

**DC FAN**  
**PRODUCT GUIDE**

Max-Flow Electric Machinery Co., Ltd.

## ■ PROFILE OF THE COMPANY

### ■ BRAND



### ■ COMPANY NAME

Max-Flow Electric Machinery Co., Ltd.

### ■ ADDRESS

No 19, Lane 349, Hwa Cheng Rd., Hsin Chang City, Taipei Huian, Taiwan, R. O. C.

### ■ TEL NO.

+886-2-85218198

### ■ FAX NO.

+886-2-85218201

### ■ PRODUCTS

- 1.AC FAN .
- 2.DC FAN
- 3.DC BLOWER
- 4.ECFAN .

### ■ EXPORT

TAIWAN, ITALY, KOREA, Israel, Kuwait, Turkey, Spain, ETC. . .

### ■ CAPACITY PER MONTH

AC FAN 50,000 PCS.  
DC FAN 800.000 PCS



Max Flow Electric Machinery Co., Ltd. was established in 1984 and has concentrated on research, development and manufacture for around twenty years.

Max Flow is a leading professional cooling fan manufacturer and exporter Taiwan area.

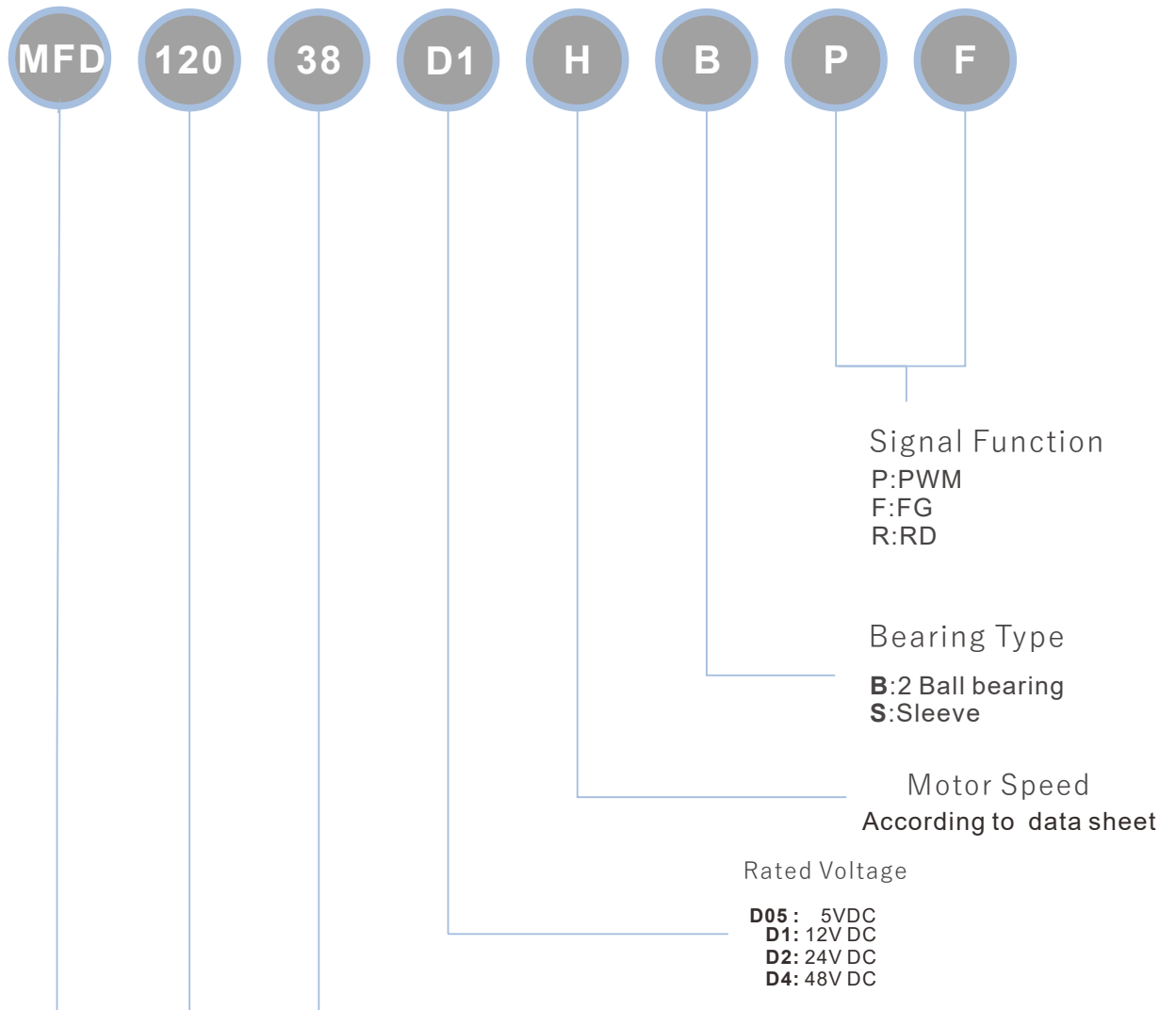
"Customer First, Quality First" principle lets us win a good reputation in computer, electronics and machinery fields.

However, we're not satisfied with this.

We're making our efforts for the R&D (Research and Development) and manufacture of cooling fans.

# DC FAN Part Number Code

※Example :Part No.MFD12038D2-HBPF



Rated Voltage

- D05** : 5VDC
- D1** : 12V DC
- D2** : 24V DC
- D4** : 48V DC

Frame	size	Frame	size	Thick	Size	Thick	Size
15	15*15mm	92	92*92mm	4	4mm	50	50mm
18	18*18mm	100	Ø100mm	5	5mm	51	51mm
20	20*20mm	110	Ø110mm	6	6mm	59	59mm
25	25*25mm	120	120*120mm	7	7mm	60	60mm
30	30*30mm	140	140*140mm	10	10mm	80	80mm
40	40*40mm	150	150*150mm	15	15mm		
50	50*50mm	172	172*172mm	20	20mm		
60	60*60mm	200	200*200mm	25	25mm		
70	70*70mm	220	Ø220mm	38	38mm		
80	80*80mm	Ø250	Ø250mm	40	40mm		

Product Series

- MFD**: DC FAN
- MFB**: DC BLOWER
- MFL**: DC CENTRIFUGE
- MFE**: EC FAN

# Motor function introduction

## FG (Tach output type) Connection Diagram

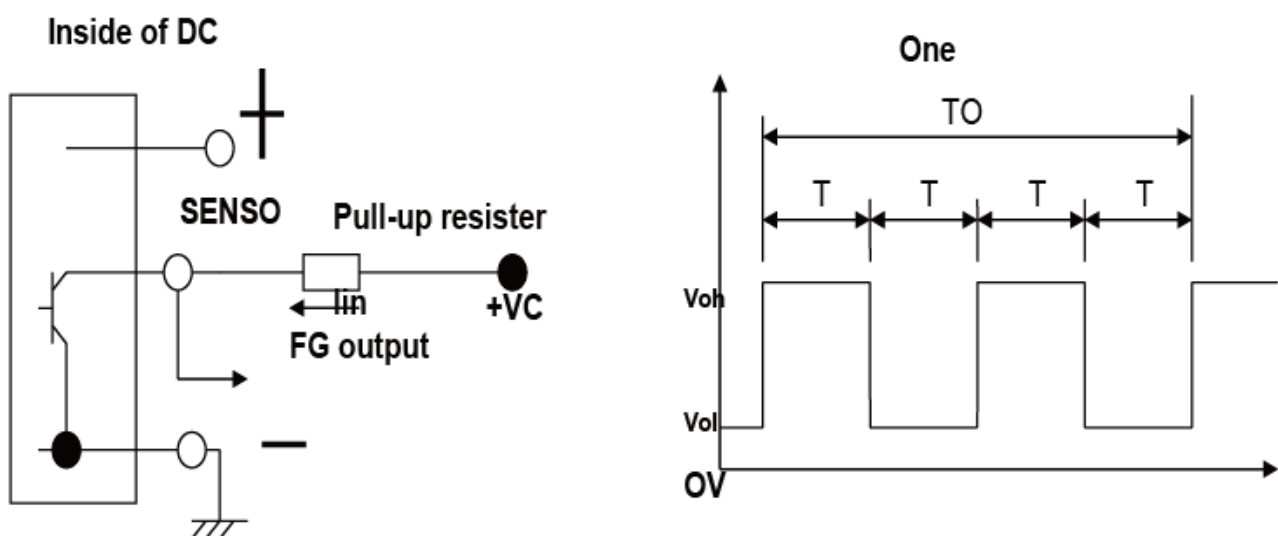
Fan with FG function will create a square wave output.

You can know fan speed by sensing the output wave Frequency.

Most dc fan have four pole. So when fan run for one round, there will be two high level pulse. About other Multipole brushless fan, high level pulse will be different.

But please notice if you want to sense it's output wave, there is a external circuit. Please check the circuit Diagram below.

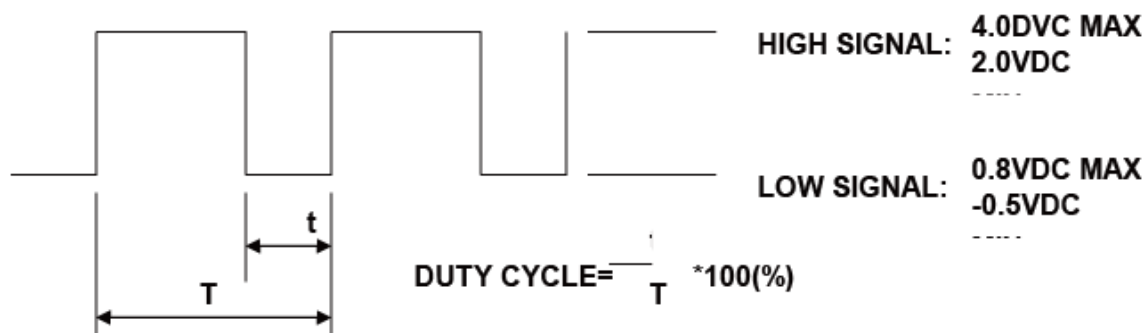
There is no pull-up and VCC value limit. But please notice the Max I<sub>in</sub> have to be small than 20mA.



# Motor function introduction

## PWM CONTROL SIGNAL

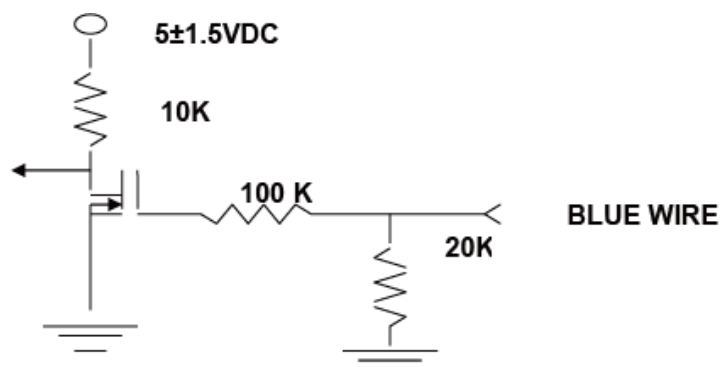
**SIGNAL VOLTAGE RANGE: -0.5~+4.0VDC**



**THE FREQUENCY FOR CONTROL SIGNAL OF THE FAN SHALL BE ABLE TO ACCEPT 16K~32 KHZ.**

- < THE PREFERRED OPERATING POINT FOR THE FAN IS 25K HZ.
- < AT 100% DUTY CYCLE, THE ROTOR WILL SPIN AT MAXIMUM SPEED.
- < AT 0% DUTY CYCLE, THE ROTOR WILL STOP.
- < WHEN CONTROL SIGNAL LEAD DISCONNECTED, THE FAN WILL MAXIMUM SPEED.
- < AT 25K 3%~5% DUTY CYCLE, THE FAN WILL BE ABLE TO START FROM A DEAD STOP.
- < THE FAN SPEED CONTROL IS CLOSED-LOOP.

**PWM CONTROL LEAD WIRE INPUT IMPEDANCE:**



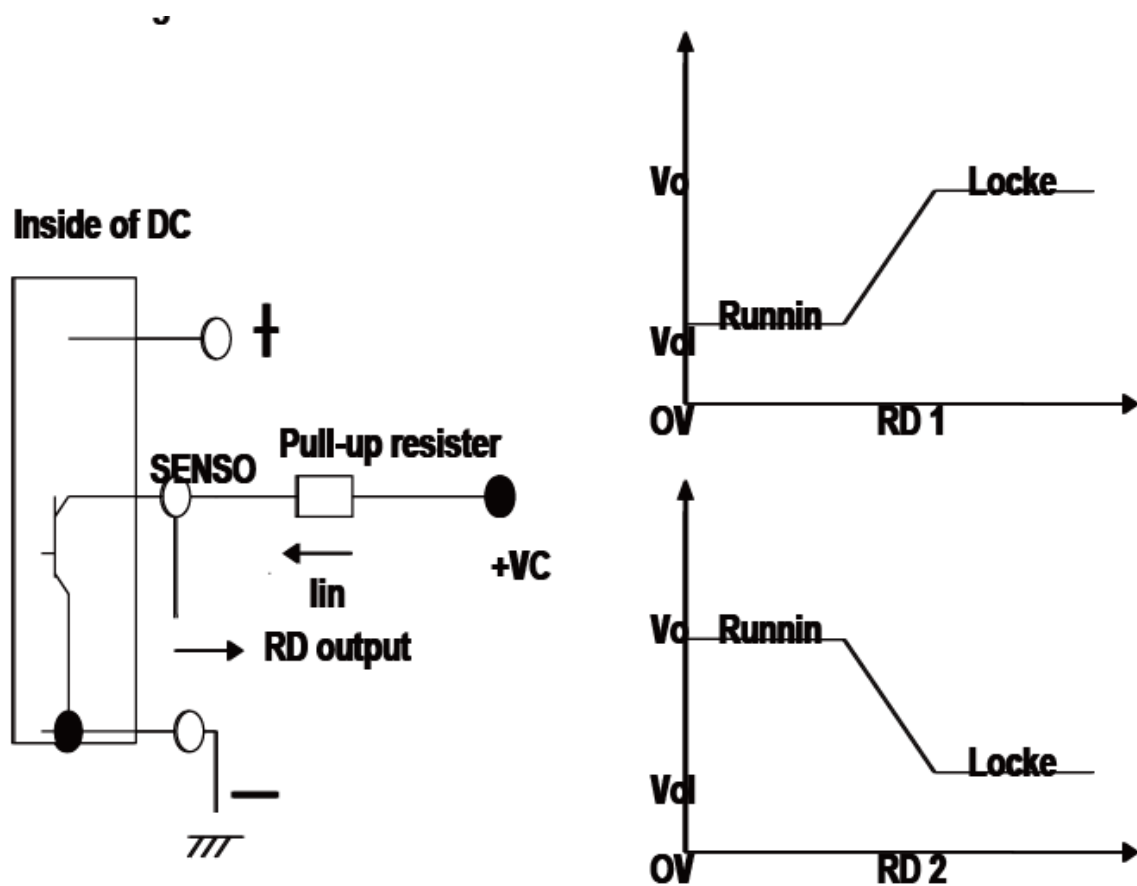
1. THE FAN SPEED WILL DEFAULT TO MAXIMUM WHEN THE SPEED CONTROL INPUT IS LEFT UNCON
2. ABSOLUTELY NO INTERNAL PULL-UP.NECTED.

# Motor function introduction

## RD (Alarm output) connection Diagram

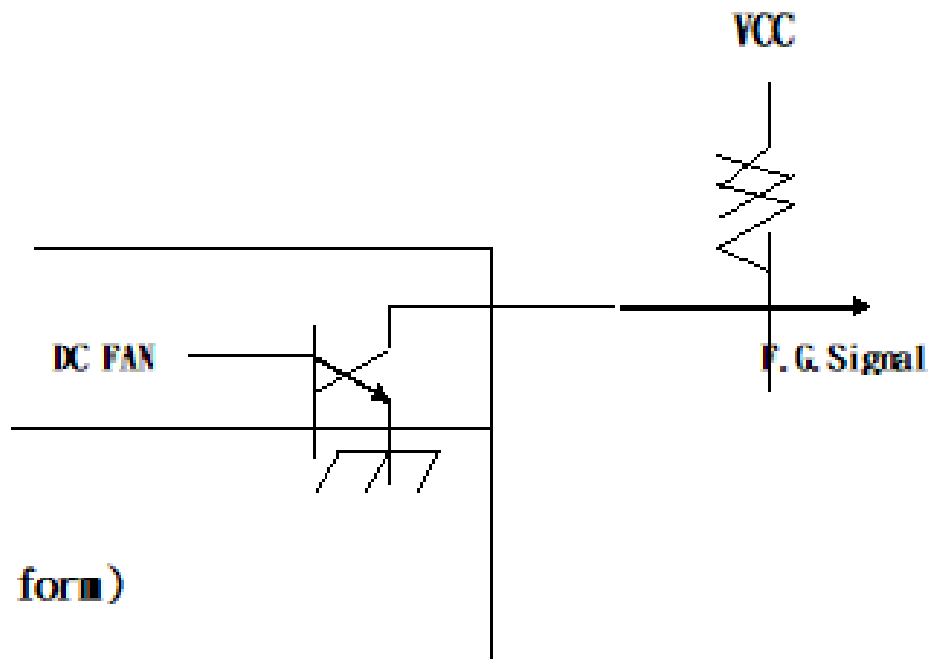
Some fan have RD extra function. There is a alarm signal output when fan stop work.

Please notice there are Two kinds of signal output. Different ustomer will need different alarm type. Please check the diagram below.

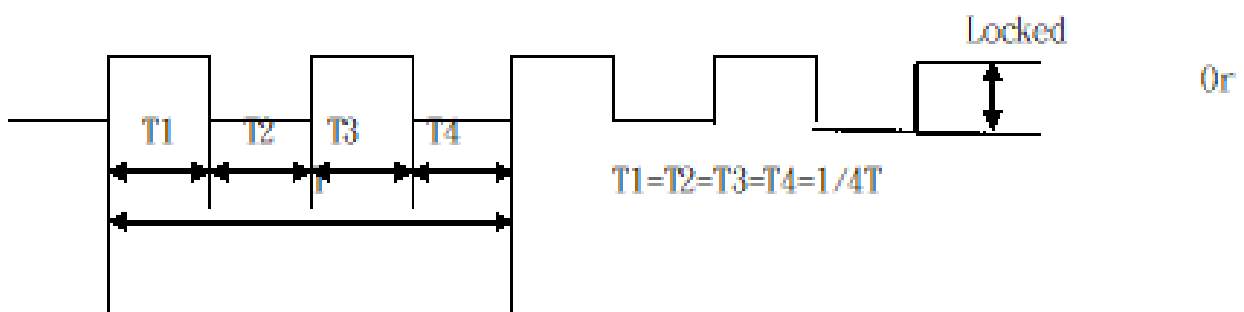


# Motor function introduction

## Frequency test mode



波形 (Wave form)



# Motor function introduction

## ATUO RESTSTA00R

In the event that the fan (impeller) is blocked by expected or unexpected external means, a signal sent will be sent.

from circuit to IC such that the power is switched to stand by status. Meanwhile, a capacitor is charged as a reserved source of power for rebooting the fan.

By applying this function, the temperature of the fan can be kept alower level in case the fan is stopped w ith power on.

## Temperature Control

**The thermal speed control option varies the speed without the need of any external input.**

**This option uses a thermistor to monitor the temperature and regulation the speed accordingly.**

**Sensor sensor ambient temperature rise or fall, will automatically adjust the fan speed**

# MFD1504



Size : 15 x 15 x 4 mm  
 Bearing system: Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Sleeve: 25,000 hours at 25°C  
 Weight: 2 g

### Bearing system

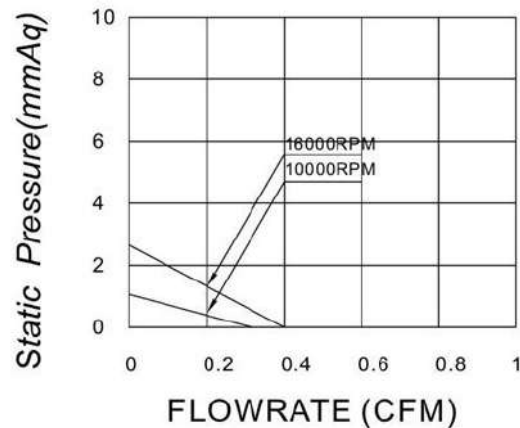
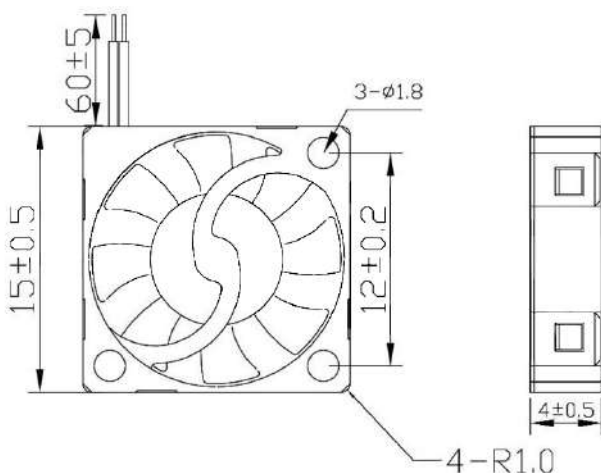
BALL	SLEEVE
	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD1504D05-HS	5	2 - 6	0.04	2	16000	0.4	2.8	< 35

### DIMENSIONS DRAWING & P&Q CURVE



# MFD1804



Size : 18 x 18 x 4 mm  
 Bearing system: Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Sleeve: 25,000 hours at 25°C  
 Weight: 2 g

## Bearing system

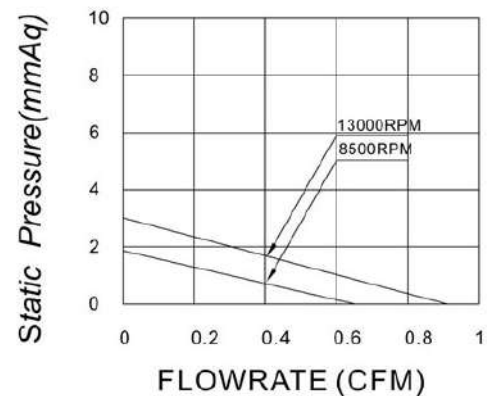
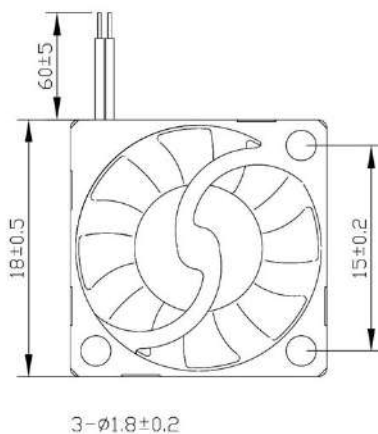
BALL	SLEEVE
	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD1804D05-HS	5	2 - 6	0.05	0.25	13000	0.9	3.5	< 35

## DIMENSIONS DRAWING & P&Q CURVE



# MFD2006



Size : 20 x 20 x 6 mm  
 Bearing system: Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Sleeve: 25,000 hours at 25°C  
 Weight: 3.5 g

## Bearing system

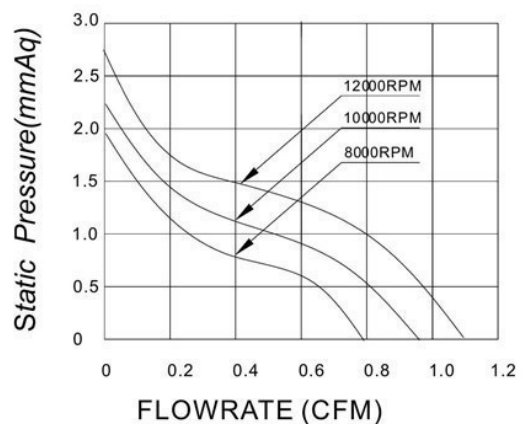
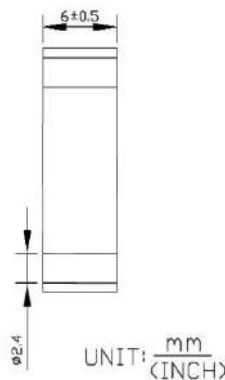
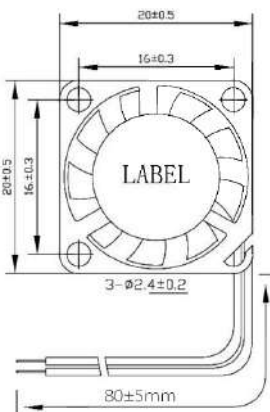
BALL	SLEEVE
	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD2006D05-L	5	1.8 ~ 6	0.06	0.3	8000	0.79	1.95	21.5
MFD2006D05-M			0.09	0.45	10000	0.95	2.22	25.6
MFD2006D05-H			0.11	0.55	12000	1.12	2.69	31.2
MFD2006D1-L	12	8.5 ~ 13.5	0.03	0.36	8000	0.79	1.95	21.5
MFD2006D1-M			0.04	0.48	10000	0.95	2.22	25.6
MFD2006D1-H			0.05	0.6	12000	1.12	2.69	31.2

## DIMENSIONS DRAWING & P&Q CURVE



# MFD2010



Size : 20 x 20 x 10 mm  
 Bearing system: Ball, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating T<sup>e</sup>mp  
 Ball : -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 4 g

## Bearing system

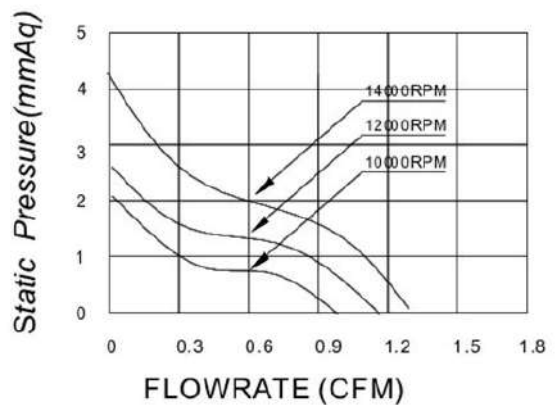
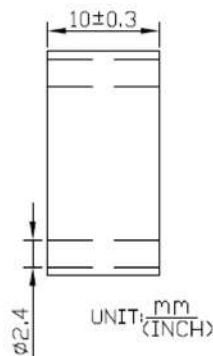
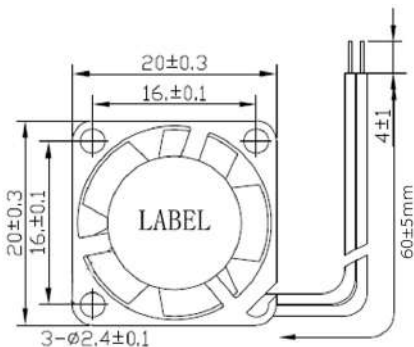
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD2010D05-L	5	1.8 ~ 6	0.06	0.3	10000	1.05	2.16	18.8
MFD2010D05-M			0.08	0.4	12000	1.14	2.65	21.3
MFD2010D05-H			0.13	0.65	14000	1.35	4.3	24.2
MFD2010D1-L	12	8.5 ~ 13.5	0.03	0.36	10000	1.05	2.16	18.8
MFD2010D1-M			0.05	0.6	12000	1.14	2.65	21.3
MFD2010D1-H			0.08	0.96	14000	1.35	4.3	24.2

## DIMENSIONS DRAWING & P&Q CURVE



# MFD2507



Size : 25 x 25 x 7 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 5 g

## Bearing system

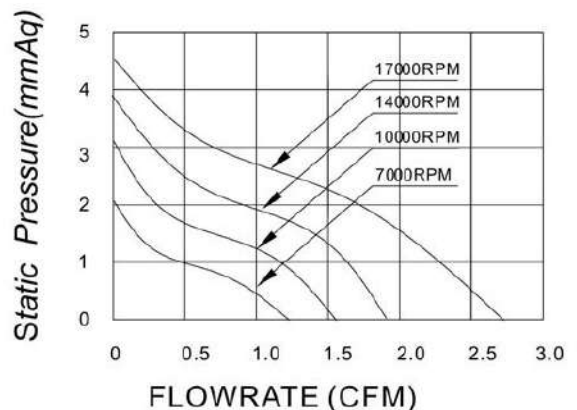
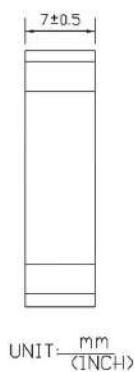
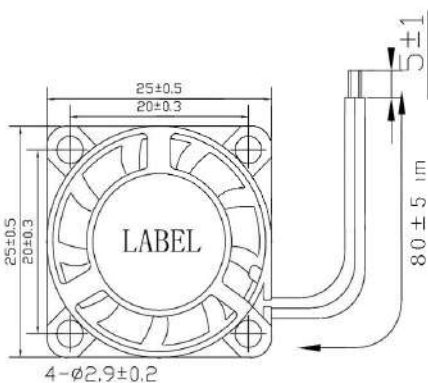
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD2507D05-L	5	3.6 ~ 6.8	0.06	0.3	7000	1.22	2.16	19.6
MFD2507D05-M			0.09	0.45	10000	1.55	3.1	23.5
MFD2507D05-H			0.23	1.15	14000	1.9	3.8	26.4
MFD2507D05-HH			0.28	1.4	17000	2.81	4.5	31.2
MFD2507D1-L	12	6.0 ~ 13.5	0.03	0.3	7000	1.22	2.16	19.6
MFD2507D1-M			0.04	0.45	10000	1.55	3.1	23.5
MFD2507D1-H			0.1	1.15	14000	1.9	3.8	26.4
MFD2507D1-HH			0.12	1.44	17000	2.81	4.5	31.2

## DIMENSIONS DRAWING & P&Q CURVE



# MFD2510



Size : 25 x 25 x 10 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 7 g

### Bearing system

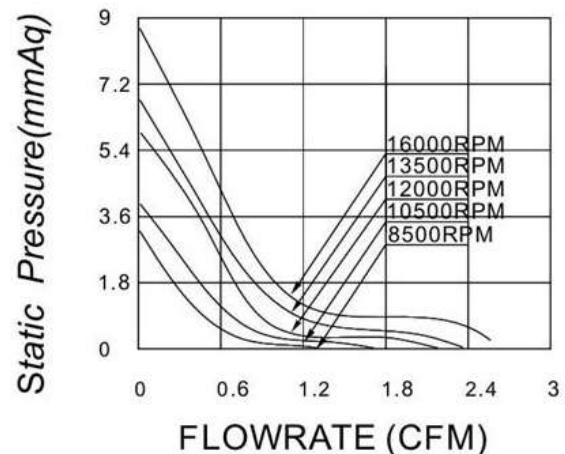
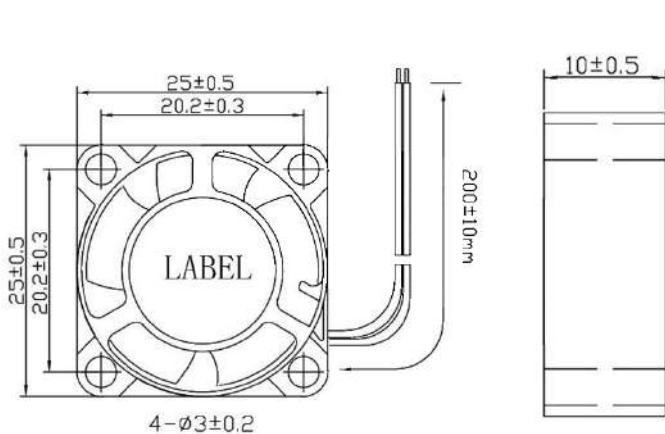
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD2510D05-L	5	3.6 ~ 6.8	0.15	0.55	8500	1.01	1.86	17.8
MFD2510D05-M			0.17	0.85	10500	1.44	3.24	27.2
MFD2510D05-H			0.19	1.15	12000	1.72	3.88	28.9
MFD2510D05-HH			0.22	1.5	13500	2.35	6.87	32.9
MFD2510D05-VH			0.24	1.2	16000	2.63	8.73	37.6
MFD2510D1-L	12	6.0 ~ 13.5	0.06	0.36	8500	1.01	1.86	17.8
MFD2510D1-M			0.07	0.72	10500	1.44	3.24	27.2
MFD2510D1-H			0.08	1.08	12000	1.72	3.88	28.9
MFD2510D1-HH			0.09	1.08	13500	2.35	6.87	32.9
MFD2510D1-VH			0.1	1.2	16000	2.63	8.73	37.6

### DIMENSIONS DRAWING & P&Q CURVE



# MFD3007



Size : 30 x 30 x 07 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 6.2 g

### Bearing system

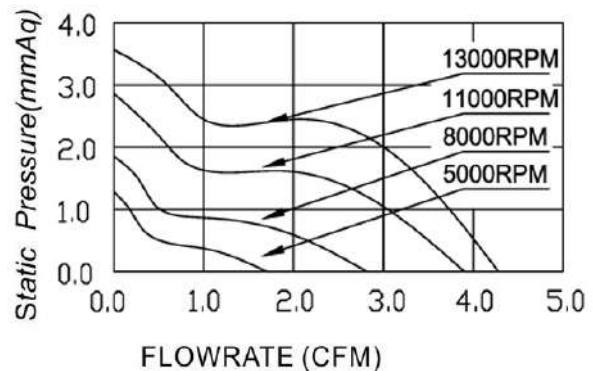
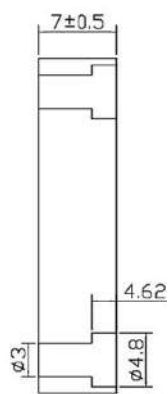
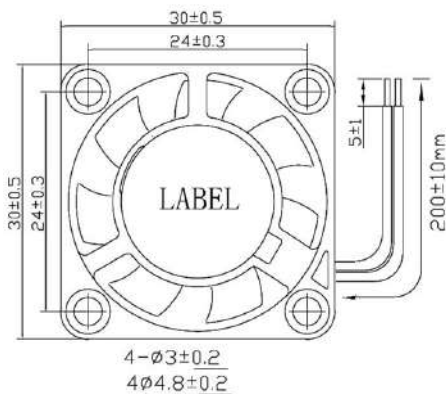
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD3007D05-L	5	1.8 ~ 6	0.04	0.72	6000	1.99	1.71	25.5
MFD3007D05-M			0.08	0.84	8000	2.66	2.7	27.4
MFD3007D05-H			0.12	0.96	10000	3.46	4.13	30.1
MFD3007D05-HH			0.22	1.08	11000	3.78	4.94	32
MFD3007D05-VH			0.24	1.2	13000	4.25	8.25	34.9
MFD3007D1-L	12	8.5 ~ 13.5	0.03	0.72	6000	1.99	1.71	25.5
MFD3007D1-M			0.03	0.84	8000	2.66	2.7	27.4
MFD3007D1-H			0.05	0.96	10000	3.46	4.13	30.1
MFD3007D1-HH			0.07	1.08	11000	3.78	4.94	32
MFD3007D1-VH			0.1	1.2	13000	4.25	8.25	34.9

### DIMENSIONS DRAWING & P&Q CURVE



# MFD3007R



Size : Ø30 x 10 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 6.2 g

### Bearing system

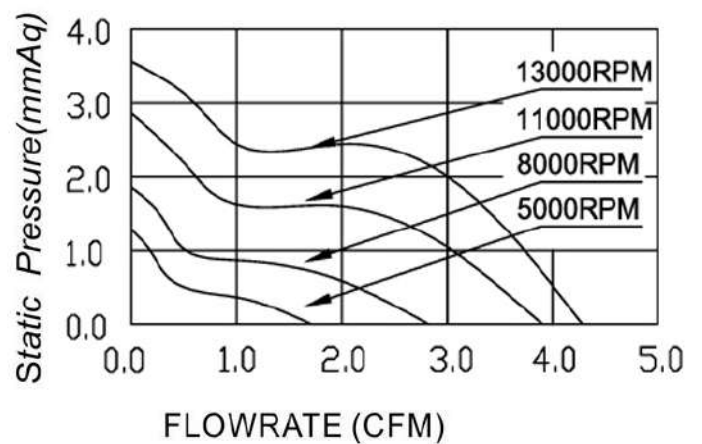
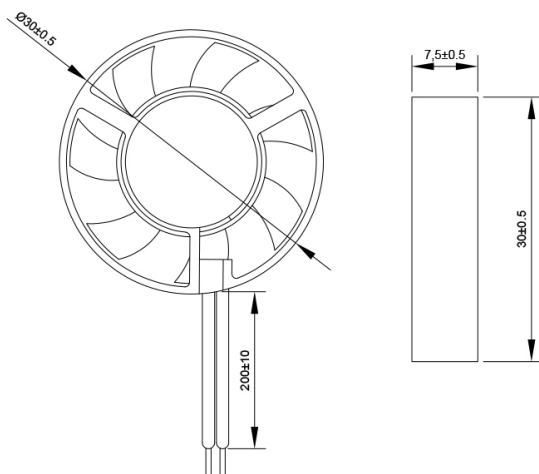
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD3007RD05-L	5	1.8 ~ 6	0.06	0.3	6000	1.99	1.71	25.5
MFD3007RD05-M			0.08	0.4	8000	2.66	2.7	27.4
MFD3007RD05-H			0.12	0.6	10000	3.46	4.13	30.1
MFD3007RD05-HH			0.22	1.08	11000	3.78	4.94	32
MFD3007RD05-VH			0.24	1.2	13000	4.25	8.25	34.9
MFD3007RD1-L	12	8.5 ~ 13.5	0.03	0.36	6000	1.99	1.71	25.5
MFD3007RD1-M			0.04	0.48	8000	2.66	2.7	27.4
MFD3007RD1-H			0.05	0.6	10000	3.46	4.13	30.1
MFD3007RD1-HH			0.07	0.84	11000	3.78	4.94	32
MFD3007RD1-VH			0.1	1.2	13000	4.25	8.25	34.9

### DIMENSIONS DRAWING & P&Q CURVE



# MFD3010



Size : 30 x 30 x 10 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 7.6 g

### Bearing system

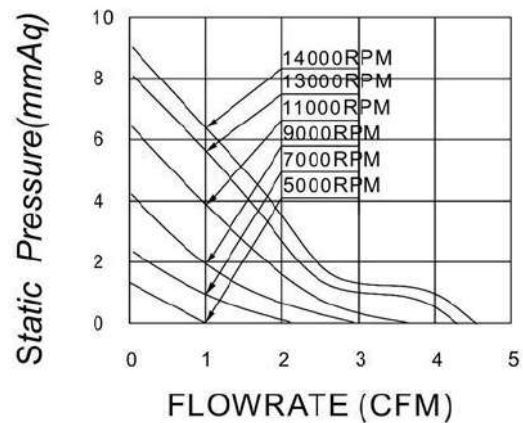
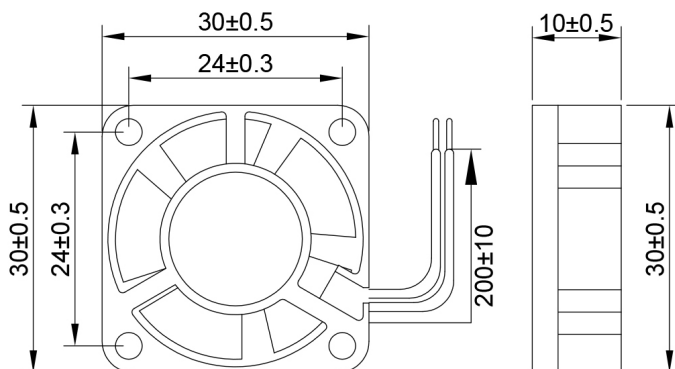
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD3010D05-L	5	1.8 ~ 6	0.14	0.72	5000	0.98	1.22	25.5
MFD3010D05-M			0.17	0.84	7000	2.25	2.5	27.4
MFD3010D05-H			0.19	0.96	9000	2.95	4.25	30.1
MFD3010D05-HH			0.22	1.08	11000	3.61	6.28	32
MFD3010D05-VH			0.24	1.2	13000	4.25	8.25	34.9
MFD3010D1-L	12	8.5 ~ 13.5	0.06	0.72	5000	0.98	1.22	25.5
MFD3010D1-M			0.07	0.84	7000	2.25	2.5	27.4
MFD3010D1-H			0.08	0.96	9000	2.95	4.25	30.1
MFD3010D1-HH			0.09	1.08	11000	3.61	6.28	32
MFD3010D1-VH			0.1	1.2	13000	4.25	8.25	34.9

### DIMENSIONS DRAWING & P&Q CURVE



# MFD3010R



Size : Ø30 x 10 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 7.6 g

### Bearing system

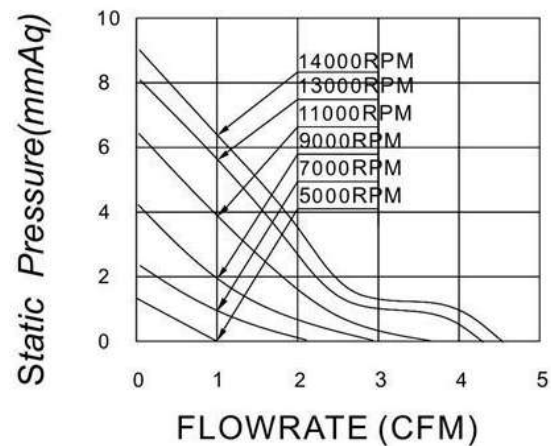
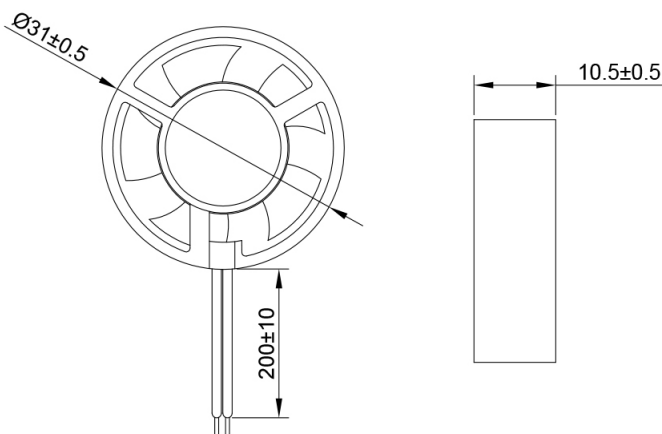
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD3010RD05-L	5	1.8 ~ 6	0.14	0.72	5000	0.98	1.22	15.5
MFD3010RD05-M			0.17	0.84	7000	2.25	2.5	22.4
MFD3010RD05-H			0.19	0.96	9000	2.95	4.25	26.3
MFD3010RD05-HH			0.22	1.08	11000	3.61	6.28	32
MFD3010RD05-VH			0.24	1.2	13000	4.25	8.25	34.9
MFD3010RD1-L	12	8.5 ~13.5	0.06	0.72	5000	0.98	1.22	15.5
MFD3010RD1-M			0.07	0.84	7000	2.25	2.5	22.4
MFD3010RD1-H			0.08	0.96	9000	2.95	4.25	26.3
MFD3010RD1-HH			0.09	1.08	11000	3.61	6.28	32
MFD3010RD1-VH			0.1	1.2	13000	4.25	8.25	34.9

### DIMENSIONS DRAWING & P&Q CURVE



# MFD3010D



Size : 30 x 30 x 10 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 7.6 g

### Bearing system

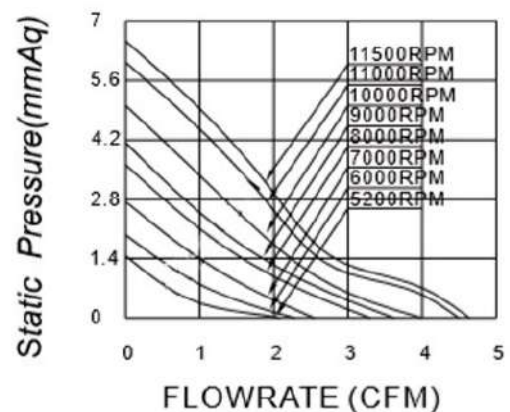
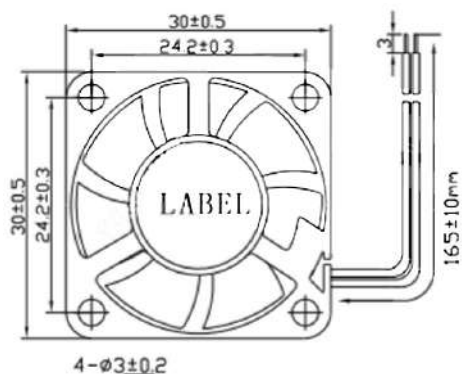
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Inp Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD3010DD05-L	5	1.8 ~ 6	0.05	0.24	5000	2.21	1.49	20.8
MFD3010DD05-LM			0.07	0.36	6000	2.39	1.98	22.7
MFD3010DD05-M			0.1	0.48	7000	2.55	2.72	24
MFD3010DD05-LH			0.1	0.5	8000	3.33	3.55	26.5
MFD3010DD05-H			0.14	0.72	9000	3.63	4.09	28.8
MFD3010DD05-HL			0.17	0.84	10000	3.99	4.94	30.4
MFD3010DD05-HH			0.22	1.08	11000	4.49	6.05	34
MFD3010DD1-L	12	8.5 ~ 13.5	0.02	0.24	5000	2.21	1.49	20.8
MFD3010DD1-LM			0.03	0.36	6000	2.39	1.98	22.7
MFD3010DD1-M			0.04	0.48	7000	2.55	2.72	24
MFD3010DD1-LH			0.05	0.6	8000	3.33	3.55	26.5
MFD3010DD1-H			0.06	0.72	9000	3.63	4.09	28.8
MFD3010DD1-HL			0.07	0.84	10000	3.99	4.94	30.4
MFD3010DD1-HH			0.09	1.08	11000	4.49	6.05	34

### DIMENSIONS DRAWING & P&Q CURVE



# MFD3010E



Size : Ø30 x 10 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 7.6 g

### Bearing system

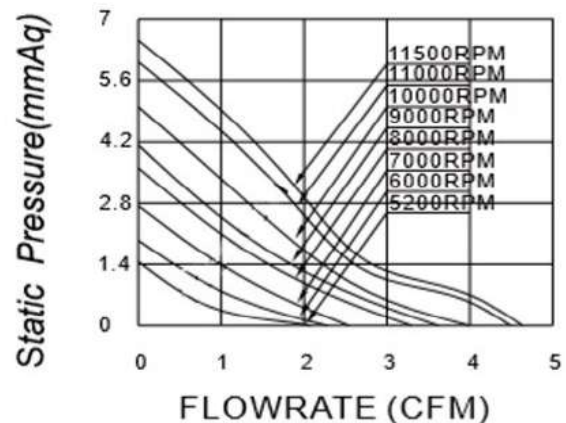
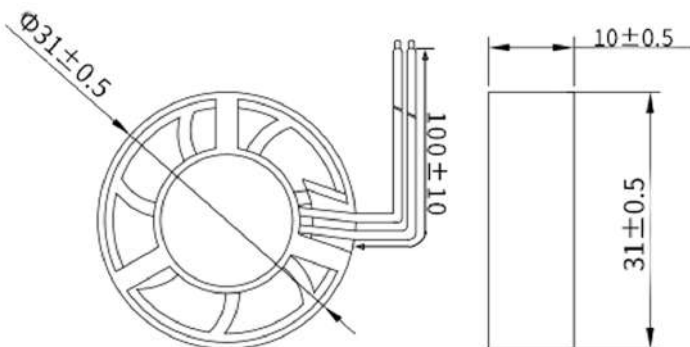
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD3010ED05-L	5	1.8 ~ 6	0.05	0.24	5000	2.21	1.49	20.8
MFD3010ED05-LM			0.07	0.36	6000	2.39	1.98	22.7
MFD3010ED05-M			0.1	0.48	7000	2.55	2.72	24
MFD3010ED05-LH			0.1	0.5	8000	3.33	3.55	26.5
MFD3010ED05-H			0.14	0.72	9000	3.63	4.09	28.8
MFD3010ED05-HL			0.17	0.84	10000	3.99	4.94	30.4
MFD3010ED05-HH			0.22	1.08	11000	4.49	6.05	34
MFD3010ED1-L	12	8.5 ~ 13.5	0.02	0.24	5000	2.21	1.49	20.8
MFD3010ED1-LM			0.03	0.36	6000	2.39	1.98	22.7
MFD3010ED1-M			0.04	0.48	7000	2.55	2.72	24
MFD3010ED1-LH			0.05	0.6	8000	3.33	3.55	26.5
MFD3010ED1-H			0.06	0.72	9000	3.63	4.09	28.8
MFD3010ED1-HL			0.07	0.84	10000	3.99	4.94	30.4
MFD3010ED1-HH			0.09	1.08	11000	4.49	6.05	34

### DIMENSIONS DRAWING & P&Q CURVE



# MFD3015



Size : 30 x 30 x 15 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 8 g

### Bearing system

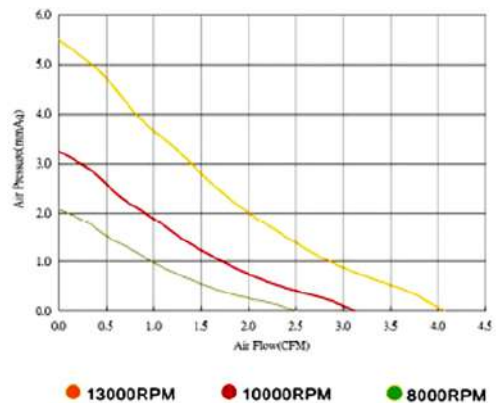
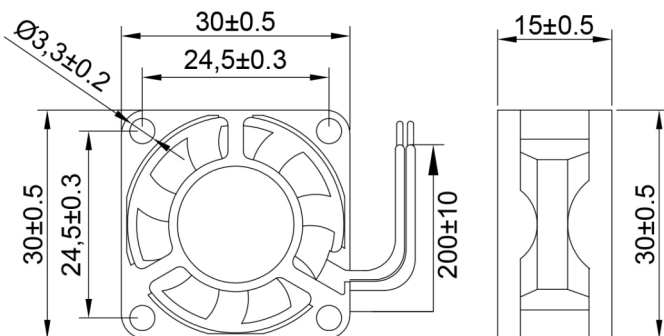
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD3015D05-L	5	1.8 ~ 6	0.16	0.8	6000	2.3	2.56	20
MFD3015D05-M			0.24	1.2	8000	2.89	3.08	24.6
MFD3015D05-H			0.32	1.6	10000	3.9	4.2	31
MFD3015D05-HH			0.42	2.1	12000	4.48	6.95	35.2
MFD3015D1-L	12	8.5 ~ 13.5	0.04	0.48	6000	2.3	2.56	20
MFD3015D1-M			0.08	0.96	8000	2.89	3.08	24.6
MFD3015D1-H			0.1	1.2	10000	3.9	4.2	31
MFD3015D1-HH			0.14	1.68	12000	4.48	6.95	35.2

### DIMENSIONS DRAWING & P&Q CURVE



# MFD3510



Size : 35 x 35 x10 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 9 g

### Bearing system

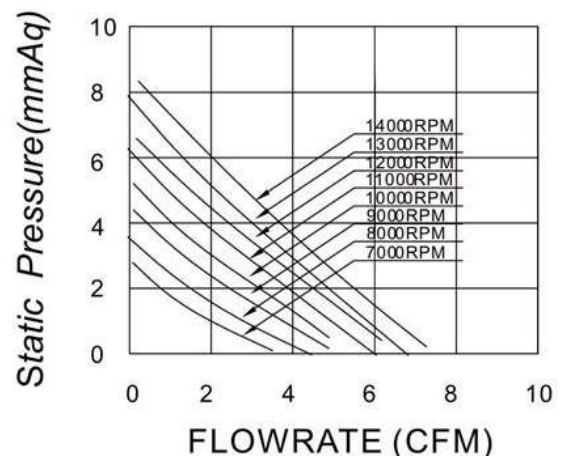
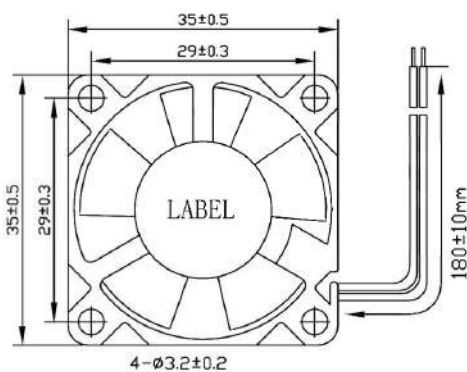
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB - A
MFD3510D05-M	5	1.8 ~ 6	0.14	0.7	7000	3.91	2.84	28
MFD3510D05-M L			0.16	0.8	8000	4.5	3.51	31
MFD3510D05-H			0.18	0.9	9000	5	4.31	34.4
MFD3510D05-LH			0.2	1	10000	5.32	5.12	37.1
MFD3510D05-HH			0.22	1.1	11000	6.06	6.11	39.4
MFD3510D05-HL			0.24	1.2	12000	6.39	6.77	41
MFD3510D05-VH			0.26	1.3	13000	6.87	7.97	42.6
MFD3510D05-HV			0.28	1.4	14000	7.41	8.74	44.7
MFD3510D1-M			12	8.5 ~ 13.5	0.07	0.8	7000	2.84
MFD3510D1-M L	0.08	0.9			8000	3.51	3.51	31
MFD3510D1-H	0.08	1			9000	4.31	4.31	34.4
MFD3510D1-LH	0.09	1.1			10000	5.12	5.12	37.1
MFD3510D1-HH	0.1	1.2			11000	6.11	6.11	39.4
MFD3510D1-HL	0.11	1.3			12000	6.77	6.77	41
MFD3510D1-VH	0.13	1.5			13000	7.97	7.97	42.6
MFD3510D1-VL	0.13	1.6			14000	8.74	8.74	44.7

### DIMENSIONS DRAWING & P&Q CURVE



# MFD3510R



Size : Ø 35 x10 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 9 g

### Bearing system

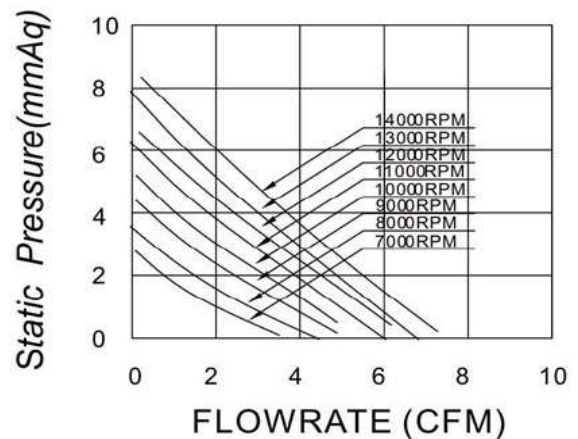
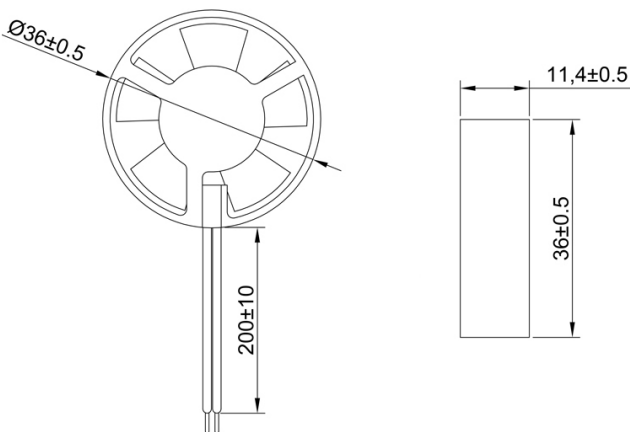
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise		
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB - A		
MFD3510RD05-M	5	1.8 ~ 6	0.14	0.7	7000	3.91	2.84	28		
MFD3510RD05-ML			0.16	0.8	8000	4.5	3.51	31		
MFD3510RD05-H			0.18	0.9	9000	5	4.31	34.4		
MFD3510RD05-LH			0.2	1	10000	5.32	5.12	37.1		
MFD3510RD05-HH			0.22	1.1	11000	6.06	6.11	39.4		
MFD3510RD05-HL			0.24	1.2	12000	6.39	6.77	41		
MFD3510RD05-VH			0.26	1.3	13000	6.87	7.97	42.6		
MFD3510RD05-HV			0.28	1.4	14000	7.41	8.74	44.7		
MFD3510RD1-M			12	8.5 ~ 13.5	0.07	0.8	7000	2.84	2.84	28
MFD3510RD1-ML					0.08	0.9	8000	3.51	3.51	31
MFD3510RD1-H	0.08	1			9000	4.31	4.31	34.4		
MFD3510RD1-LH	0.09	1.1			10000	5.12	5.12	37.1		
MFD3510RD1-HH	0.1	1.2			11000	6.11	6.11	39.4		
MFD3510RD1-HL	0.11	1.3			12000	6.77	6.77	41		
MFD3510RD1-VH	0.13	1.5			13000	7.97	7.97	42.6		
MFD3510RD1-HV	0.13	1.6			14000	8.74	8.74	44.7		

### DIMENSIONS DRAWING & P&Q CURVE



# MFD4007



Size : 40 x 40 x 7 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 14.5 g

### Bearing system

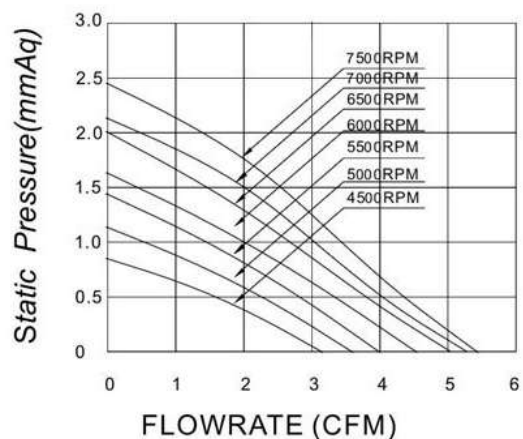
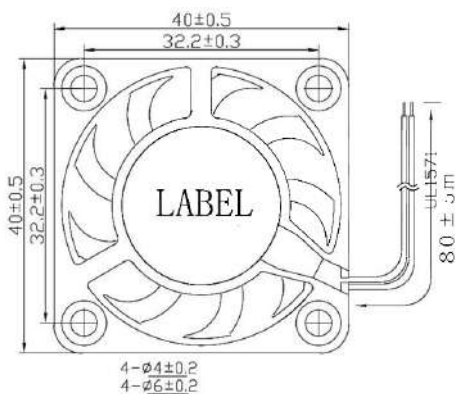
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD4007D05-L	5	1.8 ~ 6	0.06	0.3	4500	3.14	0.84	23.5
MFD4007D05-LM			0.09	0.45	5000	3.67	1.17	24.5
MFD4007D05-ML			0.11	0.55	5500	3.96	1.4	25.6
MFD4007D05-M			0.12	0.62	6000	4.6	1.65	27.5
MFD4007D05-LH			0.14	0.7	6500	5.06	2.02	29.3
MFD4007D05-H			0.16	0.8	7000	5.31	2.17	30.4
MFD4007D05-HH			0.2	1	7500	5.37	2.4	31.5
MFD4007D1-L	12	8.5 ~ 13.5	0.04	0.48	4500	3.14	0.84	23.5
MFD4007D1-LM			0.05	0.6	5000	3.67	1.17	24.5
MFD4007D1-ML			0.06	0.72	5500	3.96	1.4	25.6
MFD4007D1-M			0.07	0.84	6000	4.6	1.65	27.5
MFD4007D1-H			0.08	0.96	6500	5.06	2.02	29.3
MFD4007D1-HL			0.09	1.08	7000	5.31	2.17	30.4
MFD4007D1-HH			0.1	1.2	7500	5.37	2.4	31.5

### DIMENSIONS DRAWING & P&Q CURVE



# MFD4010



Size : 40 x 40 x 10 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp □  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 15 g

## Bearing system

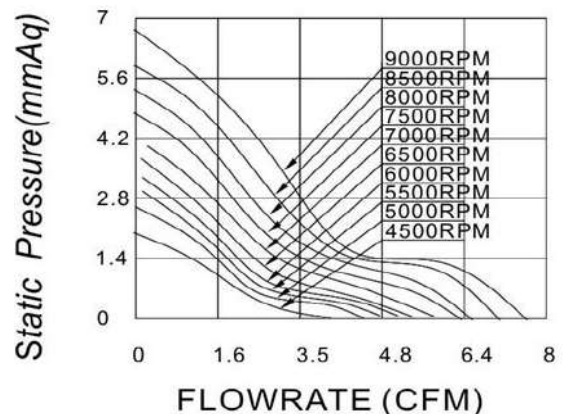
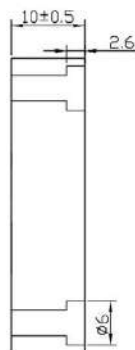
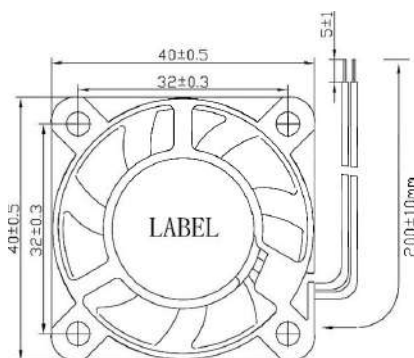
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage R	Rated Current	Rated In Power	Speed	Maxim Air Flo	Maxim Air Pres	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A
MFD4010D05-L	5	1.8 ~ 6	0.072	0.36	4500	3.39	2.09	24.6
MFD4010D05-LV			0.096	0.48	5000	4.51	2.65	28.5
MFD4010D05-LM			0.12	0.6	5500	4.83	3.03	30
MFD4010D05-ML			0.144	0.72	6000	5.16	3.43	31
MFD4010D05-M			0.168	0.84	6500	5.35	3.81	33.4
MFD4010D05-H			0.19	0.96	7000	5.84	4.19	35.3
MFD4010D05-HL			0.22	1.08	7500	6.3	4.72	37.1
MFD4010D05-HH			0.24	1.2	8000	6.51	5.26	38
MFD4010D05-VH			0.26	1.32	8500	7.02	5.92	39.5
MFD4010D1-L			12	8.5 ~ 13.5	0.03	0.36	4500	3.93
MFD4010D1-LV	0.04	0.48			5000	4.51	2.65	28.5
MFD4010D1-LM	0.05	0.6			5500	4.83	3.3	30
MFD4010D1-ML	0.06	0.72			6000	5.16	3.43	31
MFD4010D1-M	0.07	0.84			6500	5.35	3.81	33.4
MFD4010D1-H	0.08	0.96			7000	5.84	4.19	35.3
MFD4010D1-HL	0.09	1.08			7500	6.3	4.72	37.1
MFD4010D1-HH	0.1	1.2			8000	6.51	5.26	38
MFD4010D1-VH	0.11	1.32			8500	7.02	5.92	39.5

## DIMENSIONS DRAWING & P&Q CURVE



# MFD4010B



Size : 40 x 40 x 10 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 16 g

### Bearing system

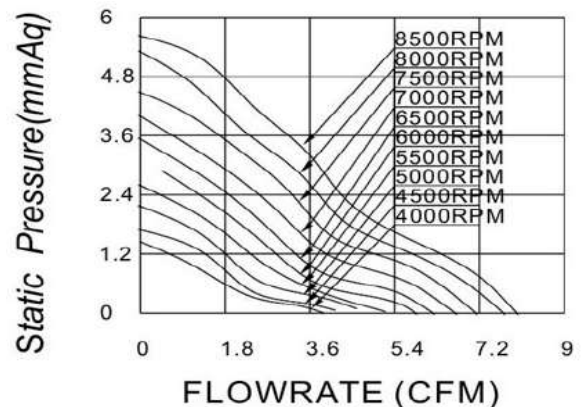
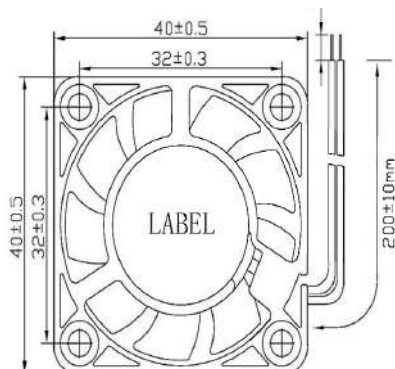
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage Range	Operating Voltage Range	Rated Current	Rated In Power	Speed	Maxim Air Flo	Maximum Air Press	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A
MFD4010BD05-L	1.8 ~ 6		0.08	0.4	4500	4.31	1.71	24.2
MFD4010BD05-LV			0.13	0.65	5000	4.81	2.21	27.3
MFD4010BD05-LM			0.14	0.72	5500	5.23	2.54	29.2
MFD4010BD05-ML			0.17	0.84	6000	5.8	3.06	31.1
MFD4010BD05-M 5			0.168	0.84	6500	6.24	3.5	33.4
MFD4010BD05-H			0.19	0.96	7000	6.59	3.91	35.1
MFD4010BD05-HL			0.22	1.08	7500	7.1	4.51	37.1
MFD4010BD05-HH			0.24	1.2	8000	7.73	5.22	39.1
MFD4010BD05-VH			0.26	1.32	8500	8.02	5.57	40.2
MFD4010BD1-L			8.5 ~ 13.5		0.03	0.4	4500	4.31
MFD4010BD1-LV	0.05	0.65			5000	4.81	2.21	27.3
MFD4010BD1-LM	0.06	0.72			5500	5.23	2.54	29.2
MFD4010BD1-ML	0.07	0.84			6000	5.8	3.06	31.1
MFD4010BD1-M 12	0.07	0.84			6500	6.24	3.5	33.4
MFD4010BD1-H	0.08	0.96			7000	6.59	3.91	35.1
MFD4010BD1-HL	0.09	1.08			7500	7.1	4.51	37.1
MFD4010BD1-HH	0.1	1.2			8000	7.73	5.22	39.1
MFD4010BD1-VH	0.11	1.32			8500	8.02	5.57	40.2

### DIMENSIONS DRAWING & P&Q CURVE



# MFD4010C



Size : 40 x 40 x 10 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 15 g

### Bearing system

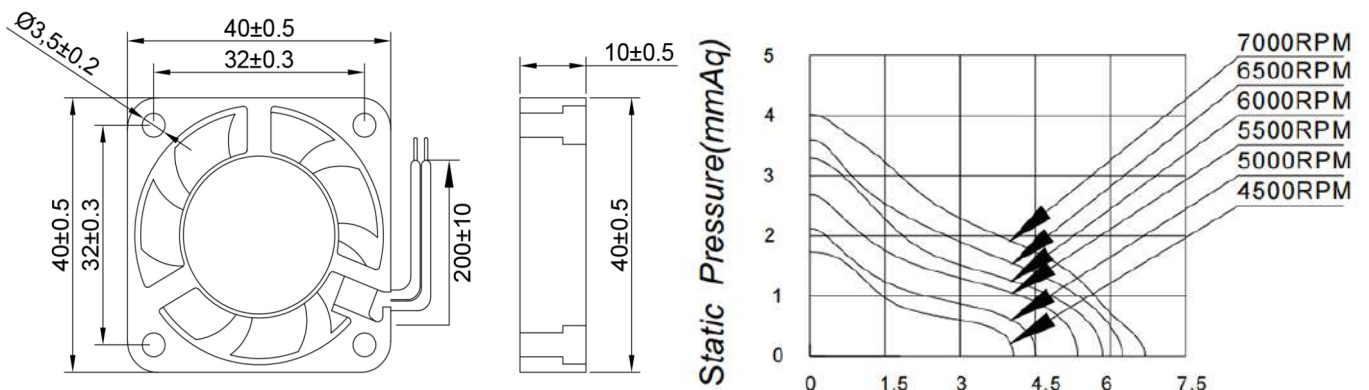
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD4010CD05-L	5	1.8 ~ 6	0.072	0.36	4500	4.06	1.73	25.1
MFD4010CD05-LV			0.096	0.48	5000	4.51	2.12	26.2
MFD4010CD05-LM			0.12	0.6	5500	5.34	2.68	28.1
MFD4010CD05-M			0.144	0.72	6000	5.84	3.29	29.6
MFD4010CD05-H			0.168	0.84	6500	6.23	3.6	31.2
MFD4010CD05-HH			0.192	0.96	7000	6.68	4.02	33.7
MFD4010CD1-L	12	8.5 ~ 13.5	0.03	0.36	4500	4.06	1.73	25.1
MFD4010CD1-LV			0.04	0.48	5000	4.51	2.12	26.2
MFD4010CD1-LM			0.05	0.6	5500	5.34	2.68	28.1
MFD4010CD1-M			0.06	0.72	6000	5.84	3.29	29.6
MFD4010CD1-H			0.07	0.84	6500	6.23	3.6	31.2
MFD4010CD1-HH			0.08	0.96	7000	6.68	4.02	33.7

### DIMENSIONS DRAWING & P&Q CURVE



# MFD4012



Size : 40 x 40 x 12mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 16 g

### Bearing system

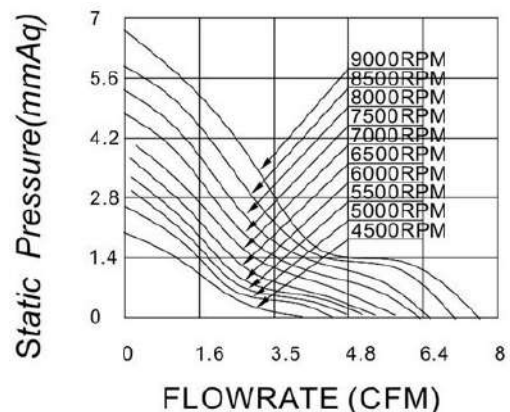
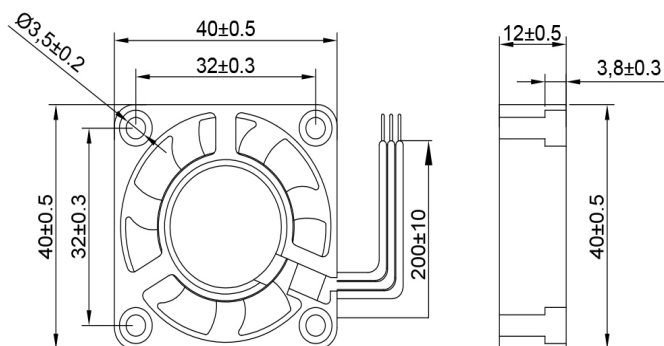
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage R	Rated Current	Rated In Power	Speed	Maxim Air Flo	Maxim Air Pres	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A
MFD4012D05-L	5	1.8 ~ 6	0.072	0.36	4500	3.93	2.09	24.6
MFD4012D05-LV			0.096	0.48	5000	4.51	2.65	28.5
MFD4012D05-LM			0.12	0.6	5500	4.83	3.03	30
MFD4012D05-ML			0.144	0.72	6000	5.16	3.43	31
MFD4012D05-M			0.168	0.84	6500	5.35	3.81	33.4
MFD4012D05-H			0.19	0.96	7000	5.84	4.19	35.3
MFD4012D05-HL			0.22	1.08	7500	6.3	4.72	37.1
MFD4012D05-HH			0.24	1.2	8000	6.51	5.26	38
MFD4012D05-VH			0.26	1.32	8500	7.02	5.92	39.5
MFD4012D1-L	12		8.5 ~ 13	0.03	0.36	4500	3.93	2.09
MFD4012D1-LV		0.04		0.48	5000	4.51	2.65	28.5
MFD4012D1-LM		0.05		0.6	5500	4.83	3.3	30
MFD4012D1-LN		0.06		0.72	6000	5.16	3.43	31
MFD4012D1-NN		0.07		0.84	6500	5.35	3.81	33.4
MFD4012D1-HE		0.08		0.96	7000	5.84	4.19	35.3
MFD4012D1-HEL		0.09		1.08	7500	6.3	4.72	37.1
MFD4012D1-HEH		0.1		1.2	8000	6.51	5.26	38
MFD4012D1-VH		0.11		1.32	8500	7.02	5.92	39.5

### DIMENSIONS DRAWING & P&Q CURVE



# MFD4015



Size : 40 x 40 x 15mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 25 g

### Bearing system

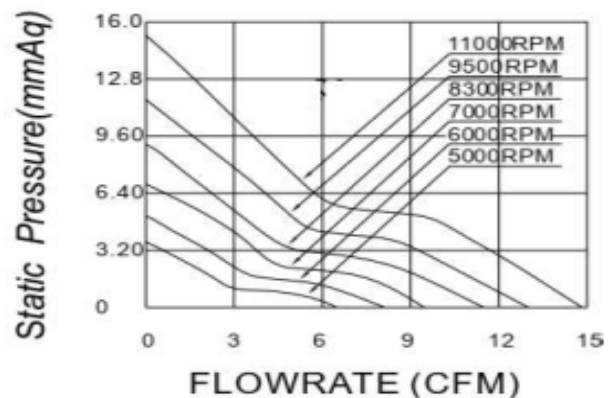
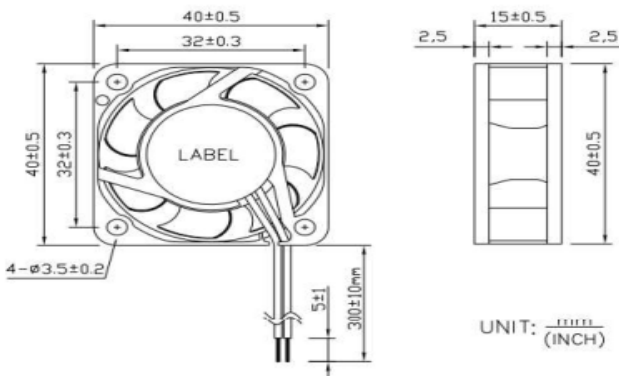
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL PART NO.	Rated Voltage VDC	Operating Voltage Range VDC	Rated Current Amp	Rated Input Power Watt	Output Speed R.P.M	Maximum Air Flow CFM	Maximum Air Pressure mm H <sub>2</sub> O	Noise DB - A
MFD4015D05-I	5	1.8 ~ 6	0.08	0.75	5000	6.5	3.67	18.5
MFD4015D05-LM			0.22	1.1	6000	8.12	5.12	24.5
MFD4015D05-M			0.24	1.2	7000	9.46	6.92	28.5
MFD4015D05-F			0.32	1.6	8300	11.48	9.13	32
MFD4015D05-FH			0.38	1.9	9500	13	11.66	36.5
MFD4015D1-L	12	7.5 ~ 13.5	0.04	0.72	5000	6.5	3.67	18.5
MFD4015D1-LM			0.05	1.08	6000	8.12	5.12	24.5
MFD4015D1-M			0.07	1.2	7000	9.46	8.92	28.5
MFD4015D1-H			0.13	1.56	8300	11.48	9.13	32
MFD4015D1-HH			0.16	1.92	9500	13	11.66	36.5
MFD4015D1-VH	0.25	3	11000	14.83	15.26	41.5		
MFD4015D2-L	24	18 ~ 26.5	0.05	1.2	5000	6.5	3.67	18.5
MFD4015D2-LM			0.06	1.44	6000	8.12	5.12	24.5
MFD4015D2-M			0.08	1.92	7000	9.46	6.92	28.5
MFD4015D2-H			0.09	2.16	8300	11.48	9.13	32
MFD4015D2-HH			0.1	2.4	9500	13	11.66	36.5
MFD4015D2-VH	0.12	2.88	11000	14.83	15.26	41.5		

### DIMENSIONS DRAWING & P&Q CURVE



# MFD4020



Size : 40 x 40 x 20mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 25 g

### Bearing system

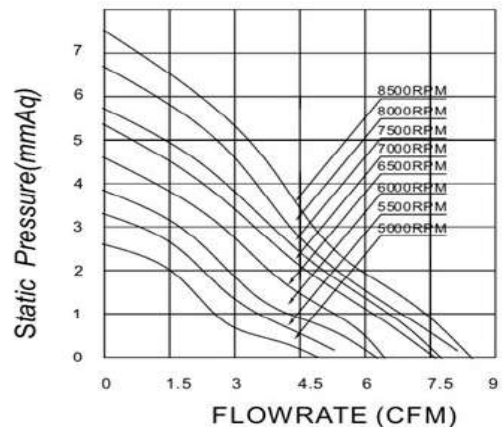
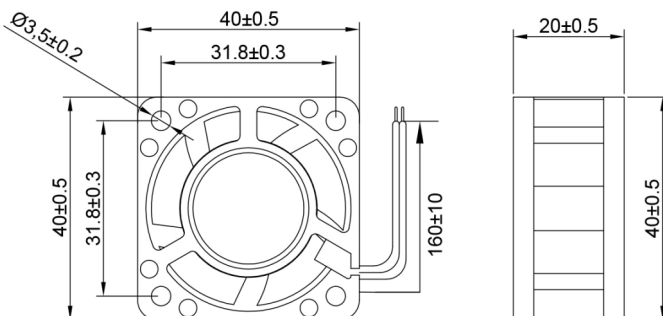
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A
MFD4020D05-L	5	1.8 ~ 6	0.15	0.72	5000	5.19	2.62	20.9
MFD4020D05-LM			0.17	0.84	6000	6.41	3.87	26.7
MFD4020D05-M			0.19	0.96	6500	6.87	4.6	29.1
MFD4020D05-H			0.22	1.08	7500	7.9	5.78	32.7
MFD4020D05-HH			0.24	1.2	8500	8.77	7.52	37.2
MFD4020D1-L	12	8.5 ~ 13.5	0.06	0.72	5000	5.19	2.62	20.9
MFD4020D1-LM			0.07	0.84	6000	6.41	3.87	26.7
MFD4020D1-M			0.08	0.96	6500	6.87	4.6	29.1
MFD4020D1-H			0.09	1.08	7500	7.9	5.78	32.7
MFD4020D1-HH			0.1	1.2	8500	8.77	7.52	37.2
MFD4020D2-M	24	18 ~ 26.5	0.4	0.96	6500	6.87	4.6	29.1
MFD4020D2-H			0.45	1.08	7500	7.9	5.78	32.7
MFD4020D2-HH			0.05	1.2	8500	8.77	7.52	37.2

### DIMENSIONS DRAWING & P&Q CURVE



# MFD4020B



Size : 40 x 40 x 20mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 25 g

### Bearing system

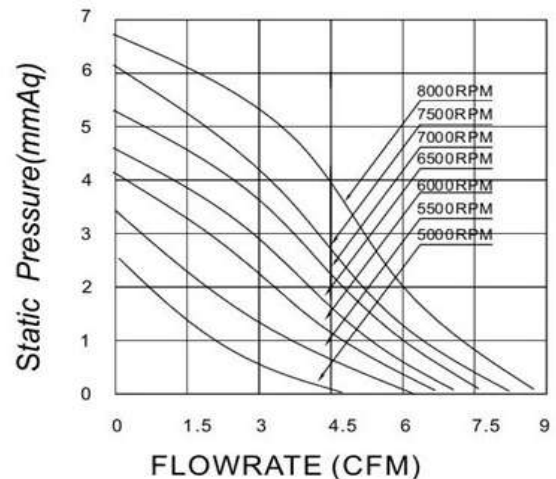
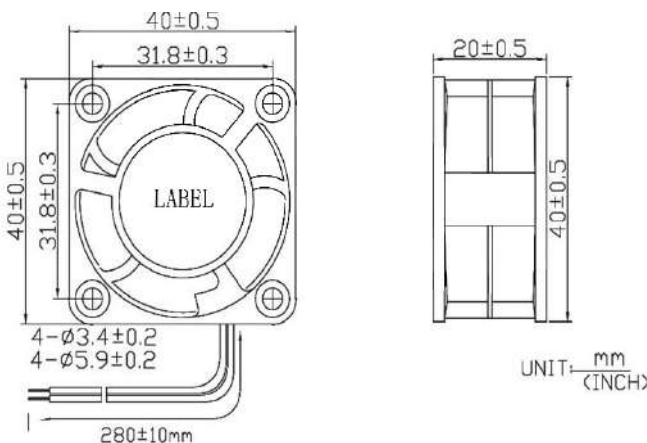
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD4020BD05-L	5	1.8 ~ 6	0.07	0.36	5000	5.34	2.65	23.8
MFD4020BD05-LM			0.1	0.48	6000	6.74	4.07	29
MFD4020BD05-M			0.12	0.6	6500	7.07	4.47	30.6
MFD4020BD05-H			0.22	1.08	7500	8.36	6.04	34.4
MFD4020BD05-HH			0.24	1.2	8500	8.94	6.76	36.4
MFD4020BD1-L	12	8.5 ~ 13.5	0.03	0.36	5000	5.34	2.65	23.8
MFD4020BD1-LM			0.04	0.48	6000	6.74	4.07	29
MFD4020BD1-M			0.05	0.6	6500	7.07	4.47	30.6
MFD4020BD1-H			0.09	1.08	7500	8.36	6.04	34.4
MFD4020BD1-HH			0.1	1.2	8500	8.94	6.76	36.4
MFD4020BD2-M	24	18 ~ 26.5	0.04	0.96	6500	7.07	4.47	30.6
MFD4020BD2-H			0.045	1.08	7500	8.36	6.04	34.4
MFD4020BD2-HH			0.05	1.2	8500	8.94	6.76	36.4

### DIMENSIONS DRAWING & P&Q CURVE



# MFD4020C



Size : 40 x 40 x 20mm  
 Bearing system: BALL,  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C

Weight: 25 g

### Bearing system

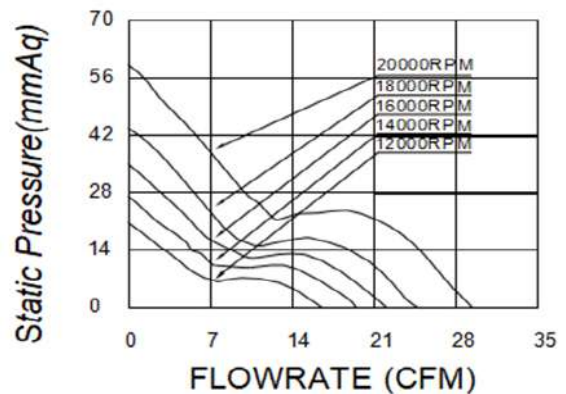
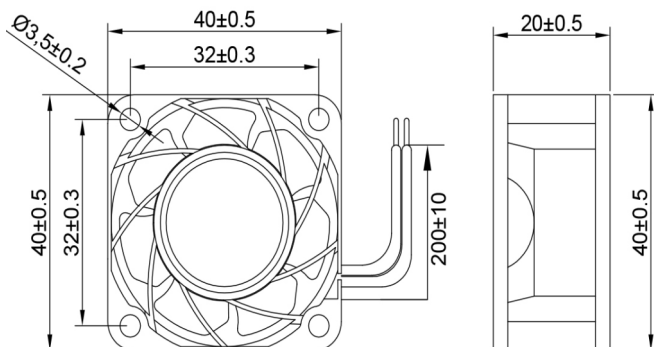
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD4020CD1-L	12	8.5 ~ 13.5	0.43	5.16	12000	16.6	20.7	53.2
MFD4020CD1-LM			0.55	6.6	14000	19.6	27.1	53.5
MFD4020CD1-M			0.67	8.04	16000	22.2	35	55.6
MFD4020CD1-H			0.85	10.2	18000	24.8	43.8	57.7
MFD4020CD1-HH			1.3	15.6	20000	29.5	59.2	58.1
MFD4020CD2-VHB	24	18~26.5	0.75	16.8	20000	29.5	59.2	58.1

### DIMENSIONS DRAWING & P&Q CURVE



# MFD4028



Size : 40 x 40 x 28mm  
 Bearing system: BALL  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 35 g

### Bearing system

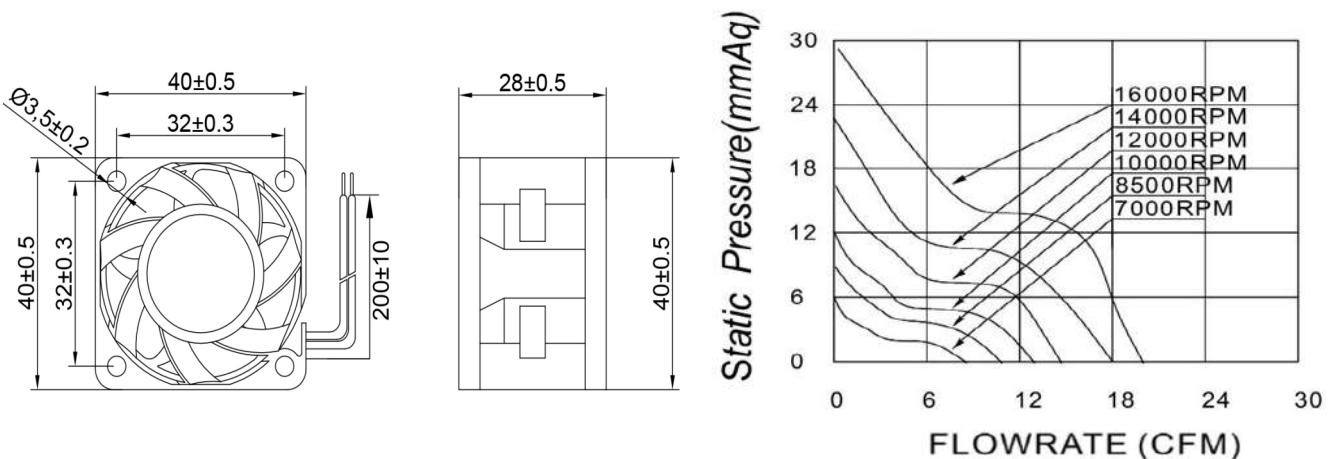
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD4028D1-M	12	7~13.5	0.15	1.8	7000	8.73	6.07	36.6
MFD4028D1-H			0.23	2.76	8500	10.6	8.7	37.3
MFD4028D1-HH			0.25	3.72	10000	12.6	12.05	41.1
MFD4028D1-HV			0.3	4.8	12000	15	16.84	47.3
MFD4028D1-UH			0.4	5.76	14000	17.9	22.74	50.9
MFD4028D1-VH			0.5	7.2	16000	20.4	29.62	52.6
MFD4028D2-M	24	18~26.5	0.08	1.8	7000	8.73	6.07	36.6
MFD4028D2-H			0.115	27.6	8500	10.6	8.7	37.3
MFD4028D2-HH			0.13	3.72	10000	12.6	12.05	41.1
MFD4028D2-HV			0.15	4.8	12000	15	16.84	47.3
MFD4028D2-UH			0.2	5.76	14000	17.9	22.74	50.9
MFD4028D2-VH			0.25	7.2	16000	20.4	29.62	52.6

### DIMENSIONS DRAWING & P&Q CURVE



# MFD4028B



Size : 40 x 40 x 28mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 40 g

### Bearing system

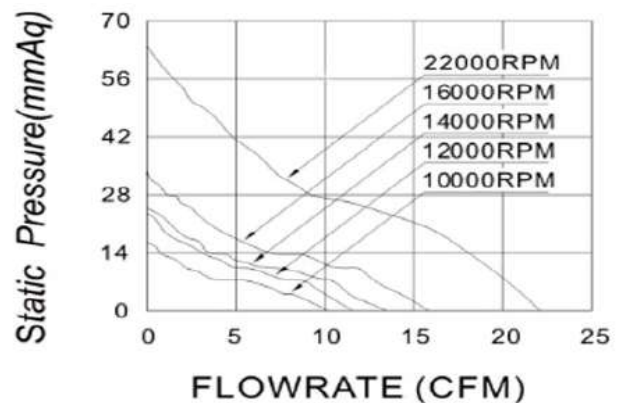
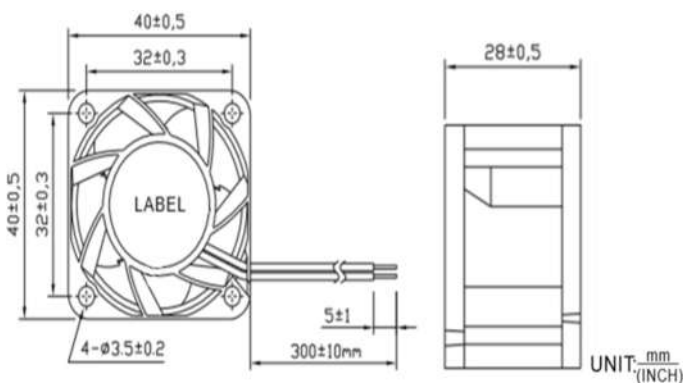
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD4028BD1-HH	12	7~13.5	0.15	1.8	10000	10.26	16	32.2
MFD4028BD1-HV			0.24	2.88	12000	11.76	22.7	38.6
MFD4028BD1-UH			0.3	3.6	14000	13.43	24.2	45
MFD4028BD1-VH			0.37	4.44	16000	15.84	32.0	51.5
MFD4028BD1-LV			0.6	7.2	22000	22.1	61.8	61
MFD4028BD2-HH	24	18~26.5	0.08	1.92	10000	10.26	16.0	32.2
MFD4028BD2-HV			0.12	2.88	12000	11.76	22.7	38.6
MFD4028BD2-UH			0.15	3.6	14000	13.43	24.2	45
MFD4028BD2-VH			0.19	4.56	16000	15.84	32.0	51.5
MFD4028BD2-LV			0.3	7.2	22000	22.1	61.8	61

### DIMENSIONS DRAWING & P&Q CURVE



# MFD4510



Size : 45 x 45 x 10mm  
 Bearing system: BALL  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 20 g

### Bearing system

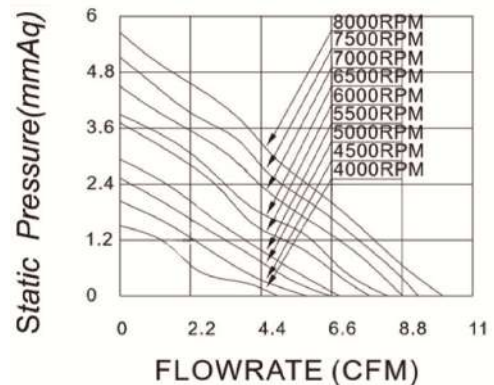
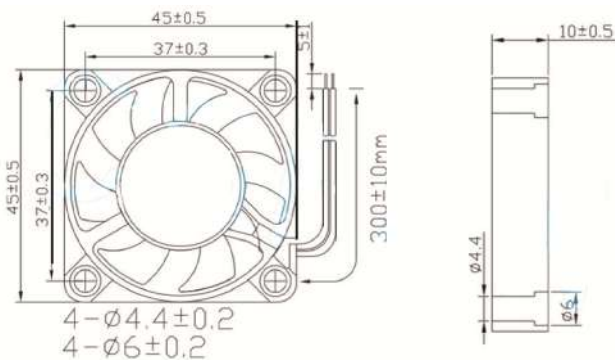
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD4510D05-VL	5	1.8~6	0.1	0.46	4000	5.19	1.61	24.3
MFD4510D05-LL			0.12	0.6	4500	5.41	2.06	28.1
MFD4510D05-L			0.144	0.72	5000	6.46	2.5	30.2
MFD4510D05-LM			0.192	0.96	5500	6.88	2.92	33.9
MFD45010D05-M			0.24	1.2	6000	7.87	3.69	36.3
MFD4510D05-H			0.264	1.32	6500	8.24	3.89	37.3
MFD45010D05-HH			0.31	1.56	7000	8.85	4.5	39.3
MFD4510D1VL	12	8.5~13.5	0.04	0.46	4000	5.19	1.61	24.3
MFD4510D1-LL			0.05	0.6	4500	5.41	2.06	28.1
MFD4510D1-L			0.06	0.72	5000	6.46	2.5	30.2
MFD4510D1-LM			0.08	0.96	5500	6.88	2.92	33.9
MFD4501D1-M			0.1	1.2	6000	7.87	3.69	36.3
MFD4510D1-H			0.11	1.32	6500	8.24	3.89	37.3
MFD4510D1-HH			0.13	1.56	7000	8.85	4.5	39.3

### DIMENSIONS DRAWING & P&Q CURVE



# MFD5010



Size : 50 x 50 x 10mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 15 g

### Bearing system

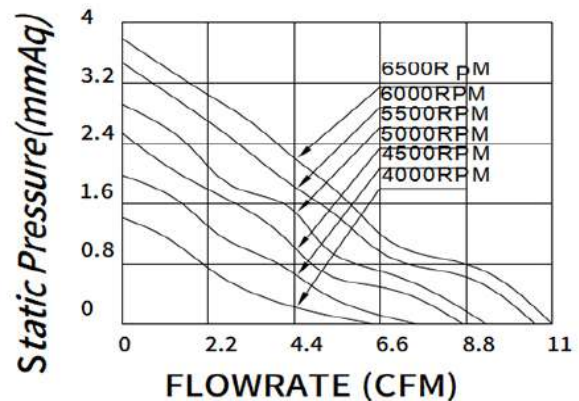
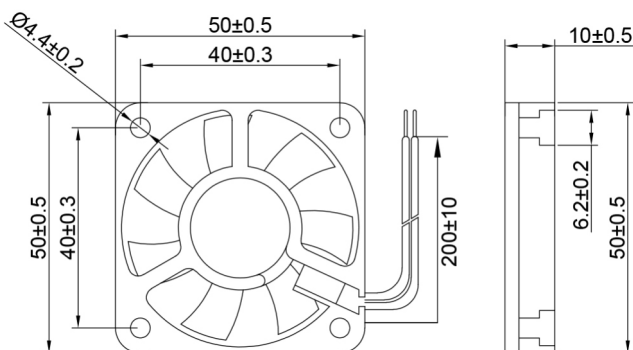
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD5010D05-L	5	1.8~6	0.07	0.35	4000	6.34	1.37	22.1
MFD5010D05-LM			0.13	0.65	4500	7.62	1.98	27.1
MFD5010D05-M			0.15	0.75	5000	8.65	2.53	31.8
MFD5010D05-LH			0.19	9.5	5500	9.12	2.92	35.1
MFD5010D05-H			0.2	1	6000	10.6	3.45	37.6
MFD5010D05-HH			0.22	1.1	6500	10.9	3.77	40
MFD5010D1-L	12	8.5~13.5	0.03	0.36	4000	6.34	1.37	22.1
MFD5010D1-LM			0.06	0.72	4500	7.62	1.98	27.1
MFD5010D1-M			0.07	0.84	5000	8.65	2.53	31.8
MFD5010D1-LH			0.08	0.96	5500	9.12	2.92	35.1
MFD5010D1-H			0.09	1.08	6000	10.6	3.45	37.6
MFD5010D1-HH			0.1	1.2	6500	10.9	3.77	40

### DIMENSIONS DRAWING & P&Q CURVE



# MFD5010B



Size : 50 x 50 x 10mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 15 g

### Bearing system

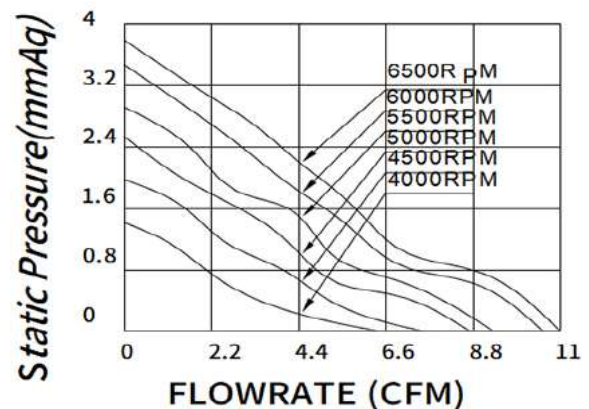
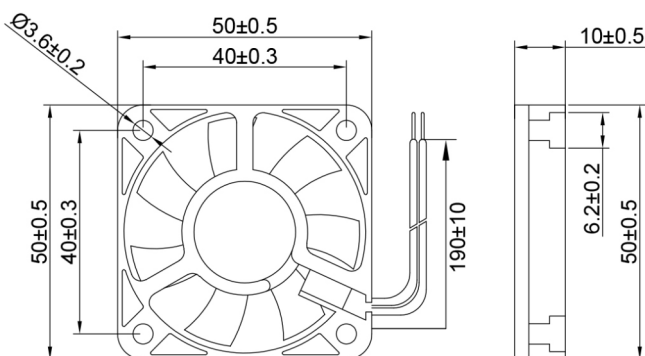
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD5010BD05-L	5	1.8~6	0.07	0.35	4000	6.34	1.37	22.1
MFD5010BD05-LM			0.13	0.65	4500	7.62	1.98	27.1
MFD5010BD05-M			0.15	0.75	5000	8.65	2.53	31.8
MFD5010BD05-LH			0.19	9.5	5500	9.12	2.92	35.1
MFD5010BD05-H			0.2	1	6000	10.6	3.45	37.6
MFD5010BD05-HH			0.22	1.1	6500	10.9	3.77	40
MFD5010BD1-L	12	8.5~13.5	0.03	0.36	4000	6.34	1.37	22.1
MFD5010BD1-LM			0.06	0.72	4500	7.62	1.98	27.1
MFD5010BD1-M			0.07	0.84	5000	8.65	2.53	31.8
MFD5010BD1-LH			0.08	0.96	5500	9.12	2.92	35.1
MFD5010BD1-H			0.09	1.08	6000	10.6	3.45	37.6
MFD5010BD1-HH			0.1	1.2	6500	10.9	3.77	40

### DIMENSIONS DRAWING & P&Q CURVE



# MFD5010C



Size : 50 x 50 x 10mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 15 g

### Bearing system

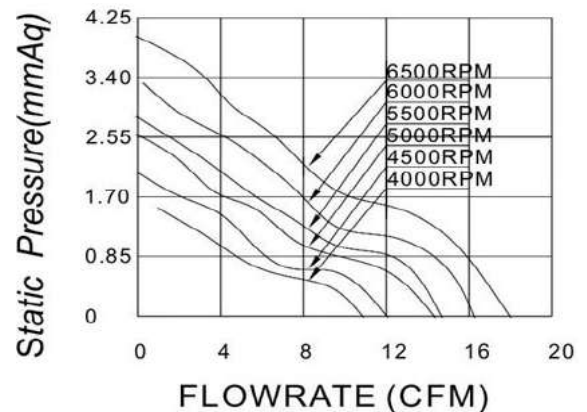
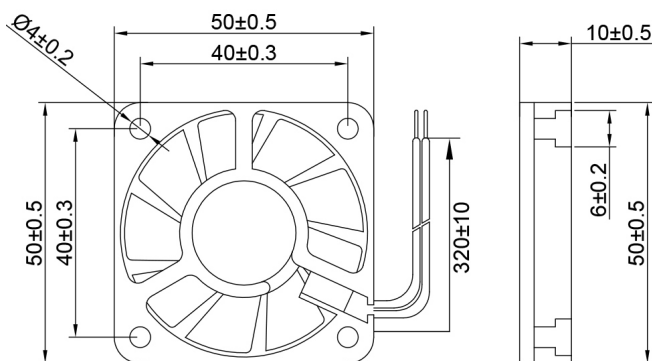
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD5010CD05-L	5	1.8~6	0.072	0.36	4000	8.14	1.65	36.8
MFD5010CD05-LM			0.096	0.48	4500	9.09	2.05	29.7
MFD5010CD05-M			0.12	0.6	5000	10.5	2.58	31
MFD5010CD05-LH			0.144	0.72	5500	10.8	2.84	33.5
MFD5010CD05-H			0.168	0.84	6000	12.1	3.34	34.2
MFD5010CD05-HH			0.19	0.96	6500	13.4	3.85	36.8
MFD5010CD1-L	12	8.5~13.5	0.03	0.36	4000	8.14	1.65	26.8
MFD5010CD1-LM			0.04	0.48	4500	9.09	2.05	29.7
MFD5010CD1-M			0.05	0.6	5000	10.5	2.58	31
MFD5010CD1-LH			0.06	0.72	5500	10.8	2.84	33.5
MFD5010CD1-H			0.07	0.84	6000	12.1	3.34	34.2
MFD5010CD1-HH			0.08	0.96	6500	13.4	3.85	36.8

### DIMENSIONS DRAWING & P&Q CURVE



# MFD5010D



Size : 50 x 50 x 10mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 15 g

### Bearing system

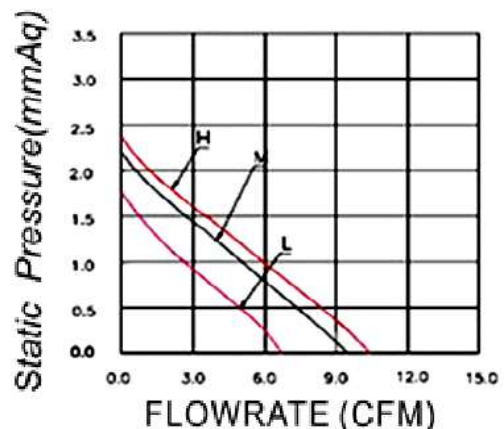
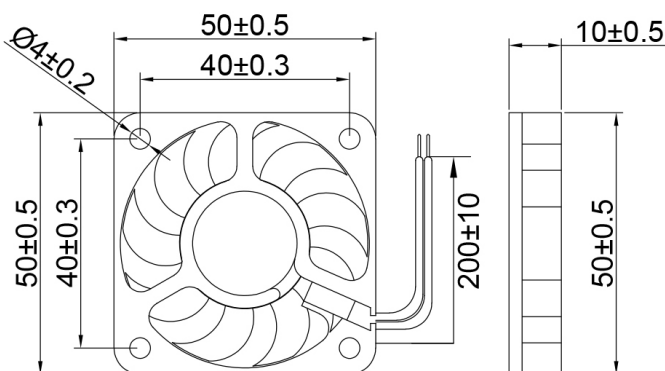
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD5010CD05-L	5	1.8~6	0.11	0.55	3500	7.3	1.17	20.8
MFD5010CD05-M			0.16	0.8	4500	9.42	2.27	26.1
MFD5010CD05-H			0.21	1.05	5000	10.43	2.37	28.5
MFD5010CD1-L	12	8.5~13.5	0.05	0.6	3500	7.3	1.77	20.8
MFD5010CD1-M			0.07	0.84	4500	9.42	2.27	26.1
MFD5010CD1-H			0.09	1.08	5000	10.43	2.37	28.5

### DIMENSIONS DRAWING & P&Q CURVE



# MFD5015



Size : 50 x 50 x 15mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 27g

### Bearing system

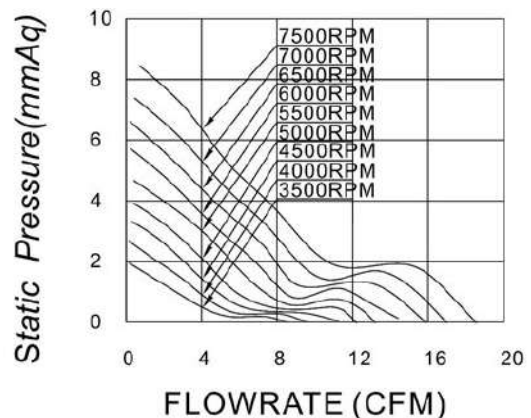
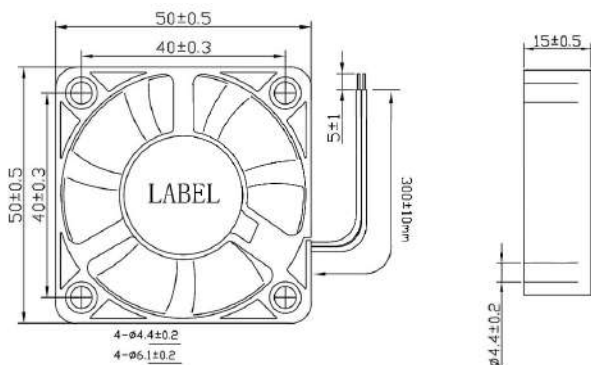
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated In Power	Speed	Maxim Air Flo	Maxim Air Pres	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A
MFD5015D05-H	5	1.8-6	0.12	0.6	3500	8.52	2.06	24.1
MFD5015D05-HH			0.144	0.72	4000	9.77	2.76	28.1
MFD5015D05-VH			0.192	0.96	4500	10.8	3.37	31.2
MFD5015D05-HV			0.24	1.2	5000	12.1	4.04	33.9
MFD5015D1-HX	12	8.5 ~ 13.5	0.05	0.6	3500	8.52	2.06	24.1
MFD5015D1-HH			0.06	0.72	4000	9.77	2.76	28.1
MFD5015D1-VH			0.08	0.96	4500	10.8	3.37	31.2
MFD5015D1-HV			0.1	1.2	5000	12.1	4.04	33.9
MFD5015D1-LH			0.14	1.68	5500	13.4	4.84	37.7
MFD5015D1-HL			0.18	2.16	6000	14.6	5.76	39.4
MFD5015D1-MH			0.24	2.88	6500	15.8	6.68	41.2
MFD5015D1-HM			0.3	3.6	7500	18.3	8.68	46.1
MFD5015D2-VH	24	18 ~ 26.5	0.04	0.96	4500	10.8	3.37	31.2
MFD5015D2-HV			0.05	1.2	5000	12.1	4.04	33.9
MFD5015D2-LH			0.07	1.68	5500	13.4	4.84	37.7
MFD5015D2-HL			0.09	2.16	6000	14.6	5.76	39.4
MFD5015D2-MH			0.12	2.88	6500	15.8	6.68	41.2
MFD5015D2-HM			0.15	3.6	7500	18.3	8.68	46.1

### DIMENSIONS DRAWING & P&Q CURVE



# MFD5015B



Size : 50 x 50 x 15mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 27g

### Bearing system

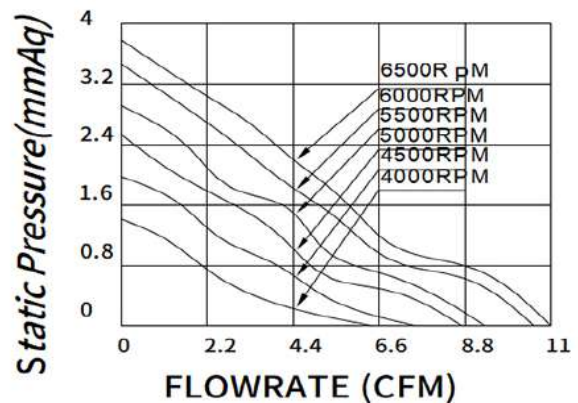
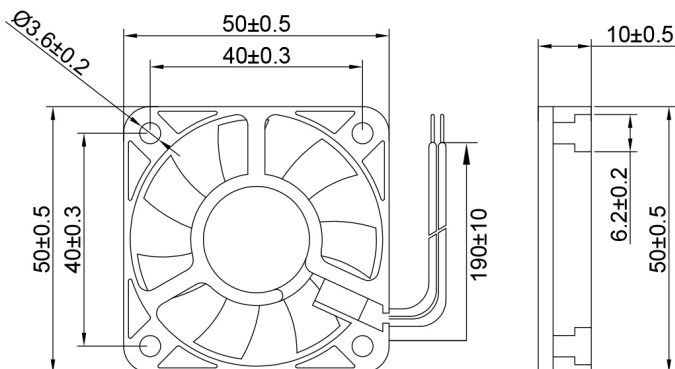
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD5015BD05-L	5	1.8-6	0.07	0.35	4000	6.34	1.37	22.1
MFD5015BD05-LM			0.13	0.65	4500	7.62	1.98	27.1
MFD5015BD05-M			0.15	0.75	5000	8.65	2.53	31.8
MFD5015BD05-LH			0.19	0.95	5500	9.12	2.92	35.1
MFD5015BD05-H			0.2	1	6000	10.6	3.45	37.6
MFD5015BD05-HH			0.22	1.1	6500	10.9	3.77	40
MFD5015BD1-L	12	8.5 ~ 13.5	0.03	0.36	4000	6.34	1.37	22.1
MFD5015BD1-LM			0.06	0.72	4500	7.62	1.98	27.1
MFD5015BD1-MH			0.07	0.84	5000	8.65	2.53	31.8
MFD5015BD1-LH			0.08	0.96	5500	9.12	2.92	35.1
MFD5015BD1-H			0.09	1.08	6000	10.6	3.45	37.6
MFD5015BD1-HH			0.1	1.2	6500	10.9	3.77	40

### DIMENSIONS DRAWING & P&Q CURVE



# MFD5020



Size : 50 x 50 x 20 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 32g

### Bearing system

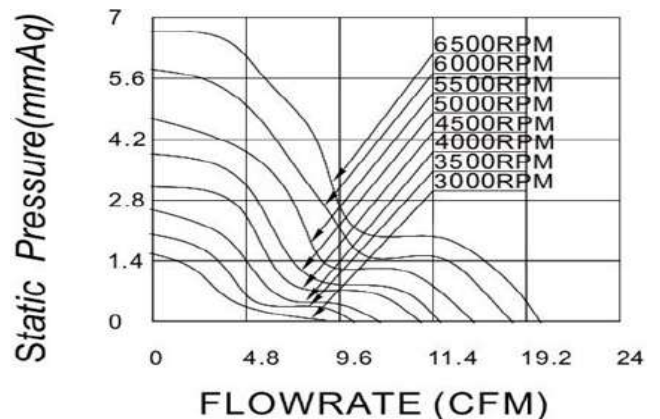
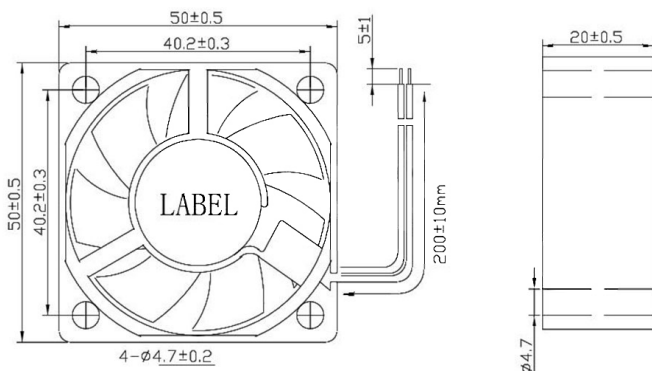
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise		
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A		
MFD5020D1-VL	1.2	8.5 ~ 13.5	0.06	0.72	3000	8.85	1.53	22.3		
MFD5020D1-LL			0.08	0.96	3500	10.3	1.99	24.2		
MFD5020D1-L			0.1	1.2	4000	11.9	2.57	26		
MFD5020D1-M			0.14	1.68	4500	13.4	3.15	30.2		
MFD5020D1-MH			0.18	2.16	5000	14.7	3.84	34.5		
MFD5020D1-H			0.22	2.64	5500	16.6	4.69	36.8		
MFD5020D1-LH			0.24	2.88	6000	18.4	5.81	40.6		
MFD5020D1-HH			0.28	3.36	6500	20.1	6.71	41.4		
MFD5020D2-VL			2.4	18 ~ 26.5	0.03	0.72	3000	8.85	1.53	22.3
MFD5020D2-L					0.04	0.96	3500	10.3	1.99	24.2
MFD5020D2-LL	0.05	1.2			4000	11.9	2.57	26		
MFD5020D2-M	0.07	1.68			4500	13.4	3.15	30.2		
MFD5020D2-MH	0.09	2.16			5000	14.7	3.84	34.5		
MFD5020D2-H	0.11	2.64			5500	16.6	4.69	36.8		
MFD5020D2-LH	0.12	2.88			6000	18.4	5.81	40.6		
MFD5020D2-HH	0.14	3.36			6500	20.1	6.71	41.4		

### DIMENSIONS DRAWING & P&Q CURVE



# MFD6010



Size : 60 x 60 x 10mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 21 g

## Bearing system

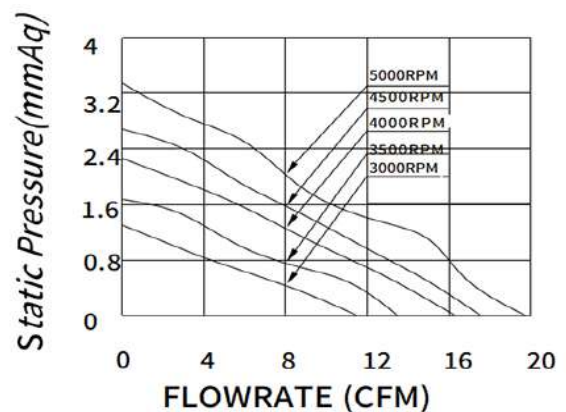
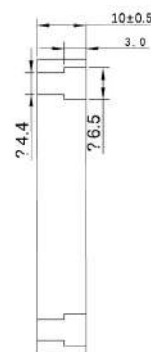
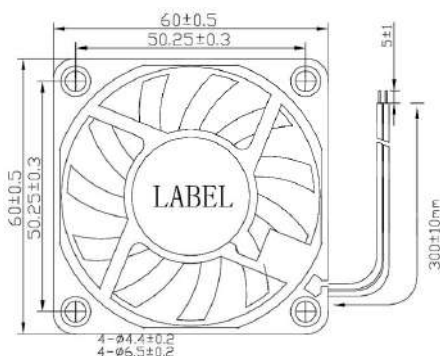
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD6010D05-L	5	1.8~6	0.12	0.6	3000	11.4	1.3	25.3
MFD6010D05-M			0.19	0.95	3500	13.4	1.67	29.3
MFD6010D05-H			0.26	1.32	4000	16.2	2.29	32.8
MFD6010D05-HH			0.34	1.68	4500	17.7	2.72	35.9
MFD6010D05-VH			0.43	2.04	5000	19.4	3.34	39
MFD6010D1-L	12	8.5~13.5	0.05	0.6	3000	11.4	1.3	25.3
MFD6010D1-M			0.08	0.95	3500	13.4	1.67	29.3
MFD6010D1-H			0.11	1.32	4000	16.2	2.29	32.8
MFD6010D1-HH			0.14	1.68	4500	17.7	2.72	35.9
MFD6010D1-VH			0.17	2.04	5000	19.4	3.34	39

## DIMENSIONS DRAWING & P&Q CURVE



# MFD6010B



Size : 60 x 60 x 10mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 21 g

### Bearing system

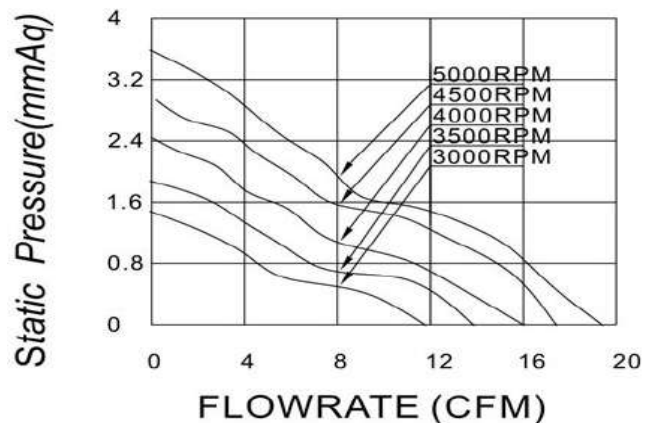
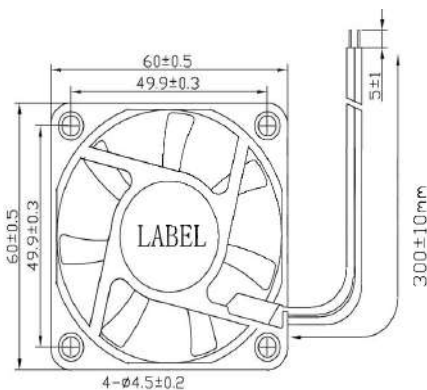
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD6010BD05-L	5	1.8~6	0.072	0.36	3000	11.6	1.48	21
MFD6010BD05-M			0.096	0.48	3500	13.7	1.83	24.4
MFD6010BD05-H			0.12	0.6	4000	15.9	2.43	29.5
MFD6010BD05-HH			0.144	0.72	4500	17.7	2.95	30.5
MFD6010BD05-VH			0.168	0.84	5000	19.3	3.56	34.4
MFD6010BD1-L	12	8.5~13.5	0.03	0.36	3000	11.6	1.48	21
MFD6010BD1-M			0.04	0.48	3500	13.7	1.83	24.4
MFD6010BD1-H			0.05	0.6	4000	15.9	2.43	29.5
MFD6010BD1-HH			0.06	0.72	4500	17.7	2.95	30.5
MFD6010BD1-VH			0.07	0.84	5000	19.3	3.56	34.4

### DIMENSIONS DRAWING & P&Q CURVE



# MFD6010C



Size : 60 x 60 x 10mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 23 g

### Bearing system

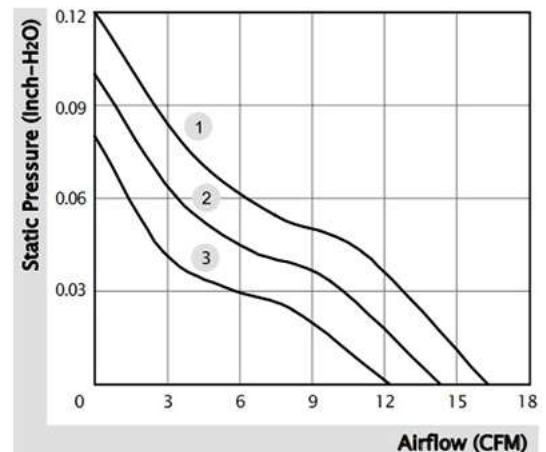
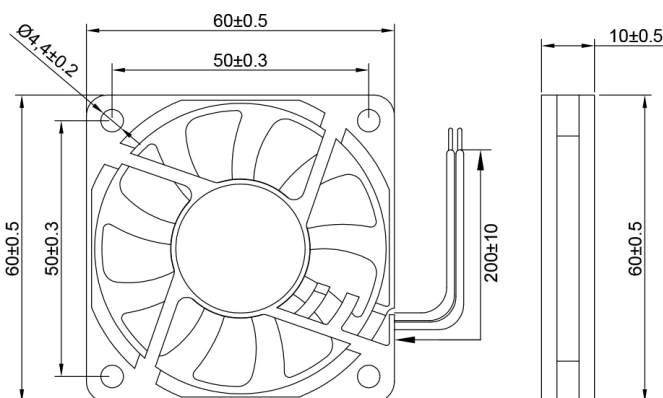
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD6010CD1-L	12	8.5~13.5	0.04	0.48	3000	12.2	2.03	20.5
MFD6010CD1-M			0.07	0.84	3500	14.3	2.54	25
MFD6010CD1-H			0.1	1.2	4000	16.3	3.05	28.5

### DIMENSIONS DRAWING & P&Q CURVE



# MFD6015



Size : 60 x 60 x 15mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 38 g

## Bearing system

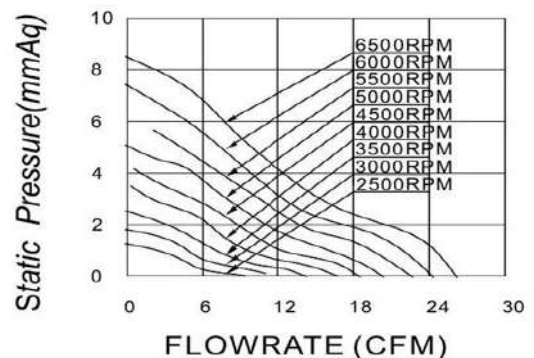
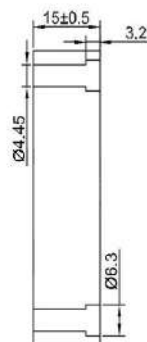
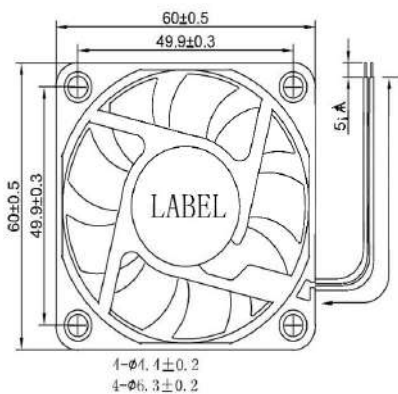
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage VDC	Operating Voltage VDC	Rated Current Amp	Rated Power Watt	Speed R.P.M	Max Air Fl CFM	Max Air Pre mm H <sub>2</sub> O	Nois OD B -	
MFD6015D05-L	5	1.8 ~ 6	0.1	0.72	2000	9.41	1.34	21.1	
MFD6015D05-M	5		0.19	0.96	3000	11.5	1.86	24.8	
MFD6015D05-M <sub>L</sub>	5		0.24	1.2	3500	14.2	2.61	29.8	
MFD6015D05-H	5		0.29	1.44	4000	16.4	3.5	31.2	
MFD6015D1L	1		0.04	0.72	2000	9.41	1.34	21.1	
MFD6015D1M	1	8.5 ~ 13	0.09	0.96	3000	11.5	1.86	24.8	
MFD6015D1ML	1		0.1	1.2	3500	14.2	2.61	29.8	
MFD6015D1H	1		0.12	1.44	4000	16.4	3.5	31.2	
MFD6015D1HL <sub>1 2</sub>	1		0.14	1.68	4500	18.3	4.35	34.8	
MFD6015D1HH	1		0.16	1.92	5000	20.5	5.34	36.6	
MFD6015D1HV	1		0.18	2.16	5500	22.4	6.35	39	
MFD6015D1VH	1		0.28	2.4	6000	24	7.33	41	
MFD6015D2L	2		1.8 ~ 26	0.03	0.72	2000	9.41	1.34	21.1
MFD6015D2M	2			0.04	0.96	3000	11.5	1.86	24.8
MFD6015D2ML	2			0.05	1.2	3500	14.2	2.61	29.8
MFD6015D2H	2	0.06		1.44	4000	16.4	3.5	31.2	
MFD6015D2HL <sub>2 4</sub>	2	0.07		1.68	4500	18.3	4.35	34.8	
MFD6015D2HH	2	0.08		1.92	5000	20.5	5.34	36.6	
MFD6015D2HV	2	0.09		2.16	5500	22.4	6.35	39	
MFD6015D2VH	2	0.1		2.4	6000	24	7.33	41	

## DIMENSIONS DRAWING & P&Q CURVE



# MFD6010C



Size : 60 x 60 x 15mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 30 g

### Bearing system

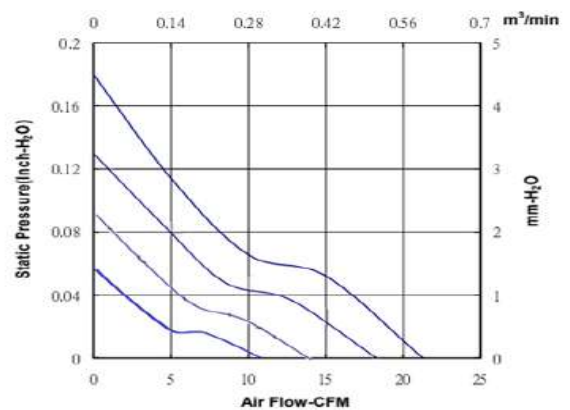
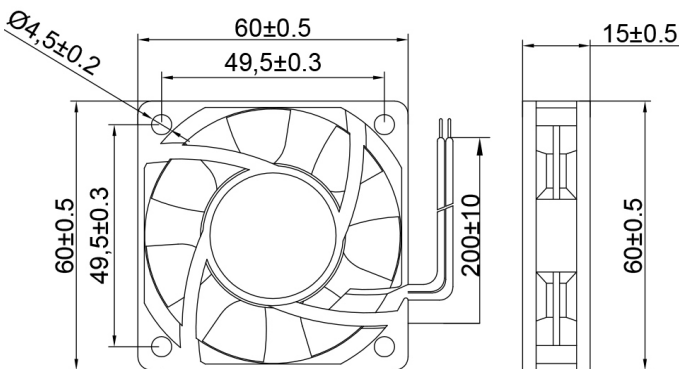
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD6015CD1-L	12	8.5~13.5	0.04	0.48	2300	10.6	1.27	17.1
MFD6015CD1-M			0.09	1.08	3200	14.5	2.29	24.9
MFD6015CD1-H			0.1	1.2	3900	18.2	3.3	29.8
MFD6015CD1-HH			0.13	1.56	4500	21.3	4.57	34.5

### DIMENSIONS DRAWING & P&Q CURVE



# MFD6020



Size : 60 x 60 x 20mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 47 g

### Bearing system

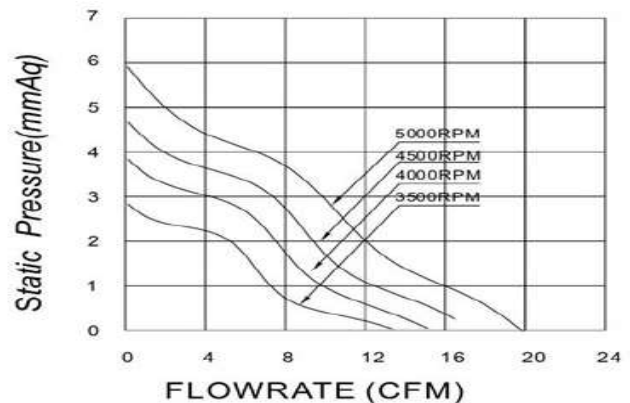
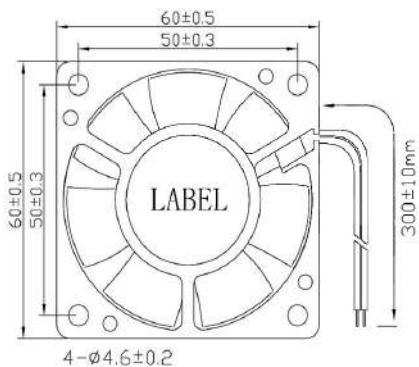
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD6020D1-L	12	7~13.5	0.06	0.72	3500	13.8	2.87	27.2
MFD6020D1-LM			0.1	1.2	4000	15.4	3.9	30.1
MFD6020D1-M			0.11	1.32	4500	17.6	4.86	33.5
MFD6020D1-H			0.12	1.44	5000	19.6	5.94	36.5
MFD6020D2-L	24	18~26.5	0.03	0.72	3500	13.8	2.87	27.2
MFD6020D2-LM			0.05	1.2	4000	15.4	3.9	30.1
MFD6020D2-M			0.06	1.32	4500	17.6	4.86	33.5
MFD6020D2-H			0.06	1.44	5000	19.6	5.94	36.5

### DIMENSIONS DRAWING & P&Q CURVE



# MFD6025



Size : 60 x 60 x 25mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 60 g

## Bearing system

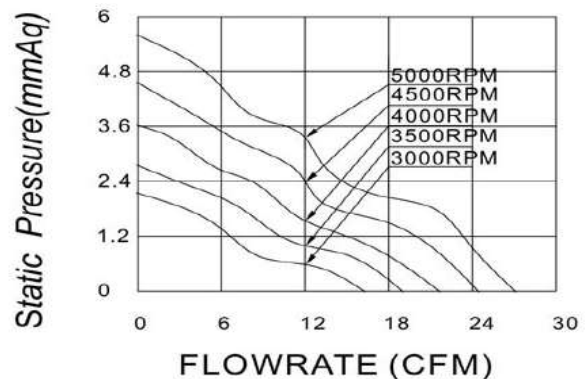
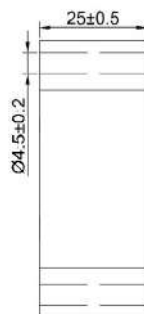
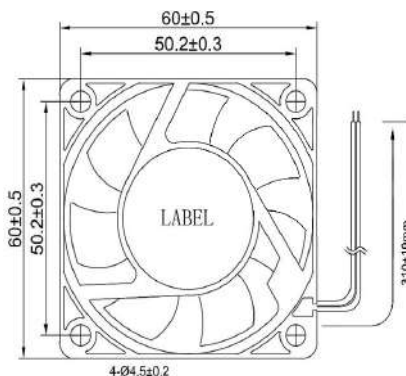
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Inp Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD6025D1-L	12	8.5 ~ 13.5	0.06	0.72	3000	15.7	2.13	27.2
MFD6025D1-LM			0.14	1.68	3500	18.9	2.76	30.7
MFD6025D1-M			0.17	2.04	4000	21.5	3.64	34.3
MFD6025D1-H			0.2	2.4	4500	24.3	4.63	37.7
MFD6025D1-LH			0.23	2.76	5000	26.9	5.56	40.2
MFD6025D2-L	24	18 ~ 26.5	0.05	1.2	3000	15.7	2.13	27.2
MFD6025D2-LM			0.07	1.68	3500	18.9	2.76	30.7
MFD6025D2-M			0.085	2.04	4000	21.5	3.64	34.3
MFD6025D2-H			0.1	2.4	4500	24.3	4.63	37.7
MFD6025D2-LH			0.11	2.76	5000	26.9	5.56	40.2
MFD6025D4-L	48	36 ~ 54	0.025	1.2	3000	15.7	2.13	27.2
MFD6025D4-LM			0.035	1.68	3500	18.9	2.75	30.7
MFD6025D4M			0.04	2.04	4000	21.5	3.64	34.3
MFD6025D4-H			0.05	2.4	4500	24.3	4.63	37.7
MFD6025D4-LH			0.06	2.76	5000	26.9	5.56	40.2

## DIMENSIONS DRAWING & P&Q CURVE



# MFD6025B



Size : 60 x 60 x 25mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 60 g

## Bearing system

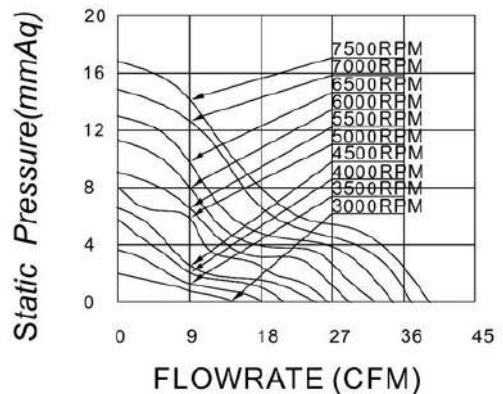
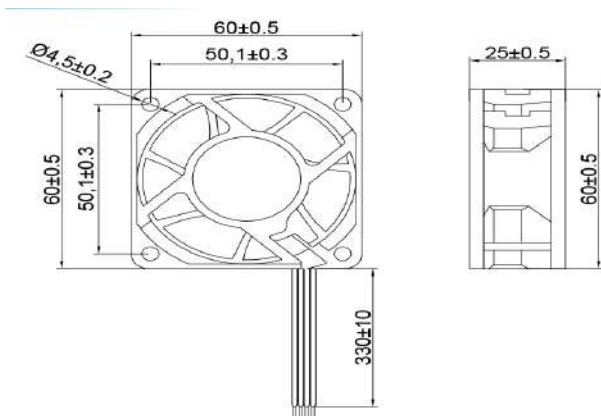
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Inp Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD6025BD1-VM	12	8.5 ~ 13.5	0.35	4.2	5500	29.2	9.23	39.9
MFD6025BD1-HV			0.38	4.56	6000	31.8	11.15	42.2
MFD6025BD1-VH			0.4	4.8	6500	34.6	13.09	44.8
MFD6025BD1-HHV			0.45	5.4	7000	37	14.82	46
MFD6025BD1-VHH			0.5	6	7500	39.5	16.83	49.5
MFD6025BD2-VM	24	18 ~ 26.5	0.16	3.9	5500	29.2	9.23	39.9
MFD6025BD2-HV			0.18	4.2	6000	31.8	11.15	42.2
MFD6025BD2-VH			0.19	4.5	6500	34.6	13.09	44.8
MFD6025BD2-HHV			0.2	4.8	7000	37	14.82	46
MFD6025BD2-VHH			0.25	6	7500	39.5	16.83	49.5
MFD6025BD4-VM	48	36 ~ 54	0.088	4.2	5500	29.2	9.23	39.9
MFD6025BD4-HV			0.095	4.56	6000	31.8	11.15	42.2
MFD6025BD4-VH			0.1	4.8	6500	34.6	13.09	44.8
MFD6025BD4-HHV			0.113	5.4	7000	37	14.82	46
MFD6025BD4-VHH			0.125	6	7500	39.5	16.83	49.5

## DIMENSIONS DRAWING & P&Q CURVE



# MFD6038



Size : 60 x 60 x 38mm  
 Bearing system: BALL  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 110 g

### Bearing system

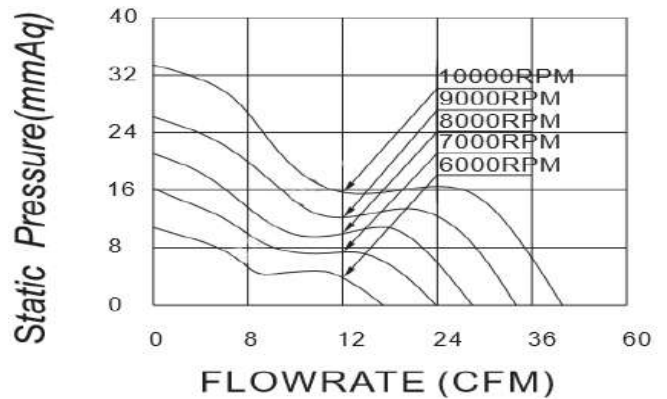
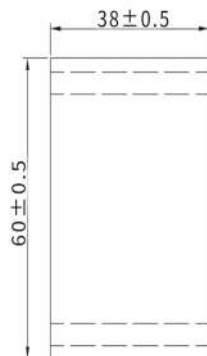
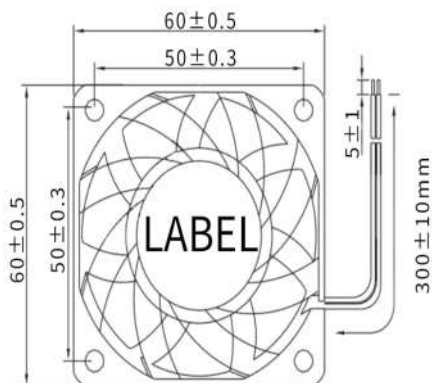
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Inp Power	Speed	Maximum Air Flow	Maximum Air Pressu	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD6038D1-L	12	7 ~ 13.5	0.26	3.12	6000	29.7	11.48	48.9
MFD6038D1-M			0.42	5.04	7000	35.7	16.19	52.3
MFD6038D1-H			0.6	7.2	8000	41.4	21.07	56.1
MFD6038D1-LH			0.72	8.64	9000	45.8	26.24	60.3
MFD6038D1-HH			0.9	10.8	10000	51.6	32.75	62.2
MFD6038D2-L	24	18 ~ 26.5	0.13	3.12	6000	29.7	11.48	48.9
MFD6038D2-M			0.21	5.04	7000	35.7	16.19	52.3
MFD6038D2-H			0.3	7.2	8000	41.4	21.07	56.1
MFD6038D2-LH			0.36	8.64	9000	45.8	26.24	60.3
MFD6038D2-HH			0.45	10.8	10000	51.6	32.75	62.2
MFD6038D4-L	48	36 ~ 54	0.07	3.12	6000	29.7	11.48	48.9
MFD6038D4-M			0.1	5.04	7000	35.7	16.19	52.3
MFD6038D4-H			0.15	7.2	8000	41.4	21.07	56.1
MFD6038D4-LH			0.18	8.64	9000	45.8	26.24	60.3
MFD6038D4-HH			0.225	10.8	10000	51.6	32.75	62.2

### DIMENSIONS DRAWING & P&Q CURVE



# MFD6038B



Size : 60 x 60 x 38mm  
 Bearing system: BALL  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 110 g

## Bearing system

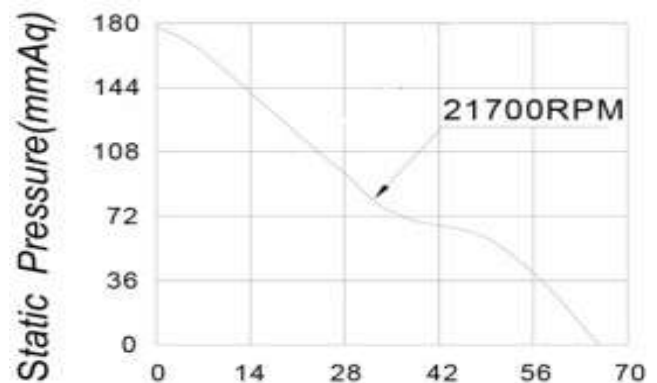
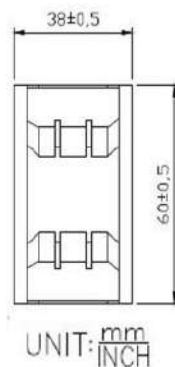
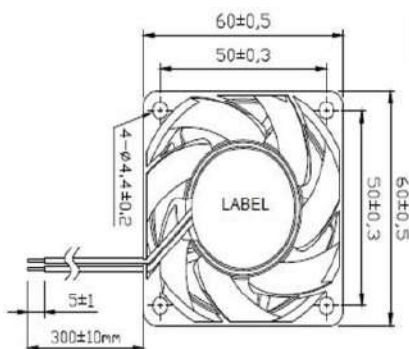
BALL	SLEEVE
●	

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD6038BD1-L	12	7.5 ~ 13.5	3	32.4	21700	66.4	177.8	68
MFD6038BD2-L	24	18 ~ 26.5	1.5	32.4	21700	66.4	177.8	68
MFD6038BD4-L	48	36 ~ 54	0.75	32.4	21700	66.4	177.8	68

## DIMENSIONS DRAWING & P&Q CURVE



# MFD6038C



Size : 60 x 60 x 38mm  
 Bearing system: BALL  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 110 g

## Bearing system

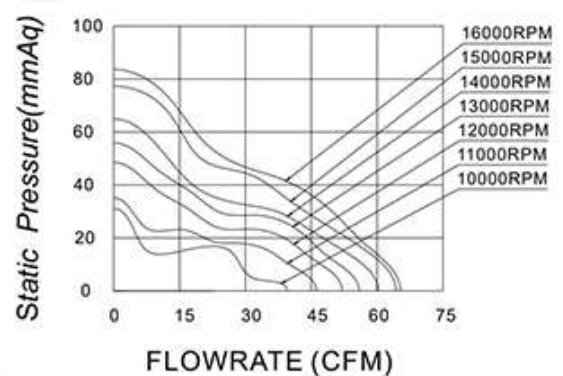
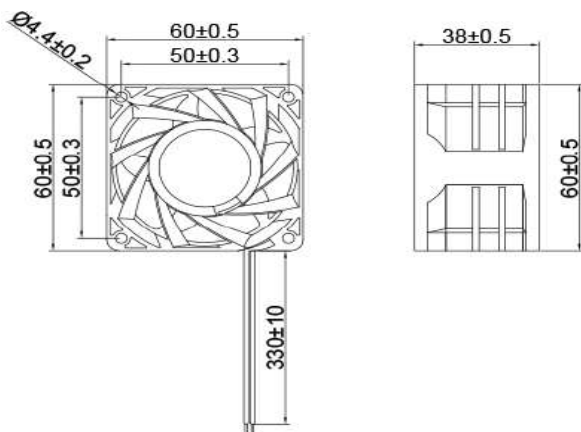
BALL	SLEEVE
●	

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD6068CD1-H			0.9	10.8	12000	52.04	48.51	61.8
MFD6068CD1-LH			1	12	13000	55.89	55.9	63.7
MFD6068CD1-HF			1.2	14.4	14000	60.25	64.98	64.7
MFD6068CD1-VF			1.3	15.6	15000	64.29	77.37	68.8
MFD6068CD1-HV			1.4	16.8	16000	65.34	83.69	70.8
MFD6068CD2-H			0.45	10.8	12000	52.04	48.51	61.8
MFD6068CD2-LH			0.5	12	13000	55.89	55.9	63.7
MFD6068CD2-HF			0.6	14.4	14000	60.25	64.98	64.7
MFD6068CD2-VF			0.65	15.6	15000	64.29	77.37	68.8
MFD6068CD2-HV			0.7	16.8	16000	65.34	83.69	70.8
MFD6068CD4-H			0.225	10.8	12000	52.04	48.51	61.8
MFD6068CD4-LH			0.25	12	13000	55.89	55.9	63.7
MFD6068CD4-HF			0.3	14.4	14000	60.25	64.98	64.7
MFD6068CD4-VF			0.325	15.6	15000	64.29	77.37	68.8
MFD6068CD4-HV			0.35	16.8	16000	65.34	83.69	70.8

## DIMENSIONS DRAWING & P&Q CURVE



# MFD7015



Size : 70 x 70 x 15mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 44 g

### Bearing system

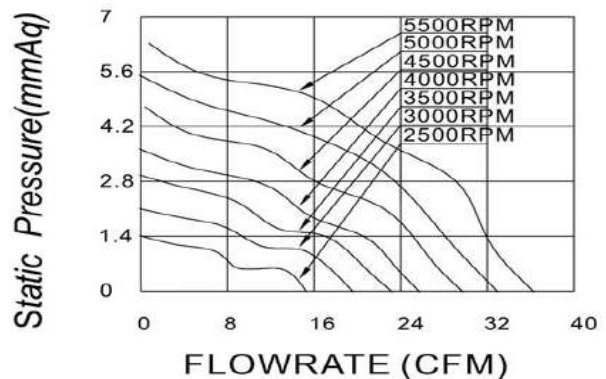
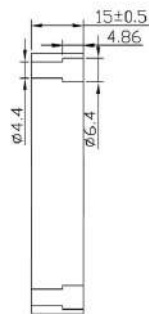
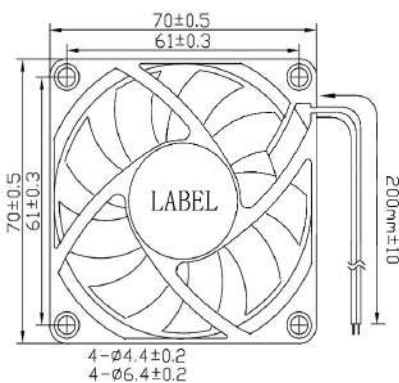
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD7015D05-VL	5	1.8 ~ 6	0.1	0.48	2000	13.9	0.89	22.9
MFD7015D1-VL	12	7 ~ 13.5	0.04	0.48	2500	14.8	1.36	22.9
MFD7015D1-LL			0.06	0.72	3000	19.7	2.1	27.2
MFD7015D1-L			0.08	0.96	3500	23	2.92	33.3
MFD7015D1-M			0.12	1.44	4000	26	3.55	36.2
MFD7015D1-H			0.29	3.48	4500	29.8	4.62	38.9
MFD7015D2-VL			24	18~26.5	0.02	0.48	2500	14.8
MFD7015D2-LL	0.03	0.72			3000	19.7	2.1	27.2
MFD7015D2-L	0.04	0.96			3500	23	2.92	33.3
MFD7015D2-M	0.06	1.44			4000	26	3.55	36.2
MFD7015D2-H	0.09	2.16			4500	29.8	4.62	38.9

### DIMENSIONS DRAWING & P&Q CURVE



# MFD7020



Size : 70 x 70 x 20 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 60 g

### Bearing system

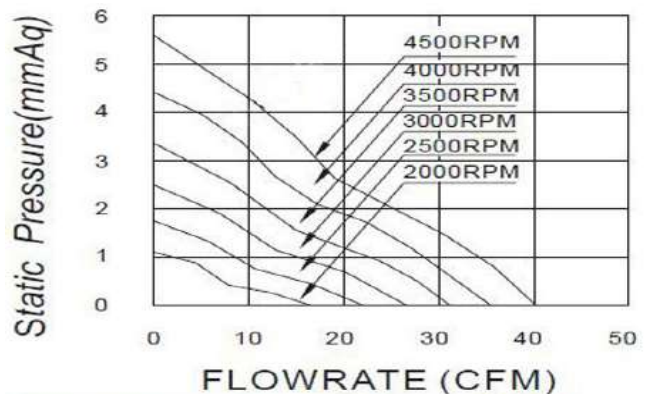
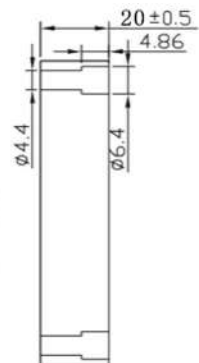
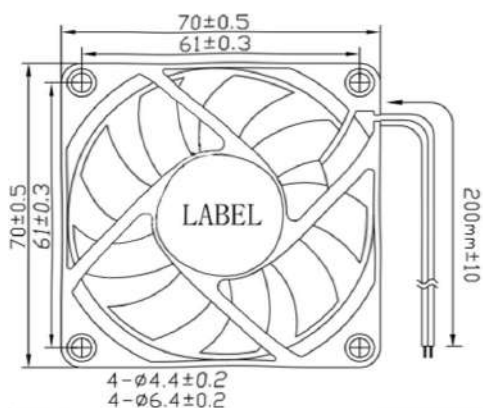
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD7020D1-LL	12	7.0 ~ 13.5	0.04	0.48	2000	16.6	1.07	24.2
MFD7020D1-L			0.09	1.12	2500	21.8	1.78	25.8
MFD7020D1-M			0.14	1.68	3000	26	2.44	30.4
MFD7020D1-H			0.18	2.16	3500	31.1	3.33	34.5
MFD7020D1-HH			0.24	2.88	4000	35.3	4.41	38.3
MFD7020D1-VH			0.3	3.6	4500	40.4	5.69	42.2
MFD7020D2-LL	24	18 ~ 26.5	0.03	0.72	2000	16.6	1.07	24.2
MFD7020D2-L			0.06	1.44	2500	21.8	1.78	25.8
MFD7020D2-M			0.08	1.92	3000	26	2.44	30.4
MFD7020D2-H			0.1	2.4	3500	31.1	3.33	34.5
MFD7020D2-HH			0.14	3.36	4000	35.3	4.41	38.3
MFD7020D2-VH			0.16	3.84	4500	40.4	5.69	42.2

### DIMENSIONS DRAWING & P&Q CURVE



# MFD7025



Size : 70 x 70 x 25 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 68 g

### Bearing system

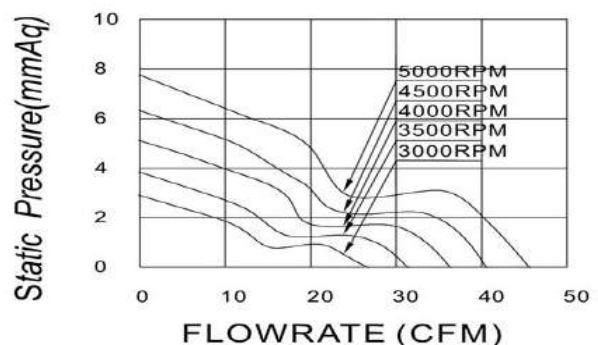
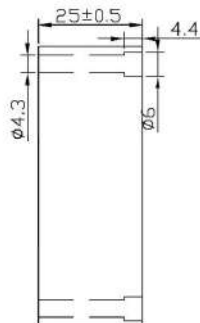
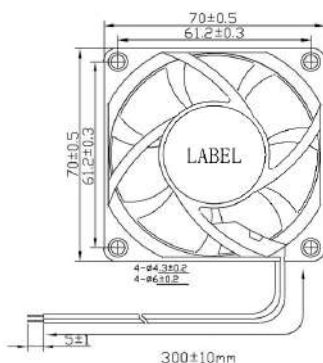
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Inp Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD7025D1-L	12	7 ~ 13.5	0.14	1.68	3000	26.8	2.93	32.5
MFD7025D1-M			0.176	2.16	3500	31.2	3.84	36
MFD7025D1-H			0.22	2.64	4000	36	5.09	40.9
MFD7025D1-HH			0.26	3.12	4500	40.5	6.29	43
MFD7025D1-VH			0.32	3.84	5000	44.9	7.8	47.3
MFD7025D2-L	24	18 ~ 26.5	0.07	1.68	3000	26.8	2.93	32.5
MFD7025D2-M			0.09	2.16	3500	31.2	3.84	36
MFD7025D2-H			0.11	2.64	4000	36	5	40.9
MFD7025D2-HH			0.13	3.12	4500	40.5	6.29	43
MFD7025D2-VH			0.16	3.84	5000	44.9	7.8	47.3
MFD7025D4-M	48	36 ~ 54	0.045	2.16	3500	31.2	3.84	36
MFD7025D4H-			0.055	2.64	4000	36	5.09	40.9
MFD7025D4-HH			0.065	3.12	4500	40.5	6.29	43
MFD7025D4-VH			0.08	3.84	5000	44.9	7.8	47.3

### DIMENSIONS DRAWING & P&Q CURVE



# MFD8010



Size : 80 x 80 x 10 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 39 g

### Bearing system

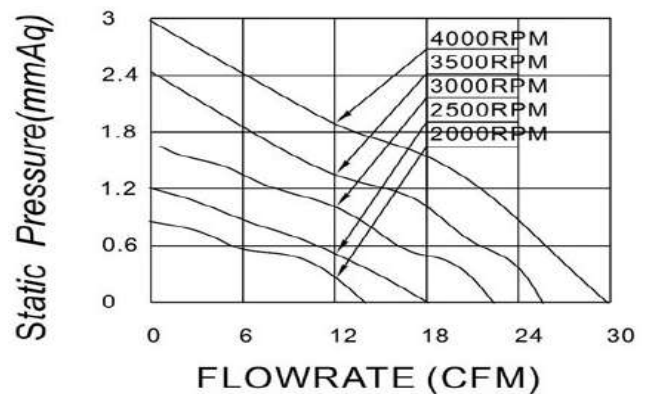
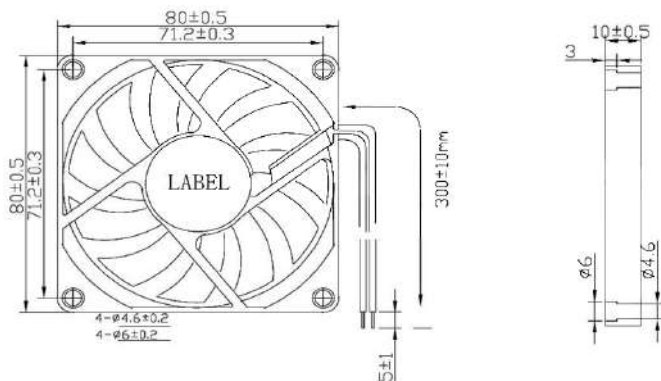
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD8010D05-VL	5	3.6 ~ 6.8	0.2	1	2000	13.9	0.89	22.9
MFD8010D1-VL	12	6.0 ~ 13.5	0.1	1.2	2000	13.9	0.89	22.9
MFD8010D1-L			0.12	1.44	2500	17.8	1.2	26.5
MFD8010D1-M			0.15	1.8	3000	21.8	1.71	30.7
MFD8010D1-H			0.18	2.16	3500	25.6	2.44	34.9
MFD8010D2-VL	24	18 ~ 26.5	0.03	0.72	2000	13.9	0.89	22.9
MFD8010D2-L			0.05	1.2	2500	17.8	1.2	26.5
MFD8010D2-M			0.07	1.68	3000	21.8	1.71	30.7
MFD8010D2-H			0.09	2.16	3500	25.6	2.44	34.9

### DIMENSIONS DRAWING & P&Q CURVE



# MFD8015



Size : 80 x 80 x 15 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 49g

### Bearing system

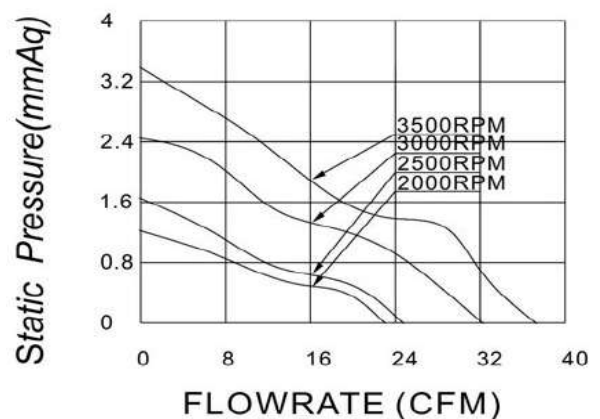
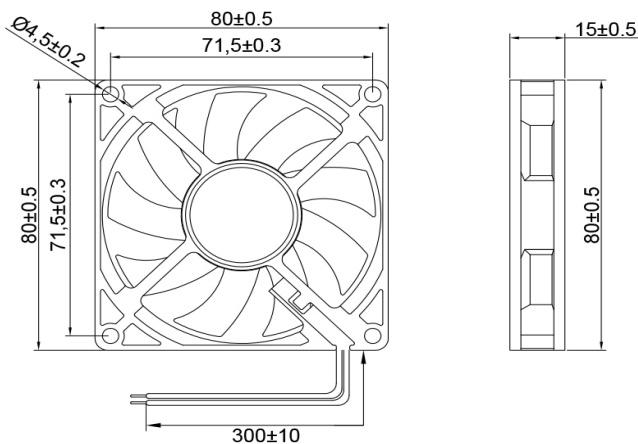
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD8015D05-L	5	3.6 ~ 6.8	0.24	1.2	2000	22.8	1.2	30.4
MFD8015D1-L	12	6.0 ~ 13.5	0.1	1.2	2000	22.8	1.2	30.4
MFD8015D1-M			0.16	1.92	2500	25	1.65	33.5
MFD8015D1-H			0.2	2.4	3000	31.9	2.44	36.2
MFD8015D1-HH			0.25	3	3500	36.6	3.38	40.3
MFD8015D2-L	24	18 ~ 26.5	0.06	1.44	2000	22.8	1.2	30.4
MFD8015D2-M			0.08	1.92	2500	25	1.65	33.5
MFD8015D2-H			0.1	2.4	3000	31.9	2.44	36.2
MFD8015D2-HH			0.18	3	3500	36.6	3.38	40.3

### DIMENSIONS DRAWING & P&Q CURVE



# MFD8020



Size : 80 x 80 x 20 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 60 g

### Bearing system

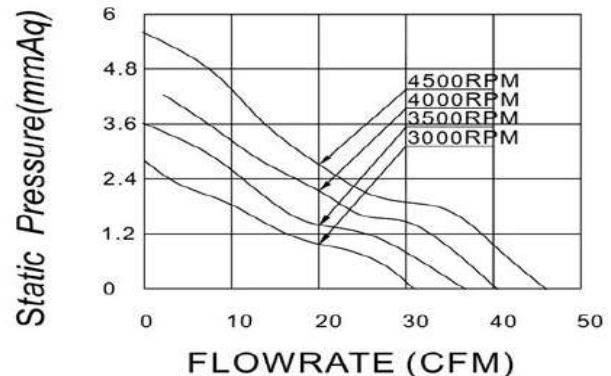
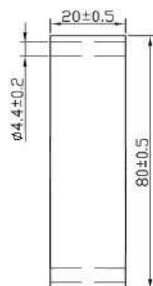
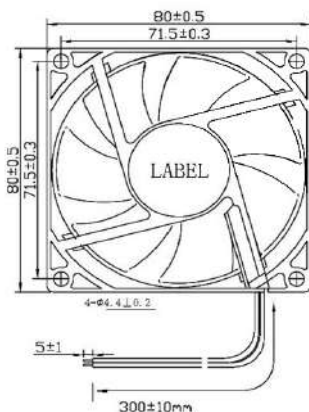
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD8020D1-L	12	7 ~ 13.5	0.1	1.2	3000	30.9	2.82	35.7
MFD8020D1-M			0.12	1.44	3500	35.7	3.6	38.5
MFD8020D1-H			0.16	1.92	4000	40.1	4.41	41.6
MFD8020D1-HH			0.2	2.4	4500	45.1	5.51	45.3
MFD8020D2-L	24	18 ~ 26.5	0.05	1.2	3000	30.9	2.82	35.7
MFD8020D2-M			0.06	1.44	3500	35.7	3.6	38.5
MFD8020D2-H			0.08	1.92	4000	40.1	4.41	41.6
MFD8020D2-HH			0.1	2.4	4500	45.1	5.51	45.3
MFD8020D4-L	48	36 ~ 54	0.03	1.2	3000	30.9	2.82	35.7
MFD8020D4-M			0.03	1.44	3500	35.7	3.6	38.5
MFD8020D4H			0.04	1.92	4000	40.1	4.41	41.6
MFD8020D4-HH			0.05	2.4	4500	45.1	5.51	45.3

### DIMENSIONS DRAWING & P&Q CURVE



# MFD8025



Size : 80 x 80 x 25 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 85 g

### Bearing system

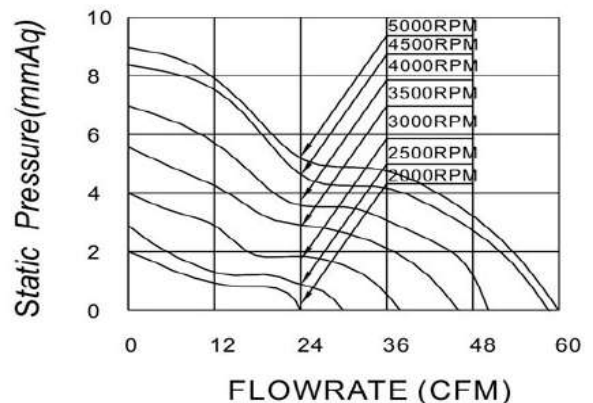
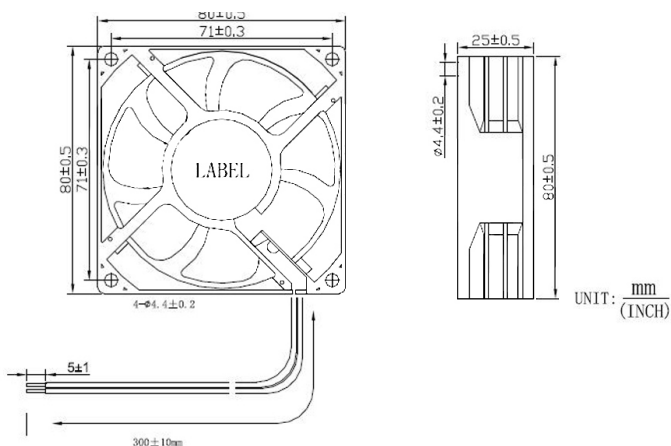
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD8025D1-LL	12	7 ~ 13.5	0.06	0.72	2000	24.4	2	25.8
MFD8025D1-L			0.08	0.96	2500	31.4	2.8	29.1
MFD8025D1-M			0.16	1.92	3000	37.9	4	34.2
MFD8025D1-H			0.17	2	3500	44.3	5.3	36.9
MFD8025D1-HH			0.18	2.16	4000	50.8	7	41.8
MFD8025D1-VH			0.3	3.6	4500	57.6	8.5	45.4
MFD8025D1-HV			0.44	5.28	5000	60.5	8.9	46.3
MFD8025D2-M	24	18 ~ 26.5	0.08	1.92	3000	37.9	4	34.2
MFD8025D2-HH			0.11	2.64	4000	50.8	7	41.8
MFD8025D2-HV			0.22	5.28	5000	60.5	8.9	46.3
MFD8025D4-M	48	36 ~ 54	0.04	1.92	3000	37.9	4	34.2
MFD8025D4-HH			0.08	3.84	4000	50.8	7	41.8
MFD8025D4HV-			0.09	4.56	5000	60.5	8.9	46.3

### DIMENSIONS DRAWING & P&Q CURVE



# MFD8025B



Size : 80 x 80 x 25 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 85 g

### Bearing system

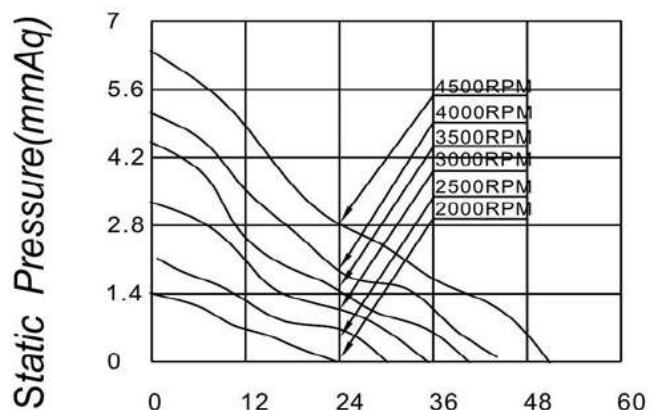
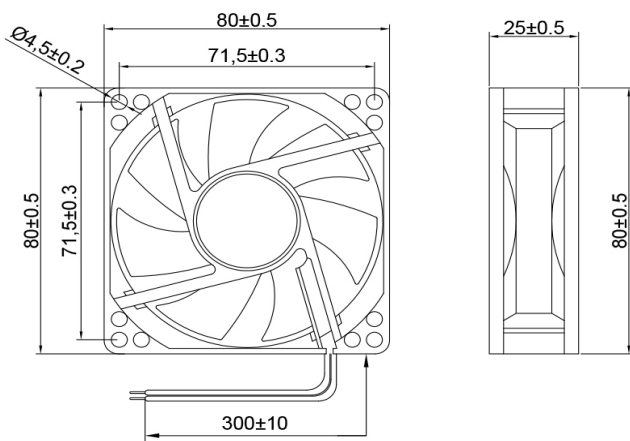
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD8025BD1-LL	12	7 ~ 13.5	0.08	0.96	2000	23.1	1.4	24.9
MFD8025BD1-L			0.12	1.44	2500	29.6	2.1	29.6
MFD8025BD1-M			0.15	1.8	3000	34.9	3.1	35.1
MFD8025BD1-H			0.25	3	3500	40.4	4.1	40.3
MFD8025BD1-HH			0.3	3.6	4000	44.9	5.2	42.4
MFD8025BD1-VH			0.5	6	4500	50.2	6.2	45.4
MFD8025BD2-M	24	18 ~ 26.5	0.08	1.92	3000	34.9	3.1	35.1
MFD8025BD2-HH			0.16	3.84	4000	44.9	5.2	42.4
MFD8025BD2-VH			0.25	6	4500	50.2	6.2	45.4
MFD8025BD4-M	48	36 ~ 54	0.04	1.92	3000	34.9	3.1	35.1
MFD8025BD4-HH			0.08	3.84	4000	44.9	5.2	42.4
MFD8025BD4-VH			0.12	5.76	4500	50.2	6.2	45.4

### DIMENSIONS DRAWING & P&Q CURVE



# MFD8025C



Size : 80 x 80 x 25 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 85 g

## Bearing system

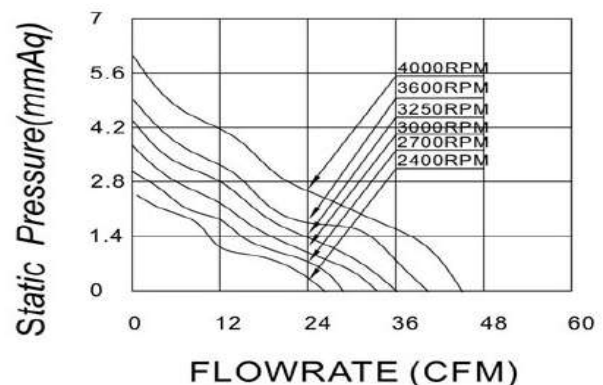
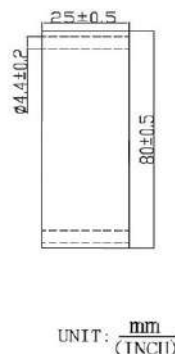
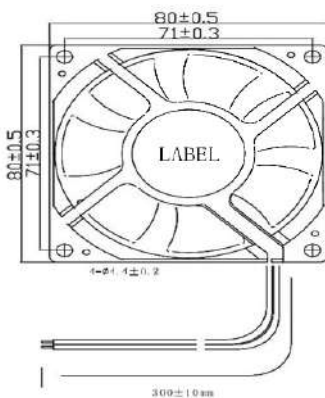
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD8025CD1-LL	12	7 ~ 13.5	0.08	0.96	2400	27.3	2.5	24.9
MFD8025CD1-L			0.12	1.44	2700	29.8	3	29.6
MFD8025CD1-M			0.15	1.8	3000	33.3	3.7	35.1
MFD8025CD1-H			0.25	3	3250	36	4.1	40.3
MFD8025CD1-HH			0.3	3.6	3600	40.3	5	42.4
MFD8025CD1-VH			0.5	6	4000	44.4	6.1	45.4
MFD8025CD2-M	24	18 ~ 26.5	0.08	1.92	3000	33.3	3.7	35.1
MFD8025CD2-HH			0.16	3.84	3600	40.3	5	42.4
MFD8025CD2-VH			0.27	6.5	4000	44.4	6.1	45.4
MFD8025CD4-M	48	36 ~ 54	0.04	1.92	3000	33.3	3.7	35.1
MFD8025CD4-HH			0.08	3.84	3600	40.3	5	42.4
MFD8025CD4-VH			0.12	6.75	4000	44.4	6.1	45.4

## DIMENSIONS DRAWING & P&Q CURVE



# MFD8025D



Size : 80 x 80 x 25 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 85 g

### Bearing system

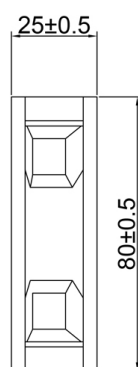
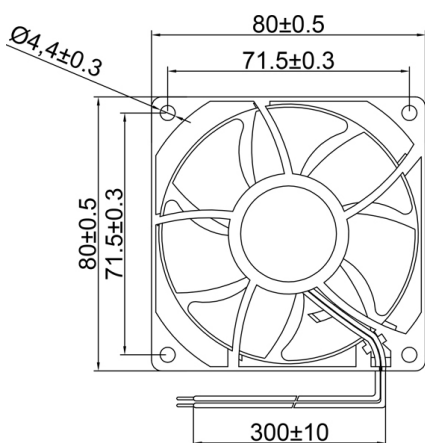
BALL	SLEEVE
●	●

### Available Functions

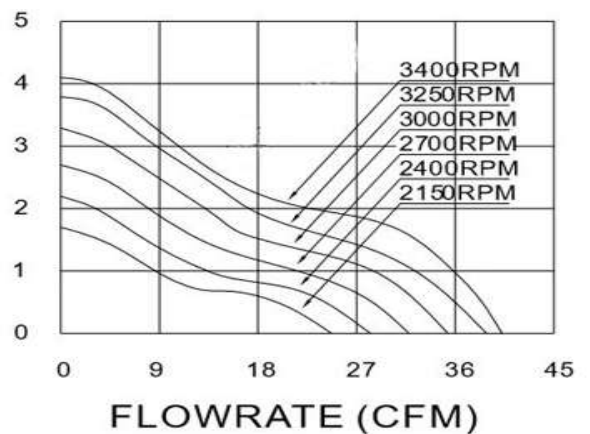
FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD8025DD1-LL	12	7 ~ 13.5	0.08	0.96	2150	24.7	1.7	22
MFD8025DD1-L			0.09	1.08	2400	28.2	2.2	25
MFD8025DD1-M			0.11	1.32	2700	31.7	2.7	28
MFD8025DD1-H			0.13	1.56	3000	35.3	3.29	31
MFD8025DD1-HH			0.17	2.04	3250	38.6	3.79	34
MFD8025DD1-VH			0.22	2.64	3400	40.2	4.1	35
MFD8025DD2-LL	24	18 ~ 26.5	0.045	1.08	2150	24.7	1.7	22
MFD8025DD2-L			0.05	1.2	2400	28.2	2.2	25
MFD8025DD2-M			0.06	1.44	2700	31.7	2.7	28
MFD8025DD2-H			0.07	1.68	3000	35.3	3.29	31
MFD8025DD2-HH			0.1	2.4	3250	38.6	3.79	34
MFD8025DD2-VH			0.12	2.88	3400	40.2	4.1	35

### DIMENSIONS DRAWING & P&Q CURVE



Static Pressure(mmAq)



# MFD8032



Size : 80 x 80 x 32 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 180 g

## Bearing system

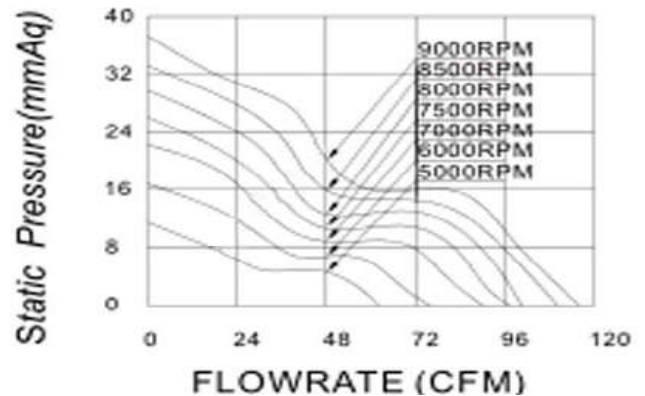
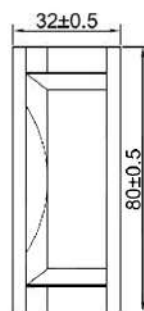
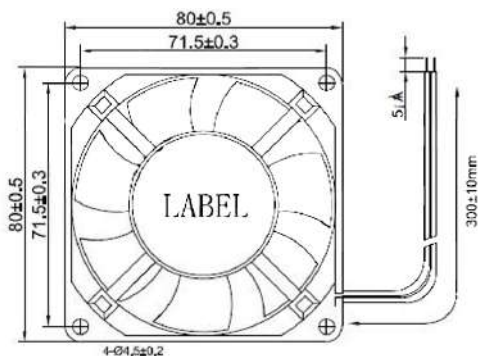
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated In Power	Speed	Maxim Air Flo	Maxim Air Pres	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A
MFD8032D1-L	12	7 ~ 13.5	0.4	4.8	4000	49.89	8.51	46.8
MFD8032D1-M			0.68	8.16	5000	61.29	11.63	50.3
MFD8032D1-H			0.96	11.5	6000	75.5	16.78	52
MFD8032D1-H			1.24	14.9	7000	88.93	22.39	54.2
MFD8032D1-V			1.51	18.2	8500	100.8	29.53	61.2
MFD8032D1-H			1.84	22.1	8500	107.13	32.9	63.5
MFD8032D2-L	24	18 ~ 26	0.2	4.8	4000	49.89	8.51	46.8
MFD8032D2-M			0.34	8.16	5000	61.29	11.63	50.3
MFD8032D2-H			0.48	11.5	6000	75.5	16.78	52
MFD8032D2-H			0.62	14.9	7000	88.93	22.39	54.2
MFD8032D2-V			0.76	18.2	8500	100.8	29.53	61.2
MFD8032D2-H			0.92	22.1	8500	107.13	32.9	63.5
MFD8032D4-L	48	36 ~ 54	0.1	4.8	4000	49.89	8.51	46.8
MFD8032D4-M			0.17	8.16	5000	61.29	11.63	50.3
MFD8032D4-H			0.24	11.5	6000	75.5	16.78	52
MFD8032D4-H			0.31	14.9	7000	88.93	22.39	54.2
MFD8032D4-V			0.38	18.2	8500	100.8	29.53	61.2
MFD8032D4-H			0.46	22.1	8500	107.13	32.9	63.5

## DIMENSIONS DRAWING & P&Q CURVE



# MFD8038



Size : 80 x 80 x 38 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 175 g

## Bearing system

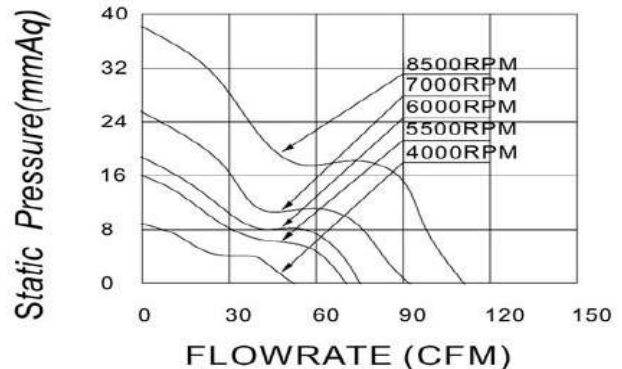
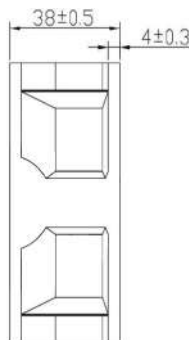
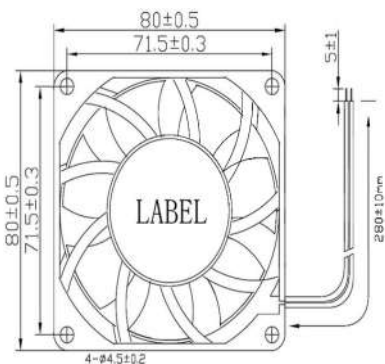
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Inp Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD8038D1-L	12	7 ~ 13.5	0.29	3.48	4000	49.89	8.51	46.8
MFD8038D1-M			0.72	8.64	5500	70.21	15.83	53.2
MFD8038D1-H			0.9	10.8	6000	74.98	18.78	58.9
MFD8038D1-HH			1.2	14.4	7000	91.51	25.52	60.5
MFD8038D1-VH			1.8	21.6	8500	109.06	37.26	66.6
MFD8038D2-L	24	18 ~ 26.5	0.14	3.48	4000	49.89	8.51	46.8
MFD8038D2-M			0.36	8.64	5500	70.21	15.83	53.2
MFD8038D2-H			0.45	10.8	6000	74.98	18.78	58.9
MFD8038D2-HH			0.5	14.4	7000	91.51	25.52	60.5
MFD8038D2-VH			0.9	21.6	8500	109.06	37.26	66.6
MFD8038D4-L	48	36 ~ 54	0.13	6	4000	49.89	8.51	46.8
MFD8038D4-M			0.23	10.8	5500	70.21	15.83	53.2
MFD8038D4-H			0.36	14.4	6000	74.98	18.78	58.9
MFD8038D4-HH			0.4	19.2	7000	91.51	25.52	60.5
MFD8038D4-VH			0.53	25.2	8500	109.06	37.26	66.6

## DIMENSIONS DRAWING & P&Q CURVE



# MFD8038B



Size : 80 x 80 x 38 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 175 g

### Bearing system

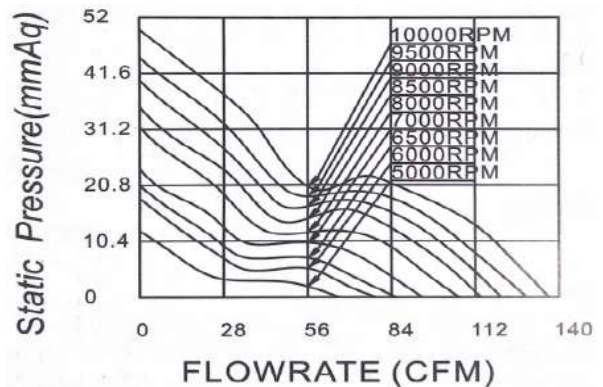
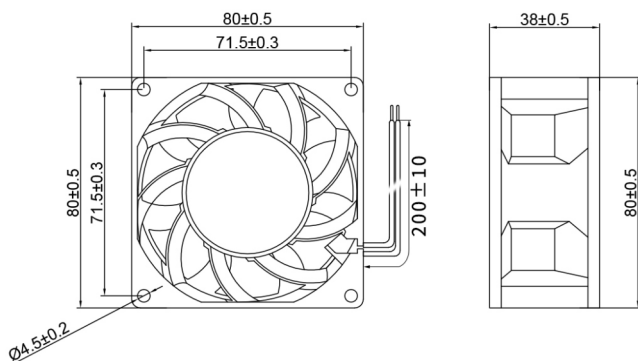
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD8038BD1-VH	12	7~13.5	2.04	24.5	8500	113.31	36.43	61.9
MFD8038BD1-MVH			2.68	32.2	9500	128.01	45.21	64.7
MFD8038BD1-VVH			3	36	10000	133.95	50.02	66.6
MFD8038BD2-VH	24	18 ~ 26.5	1.02	24.5	8500	113.31	36.43	61.9
MFD8038BD2-MVH			1.34	32.2	9500	128.01	45.21	64.7
MFD8038BD2-VVH			1.5	36	10000	133.95	50.02	66.6
MFD8038BD4-VH	48	36 ~ 54	0.51	24.5	8500	113.31	36.43	61.9
MFD8038BD4-MVH			0.67	32.2	9500	128.01	45.21	64.7
MFD8038BD4-VVH			0.75	36	10000	133.95	50.02	66.6

### DIMENSIONS DRAWING & P&Q CURVE



# MFD8038C



Size : 80 x 80 x 38 mm  
 Bearing system: BALL  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 175 g

### Bearing system

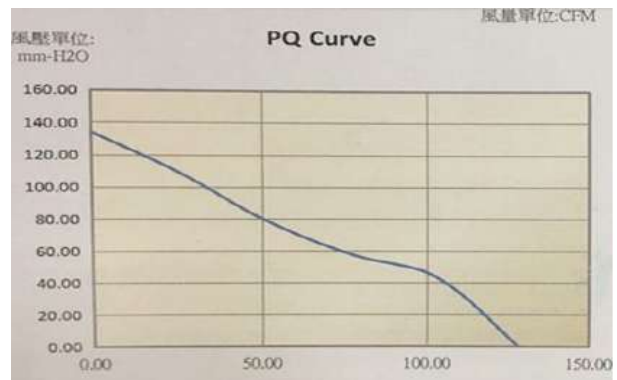
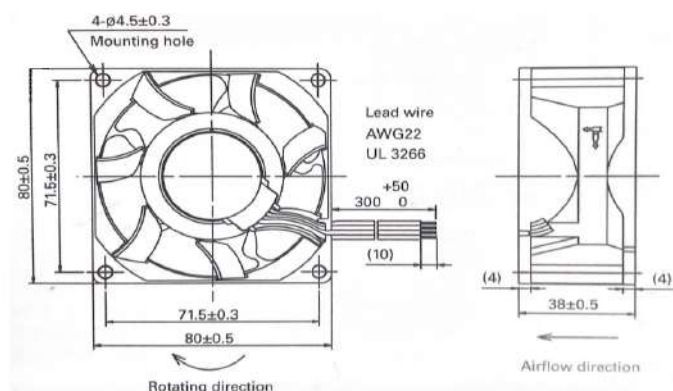
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD8038CD1-VH	12	7~13.5	3.4	40.8	16100	132	137.7	73
MFD8038CD2-VH	24	18~26.5	1.7	40.8	16100	132	137.7	73
MFD8038CD4-VH	48	36~54	0.85	40.8	16100	132	137.7	73

### DIMENSIONS DRAWING & P&Q CURVE



# MFD9225



Size : 92 x 92 x 25 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 102 g

## Bearing system

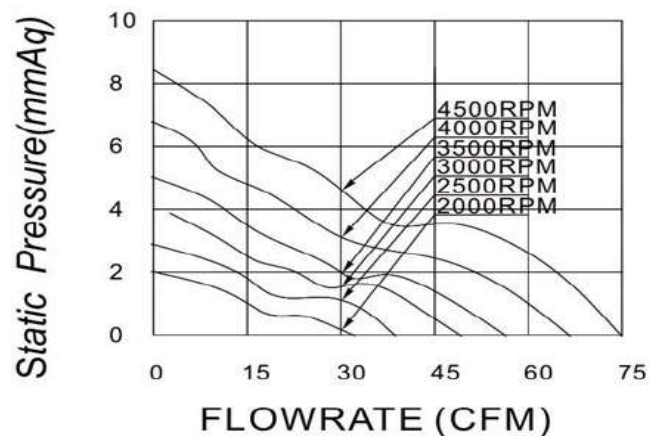
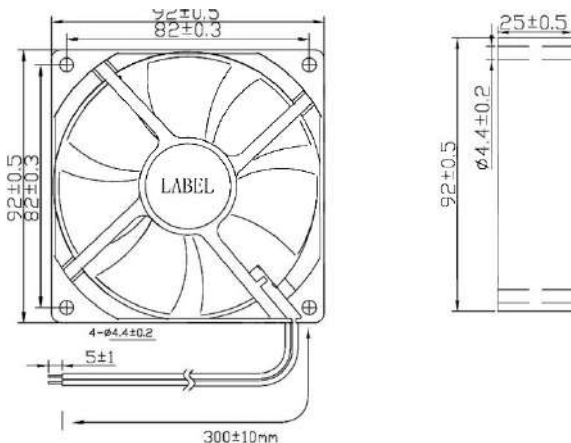
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxim. Air Flow	Maxim. Air Press.	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A
MFD9225D1-L	12	7 ~ 13.5	0.07	0.84	2500	31.9	2.01	27.5
MFD9225D1-M			0.12	1.44	3000	38.3	2.92	33.7
MFD9225D1-H			0.14	1.68	3500	49	4.11	39.1
MFD9225D1-V			0.24	2.88	4000	54.8	4.99	42.4
MFD9225D1-H7			0.32	3.84	4500	66.2	6.78	46.4
MFD9225D2-L	24	18 ~ 26.5	0.06	1.44	2000	31.9	2.01	27.5
MFD9225D2-M			0.08	1.92	2500	38.3	2.92	33.7
MFD9225D2-H			0.12	2.88	3000	49	4.11	39.1
MFD9225D2-V			0.15	3.6	3500	54.8	4.99	42.4
MFD9225D2-H7			0.16	3.84	4000	66.2	6.78	46.4
MFD9225D4-L	48	36 ~ 54	0.03	1.44	2000	31.9	2.01	27.5
MFD9225D4-M			0.04	1.92	2500	38.3	2.92	33.7
MFD9225D4-H			0.05	2.4	3000	49	4.11	39.1
MFD9225D4-V			0.06	2.88	3500	54.8	4.99	42.4
MFD9225D4-H7			0.08	3.84	4000	66.2	6.78	46.4
MFD9225D4-V1			0.11	5.28	4500	73.9	8.32	50.1

## DIMENSIONS DRAWING & P&Q CURVE



# MFD9225B



Size : 92 x 92 x 25 mm  
 Bearing system: BALL, Sleeve  
 Frame: aluminum  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 158 g

## Bearing system

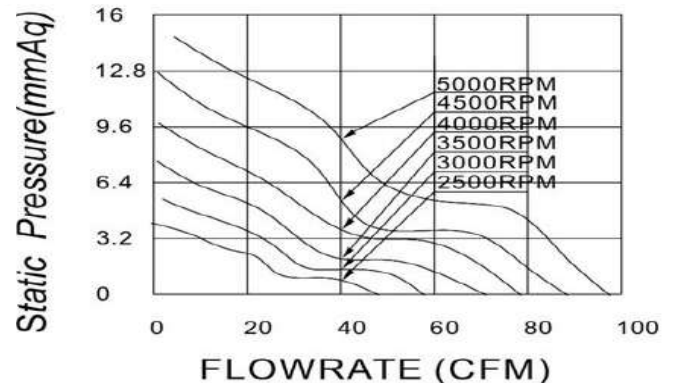
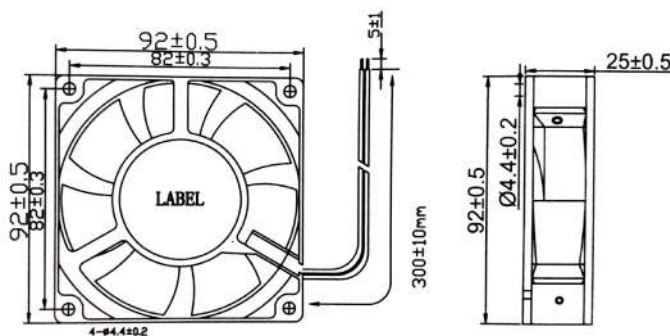
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated In Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A
MFD9225BD1-L	12	7 ~ 13.5	0.3	0.84	2000	46.8	46.8	35.5
MFD9225BD1-M			0.45	1.44	2500	56.6	5.71	41.1
MFD9225BD1-H			0.51	16.8	3000	69.1	7.81	45.5
MFD9225BD1-HH			0.64	2.88	3500	77.3	10.08	48.3
MFD9225BD1-HV			0.81	3.84	4000	87.6	12.87	53.7
MFD9225BD1-VH			1.1	5.4	4500	96.9	15.57	55
MFD9225BD2-L	24	18 ~ 26.4	0.15	1.44	2000	46.8	46.8	35.5
MFD9225BD2-M			0.225	1.92	2500	56.6	5.71	41.1
MFD9225BD2-H			0.255	2.88	3000	69.1	7.81	45.5
MFD9225BD2-HH			0.32	3.6	3500	77.3	10.08	48.3
MFD9225BD2-HV			0.4	3.84	4000	87.6	12.87	53.7
MFD9225BD2-VH			0.55	5.28	4500	96.9	15.57	55
MFD9225BD4-L	48	36 ~ 54	0.075	3.6	2000	46.8	46.8	35.5
MFD9225BD4-M			0.11	5.4	2500	56.6	5.71	41.1
MFD9225BD4-H			0.127	6.12	3000	69.1	7.81	45.5
MFD9225BD4-HH			0.16	7.66	3500	77.3	10.08	48.3
MFD9225BD4-HV			0.2	9.72	4000	87.6	12.87	53.7
MFD9225BD4-VH			0.275	13.2	4500	96.9	15.57	55

## DIMENSIONS DRAWING & P&Q CURVE



# MFD9225E



Size : 92 x 92 x 25 mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 115 g

### Bearing system

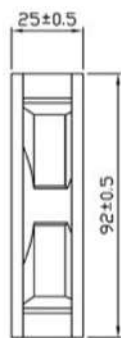
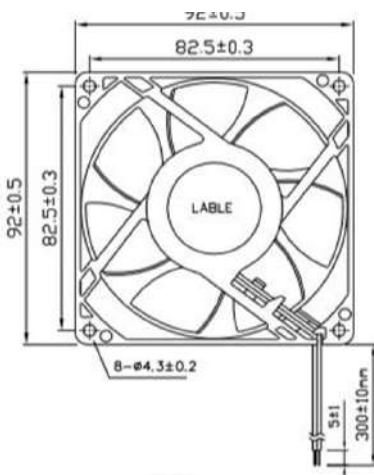
BALL	SLEEVE
●	●

### Available Functions

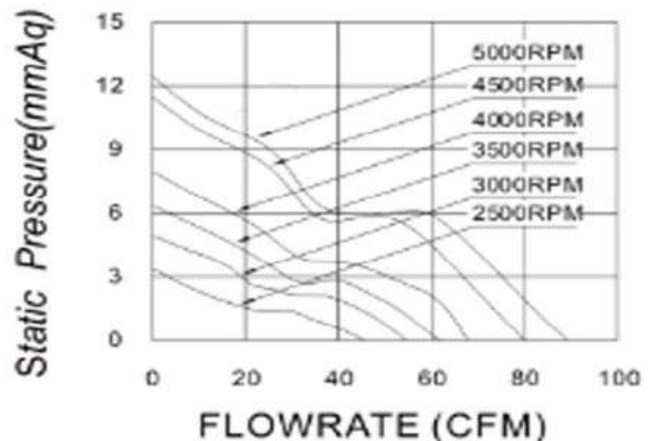
FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage VDC	Operating Voltage Range VDC	Rated Current Amp	Rated In Power Watt	Speed R.P.M	Maximum Air Flow CFM	Maximum Air Pres: mm H <sub>2</sub> O	Noise DB-A
MFD9225ED1-L	12	7 ~ 13.5	0.1	1.2	2500	45.7	3.41	29.7
MFD9225ED1-M			0.15	1.6	3000	54.6	4.98	34.3
MFD9225ED1-H			0.18	2.16	3500	62	6.37	39.3
MFD9225ED1-HH			0.27	3.24	4000	67.7	7.99	41.9
MFD9225ED1-HV			0.43	5.16	4500	80	11.5	45
MFD9225ED1-VH			0.47	5.64	5000	89.1	12.48	48
MFD9225ED2-L	24	18 ~ 26.4	0.05	1.2	2500	45.7	3.41	29.7
MFD9225ED2-M			0.08	1.92	3000	54.6	4.98	34.3
MFD9225ED2-H			0.09	2.16	3500	62	6.37	39.3
MFD9225ED2-HH			0.14	3.36	4000	67.7	7.99	41.9
MFD9225ED2-HV			0.22	5.26	4500	80	11.5	45
MFD9225ED2-VH			0.24	5.76	5000	89.1	12.48	48
MFD9225ED4-L	48	36 ~ 54	0.03	1.44	2500	45.7	3.41	29.7
MFD9225ED4-M			0.04	1.92	3000	54.6	4.98	34.3
MFD9225ED4-H			0.05	2.4	3500	62	6.37	39.3
MFD9225ED4-HH			0.07	3.36	4000	67.7	7.99	41.9
MFD9225ED4-HV			0.11	5.28	4500	80	11.5	45
MFD9225ED4-VH			0.12	5.76	5000	89.1	12.48	48

### DIMENSIONS DRAWING & P&Q CURVE



UNIT:  $\frac{\text{mm}}{\text{(INCH)}}$



# MFD9225F



Size :  $\varnothing 92 \times 25$ mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL:  $-10 \sim 70^{\circ}\text{C}$   
 Sleeve:  $-10 \sim 70^{\circ}\text{C}$   
 Life Expectancy  
 Ball : 50,000 hours at  $25^{\circ}\text{C}$   
 Sleeve: 25,000 hours at  $25^{\circ}\text{C}$   
 Weight: 158 g

### Bearing system

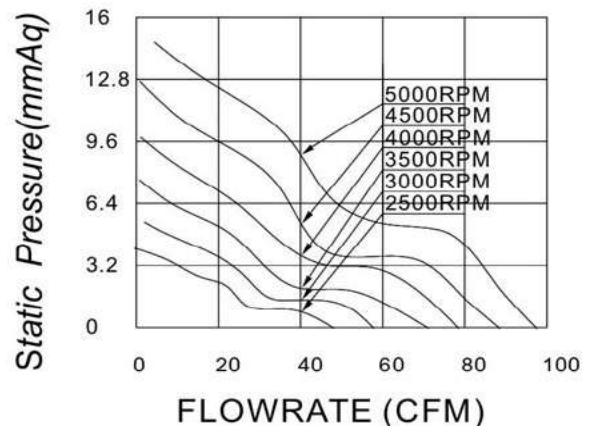
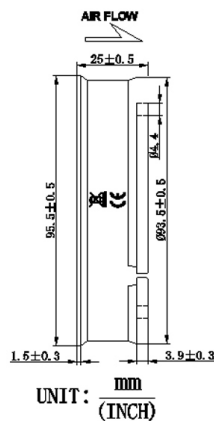
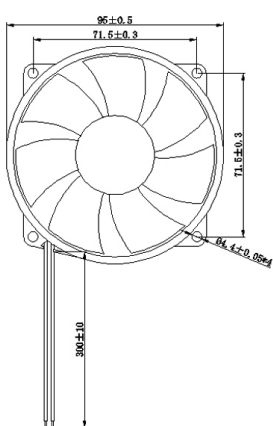
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated In Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A
MFD9225FD1-L	12	7 ~ 13.5	0.3	0.84	2000	46.8	46.8	35.5
MFD9225FD1-M			0.45	1.44	2500	56.6	5.71	41.1
MFD9225FD1-H			0.51	16.8	3000	69.1	7.81	45.5
MFD9225FD1-HH			0.64	2.88	3500	77.3	10.08	48.3
MFD9225FD1-HV			0.81	3.84	4000	87.6	12.87	53.7
MFD9225FD1-VH			1.1	5.4	4500	96.9	15.57	55
MFD9225FD2-L	24	18 ~ 26.1	0.15	1.44	2000	46.8	46.8	35.5
MFD9225FD2-M			0.225	1.92	2500	56.6	5.71	41.1
MFD9225FD2-H			0.255	2.88	3000	69.1	7.81	45.5
MFD9225FD2-HH			0.32	3.6	3500	77.3	10.08	48.3
MFD9225FD2-HV			0.4	3.84	4000	87.6	12.87	53.7
MFD9225FD2-VH			0.55	5.28	4500	96.9	15.57	55
MFD9225FD4-L	48	36 ~ 54	0.075	3.6	2000	46.8	46.8	35.5
MFD9225FD4-M			0.11	5.4	2500	56.6	5.71	41.1
MFD9225FD4-H			0.127	6.12	3000	69.1	7.81	45.5
MFD9225FD4-HH			0.16	7.66	3500	77.3	10.08	48.3
MFD9225FD4-HV			0.2	9.72	4000	87.6	12.87	53.7
MFD9225FD4-VH			0.275	13.2	4500	96.9	15.57	55

### DIMENSIONS DRAWING & P&Q CURVE



# MFD9238



Size : 92 x 92 x 38mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 175 g

### Bearing system

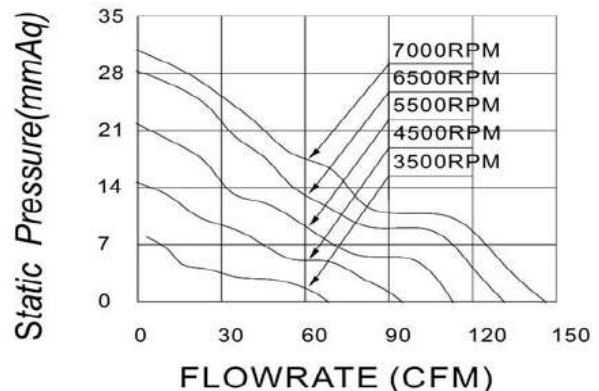
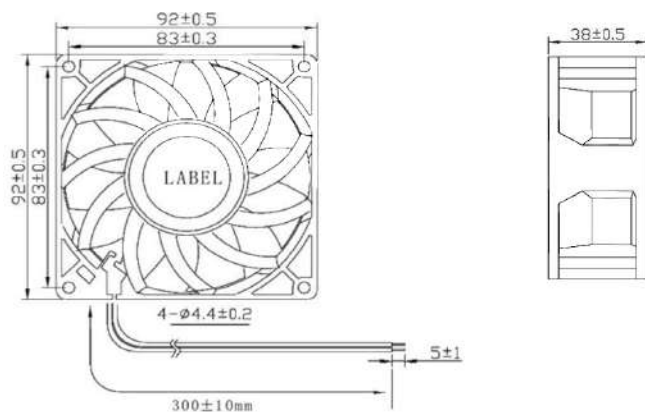
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD9238D1-L	12	6.0 ~ 13.5	0.28	6	3500	70.86	8.25	48
MFD9238D1-M			0.9	10.8	4500	94.09	14.26	55.1
MFD9238D1-H			1.2	14.4	5500	112.5	20.24	64.5
MFD9238D1-HH			1.6	16.2	6500	133.04	24.87	65.6
MFD9238D1-VH			2.1	25.2	7500	144.26	30.88	66.2
MFD9238D2-L	24	18 ~ 26.5	0.25	6	3500	70.86	8.25	48
MFD9238D2-M			0.31	7.44	4500	94.09	14.26	55.1
MFD9238D2-H			0.55	13.2	5500	112.5	20.24	64.5
MFD9238D2-HH			0.8	19.2	6500	133.04	24.87	65.6
MFD9238D2-VH			1.05	25.2	7500	144.26	30.88	66.2
MFD9238D4-L	48	36 ~ 55	0.13	6	3500	70.86	8.25	48
MFD9238D4-M			0.23	10.8	4500	94.09	14.26	55.1
MFD9238D4-H			0.36	14.4	5500	112.5	20.24	64.5
MFD9238D4-HH			0.4	16.2	6500	133.04	24.87	65.6
MFD9238D4-VH			0.53	25.2	7500	144.26	30.88	66.2

### DIMENSIONS DRAWING & P&Q CURVE



# MFD12025



Size : 120 x 120 x 25mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 150 g

### Bearing system

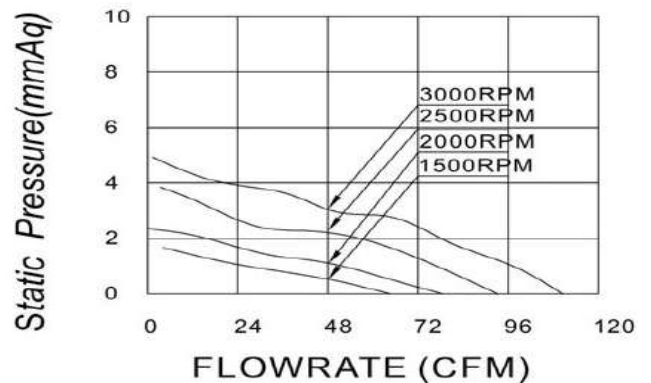
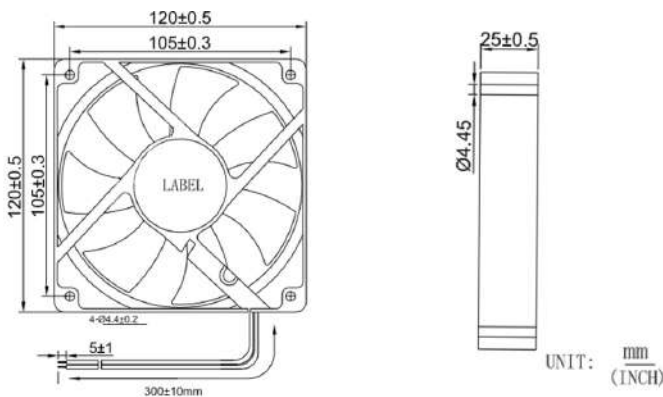
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD12025D1-L	12	6.0 ~ 13.5	0.18	2.16	1500	64.2	1.76	30.5
MFD12025D1-M			0.25	3	2000	76.6	2.43	36.5
MFD12025D1-H			0.31	3.72	2500	92.4	3.98	42.1
MFD12025D1-HH			0.45	5.4	3000	107	5.04	47.4
MFD12025D2-L	24	18 ~ 26.5	0.09	2.16	1500	64.2	1.76	30.5
MFD12025D2-M			0.125	3	2000	76.6	2.43	36.5
MFD12025D2-H			0.155	3.72	2500	92.4	3.98	42.1
MFD12025D2-HH			0.225	5.4	3000	107	5.04	47.4
MFD12025D4-L	48	36 ~ 55	0.045	2.16	1500	64.2	1.76	30.5
MFD12025D4-M			0.063	3	2000	76.6	2.43	36.5
MFD12025D4-H			0.078	3.72	2500	92.4	3.98	42.1
MFD12025D4-HH			0.112	5.4	3000	107	5.04	47.4

### DIMENSIONS DRAWING & P&Q CURVE



# MFD12025B



Size : 120 x 120 x 25mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 185 g

## Bearing system

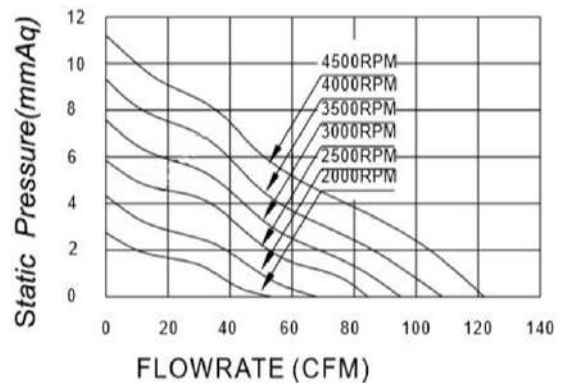
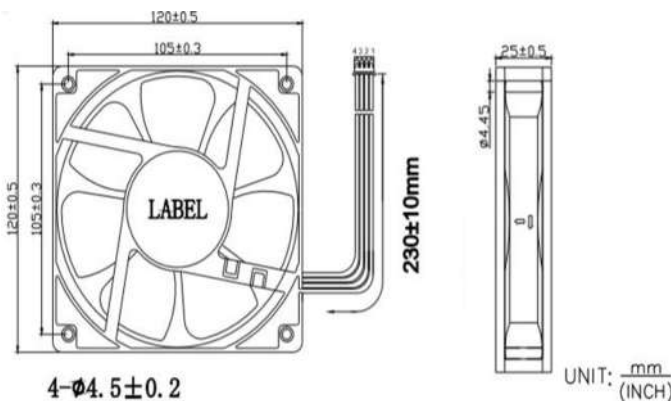
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated In Power	Speed	Maxim Air Flo	Maxim Air Pres	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A
MFD12025BD1-L	7 ~ 13.5	7 ~ 13.5	0.3	3.6	2000	54.19	2.81	33.3
MFD12025BD1-M			0.4	4.8	2500	67.49	4.26	41.3
MFD12025BD1-H <sup>1</sup>			0.5	6	3000	82.86	5.92	46.1
MFD12025BD1-H <sup>2</sup>			0.6	7.2	3500	95.13	7.56	50.6
MFD12025BD1-VH			0.7	8.4	4000	108.29	9.43	53
MFD12025BD1-HV			0.8	9.6	4500	121.06	11.31	57.1
MFD12025BD2-L	18 ~ 26.4	18 ~ 26.4	0.15	3.6	2000	54.19	2.81	33.3
MFD12025BD2-M			0.2	4.8	2500	67.49	4.26	41.3
MFD12025BD2-H <sup>2</sup>			0.25	6	3000	82.86	5.92	46.1
MFD12025BD2-H <sup>4</sup>			0.3	7.2	3500	95.13	7.56	50.6
MFD12025BD2-VH			0.35	8.4	4000	108.29	9.43	53
MFD12025BD2-HV			0.4	9.6	4500	121.06	11.31	57.1
MFD12025BD4-L	36 ~ 54	36 ~ 54	0.075	3.6	2000	54.19	2.81	33.3
MFD12025BD4-M			0.1	4.8	2500	67.49	4.26	41.3
MFD12025BD4-H <sup>4</sup>			0.125	6	3000	82.86	5.92	46.1
MFD12025BD4-H <sup>8</sup>			0.15	7.2	3500	95.13	7.56	50.6
MFD12025BD4-VH			0.175	8.4	4000	108.29	9.43	53
MFD12025BD4-HV			0.2	9.6	4500	121.06	11.31	57.1

## DIMENSIONS DRAWING & P&Q CURVE



# MFD12025C



Size : 120 x 120 x 25mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 150 g

### Bearing system

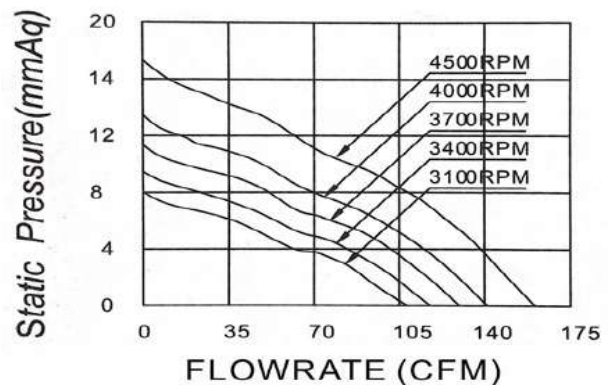
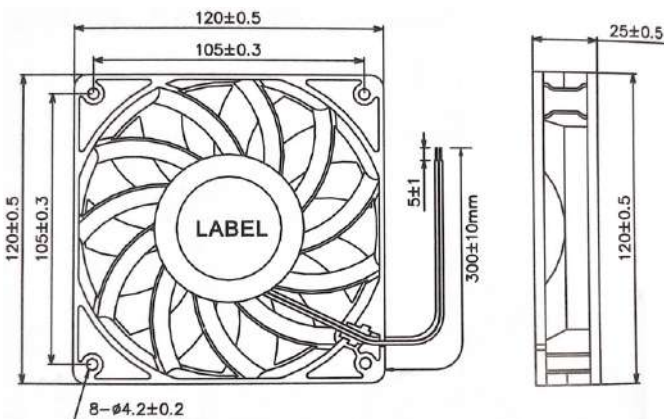
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Inp Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD12025CD1-L	12	7 ~ 13.5	0.54	6.48	3100	103.12	6.59	46.6
MFD12025CD1-M			0.62	7.44	3400	107.13	8.12	49.6
MFD12025CD1-F			0.71	8.52	3700	129.18	9.63	51.4
MFD12025CD1-FH			0.84	10.08	4000	133.7	10.55	53.8
MFD12025CD1-VH			1.2	14.4	4500	155.73	13.73	57.2
MFD12025CD2-L	24	18 ~ 26.5	0.3	7.2	3100	103.12	6.59	46.6
MFD12025CD2-M			0.31	7.44	3400	107.13	8.12	49.6
MFD12025CD2-F			0.36	8.64	3700	129.18	9.63	51.4
MFD12025CD2-FH			0.42	10.08	4000	133.7	10.55	53.8
MFD12025CD2-VH			0.6	14.4	4500	155.73	13.73	57.2
MFD12025CD4-L	48	36 ~ 54	0.14	6.72	3100	103.12	6.59	46.6
MFD12025CD4-M			0.16	7.68	3400	107.13	8.12	49.6
MFD12025CD4-F			0.18	8.64	3700	129.18	9.63	51.4
MFD12025CD4-FH			0.21	10.08	4000	133.7	10.55	53.8
MFD12025CD4-VH			0.3	14.4	4500	155.73	13.73	57.2

### DIMENSIONS DRAWING & P&Q CURVE



# MFD12025E



Size : 120 x 120 x 25mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 185 g

### Bearing system

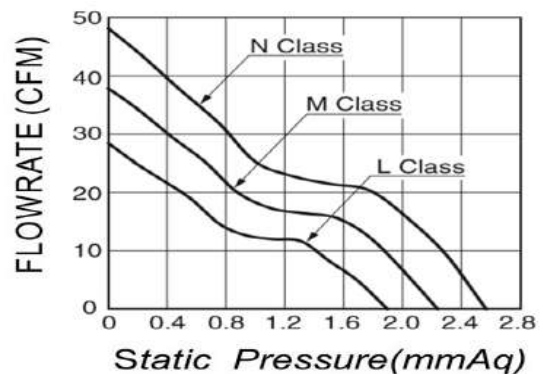
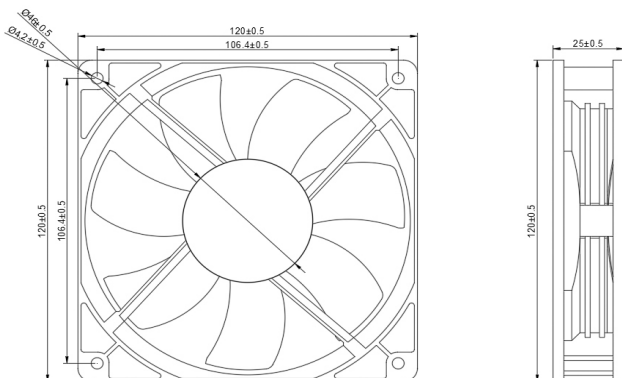
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD12025ED1-L	12	7~13.5	0.13	1.44	1900	67.1	1.8	30
MFD12025ED1-M			0.16	1.92	2200	79.4	2.2	33.5
MFD12025ED1-N			0.24	2.64	2500	91.1	2.62	37
MFD12025ED2-L	24	18 ~ 26.5	0.06	1.44	3100	67.1	1.8	30
MFD12025ED2-M			0.08	1.92	3400	79.6	2.2	33.5
MFD12025ED2-N			0.11	2.64	3700	91.1	2.62	37

### DIMENSIONS DRAWING & P&Q CURVE



# MFD12025F



Size : 120 x 120 x 25mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 150 g

### Bearing system

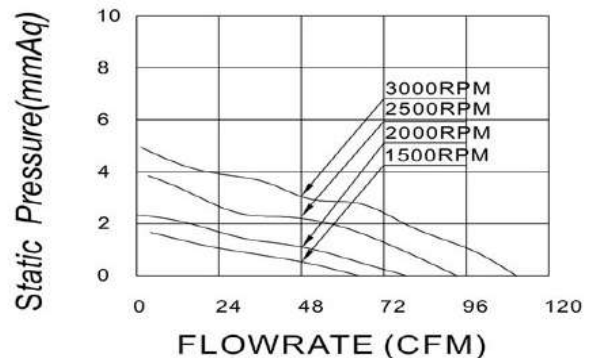
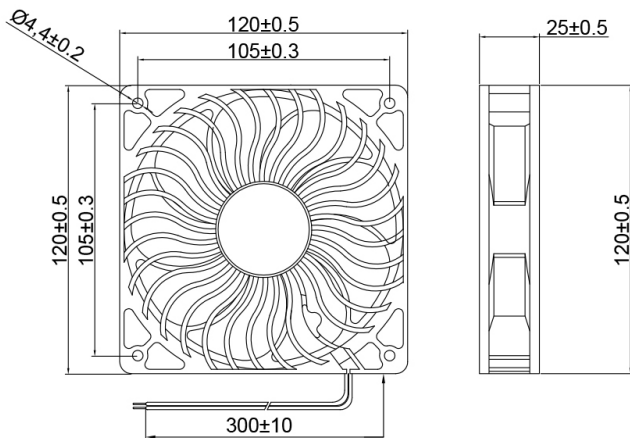
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD12025FD1-L	12	7~13.5	0.18	2.16	1500	64.2	6.59	30.5
MFD12025FD1-M			0.25	3	2000	76.6	8.12	36.5
MFD12025FD1-H			0.31	3.72	2500	92.4	9.63	42.4
MFD12025FD1-HH			0.45	5.4	3000	107	10.55	47.4
MFD12025FD2-L	24	18 ~ 26.5	0.09	2.16	1500	64.2	6.59	30.5
MFD12025FD2-M			0.13	3	2000	76.6	8.12	36.5
MFD12025FD2-H			0.16	3.72	2500	92.4	9.63	42.4
MFD12025FD2-HH			0.23	5.4	3000	107	10.55	47.4
MFD12025FD4-L	48	36 ~ 54	0.05	2.16	1500	64.2	6.59	30.5
MFD12025FD4-M			0.07	3	2000	76.6	8.12	36.5
MFD12025FD4-H			0.08	3.72	2500	92.4	9.63	42.4
MFD12025FD4-HH			0.12	5.4	3000	107	10.55	47.4

### DIMENSIONS DRAWING & P&Q CURVE



# MFD12025G



Size : 120 x 120 x 25mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 165 g

### Bearing system

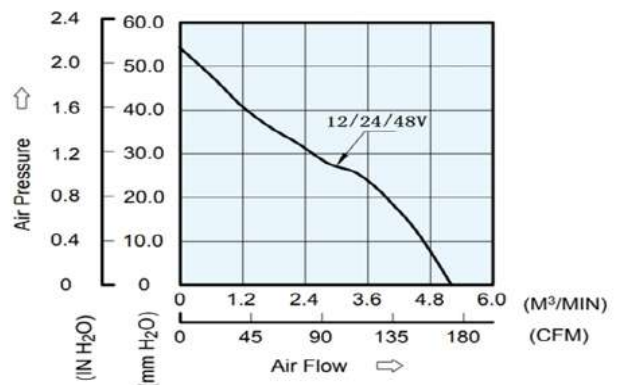
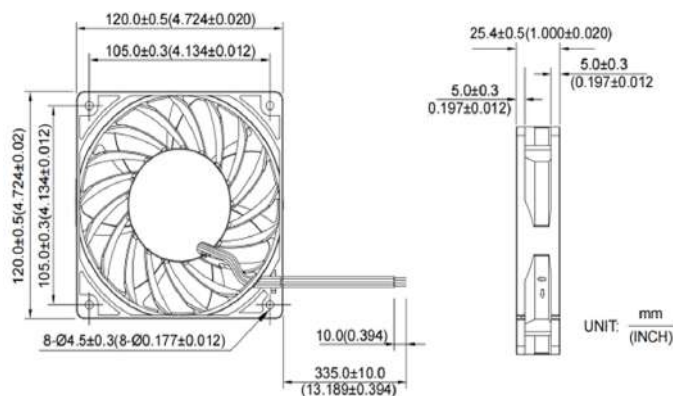
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD12025GD1-VH	12	7~13.5	2.0	24	8300	174.53	54.33	65.5
MFD12025GD2-VH	24	18 ~ 26.5	1.0	24	8300	174.53	54.33	65.5
MFD12025GD4-VH	48	36 ~ 54	0.5	24	8300	174.53	54.33	65.5

### DIMENSIONS DRAWING & P&Q CURVE



# MFD12038



Size : 120 x 120 x 38mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 300 g

### Bearing system

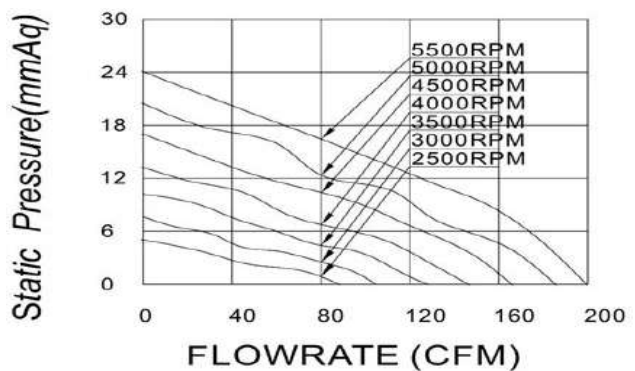
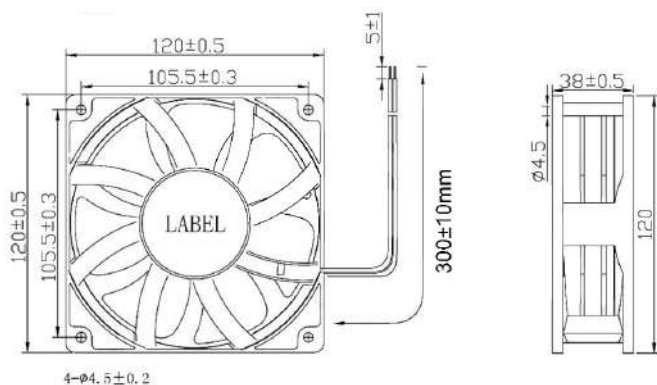
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage VDC	Operating Voltage VDC	Rated Current A	Rated Power W	Speed R.P.M	Max Air Flow CFM	Max Air Pres mm H <sub>2</sub> O	Nois OD B -1
MFD12038D1-L	8 ~ 13.5	8 ~ 13.5	0.2	2.4	2500	96.55	5.91	43.4
MFD12038D1-M			0.33	3.96	3000	111.2	8.66	47.7
MFD12038D1-V			0.47	5.64	3500	132.14	11.94	52.8
MFD12038D1-H12			0.7	8.4	4000	152.89	15.46	54.5
MFD12038D1-HH			1.3	15.6	4500	169.37	19.73	58.1
MFD12038D1-VH			0.8	21.6	5000	189.97	24.4	62.1
MFD12038D1-HV	2.1	25.2	5500	209.92	29.28	65.2		
MFD12038D2-L	1.8 ~ 2.6	1.8 ~ 2.6	0.13	3.12	2500	96.55	5.91	43.4
MFD12038D2-M			0.18	4.32	3000	111.2	8.66	47.7
MFD12038D2-V			0.3	7.2	3500	132.14	11.94	52.8
MFD12038D2-H24			0.45	10.8	4000	152.89	15.46	54.5
MFD12038D2-HH			0.6	14.4	4500	169.37	19.73	58.1
MFD12038D2-VH			0.7	16.8	5000	189.97	24.4	62.1
MFD12038D2-HV	0.9	21.6	5500	209.92	29.28	65.2		
MFD12038D4-L	3.6 ~ 5.4	3.6 ~ 5.4	0.08	3.6	2500	96.55	5.91	43.4
MFD12038D4-M			0.12	5.76	3000	111.2	8.66	47.7
MFD12038D4-V			0.19	9.12	3500	132.14	11.94	52.8
MFD12038D4-H48			0.27	12.9	4000	152.89	15.46	54.5
MFD12038D4-HH			0.3	14.4	4500	169.37	19.73	58.1
MFD12038D4-VH			0.45	21.6	5000	189.97	24.4	62.1
MFD12038D4-HV	0.5	24	5500	209.92	29.28	65.2		

### DIMENSIONS DRAWING & P&Q CURVE



# MFD12038B



Size : 120 x 120 x 38mm  
 Bearing system: BALL  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 300 g

## Bearing system

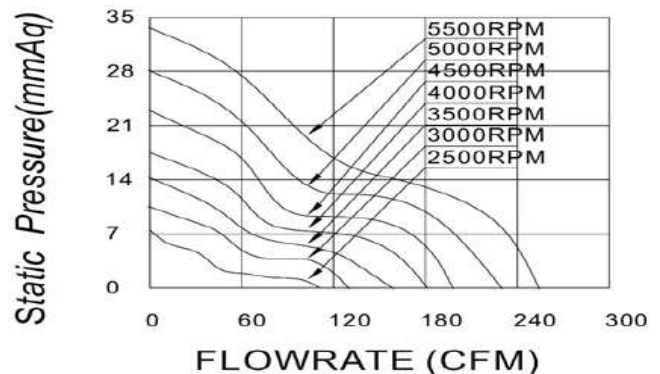
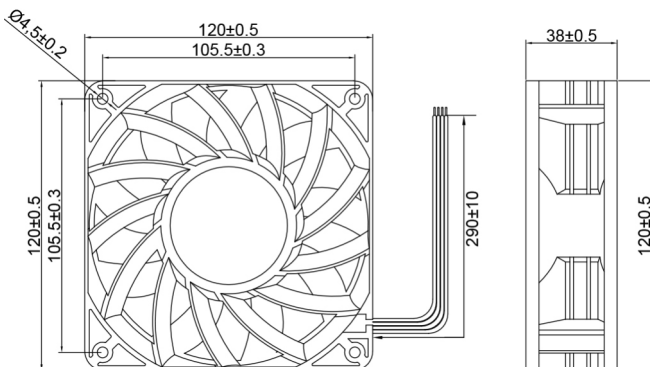
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	ODB - A
MFD12038BD	1-L	8 ~ 13.5	0.35	4.2	2500	108.2	7.16	52.4
MFD12038BD	1-M		0.85	10.2	3000	131.6	10.43	56
MFD12038BD	1-V M		1.38	16.6	3500	157.4	14.2	57.6
MFD12038BD	1-H 2		1.9	22.8	4000	179.8	18.15	62.4
MFD12038BD	1-H H		2.4	28.8	4500	200.7	22.96	66.7
MFD12038BD	1-V H		2.8	33.6	5000	225.5	28.02	69.8
MFD12038BD	1-H V	3	36	5500	248.4	33.14	71.9	
MFD12038BD	2-L	18 ~ 26	0.18	4.2	2500	108.2	7.16	52.4
MFD12038BD	2-M		0.43	10.2	3000	131.6	10.43	56
MFD12038BD	2-V M		0.7	16.6	3500	157.4	14.2	57.6
MFD12038BD	2-H 4		0.95	22.8	4000	179.8	18.15	62.4
MFD12038BD	2-H H		1.2	28.8	4500	200.7	22.96	66.7
MFD12038BD	2-V H		1.4	33.6	5000	225.5	28.02	69.8
MFD12038BD	2-H V	1.85	44.4	5500	248.4	33.14	71.9	
MFD12038BD	4-L	36 ~ 54	0.09	4.2	2500	108.2	7.16	52.4
MFD12038BD	4-M		0.21	10.2	3000	131.6	10.43	56
MFD12038BD	4-V M		0.35	16.6	3500	157.4	14.2	57.6
MFD12038BD	4-H 8		0.48	22.8	4000	179.8	18.15	62.4
MFD12038BD	4-H H		0.6	28.8	4500	200.7	22.96	66.7
MFD12038BD	4-V H		0.7	33.6	5000	225.5	28.02	69.8
MFD12038BD	4-H V	0.75	36	5500	248.4	33.14	71.9	

## DIMENSIONS DRAWING & P&Q CURVE



# MFD12038D



Size : 120 x 120 x 38mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 300 g

### Bearing system

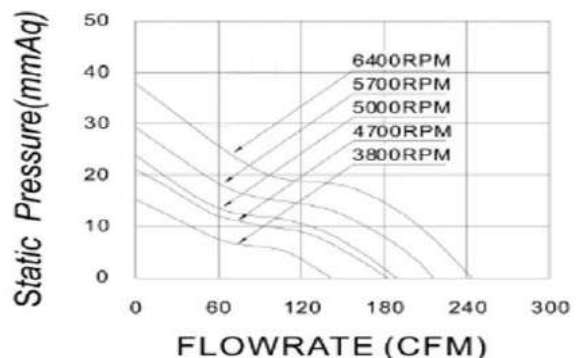
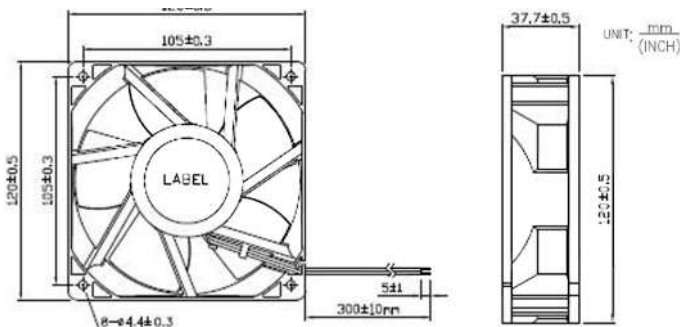
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD12038DD1-M	12	8 ~ 13.5	0.9	10.8	3800	141.2	15.24	53
MFD12038DD1-H			1.3	15.6	4700	182.6	21.08	59
MFD12038DD1-HH			1.5	18	5000	188.9	23.88	60
MFD12038DD1-VH			1.9	22.8	5700	215.7	29.21	63
MFD12038DD1-HV			2.5	30	6400	243.6	37.85	66
MFD12038DD2-M	24	18 ~ 26.5	0.45	10.8	3800	141.2	15.24	53
MFD12038DD2-H			0.74	17.6	4700	182.6	21.08	59
MFD12038DD2-HH			0.88	21.2	5000	188.9	23.88	60
MFD12038DD2-VH			1.04	24.96	5700	215.7	29.21	63
MFD12038DD2-HV			1.48	35.52	6400	243.6	37.85	66
MFD12038DD4-M	48	36 ~ 54	0.23	11.04	3800	141.2	15.24	53
MFD12038DD4-H			0.39	18.72	4700	182.6	21.08	59
MFD12038DD4-HH			0.44	21.12	5000	188.9	23.88	60
MFD12038DD4-VH			0.55	26.4	5700	215.7	29.21	63
MFD12038DD4-HV			0.7	33.6	6400	243.6	37.85	66

### DIMENSIONS DRAWING & P&Q CURVE



# MFD12038E



Size : 120 x 120 x 38mm  
 Bearing system: BALL  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 350 g

### Bearing system

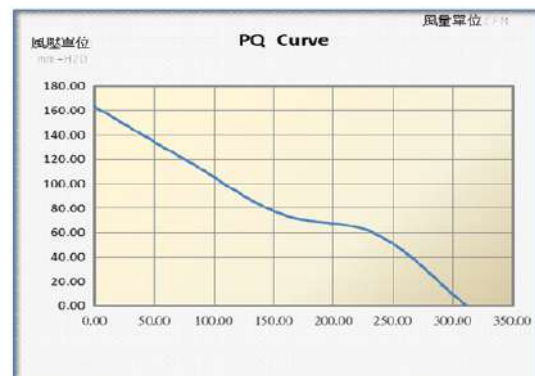
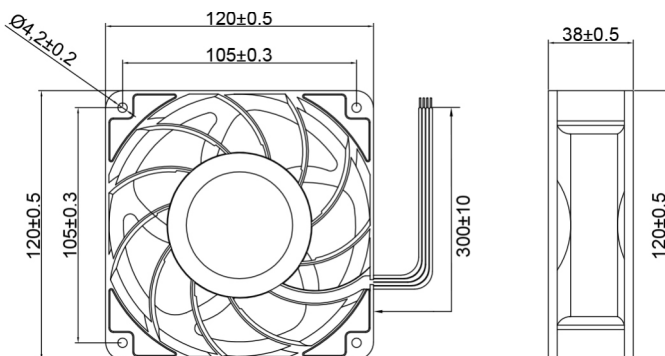
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD12038ED2-H	24	18 ~ 26.5	3.4	81.6	11000	311.68	162.89	70.8
MFD12038ED4-H	48	36 ~ 54	1.7	81.6	11000	311.68	162.89	70.8

### DIMENSIONS DRAWING & P&Q CURVE



# MFD12038F



Size : 120 x 120 x 38mm  
 Bearing system: BALL  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 600 g

## Bearing system

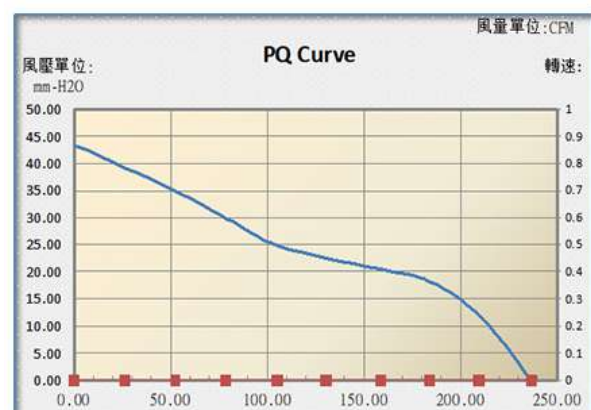
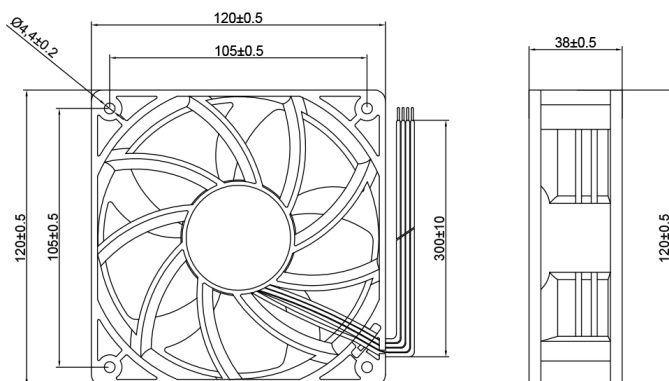
BALL	SLEEVE
●	

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD12038FD1-H	12	8 ~ 13.5	2.5	30	7500	236.48	43.45	77.3
MFD12038FD2-H	24	18 ~ 26.5	1.25	30	7500	236.48	43.45	77.3

## DIMENSIONS DRAWING & P&Q CURVE



# MFD12038H



Size : 120 x 120 x 38mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 300 g

### Bearing system

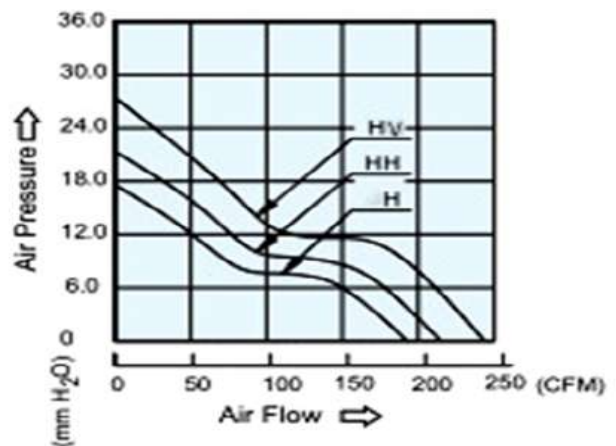
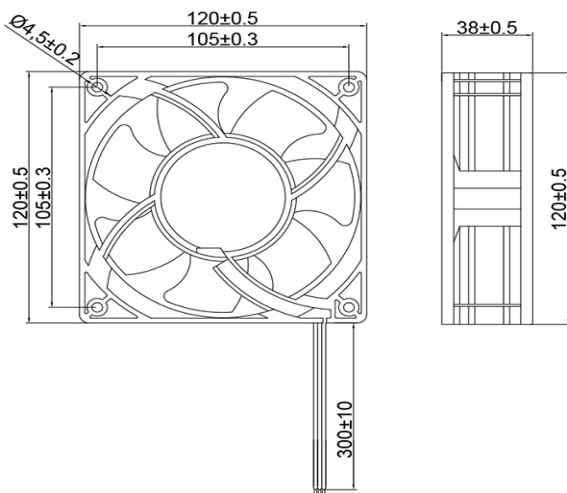
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD12038HD1-H	12	8 ~ 13.5	1.25	15	4100	190.48	17.64	55.5
MFD12038HD1-HH			1.8	21.6	4600	212.57	21.43	58.5
MFD12038HD1-HV			2.45	29.4	5200	240.96	27.48	62
MFD12038HD2-H	24	18 ~ 26.5	0.62	14.88	4100	190.48	17.64	55.5
MFD12038HD2-HH			0.85	20.4	4600	212.57	21.43	58.5
MFD12038HD2-HV			1.3	29.4	5200	240.96	27.48	62
MFD12038HD4-H	48	36 ~ 54	0.31	14.88	4100	190.48	17.64	55.5
MFD12038HD4-HH			0.85	20.4	4600	212.57	21.43	58.5
MFD12038HD4-HV			0.6	28.8	5200	240.96	27.48	62

### DIMENSIONS DRAWING & P&Q CURVE



# MFD12038Q



Size : 120 x 120 x 38mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 300 g

## Bearing system

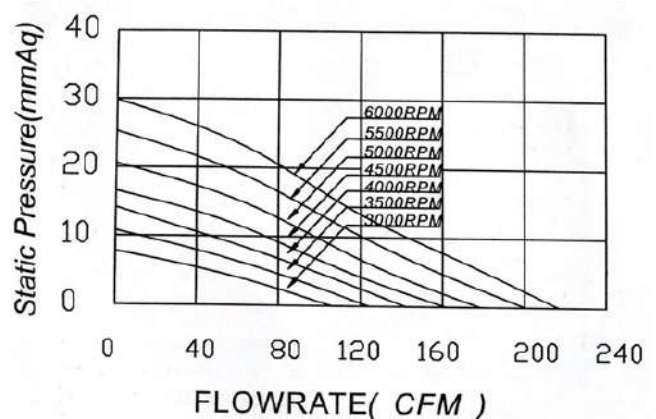
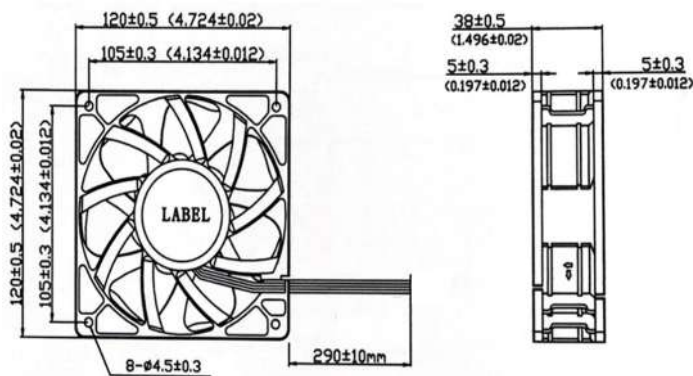
BALL	SLEEVE
●	●

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage VDC	Operating Voltage VDC	Rated Current Amp	Rated Power Watt	Speed R.P.M	Maxim Air Fl CFM	Maxim Air Pre mm H <sub>2</sub> O	Nois OD B -
MFD12038Q	1-L	8 ~ 13	0.4	4.8	3000	110.9	9.858	45.7
MFD12038Q	1-M		0.5	6	3500	124.9	210.8	49.3
MFD12038Q	1-V M		0.52	6.24	4000	142.9	713.81	52.8
MFD12038Q	1-H2		0.74	8.88	4500	162.9	317.23	56.6
MFD12038Q	1-H H		1.3	15.6	5000	181.6	121.11	59.4
MFD12038Q	1-V H		1.4	16.8	5500	201.1	725.61	62.6
MFD12038Q	1-H V		1.8	21.6	6000	217.6	229.65	63.5
MFD12038Q	2-L	18 ~ 26	0.2	4.8	3000	110.9	9.858	45.7
MFD12038Q	2-M		0.25	6	3500	124.9	210.8	49.3
MFD12038Q	2-V M		0.35	8.4	4000	142.9	713.81	52.8
MFD12038Q	2-H4		0.45	10.8	4500	162.9	317.23	56.6
MFD12038Q	2-H H		0.65	15.6	5000	181.6	121.11	59.4
MFD12038Q	2-V H		0.85	20.4	5500	201.1	725.61	62.6
MFD12038Q	2-H V		0.9	21.6	6000	217.6	229.65	63.5
MFD12038Q	4-L	36 ~ 54	0.1	4.8	3000	110.9	9.858	45.7
MFD12038Q	4-M		0.13	6.24	3500	124.9	210.8	49.3
MFD12038Q	4-V M		0.18	8.64	4000	142.9	713.81	52.8
MFD12038Q	4-H8		0.23	11.04	4500	162.9	317.23	56.6
MFD12038Q	4-H H		0.33	15.84	5000	181.6	121.11	59.4
MFD12038Q	4-V H		0.6	28.8	5500	201.1	725.61	62.6
MFD12038Q	4-H V		0.67	32	6000	217.6	229.65	63.5

## DIMENSIONS DRAWING & P&Q CURVE



# MFD14025



Size : 140 x 140 x 25mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Sleeve: 25,000 hours at 25°C  
 Weight: 180 g

### Bearing system

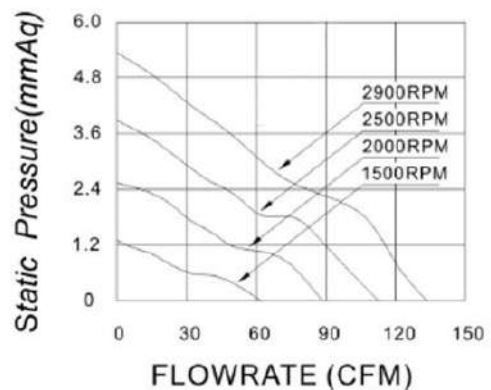
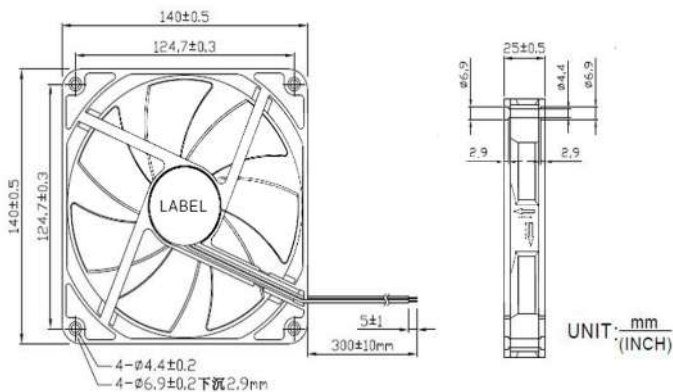
BALL	SLEEVE
●	●

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD14025D1-L	12	7.5 ~ 13.5	0.1	1.2	1500	62.07	1.3	28
MFD14025D1-M			0.23	2.76	2000	88.28	2.54	36
MFD14025D1-H			0.47	5.64	2500	112.8	3.87	43.1
MFD14025D1-HH			1	12	2900	133.43	5.35	47.1
MFD14025D2-L	24	18 ~ 26.5	0.05	1.2	1500	62.07	1.3	28
MFD14025D2-M			0.12	2.76	2000	88.28	2.54	36
MFD14025D2-H			0.24	5.64	2500	112.8	3.87	43.1
MFD14025D2-HH			0.5	12	2900	133.43	5.35	47.1
MFD14025D4-L	48	36 ~ 54	0.03	1.2	1500	62.07	1.3	28
MFD14025D4-M			0.06	2.76	2000	88.28	2.54	36
MFD14025D4-H			0.12	5.64	2500	112.8	3.87	43.1
MFD14025D4-HH			0.25	12	2900	133.43	5.35	47.1

### DIMENSIONS DRAWING & P&Q CURVE



# MFD14038



Size : 140 x 140 x 38mm  
 Bearing system: BALL  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 450 g

### Bearing system

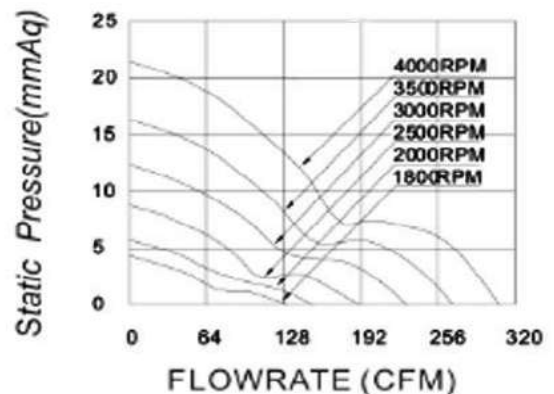
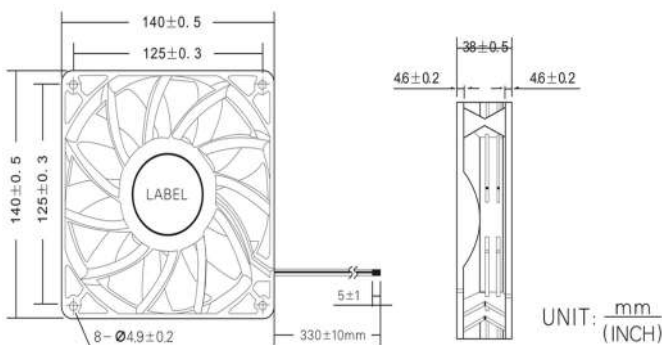
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated In Power	Speed	Maximum Air Flow	Maximum Air Pres.	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A
MFD14038D1-L	12	7.5 ~ 13.5	0.39	4.68	1800	133.3	4.24	43.8
MFD14038D1-M			0.51	6.12	2000	152.1	5.66	47.5
MFD14038D1-H			0.85	10.2	2500	191.1	8.74	53.5
MFD14038D1-HH			1.4	16.8	3000	230.7	12.4	66
MFD14038D1-VH			2.15	25.8	3500	266.3	16.35	68
MFD14038D1-HV			3.25	39	4000	307.2	21.5	62.1
MFD14038D2-L	24	18 ~ 26.5	0.2	4.68	1800	133.3	4.24	43.8
MFD14038D2-M			0.25	6.12	2000	152.1	5.66	47.5
MFD14038D2-H			0.42	10.2	2500	191.1	8.74	53.5
MFD14038D2-HH			0.7	16.8	3000	230.7	12.4	66
MFD14038D2-VH			1.07	25.8	3500	266.3	16.35	68
MFD14038D2-HV			1.63	39	4000	307.2	21.5	62.1
MFD14038D4-L	48	36 ~ 54	0.1	4.68	1800	133.3	4.24	43.8
MFD14038D4-M			0.12	6.12	2000	152.1	5.66	47.5
MFD14038D4-H			0.21	10.2	2500	191.1	8.74	53.5
MFD14038D4-HH			0.35	16.8	3000	230.7	12.4	66
MFD14038D4-VH			0.53	25.8	3500	266.3	16.35	68
MFD14038D4-HV			0.81	39	4000	307.2	21.5	62.1

### DIMENSIONS DRAWING & P&Q CURVE



# MFD14038B



Size : 140 x 140 x 38mm  
 Bearing system: BALL  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 180 g

### Bearing system

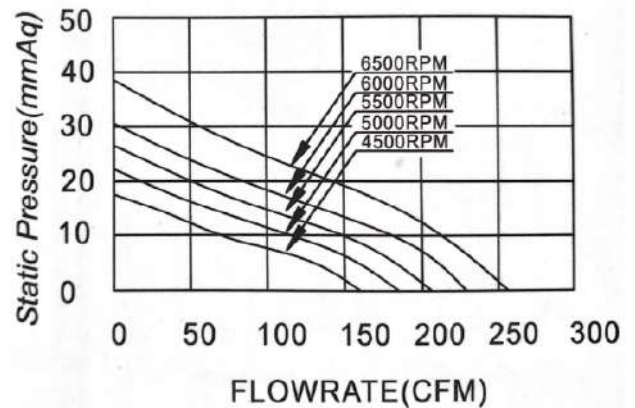
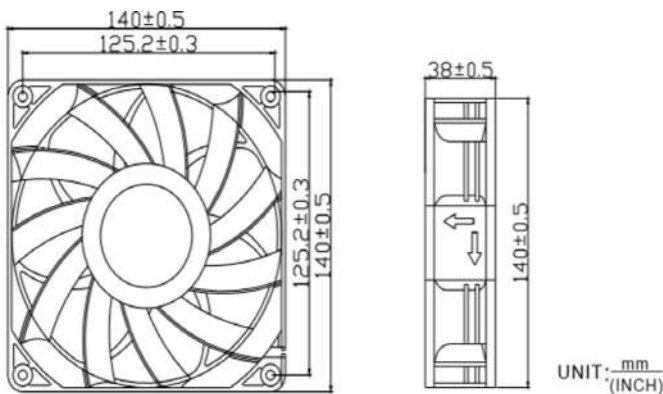
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD14038BD1-L	12	7.5 ~ 13.5	2.3	27	4500	167.7	17.92	55.8
MFD14038BD1-M			2.5	30	5000	189.71	22.4	58.2
MFD14038BD1-H			2.7	32	5500	209.4	26.72	62
MFD14038BD1-HH			3	36	6000	229.45	31.64	64
MFD14038BD1-VH			3.5	42	6500	254.89	37.93	67.8
MFD14038BD2-L	24	18 ~ 26.5	1.17	28	4500	167.7	17.92	55.8
MFD14038BD2-M			1.33	32	5000	189.71	22.4	58.2
MFD14038BD2-H			1.42	34	5500	209.4	26.72	62
MFD14038BD2-HH			1.58	38	6000	229.45	31.64	64
MFD14038BD2-VH			1.83	44	6500	254.89	37.93	67.8
MFD14038BD4-L	48	36 ~ 54	0.63	30	4500	167.7	17.92	55.8
MFD14038BD4-M			0.71	34	5000	189.71	22.4	58.2
MFD14038BD4-H			0.79	38	5500	209.4	26.72	62
MFD14038BD4-HH			0.92	44	6000	229.45	31.64	64
MFD14038BD4-VH			1.04	50	6500	254.89	37.93	67.8

### DIMENSIONS DRAWING & P&Q CURVE



# MFD14050



Size : 140 x 140 x 50mm  
 Bearing system: BALL,  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C

Weight: 500 g

### Bearing system

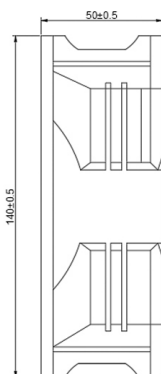
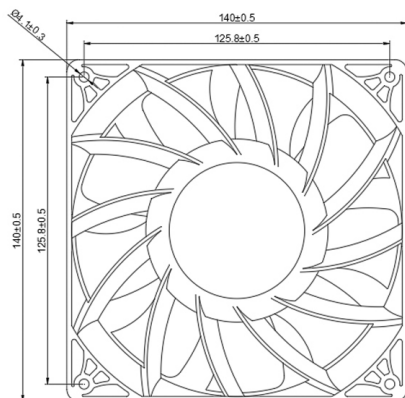
BALL	SLEEVE
●	

### Available Functions

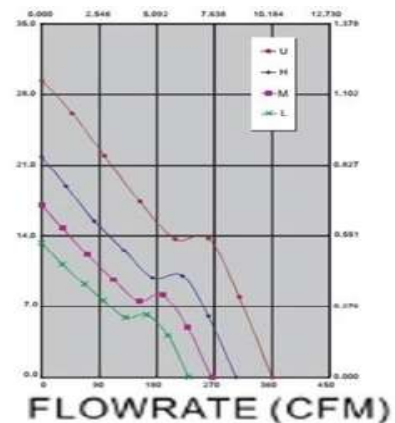
FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmAq	DB-A
MFD14050D1-L	12	7.5 ~ 13.5	2.12	21.6	2800	229.46	13.258	59.4
MFD14050D1-M			2.6	33.6	3200	265.12	17.018	62.5
MFD14050D1-H			2.85	38.4	3600	303.68	21.818	64.7
MFD14050D2-L	24	18~ 26.5	0.3	19.2	2800	229.46	13.258	59.4
MFD14050D2-M			1.1	26.4	3200	265.12	17.018	62.5
MFD14050D2-H			1.5	36	3600	303.68	21.818	64.7
MFD14050D4-L	48	36 ~ 54	0.53	17.28	2800	229.46	13.258	59.4
MFD14050D4-M			0.67	24.48	3200	265.12	17.018	62.5
MFD14050D4-H			0.73	35.04	3600	303.68	21.818	64.7
MFD14050D4-U			1.1	52.8	4300	360.8	29.387	68.1

### DIMENSIONS DRAWING & P&Q CURVE



Static Pressure(mmAq)



# MFD15050



Size : 150 x 150 x 51mm  
 Bearing system: BALL  
 Frame: Aluminum  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 1000 g

### Bearing system

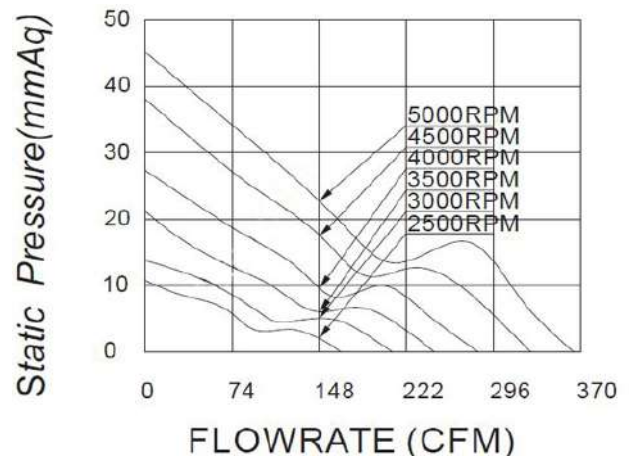
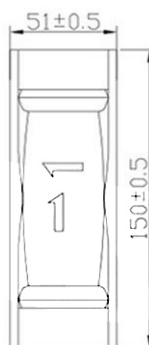
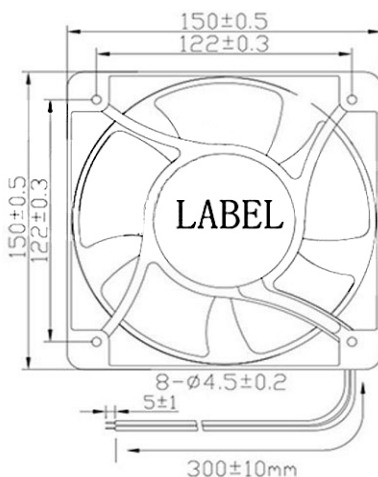
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated In Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB - A
MFD15050D1-1L	12	6.0 ~ 13.5	0.66	7.92	2500	172.21	10.92	56.1
MFD15050D1-1M			1	12	3000	209.4	15.33	58.3
MFD15050D1-1H			1.6	19.2	3500	248.09	21.33	62.5
MFD15050D1-1HH			2.2	26.4	4000	283	27.36	65.5
MFD15050D1-1VH			3.2	38.4	4500	325.57	37.57	68.2
MFD15050D1-1HV			4	48	5000	361.69	45.36	71.4
MFD15050D2-1L	24	18 ~ 26.5	0.36	8.64	2500	172.21	10.92	56.1
MFD15050D2-1M			0.53	12.72	3000	209.4	15.33	58.3
MFD15050D2-1H			0.74	17.76	3500	248.09	21.33	62.5
MFD15050D2-1HH			1.2	28.8	4000	283	27.36	65.5
MFD15050D2-1VH			1.7	40.8	4500	325.57	37.57	68.2
MFD15050D2-1HV			2.1	50.4	5000	361.69	45.36	71.4
MFD15050D4-1L	48	36 ~ 55	0.2	9.6	2500	172.21	10.92	56.1
MFD15050D4-1M			0.3	14.4	3000	209.4	15.33	58.3
MFD15050D4-1H			0.5	24	3500	248.09	21.33	62.5
MFD15050D4-1HH			0.7	33.6	4000	283	27.36	65.5
MFD15050D4-1VH			0.9	43.2	4500	325.57	37.57	68.2
MFD15050D4-1HV			1.2	57.6	5000	361.69	45.36	71.4

### DIMENSIONS DRAWING & P&Q CURVE



# MFD17225



Size : 172x 150 x 25mm  
 Bearing system: BALL, Sleeve  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 450 g

### Bearing system

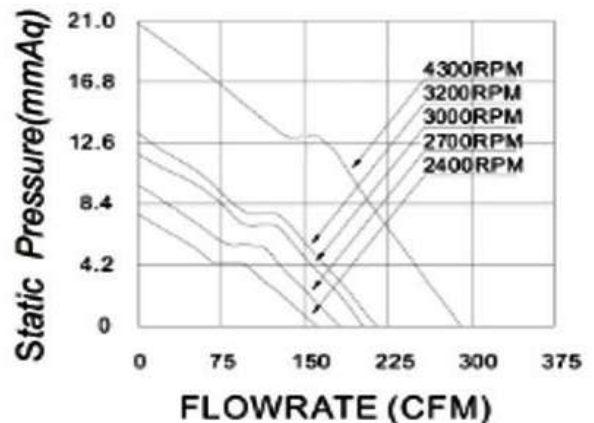
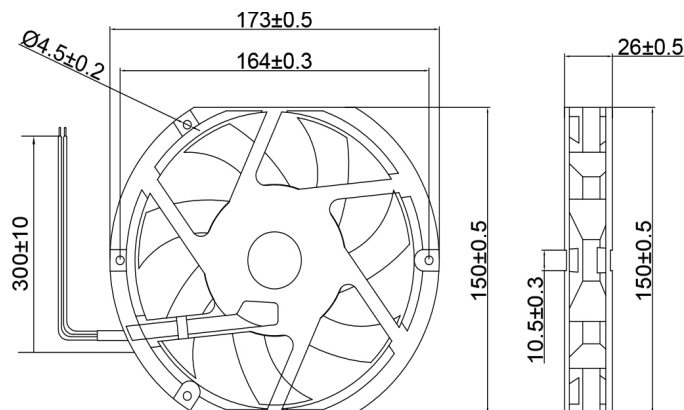
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Inp Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD17225D1-L	12	7.5 ~ 13.5	0.56	5.72	2400	160.77	7.75	46
MFD17225D1-M			0.85	10.2	2700	181.32	9.7	49
MFD17225D1-H			0.98	11.76	3000	202.54	11.85	52
MFD17225D1-HF			1.17	14.04	3200	214.85	13.3	53.5
MFD17225D1-VH			3	36	4000	290.64	20.85	61.5
MFD17225D2-L	24	18 ~ 26.5	0.31	7.44	2400	160.77	7.75	46
MFD17225D2-M			0.4	9.6	2700	181.32	9.7	49
MFD17225D2-H			0.5	12	3000	202.54	11.85	52
MFD17225D2-HF			0.7	16.8	3200	214.85	13.3	53.5
MFD17225D2-VH			1.6	38.4	4000	290.64	20.85	61.5
MFD17225D4-L	48	36 ~ 55	0.17	8.16	2400	160.77	7.75	46
MFD17225D4-M			0.22	10.56	2700	181.32	9.7	49
MFD17225D4-H			0.27	12.96	3000	202.54	11.85	52
MFD17225D4-HF			0.31	14.88	3200	214.85	13.3	53.5
MFD17225D4-VH			0.8	38.4	4000	290.64	20.85	61.5

### DIMENSIONS DRAWING & P&Q CURVE



# MFD17251



Size : 172 x 150 x 51mm  
 Bearing system: BALL  
 Frame: Aluminum  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 1000 g

### Bearing system

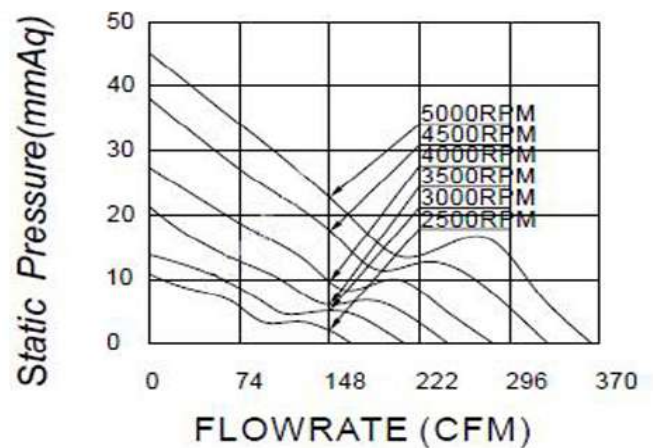
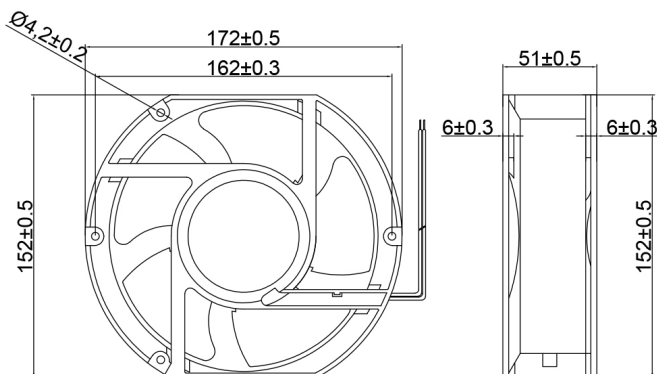
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated In Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A
MFD17251D1-L	12	6.0 ~ 13.0	0.6	7.2	2500	172.21	10.92	56.1
MFD17251D1-M			1	12	3000	209.4	15.33	58.3
MFD17251D1-H			1.5	18	3500	248.09	21.33	62.5
MFD17251D1-HH			2.1	25.2	4000	283	27.36	65.5
MFD17251D1-VH			3.2	38.4	4500	325.57	37.57	68.2
MFD17251D1-HV	4	48	5000	361.69	45.36	71.4		
MFD17251D2-L	24	18 ~ 26.0	0.3	7.2	2500	172.21	10.92	56.1
MFD17251D2-M			0.5	12	3000	209.4	15.33	58.3
MFD17251D2-H			0.7	16.8	3500	248.09	21.33	62.5
MFD17251D2-HH			1.07	25.68	4000	283	27.36	65.5
MFD17251D2-VH			1.06	38.4	4500	325.57	37.57	68.2
MFD17251D2-HV	2	48	5000	361.69	45.36	71.4		
MFD17251D4-L	48	36 ~ 55	0.15	7.2	2500	172.21	10.92	56.1
MFD17251D4-M			0.25	12	3000	209.4	15.33	58.3
MFD17251D4-H			0.3	14.4	3500	248.09	21.33	62.5
MFD17251D4-HH			0.5	24	4000	283	27.36	65.5
MFD17251D4-VH			0.8	38.4	4500	325.57	37.57	68.2
MFD17251D4-HV	1	48	5000	361.69	45.36	71.4		

### DIMENSIONS DRAWING & P&Q CURVE



# MFD17251R



Size : Ø172 x 51 mm  
 Bearing system: BALL  
 Frame: Aluminum  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 1000 g

### Bearing system

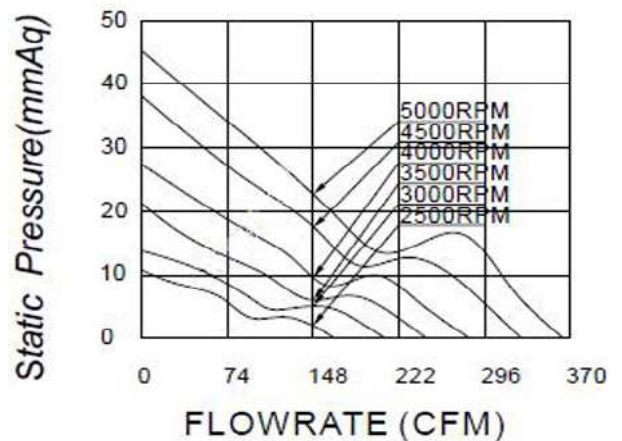
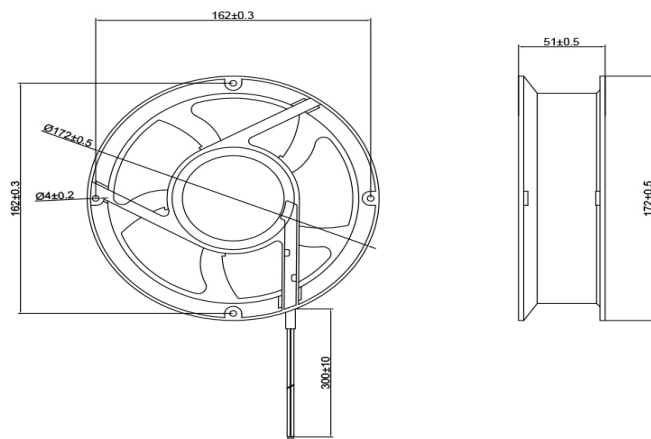
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated In Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mm H <sub>2</sub> O	DB-A
MFD17251RD1	-L	6.0 ~ 13.0	0.6	7.2	2500	172.21	10.92	56.1
MFD17251RD1	-M		1	12	3000	209.4	15.33	58.3
MFD17251RD1	-H <sub>1</sub> 2		1.5	18	3500	248.09	21.33	62.5
MFD17251RD1	-H <sub>1</sub> 2		2.1	25.2	4000	283	27.36	65.5
MFD17251RD1	-VH		3.2	38.4	4500	325.57	37.57	68.2
MFD17251RD1	-HV	4	48	5000	361.69	45.36	71.4	
MFD17251RD2	-L	18 ~ 26.0	0.3	7.2	2500	172.21	10.92	56.1
MFD17251RD2	-M		0.5	12	3000	209.4	15.33	58.3
MFD17251RD2	-H <sub>2</sub> 4		0.7	16.8	3500	248.09	21.33	62.5
MFD17251RD2	-H <sub>2</sub> 4		1.07	25.68	4000	283	27.36	65.5
MFD17251RD2	-VH		1.06	38.4	4500	325.57	37.57	68.2
MFD17251RD2	-HV	2	48	5000	361.69	45.36	71.4	
MFD17251RD4	-L	36 ~ 55	0.15	7.2	2500	172.21	10.92	56.1
MFD17251RD4	-M		0.25	12	3000	209.4	15.33	58.3
MFD17251RD4	-H <sub>4</sub> 8		0.3	14.4	3500	248.09	21.33	62.5
MFD17251RD4	-H <sub>4</sub> 8		0.5	24	4000	283	27.36	65.5
MFD17251RD4	-VH		0.8	38.4	4500	325.57	37.57	68.2
MFD17251RD4	-HV	1	48	5000	361.69	45.36	71.4	

### DIMENSIONS DRAWING & P&Q CURVE



# MFD17251E



Size : 172 x 150 x 51 mm  
 Bearing system: BALL  
 Frame: Aluminum  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 1000 g

### Bearing system

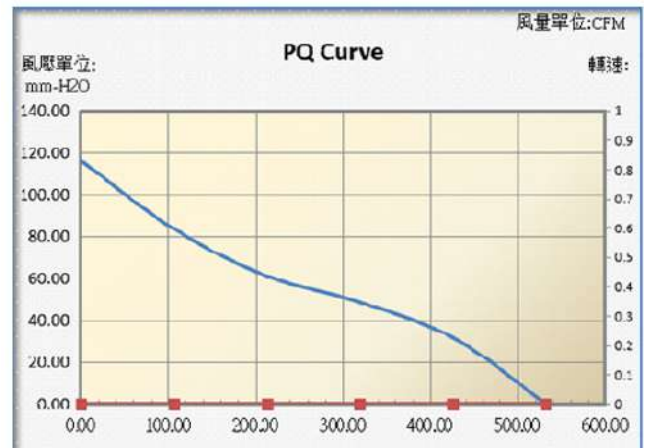
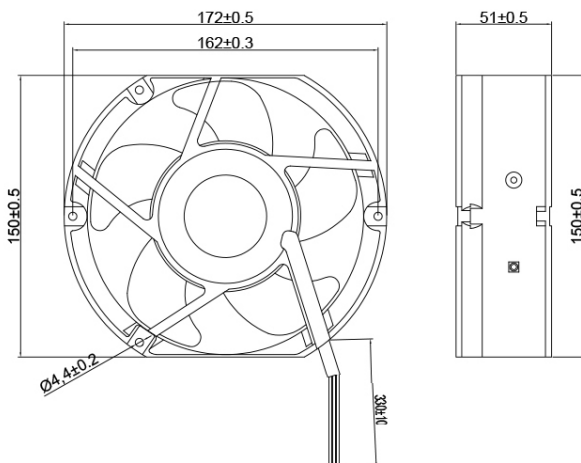
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maximun Air Pressure	Noise
PARTNO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD17251RD4-L	48	36~55	3.2	153.6	9200	532.07	116.19	>90

### DIMENSIONS DRAWING & P&Q CURVE



# MFD18025



Size : 180 x 180 x 25 mm  
 Bearing system: BALL  
 Frame: plastic PBT UL94V-0  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 180 g

### Bearing system

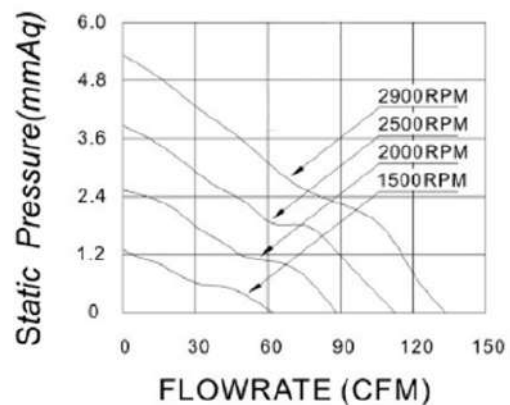
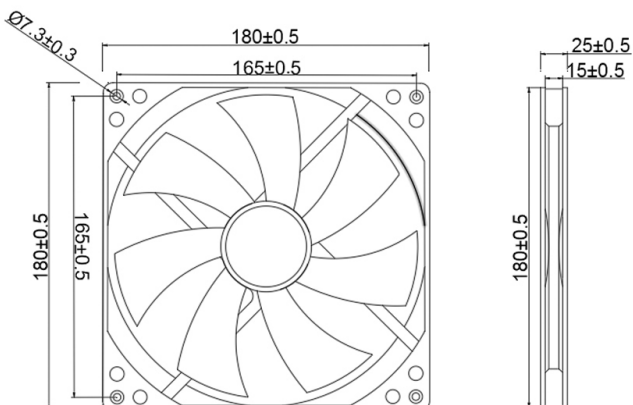
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	RPM	CFM	mmH2O	DB-A
MFD18025D1-L	12	10.8-13.5	0.24	2.88	1000	89	2.41	24.5
MFD18025D1-M			0.3	3.6	1400	100	3	26
MFD18025D1-H			0.58	6.96	1800	123.8	3.5	30
MFD18025D2-L	24	18-26	0.12	2.88	1000	89	2.41	24.5
MFD18025D2-M			0.2	3.6	1400	100	3	26
MFD18025D2-HH			0.25	6	1800	123.8	3.5	30

### DIMENSIONS DRAWING & P&Q CURVE



# MFD18060



Size : 180 x 180 x 60 mm  
 Bearing system: BALL  
 Frame: Aluminum  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 1540 g

### Bearing system

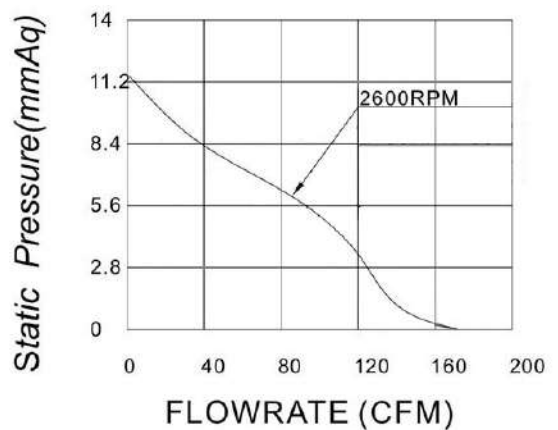
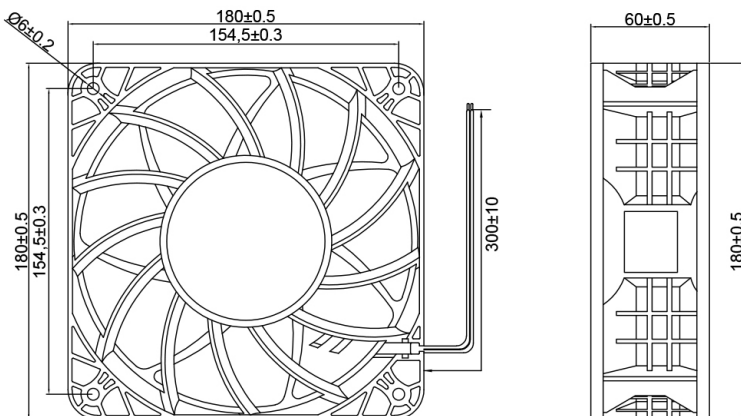
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maimun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD18060D1-H	12	7.0 ~ 13.5	2.8	33.6	2800	183.08	12.38	52.7
MFD18060D2-H	24	18 ~ 26.5	1.4	33.6	2800	183.08	12.38	52.7

### DIMENSIONS DRAWING & P&Q CURVE



# MFD20060



Size : 200 x 200 x 60 mm  
 Bearing system: BALL  
 Frame: Aluminum  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 1600 g

### Bearing system

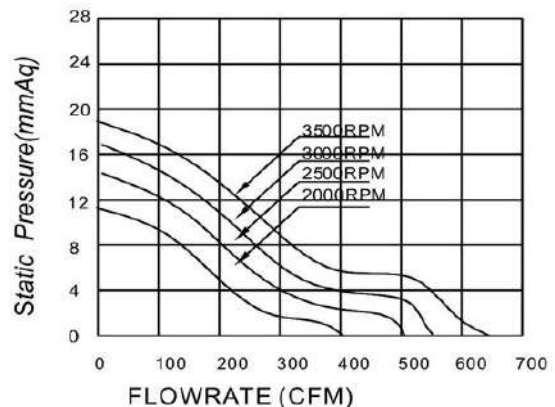
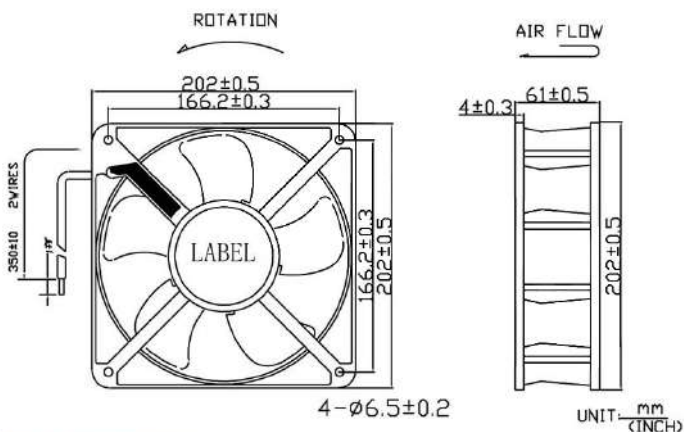
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD20060D1-M			1.25	15	2000	410.93	7.39	56.3
MFD20060D1-H			2.8	33.6	2500	513.66	9.24	60.2
MFD20060D1-HH			4	48	3000	616.4	11.08	65.8
MFD20060D1-VH			5.3	64	3500	719.14	12.93	70.5
MFD20060D2-M			0.63	15.12	2000	410.93	7.39	56.3
MFD20060D2-H			1.42	34	2500	513.66	9.24	60.2
MFD20060D2-HH			2	48	3000	616.4	11.08	65.8
MFD20060D2-VH			2.75	66	3500	719.14	12.93	70.5
MFD20060D4-M			0.37	17.86	2000	410.93	7.39	56.3
MFD20060D4-H			0.66	31.68	2500	513.66	9.24	60.2
MFD20060D4-HH			1	48	3000	616.4	11.08	65.8
MFD20060D4-VH			1.38	66	3500	719.14	12.93	70.5

### DIMENSIONS DRAWING & P&Q CURVE



# MFD20572



Size : 205 x 205 x 72 mm  
 Bearing system: BALL  
 Frame: Aluminum  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 1800 g

## Bearing system

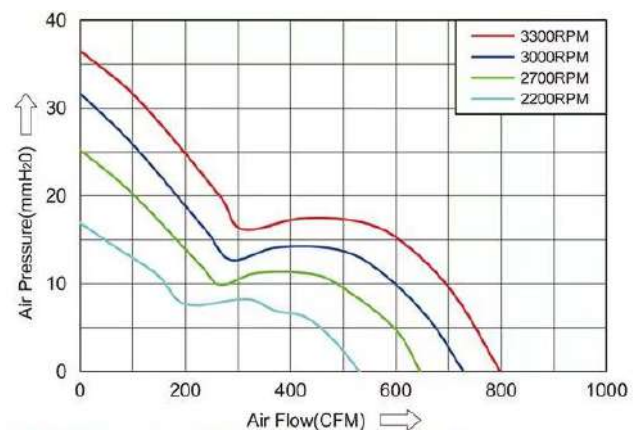
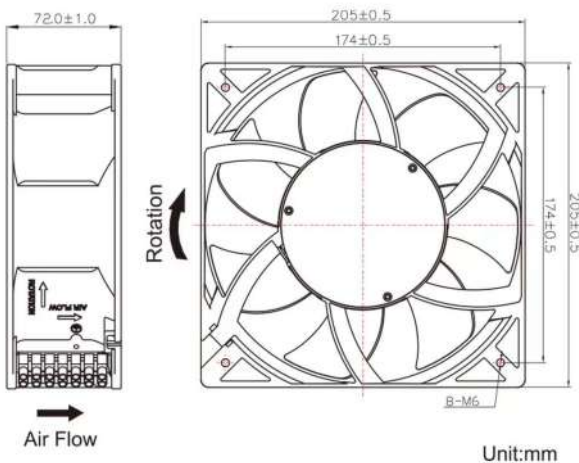
BALL	SLEEVE
●	

## Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maimun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD20572D1-L	12	6 ~ 13.5	8	96	3000	728.4	31.7	59
MFD20572D2-L	24	12 ~ 26.4	3	72	2200	531.3	16.9	51
MFD20572D2-M			4	96	2700	646.3	25.2	57
MFD20572D2-H			5	120	3300	798.3	36.6	62
MFD20572D4-L	48	24 ~ 52.8	1.2	57.6	2200	531.3	16.9	51
MFD20572D4-M			1.5	72	2700	646.3	25.2	57
MFD20572D4-H			2	96	3300	798.3	36.6	62

## DIMENSIONS DRAWING & P&Q CURVE



# MFD22060



Size : Ø220 x 60 mm  
 Bearing system: BALL  
 Frame: Aluminum  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 1150 g

### Bearing system

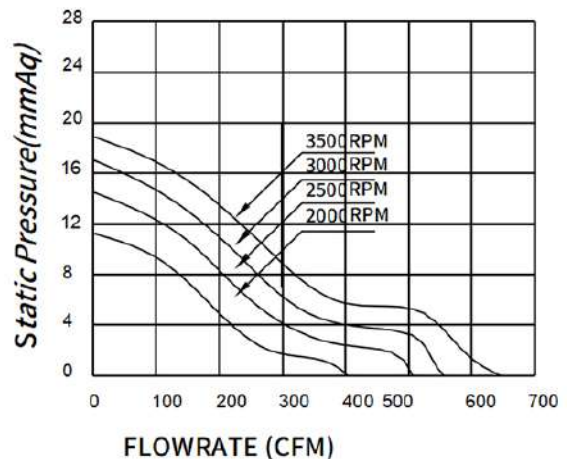
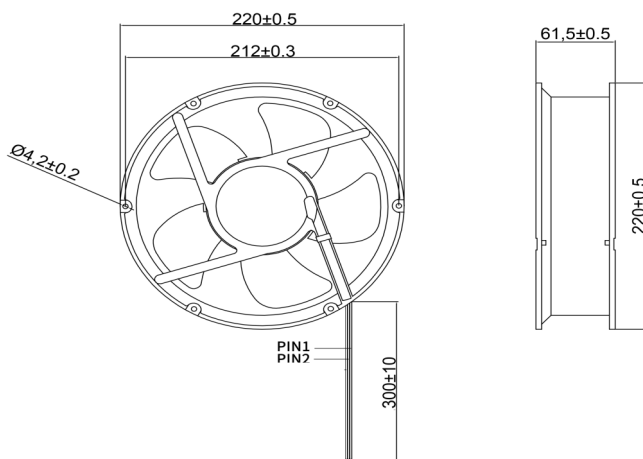
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD22060D1-M	12	7~ 13.5	1.65	19.8	2000	400.58	6.65	54.6
MFD22060D1-H			2.92	35.04	2500	513.39	12.15	60
MFD22060D1-HH			4.73	56.76	3000	586.69	17.28	63.6
MFD22060D1-VH			7.4	88.8	3500	645.61	22.02	68.5
MFD22060D2-M	24	18 ~26.5	0.78	18.81	2000	400.58	6.65	54.6
MFD22060D2-H			1.39	33.29	2500	513.39	12.15	60
MFD22060D2-HH			2.25	53.92	3000	586.69	17.28	63.6
MFD22060D2-VH			3.52	84.36	3500	645.61	22.02	68.5
MFD22060D4-M	48	36 ~54	0.37	17.87	2000	400.58	6.65	54.6
MFD22060D4-H			0.66	31.62	2500	513.39	12.15	60
MFD22060D4-HH			1.07	51.23	3000	586.69	17.28	63.6
MFD22060D4-VH			1.67	80.14	3500	645.61	22.02	68.5

### DIMENSIONS DRAWING & P&Q CURVE



# MFD22580



Size : 225 x 225 x 80 mm  
 Bearing system: BALL  
 Frame: Aluminum  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 2000 g

### Bearing system

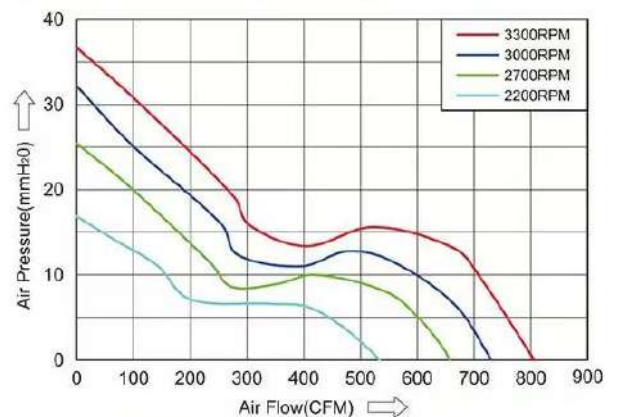
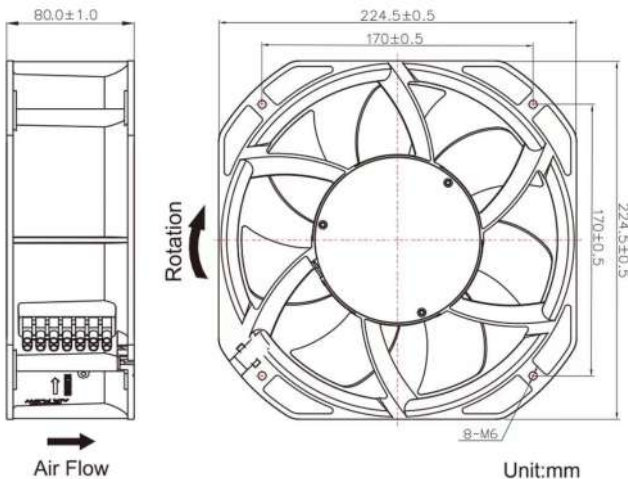
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximun Air Flow	Maimun Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD22580D1-L	12	6 ~ 13.5	8	96	3000	730.8	32.2	58
MFD22580D2-L	24	12 ~ 26.4	3	72	2200	533.5	16.9	50
MFD22580D2-M			4	96	2700	656.5	25.4	55
MFD22580D2-H			5	120	3300	806	36.7	61
MFD22580D4-L	48	24 ~ 52.8	1.2	57.6	2200	533.5	16.9	50
MFD22580D4-M			1.5	72	2700	656.5	25.4	55
MFD22580D4-H			2	96	3300	806	36.7	61

### DIMENSIONS DRAWING & P&Q CURVE



# MFD25489



Size :  $\varnothing 254 \times 89$  mm  
 Bearing system: BALL  
 Frame: Aluminum  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL:  $-10 \sim 70^{\circ}\text{C}$   
 Sleeve:  $-10 \sim 70^{\circ}\text{C}$   
 Life Expectancy  
 Ball : 50,000 hours at  $25^{\circ}\text{C}$   
 Weight: 2700 g

### Bearing system

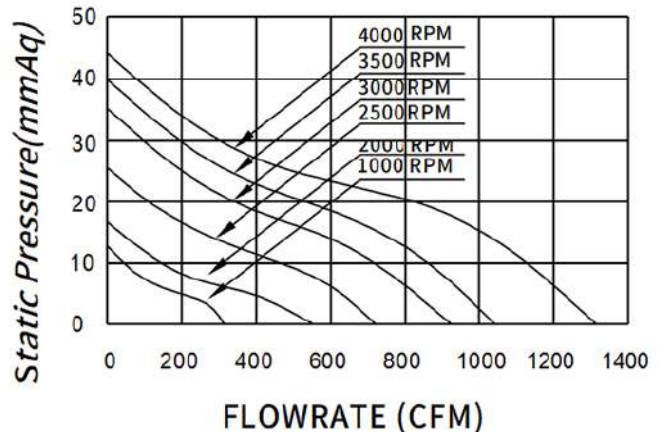
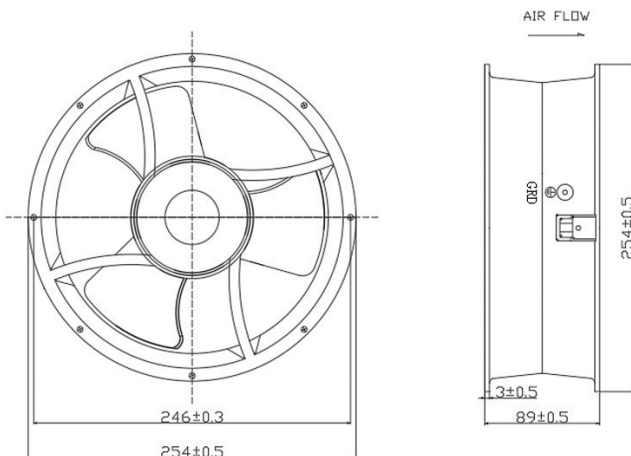
BALL	SLEEVE
●	

### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH <sub>2</sub> O	DB-A
MFD25489D1-L	12	7 ~ 13.5	0.75	9	1000	305.3	11.8	53.4
MFD25489D1-M			3.5	42	2000	548.6	15.4	66.1
MFD25489D1-H			5.5	66	2500	691.8	24.7	71.2
MFD25489D2-L	24	18 ~ 26.5	0.5	12	1000	305.3	11.8	53.4
MFD25489D2-M			1.5	36	2000	548.6	15.4	66.1
MFD25489D2-H			2.9	69.6	2500	691.8	24.7	71.2
MFD25489D2-HH			3.7	88.8	3000	847.8	32.6	75.6
MFD25489D2-VH			5.7	136.8	3500	1035.6	38.6	80.4
MFD25489D2-HV			7.8	187.2	4000	1296.4	42.1	89.6
MFD25489D4-L	48	36 ~ 54	0.2	9.6	1000	305.3	11.8	53.4
MFD25489D4-M			0.8	38.4	2000	548.6	15.4	66.1
MFD25489D4-H			1.4	67.2	2500	691.8	24.7	71.2
MFD25489D4-HH			1.9	91.2	3000	847.8	32.6	75.6
MFD25489D4-VH			3	144	3500	1035.6	38.6	80.4
MFD25489D4-HV			4	192	4000	1296.4	42.1	89.6

### DIMENSIONS DRAWING & P&Q CURVE



# MFD28080



Size : 280 x 280 x 80 mm  
 Bearing system: BALL  
 Frame: Aluminum  
 Impeller: plastic PBT UL94V-0  
 Operating Temp :  
 BALL: -10 ~ 70°C  
 Sleeve: -10 ~ 70°C  
 Life Expectancy  
 Ball : 50,000 hours at 25°C  
 Weight: 2400 g

### Bearing system

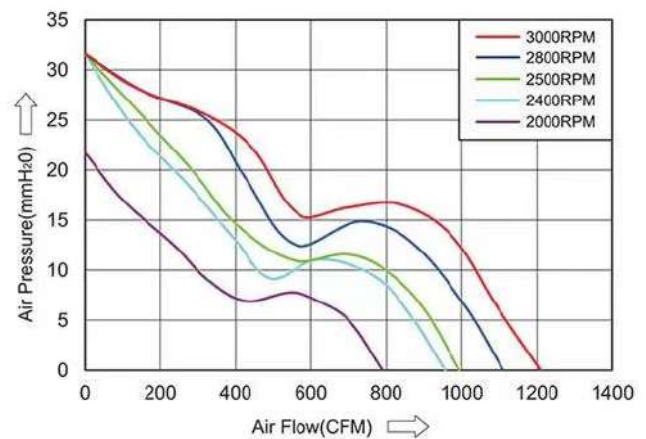
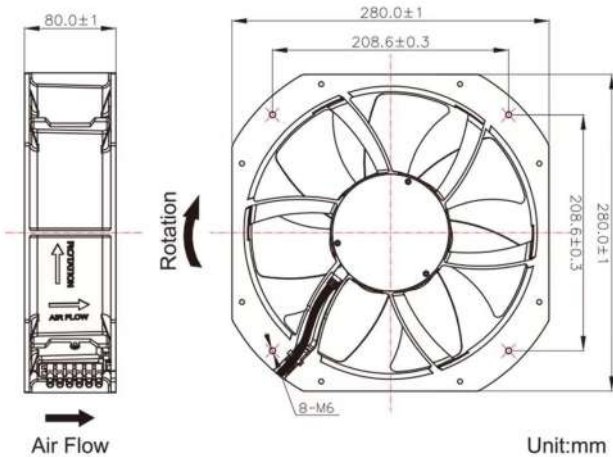
BALL	SLEEVE
●	

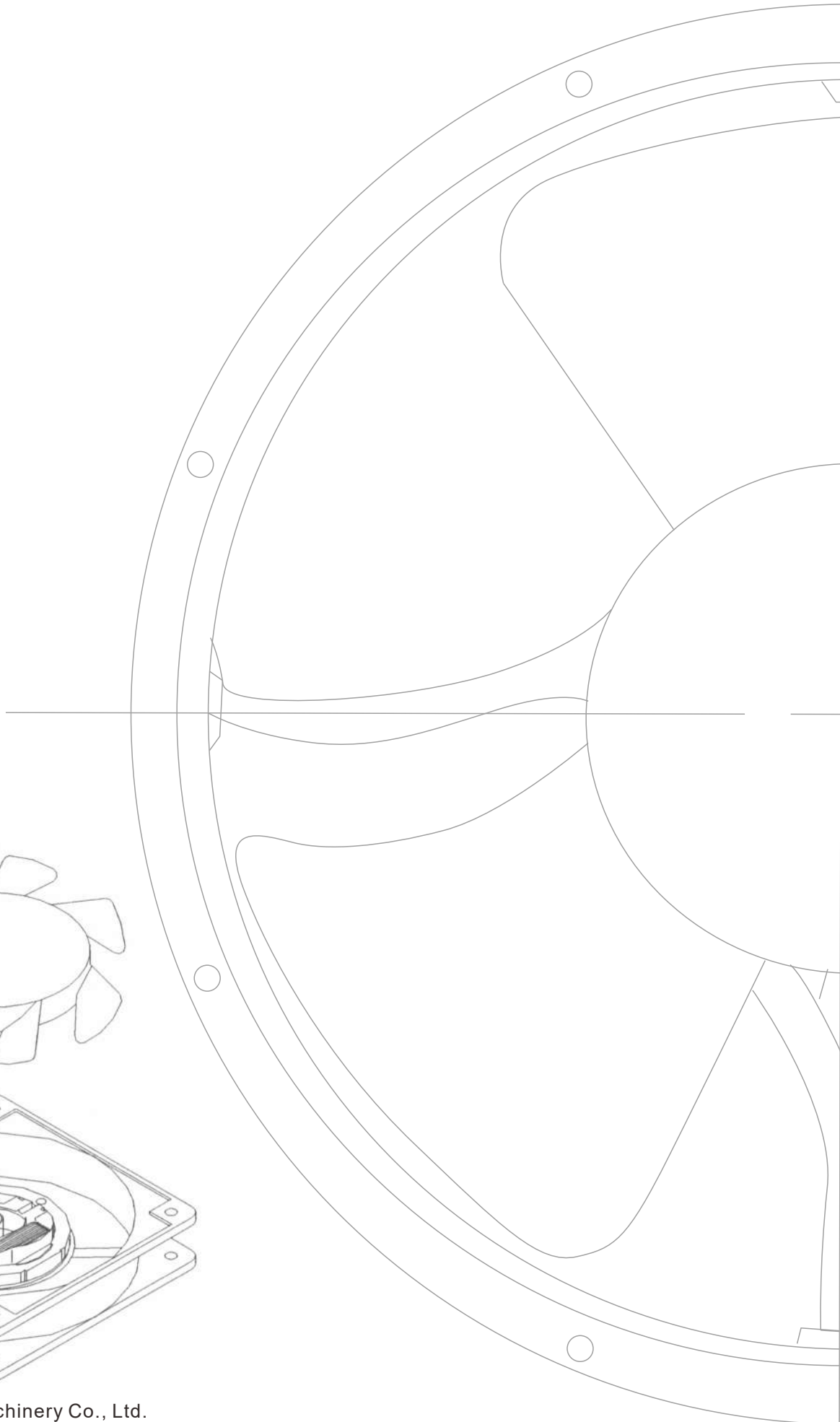
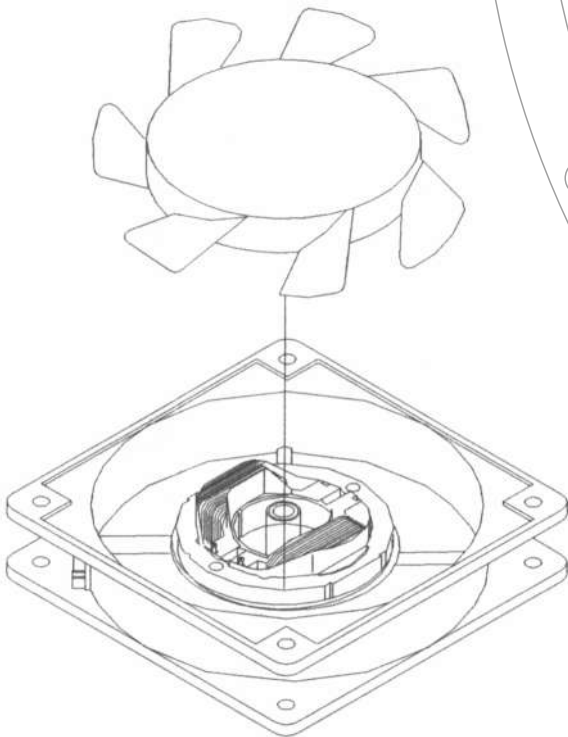
### Available Functions

FG	PWM	RD	LD
●	●	●	●

MODEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow	Maximum Air Pressure	Noise
PART NO.	VDC	VDC	Amp	Watt	R.P.M	CFM	mmH2O	DB-A
MFD28080D1-L	12	6 ~ 13.5	8	96	2500	994.6	31.6	58
MFD28080D2-L	24	12 ~ 26.4	3	72	2000	790.1	21.7	54
MFD28080D2-M			4	96	2400	955.5	31.6	57
MFD28080D2-H			5	120	2800	1110.4	33	62
MFD28080D4-L	48	24 ~ 52.8	1.2	57.6	2000	790.1	21.7	54
MFD28080D4-M			1.5	72	2400	955.5	31.6	57
MFD28080D4-H			2	96	2800	1110.4	33	62

### DIMENSIONS DRAWING & P&Q CURVE





Max-Flow Electric Machinery Co., Ltd.  
E-mail: [ian@max-flow.com](mailto:ian@max-flow.com)  
Tel:886-2-85218198 Fax:886-2-85218201  
Address:No 19, Lane 349, Hwa Cheng Rd., Hsin Chang City,Taipei Huian, Taiwan, R. O. C.