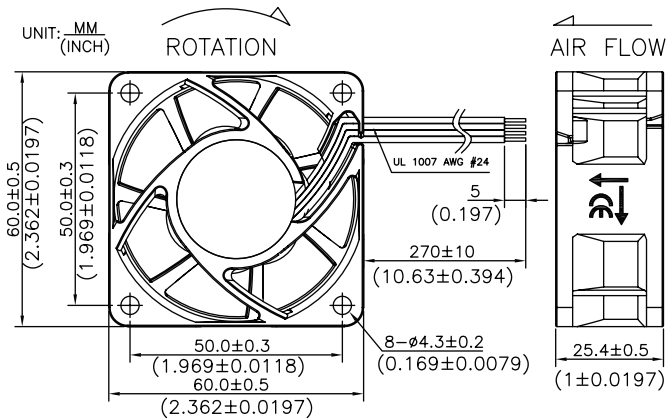
# Superior Series (PS) 60mm x 60mm x 25mm



- » Bearing Type: Ball Bearing Function Type (Optional):
- » FG Signal, RD Signal, PWM Protection:
- »
- Auto Restart Protection
- Polarity Reverse Protection
- » Lead Wire:
  - UL 1007 AWG #24 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH <sub>2</sub> O	
PSAD16025SL	P000/PF00 PR00/M000 MF00/MR00	12	6~13.8	0.24	0.19	2.28	5400	0.79	27.9	9.96	0.39	40.0
PSAD16025BL	P000/PF00	12	6~13.8	0.24	0.17	2.04	5500	0.82	28.8	10.44	0.41	41.0
PSAD16025BM	PR00/M000	12	6~13.8	0.27	0.21	2.52	6100	0.89	31.2	12.98	0.51	43.0
PSAD16025BH	MF00/MR00	12	6~13.8	0.40	0.32	3.84	7000	1.03	36.3	16.91	0.67	48.0

\* Specifications are subject to change without notice

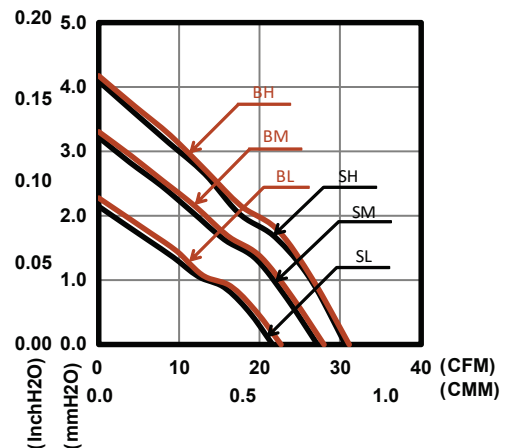
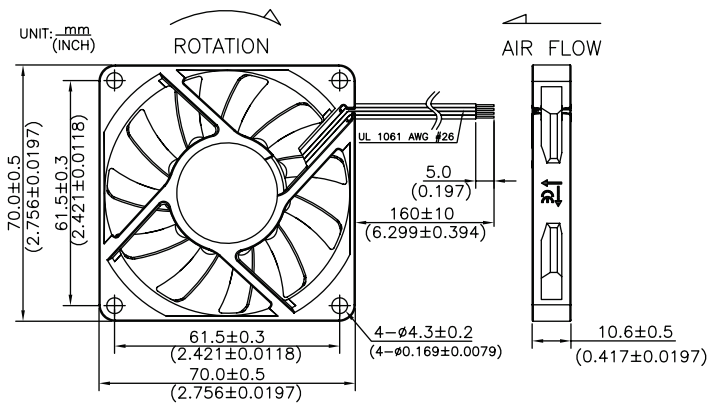
# Superior Series (PS) 70mm x 70mm x 10mm



- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1061 AWG #26 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal, RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH2O	
PSAD07010SL	P000/PF00	5	4.5~5.5	0.23	0.18	0.90	3100	0.61	21.6	2.15	0.08	28.0
PSAD07010SM	PR00/M000											
	MF00/MR00											
PSAD17010SL	P000/PF00	12	6~13.8	0.15	0.11	1.32	3100	0.61	21.6	2.15	0.08	28.0
PSAD17010SM	PR00/M000											
PSAD17010SH	MF00/MR00											
PSAD07010BL	P000/PF00	5	4.5~5.5	0.23	0.18	0.90	3200	0.64	22.7	2.28	0.09	30.0
PSAD07010BM	PR00/M000											
	MF00/MR00											
PSAD17010BL	P000/PF00	12	6~13.8	0.15	0.12	0.44	3200	0.64	22.7	2.28	0.09	30.0
PSAD17010BM	PR00/M000											
PSAD17010BH	MF00/MR00											

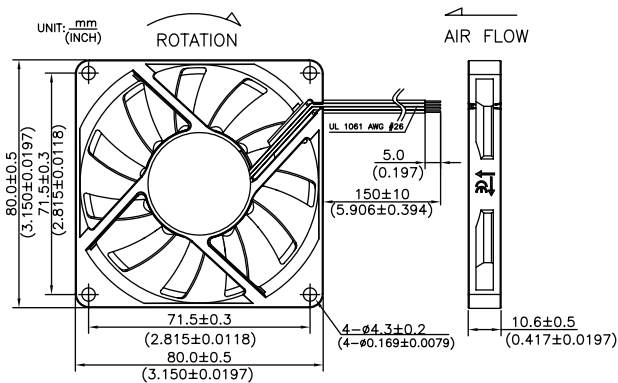
\* Specifications are subject to change without notice

# Superior Series (PS) 80mm x 80mm x 10mm

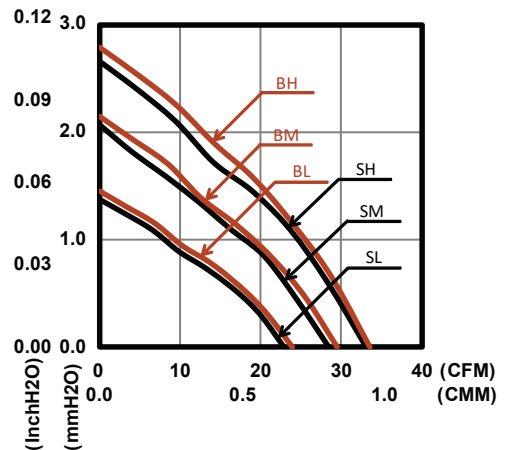


- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1061 AWG #26 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## DIMENSIONS DRAWING



## PERFORMANCE CURVES



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise									
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH <sub>2</sub> O		InH <sub>2</sub> O	dBA							
PSAD08010SL	P000/PF00	5	4.5~5.5	0.22	0.17	0.85	2300	0.65	22.9	1.37	0.05	26.0									
PSAD08010SM	PR00/M000												0.35	0.28	1.40	2800	0.81	28.5	2.07	0.08	32.0
PSAD18010SL	P000/PF00	12	6~13.8	0.12	0.09	1.08	2300	0.65	22.9	1.37	0.05	26.0									
PSAD18010SM	PR00/M000												0.16	0.13	1.56	2800	0.81	28.5	2.07	0.08	32.0
PSAD18010SH	MF00/MR00												0.24	0.19	2.28	3200	0.94	33.1	2.66	0.11	35.5
PSAD08010BL	P000/PF00	5	4.5~5.5	0.22	0.16	0.80	2400	0.68	23.9	1.46	0.06	28.0									
PSAD08010BM	PR00/M000												0.35	0.28	1.40	2900	0.83	29.5	2.15	0.09	33.0
PSAD08010BL	MF00/MR00												0.24	0.19	2.28	3200	0.94	33.1	2.66	0.11	35.5
PSAD18010BL	P000/PF00	12	6~13.8	0.12	0.09	1.08	2400	0.68	23.9	1.46	0.06	28.0									
PSAD18010BM	PR00/M000												0.16	0.12	1.44	2900	0.83	29.5	2.15	0.09	33.0
PSAD18010BH	MF00/MR00												0.24	0.16	1.92	3300	0.95	33.6	2.79	0.11	36.0

\* Specifications are subject to change without notice

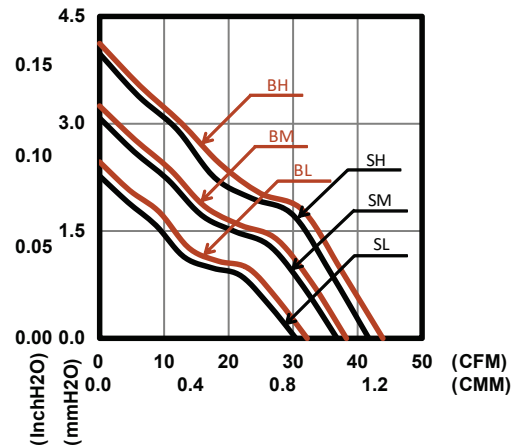
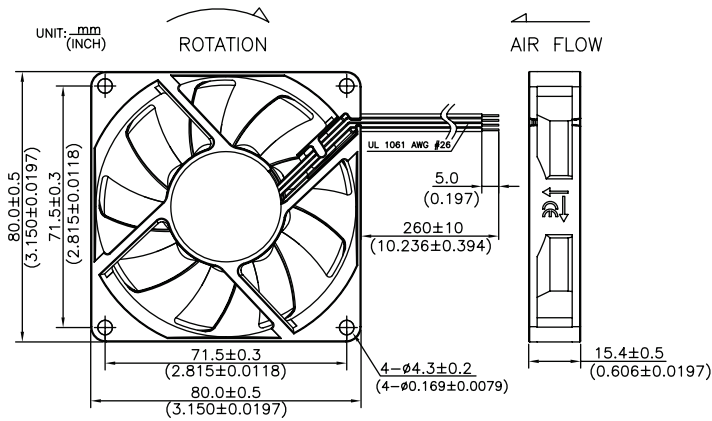
# Superior Series (PS) 80mm x 80mm x 15mm



- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1061 AWG #26 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH <sub>2</sub> O	
PSAD08015SL	P000/PF00	5	4.5~5.5	0.22	0.17	0.85	2500	0.87	30.5	2.27	0.09	28.0
PSAD08015SM	PR00/M000 MF00/MR00	5	4.5~5.5	0.35	0.28	1.40	3000	1.04	36.8	3.08	0.12	32.5
PSAD18015SL	P000/PF00	12	6~13.8	0.12	0.09	1.08	2500	0.87	30.5	2.27	0.09	28.0
PSAD18015SM	PR00/M000	12	6~13.8	0.20	0.16	1.92	3000	1.04	36.8	3.08	0.12	32.5
PSAD18015SH	MF00/MR00	12	6~13.8	0.24	0.19	2.28	3400	1.18	41.8	3.98	0.16	36.5
PSAD08015BL	P000/PF00	5	4.5~5.5	0.22	0.16	0.80	2600	0.91	32.3	2.46	0.10	28.5
PSAD08015BM	PR00/M000 MF00/MR00	5	4.5~5.5	0.35	0.26	1.30	3100	1.09	38.3	3.25	0.13	35.0
PSAD18015BL	P000/PF00	12	6~13.8	0.12	0.09	1.08	2600	0.91	32.3	2.46	0.10	28.5
PSAD18015BM	PR00/M000	12	6~13.8	0.20	0.16	1.92	3100	1.09	38.3	3.25	0.13	35.0
PSAD18015BH	MF00/MR00	12	6~13.8	0.24	0.16	2.16	3500	1.25	44.0	4.13	0.16	38.0

\* Specifications are subject to change without notice

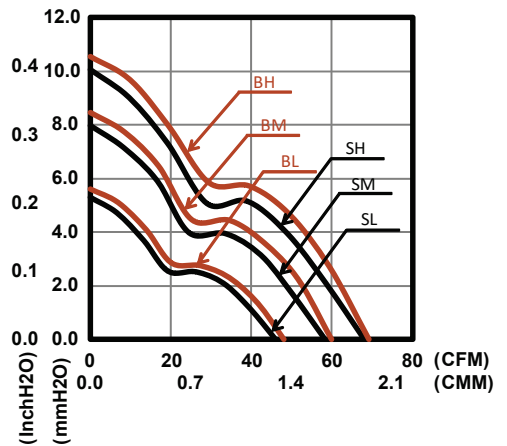
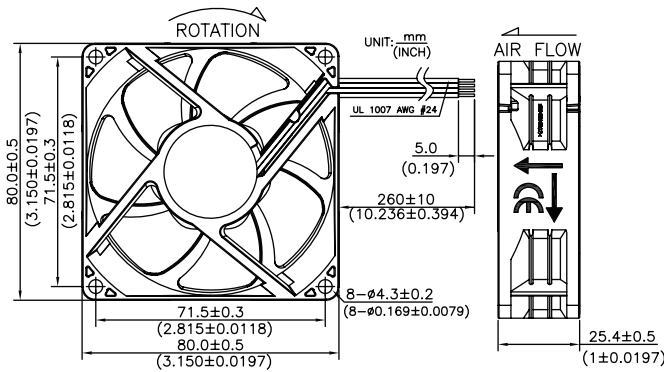
# Superior Series (PS) 80mm x 80mm x 25mm



- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1007 AWG #24 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		CMM	CFM	mmH <sub>2</sub> O	InH <sub>2</sub> O	
PSAD18025SL	P000/PF00	12	6~13.8	0.19	0.16	1.92	3400	1.30	45.9	5.29	0.21	35.0
PSAD18025SM	PR00/M000	12	6~13.8	0.29	0.23	2.76	4300	1.65	58.2	7.98	0.31	41.0
PSAD18025SH	MF00/MR00	12	6~13.8	0.43	0.34	4.08	4900	1.92	68.0	10.06	0.40	44.5
PSAD18025BL	P000/PF00	12	6~13.8	0.19	0.15	1.80	3600	1.36	48.1	5.61	0.21	37.0
PSAD18025BM	PR00/M000	12	6~13.8	0.29	0.22	2.76	4500	1.70	60.0	8.47	0.31	43.0
PSAD18025BH	MF00/MR00	12	6~13.8	0.43	0.33	3.96	5100	1.96	69.2	10.56	0.40	45.5

\* Specifications are subject to change without notice

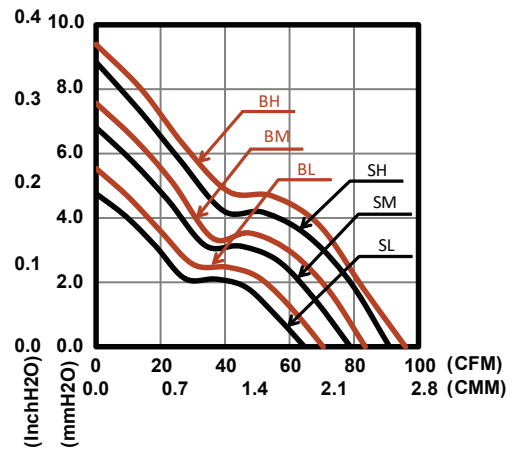
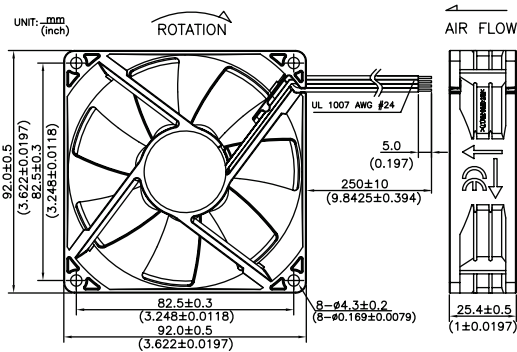
# Superior Series (PS) 92mm x 92mm x 25mm



- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1007 AWG #24 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt	RPM	CMM	CFM	mmH <sub>2</sub> O	InH <sub>2</sub> O	dBA
PSAD19225SL	P000/PF00	12	6~13.8	0.22	0.18	2.16	2900	1.83	64.7	4.77	0.19	37.5
PSAD19225SM	PR00/M000	12	6~13.8	0.34	0.28	3.36	3500	2.23	78.9	6.82	0.27	43.0
PSAD19225SH	MF00/MR00	12	6~13.8	0.50	0.41	4.92	4000	2.58	91.2	8.83	0.35	47.0
PSAD19225BL	P000/PF00	12	6~13.8	0.22	0.18	2.16	3100	2.00	70.5	5.54	0.22	40.5
PSAD19225BM	PR00/M000	12	6~13.8	0.34	0.27	3.24	3700	2.37	83.6	7.57	0.30	44.5
PSAD19225BH	MF00/MR00	12	6~13.8	0.50	0.40	4.80	4200	2.72	96.1	9.38	0.37	48.5

\* Specifications are subject to change without notice



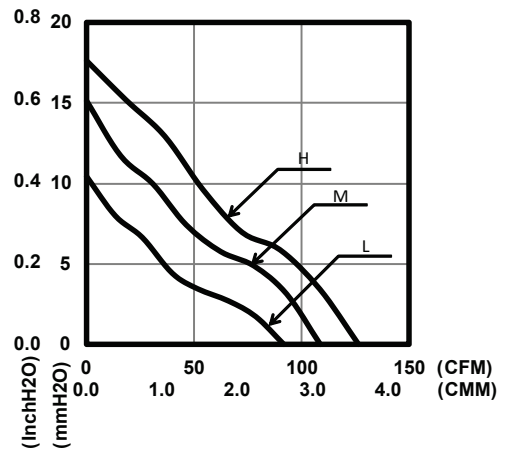
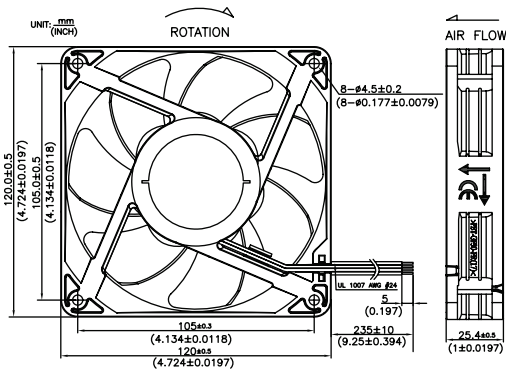
# Superior Series (PS) 120mm x 120mm x 25mm



- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1007 AWG #24 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt	RPM	CMM	CFM	mmH <sub>2</sub> O	InH <sub>2</sub> O	dBA
PSAD1A225BL	P000/PF00	12	6~13.8	0.35	0.28	3.36	2900	2.60	91.8	10.43	0.41	42.0
PSAD1A225BM	PR00/M000	12	6~13.8	0.53	0.39	4.68	3500	3.09	109.0	15.16	0.60	47.0
PSAD1A225BH	MF00/MR00	12	6~13.8	0.79	0.59	7.08	4100	3.59	126.9	17.62	0.69	51.5
PSAD2A225BL	P000/PF00	24	16~27.6	0.19	0.15	3.60	2900	2.60	91.8	10.43	0.41	42.0
PSAD2A225BM	PR00/M000	24	16~27.6	0.26	0.21	5.04	3500	3.09	109.0	15.16	0.60	47.0
PSAD2A225BH	MF00/MR00	24	16~27.6	0.39	0.31	7.44	4100	3.59	126.9	17.62	0.69	51.5
PSAD4A225BL	P000/PF00	48	30~55.2	0.10	0.08	3.84	2900	2.60	91.8	10.43	0.41	42.0
PSAD4A225BM	PR00/M000	48	30~55.2	0.15	0.12	5.76	3500	3.09	109.0	15.16	0.60	47.0
PSAD4A225BH	MF00/MR00	48	30~55.2	0.23	0.17	8.16	4100	3.59	126.9	17.62	0.69	51.5

\* Specifications are subject to change without notice



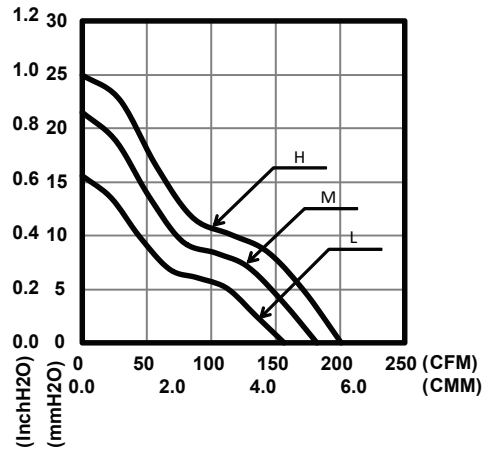
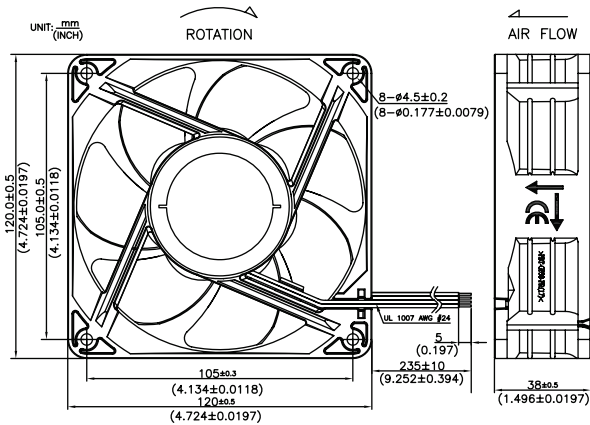
# Superior Series (PS) 120mm x 120mm x 38mm



- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1007 AWG #24 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH2O	
PSAD1A238BL	P000/PF00	12	6~13.8	0.91	0.73	8.76	3500	4.44	156.9	15.58	0.61	51.0
PSAD1A238BM	PR00/M000	12	6~13.8	1.35	1.08	12.96	4100	5.16	182.1	21.45	0.84	55.5
PSAD1A238BH	MF00/MR00	12	6~13.8	1.75	1.40	16.80	4600	5.69	200.9	25.00	0.98	59.5
PSAD2A238BL	P000/PF00	24	16~27.6	0.44	0.35	8.40	3500	4.44	156.9	15.58	0.61	51.0
PSAD2A238BM	PR00/M000	24	16~27.6	0.65	0.55	13.20	4100	5.16	182.1	21.45	0.84	55.0
PSAD2A238BH	MF00/MR00	24	16~27.6	0.88	0.70	16.80	4600	5.69	200.9	25.00	0.98	59.5
PSAD4A238BL	P000/PF00	48	30~55.2	0.23	0.18	8.64	3500	4.44	156.9	15.58	0.61	51.0
PSAD4A238BM	PR00/M000	48	30~55.2	0.34	0.27	12.96	4100	5.16	182.1	21.45	0.84	55.0
PSAD4A238BH	MF00/MR00	48	30~55.2	0.48	0.36	17.28	4600	5.69	200.9	25.00	0.98	59.5

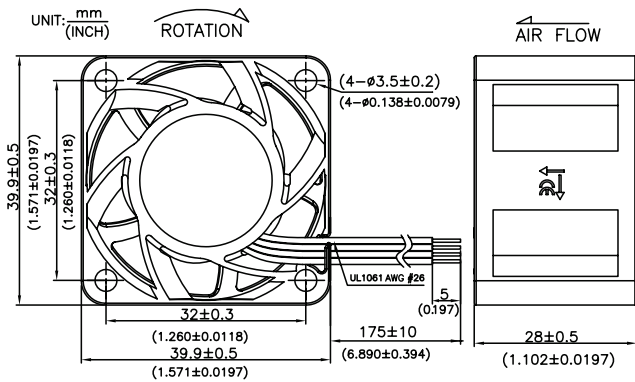
\* Specifications are subject to change without notice

# Excellence Series (PE) 40mm x 40mm x 28mm

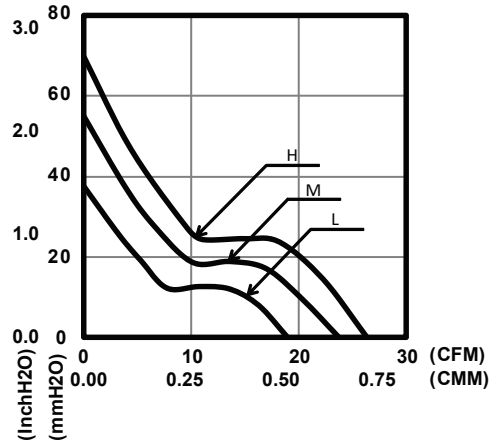


- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire :
  - UL 1061 AWG #26 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## DIMENSIONS DRAWING



## PERFORMANCE CURVES



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt	RPM	CMM	CFM	mmH <sub>2</sub> O	InH <sub>2</sub> O	
PEAD14028BL	P000/PF00	12	6~13.8	0.58	0.46	5.52	14600	0.54	19.0	37.5	1.48	52.5
PEAD14028BM	PR00/M000	12	6~13.8	0.81	0.65	7.80	17600	0.67	23.8	55.0	2.16	56.5
PEAD14028BH	MF00/MR00	12	6~13.8	1.02	0.81	9.72	20000	0.75	26.4	69.9	2.75	59.5

\* Specifications are subject to change without notice

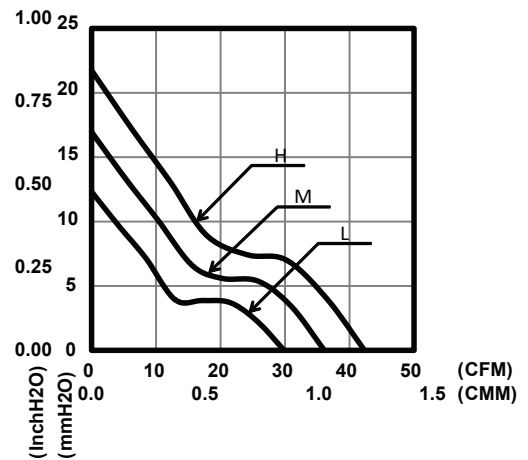
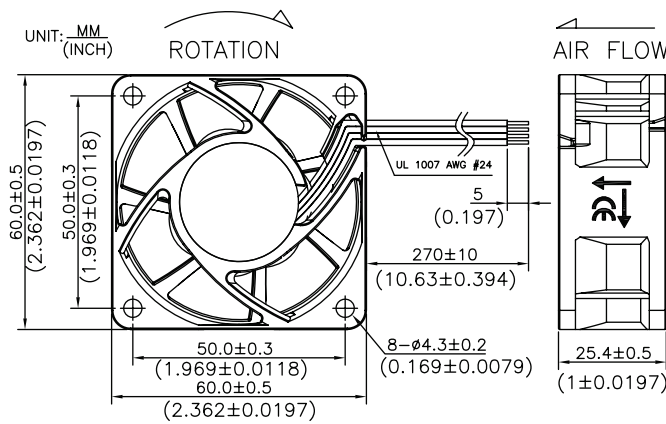
# Excellence Series (PE) 60mm x 60mm x 25mm



- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1007 AWG #24 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH <sub>2</sub> O	
PEAD16025BL	P000/PF00	12	6~13.8	0.27	0.21	2.52	5800	0.84	29.7	12.98	0.51	41.5
PEAD16025BM	PR00/M000	12	6~13.8	0.40	0.32	3.84	7000	1.01	35.5	17.94	0.71	46.0
PEAD16025BH	MF00/MR00	12	6~13.8	0.60	0.48	5.76	8000	1.21	42.8	24.58	0.97	50.5
PEAD26025BL	P000/PF00	24	16~27.6	0.15	0.11	2.64	5800	0.84	29.7	12.98	0.51	41.5
PEAD26025BM	PR00/M000	24	16~27.6	0.23	0.16	3.84	7000	1.01	35.5	17.94	0.71	45.5
PEAD26025BH	MF00/MR00	24	16~27.6	0.33	0.22	5.28	8000	1.21	42.8	24.58	0.97	50.5
PEAD46025BL	P000/PF00	48	30~55.2	0.10	0.06	2.88	5800	0.84	29.7	12.98	0.51	41.5
PEAD46025BM	PR00/M000	48	30~55.2	0.16	0.10	4.80	7000	1.01	35.5	17.94	0.71	45.5
PEAD46025BH	MF00/MR00	48	30~55.2	0.23	0.14	6.72	8000	1.21	42.8	24.58	0.97	50.5

\* Specifications are subject to change without notice

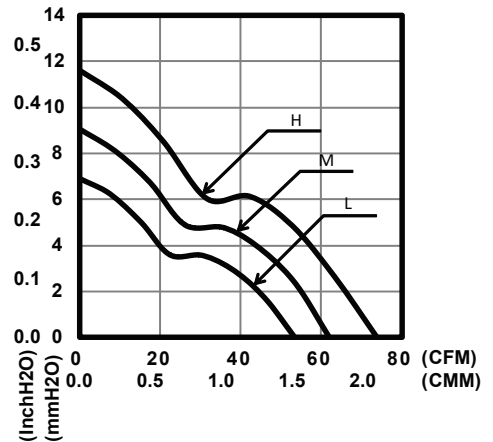
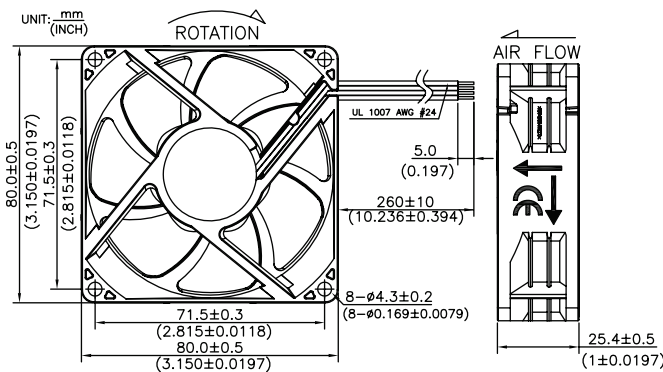
# Excellence Series (PE) 80mm x 80mm x 25mm



- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1007 AWG #24 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt	RPM	CMM	CFM	mmH2O	InH2O	dBA
PEAD18025BL	P000/PF00	12	6~13.8	0.28	0.22	2.64	4000	1.51	53.4	6.92	0.27	40.0
PEAD18025BM	PR00/M000	12	6~13.8	0.35	0.28	3.36	4600	1.76	62.1	9.04	0.36	43.5
PEAD18025BH	MF00/MR00	12	6~13.8	0.48	0.38	4.56	5400	2.08	73.5	12.00	0.47	48.0
PEAD28025BL	P000/PF00	24	16~27.6	0.14	0.11	2.64	4000	1.51	53.4	6.92	0.27	40.0
PEAD28025BM	PR00/M000	24	16~27.6	0.19	0.15	3.60	4600	1.76	62.1	9.04	0.36	43.5
PEAD28025BH	MF00/MR00	24	16~27.6	0.25	0.20	4.80	5400	2.08	73.5	12.00	0.47	48.0
PEAD48025BL	P000/PF00	48	30~55.2	0.09	0.08	3.84	4000	1.51	53.4	6.92	0.27	40.0
PEAD48025BM	PR00/M000	48	30~55.2	0.12	0.10	4.80	4600	1.76	62.1	9.04	0.36	43.5
PEAD48025BH	MF00/MR00	48	30~55.2	0.17	0.12	5.76	5400	2.08	73.5	12.00	0.47	48.0

\* Specifications are subject to change without notice

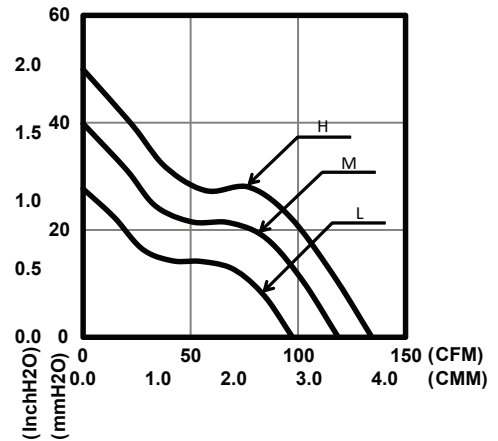
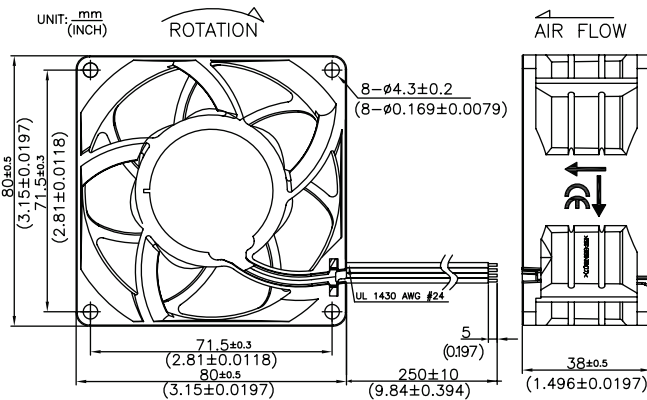
# Excellence Series (PE) 80mm x 80mm x 38mm



- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1430 AWG #24 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH <sub>2</sub> O	
PEAD18038BL	P000/PF00	12	6~13.8	1.83	1.46	17.52	7500	2.76	97.6	27.74	1.09	57.0
PEAD18038BM	PR00/M000	12	6~13.8	2.75	2.20	26.40	9000	3.37	119.0	39.83	1.57	61.5
PEAD18038BH	MF00/MR00	12	6~13.8	3.88	3.10	37.20	10200	3.81	134.5	49.91	1.97	65.5
PEAD28038BL	P000/PF00	24	16~27.6	0.68	0.85	16.32	7500	2.76	97.6	27.74	1.09	57.0
PEAD28038BM	PR00/M000	24	16~27.6	1.10	1.38	26.40	9000	3.37	119.0	39.83	1.57	61.5
PEAD28038BH	MF00/MR00	24	16~27.6	1.55	1.94	37.20	10200	3.81	134.5	49.91	1.97	65.5
PEAD48038BL	P000/PF00	48	30~55.2	0.35	0.44	16.80	7500	2.76	97.6	27.74	1.09	57.0
PEAD48038BM	PR00/M000	48	30~55.2	0.55	0.64	26.40	9000	3.37	119.0	39.83	1.57	61.5
PEAD48038BH	MF00/MR00	48	30~55.2	0.78	0.98	37.44	10200	3.81	134.5	49.91	1.97	65.5

\* Specifications are subject to change without notice

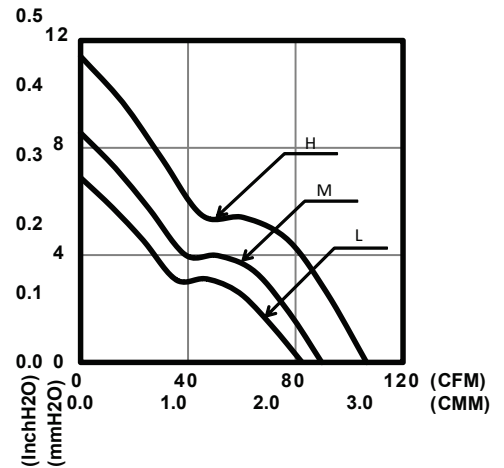
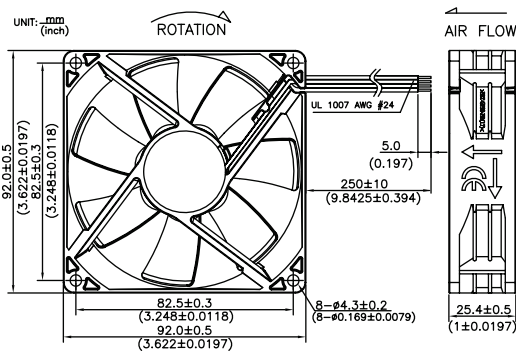
# Excellence Series (PE) 92mm x 92mm x 25mm



- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1007 AWG #24 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		CMM	CFM	mmH <sub>2</sub> O	InH <sub>2</sub> O	
PEAD19225BL	P000/PF00	12	6~13.8	0.38	0.28	3.36	3500	2.34	82.5	6.90	0.27	43.5
PEAD19225BM	PR00/M000	12	6~13.8	0.49	0.39	4.68	4000	2.55	89.9	8.55	0.34	47.5
PEAD19225BH	MF00/MR00	12	6~13.8	0.89	0.61	7.32	4600	3.20	106.7	11.42	0.45	51.0
PEAD29225BL	P000/PF00	24	16~27.6	0.19	0.15	3.60	3500	2.34	82.5	6.90	0.27	43.5
PEAD29225BM	PR00/M000	24	16~27.6	0.25	0.20	4.80	4000	2.55	89.9	8.55	0.34	47.5
PEAD29225BH	MF00/MR00	24	16~27.6	0.36	0.29	6.96	4600	3.20	106.7	11.42	0.45	51.0
PEAD48025BL	P000/PF00	48	30~55.2	0.12	0.09	4.32	3500	2.34	82.5	6.90	0.27	43.5
PEAD49225BM	PR00/M000	48	30~55.2	0.15	0.12	5.76	4000	2.55	89.9	8.55	0.34	47.5
PEAD49225BH	MF00/MR00	48	30~55.2	0.23	0.18	8.64	4600	3.20	106.7	11.42	0.45	51.0

\* Specifications are subject to change without notice



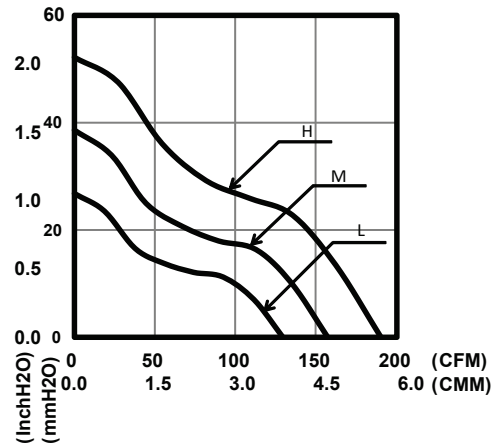
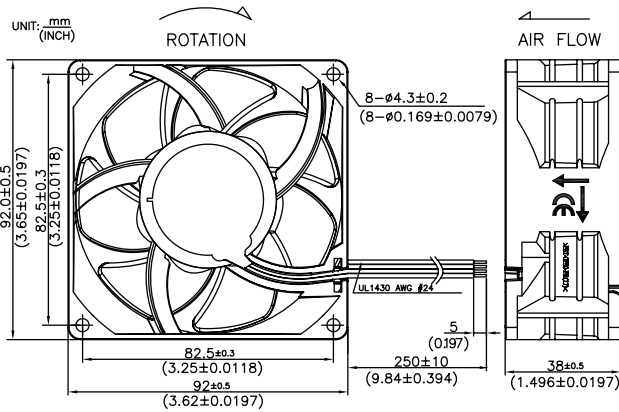
# Excellence Series (PE) 92mm x 92mm x 38mm



- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1430 AWG #24 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		RPM	CMM	CFM	mmH2O	
PEAD19238BL	P000/PF00	12	6~13.8	1.88	1.50	18.00	6200	3.66	129.4	26.80	1.05	55.0
PEAD19238BM	PR00/M000	12	6~13.8	2.88	2.30	27.60	7500	4.46	157.4	38.54	1.52	59.0
PEAD19238BH	MF00/MR00	12	6~13.8	5.00	4.00	48.00	9000	5.40	190.5	52.19	2.05	65.0
PEAD29238BL	P000/PF00	24	16~27.6	0.84	0.67	16.08	6200	3.66	129.4	26.80	1.05	55.0
PEAD29238BM	PR00/M000	24	16~27.6	1.44	1.15	27.60	7500	4.46	157.4	38.54	1.52	59.0
PEAD29238BH	MF00/MR00	24	16~27.6	2.50	2.00	48.00	9000	5.40	190.5	52.19	2.05	65.0
PEAD49238BL	P000/PF00	48	30~55.2	0.45	0.36	17.28	6200	3.66	129.4	26.80	1.05	55.0
PEAD49238BM	PR00/M000	48	30~55.2	0.69	0.55	26.40	7500	4.46	157.4	38.54	1.52	59.0
PEAD49238BH	MF00/MR00	48	30~55.2	1.19	0.95	45.60	9000	5.40	190.5	52.19	2.05	65.0

\* Specifications are subject to change without notice



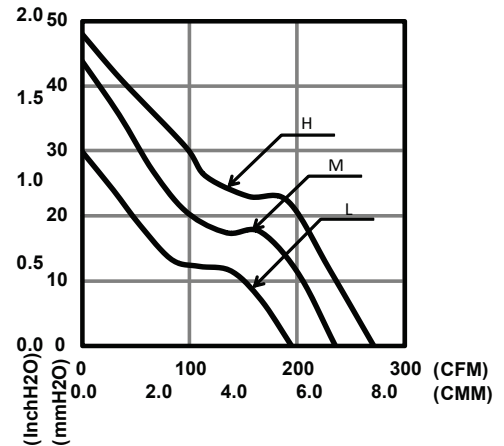
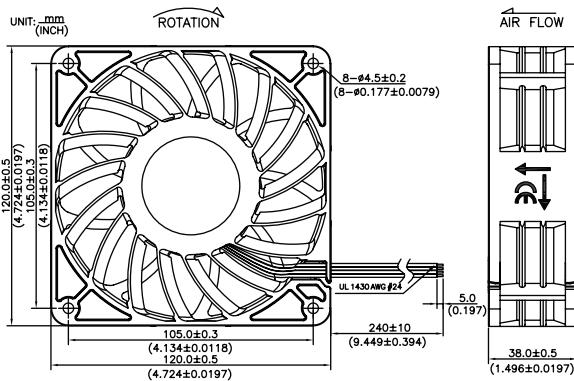
# Excellence Series (PE) 120mm x 120mm x 38mm



- » Bearing Type: Ball Bearing
- » Function Type (Optional): FG Signal, RD Signal, PWM
- » Protection:
  - Auto Restart Protection
  - Polarity Reverse Protection
- » Lead Wire:
  - UL 1430 AWG #24 or Equivalent
  - Red Wire: Positive (+)
  - Black Wire: Negative (-)
  - Yellow Wire: FG Signal
  - White Wire: RD Signal
  - Blue Wire: PWM

## PERFORMANCE CURVES

## DIMENSIONS DRAWING



## SPECIFICATION

Model	Function Type	Rated Voltage	Operating Voltage	Rated Current	Input Current	Input Power	Rated Speed	Air Flow		Air Pressure		Noise
		VDC	VDC	Amp	Amp	Watt		CMM	CFM	mmH <sub>2</sub> O	InH <sub>2</sub> O	
PEAD2A238BL	P000/PF00	12	6~13.8	2.25	2.00	24.00	4700	5.84	206.3	32.56	1.28	59.5
PEAD2A238BM	PR00/M000	12	6~13.8	3.69	3.00	36.00	5700	6.66	235.1	43.79	1.72	65.5
PEAD2A238BH	MF00/MR00	12	6~13.8	5.44	4.35	52.20	6500	7.68	271.2	47.99	1.89	68.5
PEAD2A238BL	P000/PF00	24	16~27.6	1.08	0.86	20.64	4700	5.84	206.3	32.56	1.28	59.5
PEAD2A238BM	PR00/M000	24	16~27.6	1.75	1.40	33.60	5700	6.66	235.1	43.79	1.72	65.5
PEAD2A238BH	MF00/MR00	24	16~27.6	2.63	2.10	50.40	6500	7.68	271.2	47.99	1.89	68.5
PEAD4A238BL	P000/PF00	48	30~55.2	0.54	0.43	20.64	4700	5.84	206.3	32.56	1.28	59.5
PEAD4A238BM	PR00/M000	48	30~55.2	0.88	0.70	33.60	5700	6.66	235.1	43.79	1.72	65.5
PEAD4A238BH	MF00/MR00	48	30~55.2	1.25	1.00	48.00	6500	7.68	271.2	47.99	1.89	68.5

\* Specifications are subject to change without notice

## Customized Notebook / Netbook / AIO Blower

Dimensions: 35mm x 35mm x 6mm ~ 90mm x 90mm x 22mm



## Customized Fan & Blower



## Customized Spindle Motor



## Metal Finger Guard

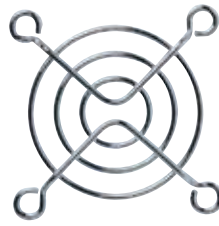
Available Dimensions: 40mm, 50mm, 60mm, 70mm, 80mm, 90mm, 120mm, 150mm



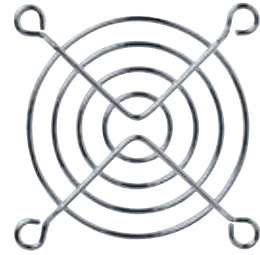
40mm



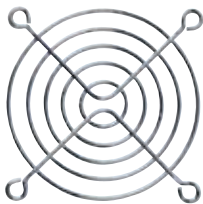
50mm



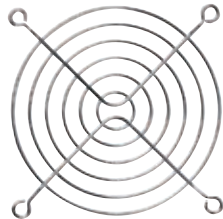
60mm



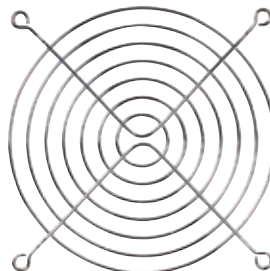
70mm



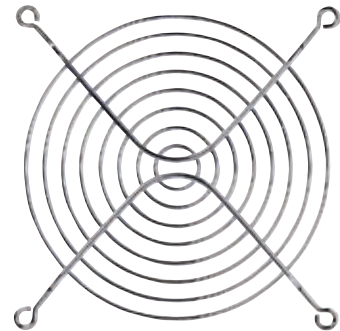
80mm



90mm



120mm



150mm

## 3-In-1 Plastic Filter

Available Dimensions: 40mm, 60mm, 80mm, 90mm, 120mm



40mm



60mm



80mm



90mm



120mm

## Exploded View Drawing

