

# Delta High Performance Blower

Delta Electronics, INC.

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Blower with high air pressure performance are not only common used in systems with high impedance design but also recommended to apply into products with high suction design; for example: vacuum cleaner & vacuum robot. The unique characteristic about blower design is the fan speed increases automatically when the faced impedance in system becomes bigger. By this specific characteristic, it is able to avoid the worse suction caused by the clogged filter in vacuum cleaner & vacuum robot. In addition, the designed PWM function can precisely control the fan speed per 1 % duty to ensure the fan operate steadily in certain speed level. Moreover, to apply ball bearing type into high-speed design is convinced to fulfill the long life inquiry.


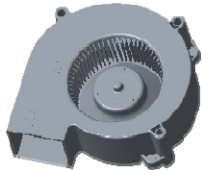
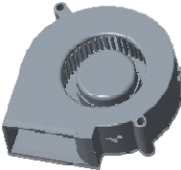


### **Product Features**

- High air pressure
- PWM speed control
- Long life

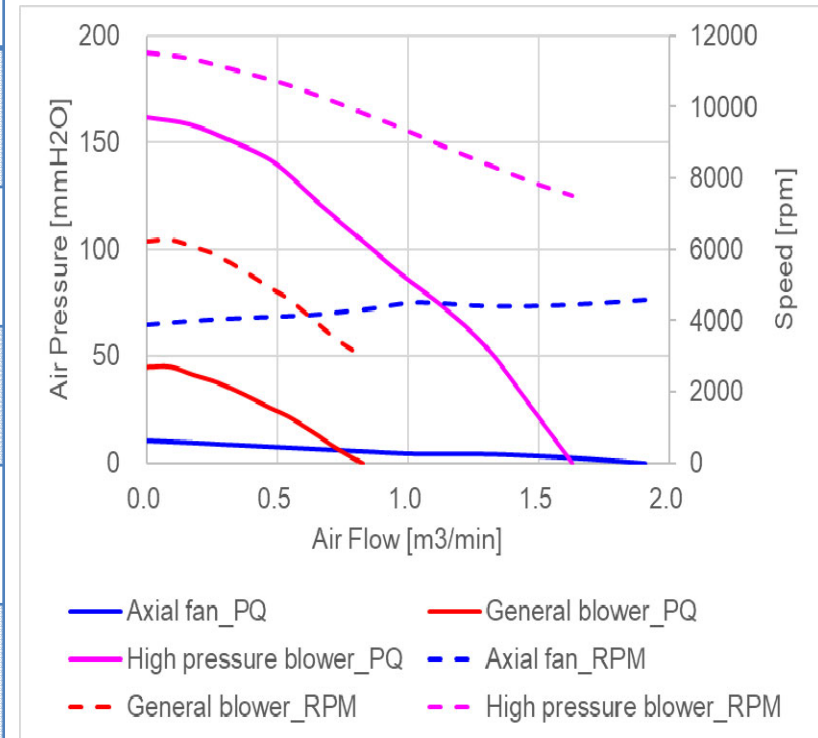
# High Performance Blower Feature

## Fan Design Type Brief Introduction :

Fan Type (L x W x H)	Axial Fan (92x92x25mm)	General Blower Fan (105x105x36mm)	High Performance Blower Fan (97x94x33mm)
Parameter			
Required height in system for assy.	92 mm	36 mm	33 mm
Rated speed	4,600 rpm	3,000 rpm	7,500 rpm
Max. air pressure	10.34 mmH <sub>2</sub> O	45.06 mmH <sub>2</sub> O	175.3 mmH <sub>2</sub> O
Bearing type	Sleeve	Sleeve	2 Ball
Life (L10)	≥ 30,000 hrs	≥ 30,000 hrs	≥ 50,000 hrs

### Product Profile

- Required height in system <35mm
- Bigger impedance causes higher speed
- Biggest air pressure:175mmH<sub>2</sub>O
- 2 Ball bearing system
- L10 ≥ 50,000hrs



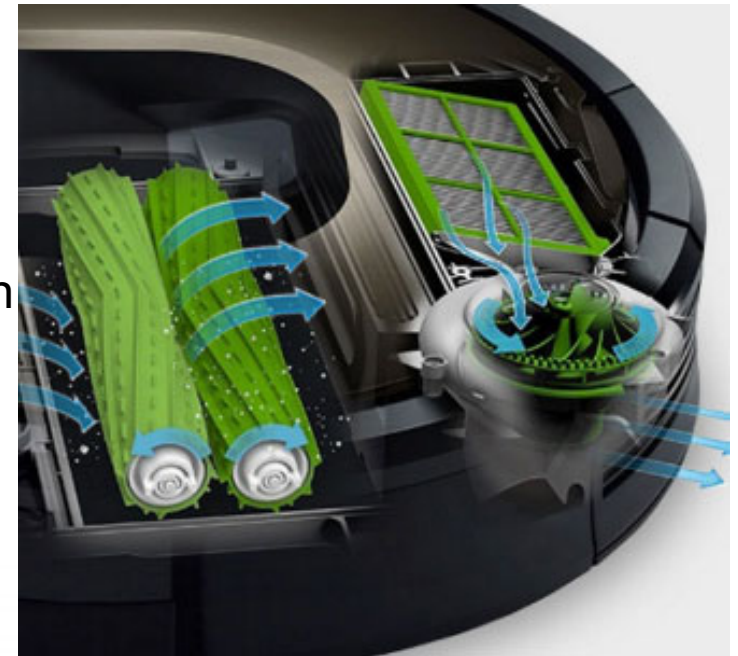


# High performance blower

Home Appliance – Robotic Vacuums

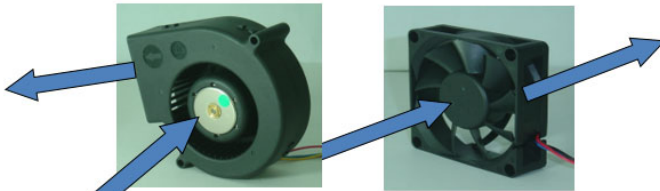
## Features:

- High Air Pressure Output
- Low Power Consumption
- Low vibration and noise caused from motor excitation
- Wide Operation Voltage Range: 10~18V
- Operating Temp. : -10~50°C

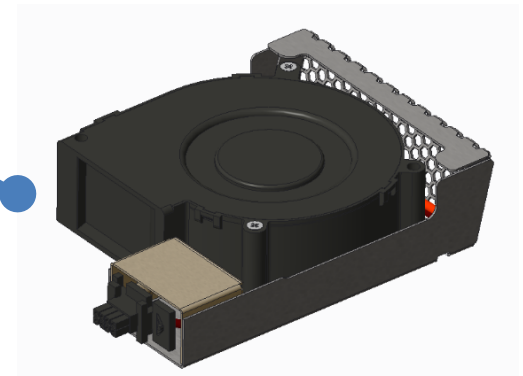
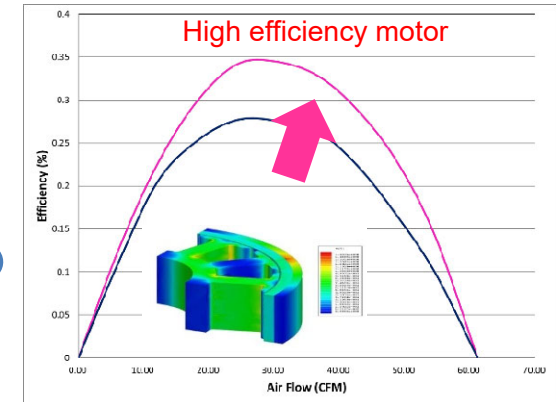




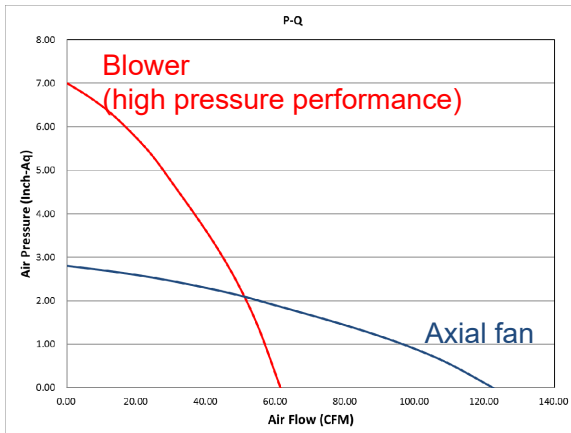
# High performance blower



Different flow direction to axial fan  
Suitable for special system restriction



Pair with sheet metal module, can achieve quick replacement function





# High Pressure Blower Fan Applications



Vacuum Cleaner



Vacuum Robot



# High performance blower

## Medical application – CPAP device

Continuous Positive Airway Pressure (CPAP) is a treatment method for patients who have sleep apnea.



- Features:
  - High Pressure
  - Low noise
  - High dynamic switching





# High performance blower

PICTURE						
PARAMETER						
Fan dimension	mm (L*W*H)	97x94x25	97x94x33	97x94x33	97x94x33	80.4x67x58
Delta part No.		BFB1012UH-BA40ZYD	BFB1012EF-0018H	BFB1012EH-C18J	BFM1012UHFF8	BFN0724SS-01
Rated Voltage	V (DC)	14.2	12	12	12	24
Operating Voltage	V (DC)	12~16.8	10.8~12.6	10.8~14	10.8~12.6	
Current	A	2.15	5.0	1.97	5.8	1.5
Speed	rpm	7000	7500	5800	8700	31500
Air Flow	CFM	36.938	56.08	45.49	66.03	18.06
	M <sup>3</sup> /MIN	1.046	1.588	1.288	7.785	0.511
Air Pressure	InchH <sub>2</sub> O	4.764	6.903	3.694	6.806	19.66
	mmH <sub>2</sub> O	121.02	175.35	93.83	172.86	499.36
Noise (1M)	dB(A)	68.0	69	62.0	70.5	38 @0.5M @Half speed
Weight	g	175	180	180	208	230



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