

\*Bearing Type **Ball Bearings** \* Material

\*Lead Wires:

Red Wire Positive (+) Black Wire Negative (-) \* Weight: 10g (0.35 oz)

Impeller & Frame: Plastic (UL 94V-0)

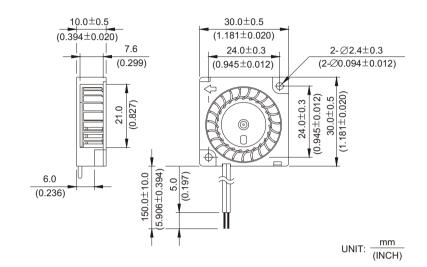
UL 1571 AWG #28 OR Equivalent

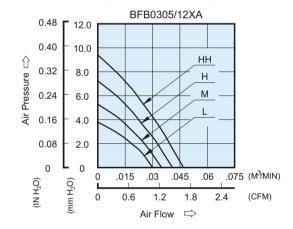




### BFB 30 x 30 x 10 MM SERIES

#### DIMENSIONS DRAWING





MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F		Maxi Air Pre		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
BFB0305LA	/ -F00	5	4.0 to 6.0	0.06	0.30	5500	0.030	1.06	3.66	0.144	24.0
BFB0312LA	-R00/ -F00	12	7.0 to 13.2	0.04	0.48	3300	0.030	1.06	3.00	0.144	24.0
BFB0305MA	/ -F00	5	4.0 to 6.0	0.08	0.40	6500	0.035	1.24	5.23	0.206	26.0
BFB0312MA	-R00/ -F00	12	7.0 to 13.2	0.05	0.60	0500	0.033	1.24	5.23	0.200	20.0
BFB0305HA	/ -F00	5	4.0 to 6.0	0.11	0.55	7500	0.041	1.45	7.24	0.285	29.0
BFB0312HA	-R00/ -F00	12	7.0 to 13.2	0.07	0.84	7500	0.041	1.45	1.24	0.200	28.0
BFB0305HHA	/ -F00	5	4.0 to 6.0	0.17	0.85	8500 0.047	0.047 1.66	9.40	0.370	31.0	
BFB0312HHA	-R00/ -F00	12	7.0 to 13.2	0.08	0.96	0300	0.047	1.00	9.40	0.570	31.0

- \* Function type is optional.

  \* The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.

  \* Noise is measured in anechoic chamber in free air, one meter from intake side.

  \* All readings are typical values at rated voltage.

  \* Specifications are subject to change without notice.



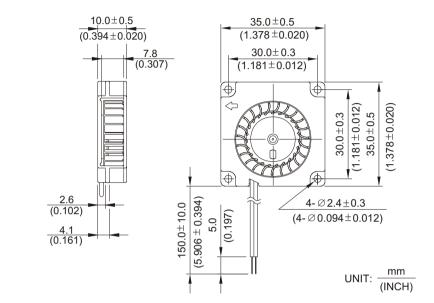


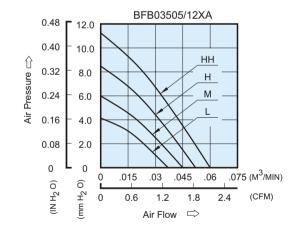




### **BFB** 35 x 35 x 10 MM SERIES

#### DIMENSIONS DRAWING





MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F		Maxi Air Pre		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H₂O	dB-A
BFB03505LA	/ -F00	5	4.0 to 6.0	0.05	0.25	5500	0.038	1 2 1	4.14	0.163	24.0
BFB03512LA	-R00/-F00	12	7.0 to 13.2	0.04	0.48	5500	0.036	1.34	4.14	0.103	24.0
BFB03505MA	/ -F00	5	4.0 to 6.0	0.08	0.40	6500	0.045	1.59	6.00	0.236	26.0
BFB03512MA	-R00/ -F00	12	7.0 to 13.2	0.05	0.60	6500	0.045	1.59	6.00	0.230	20.0
BFB03505HA	/ -F00	5	4.0 to 6.0	0.11	0.55	7500	0.052	1.84	8.50	0.335	29.0
BFB03512HA	-R00/ -F00	12	7.0 to 13.2	0.07	0.84	7500	0.052	1.04	6.50	0.333	29.0
BFB03505HHA	/-F00	5	4.0 to 6.0	0.19	0.95	8500	0.060 2.12	11.25	0.443	31.0	
BFB03512HHA	-R00/ -F00	12	7.0 to 13.2	0.08	0.96	0300	0.000	060 2.12	11.25	0.443	31.0

- \* Function type is optional.

  \* The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- \* Noise is measured in anechoic chamber in free air, one meter from intake side.
- \* All readings are typical values at rated voltage. \* Specifications are subject to change without notice.

### 94







\* Material Impeller & Frame: Plastic (UL 94V-0)

\*Lead Wires:

UL 1571 AWG #28 OR Equivalent Red Wire Positive (+)

Black Wire Negative (-) \* Weight: 11g (0.39 oz)



\*Bearing Type

\*Lead Wires:

Red Wire Positive (+) Black Wire Negative (-) \* Weight: 12g (0.42 oz)

\* Material

**Ball Bearings** 

Impeller & Frame: Plastic (UL 94V-0)

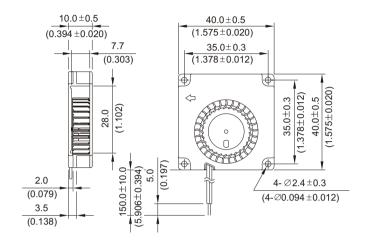
UL 1571 AWG #28 OR Equivalent





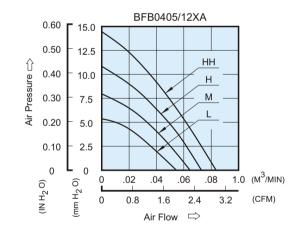
### **BEB** 40 x 40 x 10 MM SERIES

### DIMENSIONS DRAWING



UNIT: (INCH)





MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F		Maxi Air Pre		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H₂O	dB-A
BFB0405LA	/ -F00	5	4.0 to 6.0	0.07	0.35	5500	0.055	1.94	5.37	0.211	28.0
BFB0412LA	-R00/-F00	12	7.0 to 13.2	0.05	0.60	5500	0.055	1.94	5.57	0.211	20.0
BFB0405MA	/ -F00	5	4.0 to 6.0	0.11	0.55	6500	0.065	2.30	7.93	0.312	29.5
BFB0412MA	-R00/-F00	12	7.0 to 13.2	0.06	0.72	0300	0.005	2.30	7.93	0.312	29.5
BFB0405HA	/ -F00	5	4.0 to 6.0	0.17	0.85	7500	0.074	2.61	10.85	0.427	32.5
BFB0412HA	-R00/-F00	12	7.0 to 13.2	0.08	0.96	7500	0.074	2.01	10.65	0.427	32.0
BFB0405HHA	/ -F00	5	4.0 to 6.0	0.22	1.10	8500	0.085	3.00	14.33	0.564	34.5
BFB0412HHA	-R00/-F00	12	7.0 to 13.2	0.10	1.20	0300	0.000	3.00	14.33	0.304	34.3

\* Function type is optional.

\* The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.

\* Noise is measured in anechoic chamber in free air, one meter from intake side.

\* All readings are typical values at rated voltage. \* Specifications are subject to change without notice.







### **BEB** 42 x 45 x 19 MM SERIES

#### DIMENSIONS DRAWING



- \* Bearing Type **Ball Bearings**
- \* Material

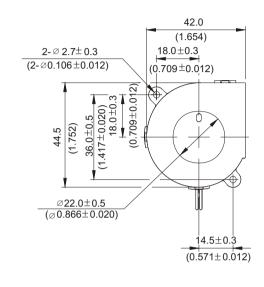
Impeller & Frame : Plastic (UL 94V-0)

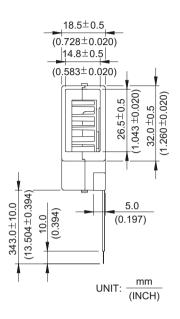
\*Lead Wires:

UL 1061 AWG #26 OR Equivalent Red Wire Positive (+)

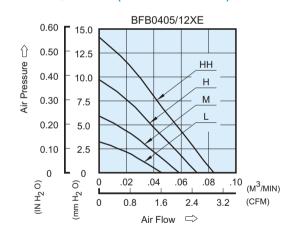
Black Wire Negative (-)

\* Weight: 22g (0.78 oz)





### ■ P & Q CURVE (AT RATED VOLTAGE)



MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F	mum Flow	Maxi Air Pre	mum essure	Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H₂O	dB-A
BFB0405LE	-R00 / -F00	5	4.0 to 5.5	0.06	0.30	3500	0.046	4.00	2.00	0.407	26.0
BFB0412LE	-R00 / -F00	12	10.0 to 13.8	0.04	0.48	3500	0.046	1.62	3.23	0.127	26.0
BFB0405ME	-R00 / -F00	5	4.0 to 5.5	0.13	0.65	4500	0.059	2.08	5.92	0.233	20.0
BFB0412ME	-R00 / -F00	12	10.0 to 13.8	0.05	0.60	4500	0.059	2.00	5.92	0.233	30.0
BFB0405HE	-R00 / -F00	5	4.0 to 5.5	0.22	1.10	5500	0.072	2.54	9.72	0.383	35.5
BFB0412HE	-R00 / -F00	12	10.0 to 13.8	0.07	0.84	5500	0.072	2.34	9.72	0.363	33.5
BFB0412HHE	-R00 / -F00	12	10.0 to 13.8	0.11	1.32	6500	0.084	2.97	14.15	0.557	39.5

\* Noise is measured in anechoic chamber in free air, one meter from intake side.

\* All readings are typical values at rated voltage.

\* Specifications are subject to change without notice.

<sup>\*</sup> Function type is optional.

\* The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.



\*Bearing Type

\*Lead Wires:

Red Wire Positive (+) Black Wire Negative (-)

\*Weight: 13g (0.46 oz)

\* Material

**Ball Bearings** 

Impeller & Frame: Plastic (UL 94V-0)

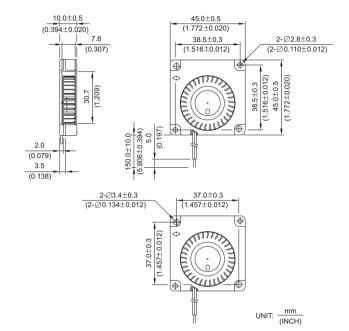
UL 1571 AWG #28 OR Equivalent



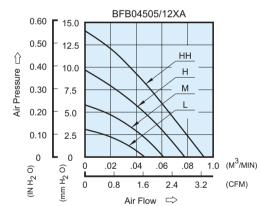


### **BFB** 45 x 45 x 10 MM SERIES

### **■ DIMENSIONS DRAWING**



### ■ P & Q CURVE (AT RATED VOLTAGE)



MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F	mum Flow	Maxi Air Pre		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
BFB04505LA	/ -F00	5	4.0 to 6.0	0.07	0.35	3500	0.047	1.66	3.11	0.122	21.5
BFB04512LA	-R00/ -F00	12	7.0 to 13.2	0.05	0.60	3300	0.047	1.00	3.11	0.122	21.5
BFB04505MA	/ -F00	5	4.0 to 6.0	0.11	0.55	4500	0.064	0.45	5.78	0.228	27.0
BFB04512MA	-R00/ -F00	12	7.0 to 13.2	0.06	0.72	4300	0.061	2.15	3.76	0.220	27.0
BFB04505HA	/ -F00	5	4.0 to 6.0	0.17	0.85	5500	0.078	2.75	9.72	0.383	30.5
BFB04512HA	-R00/ -F00	12	7.0 to 13.2	0.09	1.08	5500	0.076	2.75	9.72	0.363	30.5
BFB04505HHA	/ -F00	5	4.0 to 6.0	0.24	1.20	6500 0.0	0.093	3.28	14.09	0.555	35.5
BFB04512HHA	-R00/ -F00	12	7.0 to 13.2	0.14	1.68	0300	0.093	3.20	14.09	0.555	33.5

\* Function type is optional.

\* The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.

\* Noise is measured in anechoic chamber in free air, one meter from intake side.

\* All readings are typical values at rated voltage.

\* Specifications are subject to change without notice.







- \*Bearing Type Ball Bearings
- \* Material

Impeller & Frame: Plastic (UL94V-0)

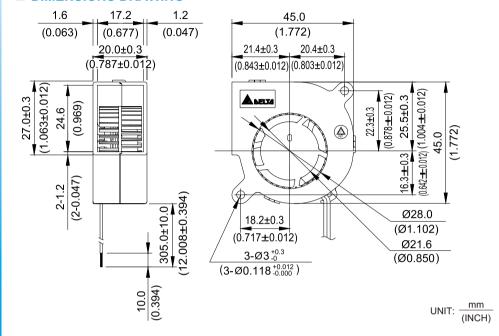
\*Lead Wires:

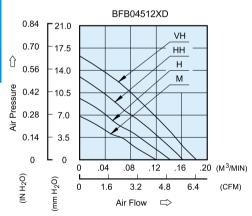
UL 1571 AWG #28 OR Equivalent Red Wire Positive (+)

Black Wire Negative (-) \*Weight: 17g (0.60 oz)

# **BEB** 45 x 45 x 20 MM SERIES

#### **DIMENSIONS DRAWING**





MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	_	mum Flow		mum essure	Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
BFB04512MD	-R00 / -F00	12	5.0 to 13.8	0.07	0.84	3300	0.120	4.24	6.83	0.269	21.0
BFB04512HD	-R00 / -F00	12	5.0 to 13.8	0.10	1.20	3800	0.139	4.91	9.29	0.366	24.5
BFB04512HHD	-R00 / -F00	12	5.0 to 13.8	0.13	1.56	4200	0.161	5.68	12.95	0.510	28.0
BFB04512VHD	-R00 / -F00	12	5.0 to 13.8	0.15	1.80	4500	0.170	6.01	14.15	0.557	30.5

<sup>\*</sup> Function type is optional.

<sup>\*</sup>The max, air flow and the speed are measured in free air; max, air pressure is measured at zero air flow.

\*Noise is measured in anechoic chamber in free air, one meter from intake side.

<sup>\*</sup> All readings are typical values at rated voltage.
\* Specifications are subject to change without notice.

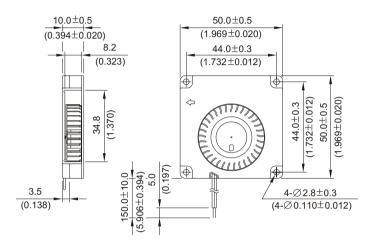






### **BFB** 50 x 50 x 10 MM SERIES

### DIMENSIONS DRAWING



mm UNIT: -(INCH)

### \*Lead Wires: UL 1571 AWG #28 OR Equivalent

Red Wire Positive (+) Black Wire Negative (-)

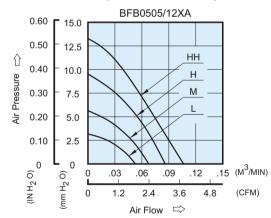
Impeller & Frame : Plastic (UL 94V-0)

\*Bearing Type

**Ball Bearings** \* Material

\* Weight: 16.5g (0.58 oz)

### ■ P & Q CURVE (AT RATED VOLTAGE)



MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
BFB0505LA	/ -F00	5	4.0 to 6.0	0.07	0.35	3500	0.053	1.87	3.18	0.125	22.5
BFB0512LA	-R00/ -F00	12	7.0 to 13.2	0.05	0.60	3300		1.07	3.10	0.120	22.0
BFB0505MA	/ -F00	5	4.0 to 6.0	0.11	0.55	4500	0.068	2.40	5.64	0.222	28.0
BFB0512MA	-R00/ -F00	12	7.0 to 13.2	0.07	0.84	4500	0.000	2.40	5.04	0.222	20.0
BFB0505HA	/ -F00	5	4.0 to 6.0	0.18	0.90	5500	500 0.096	3.04	9.47	0.373	32.5
BFB0512HA	-R00/ -F00	12	7.0 to 13.2	0.09	1.08	5500 0.086		3.04	3.47	0.373	32.0
BFB0512HHA	-R00/ -F00	12	7.0 to 13.2	0.14	1.68	6500	0.110	3.88	13.43	0.529	37.5

\* All readings are typical values at rated voltage.
\* Specifications are subject to change without notice.

<sup>\*</sup> Function type is optional.
\* The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
\* Noise is measured in anechoic chamber in free air, one meter from intake side.



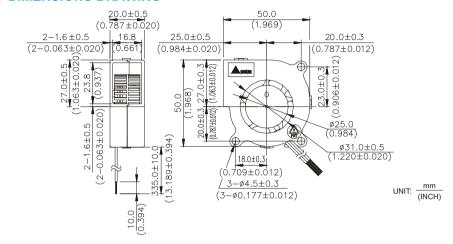


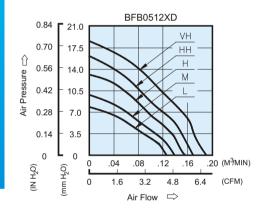


- \* Bearing Type Ball Bearings
- \* Material Impeller & Frame : Plastic(UL 94V-0)
- \* Lead Wires :
- UL 1061 AWG #26 OR Equivalent Red Wire Positive(+)
- Black Wire Negative(-)
- \* Weight: 35g (1.23 OZ)

### **BB** 50 x 50 x 20 MM SERIES

### **■ DIMENSIONS DRAWING**





MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H ₂O	dB-A
BFB0512LD	-R00 / -F00	12	5.0 to 13.8	0.12	1.44	3700	0.126	4.45	7.85	0.309	28.0
BFB0512MD	-R00 / -F00	12	5.0 to 13.8	0.13	1.56	4100	0.139	4.91	9.82	0.387	31.0
BFB0512HD	-R00 / -F00	12	5.0 to 13.8	0.14	1.68	4500	0.156	5.51	13.12	0.517	33.8
BFB0512HHD	-R00 / -F00	12	5.0 to 13.8	0.16	1.92	4900	0.165	5.83	16.15	0.636	36.5
BFB0512VHD	-R00 / -F00	12	5.0 to 13.8	0.23	2.76	5300	0.191	6.75	18.60	0.732	38.5

<sup>\*</sup> Function type is optional.

\* The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.

<sup>\*</sup> Noise is measured in anechoic chamber in free air, one meter from intake side. \* All readings are typical values at rated voltage.

<sup>\*</sup> Specifications are subject to change without notice.



\* Bearing Type

\*Lead Wires:

Red Wire Positive (+)

\* Weight : 28g (0.99 oz)

Black Wire Negative (-)

**Ball Bearings** \* Material

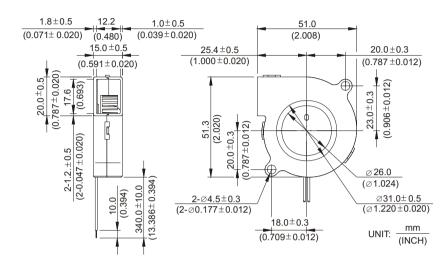
Impeller & Frame : Plastic (UL 94V-0)

UL 1061 AWG #26 OR Equivalent

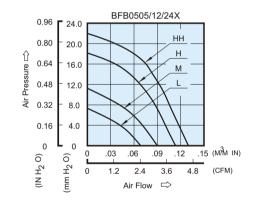




#### DIMENSIONS DRAWING



### ■ P & Q CURVE (AT RATED VOLTAGE)



MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F		Maxi Air Pre	mum essure	Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH₂O	IN H <sub>2</sub> O	dB-A
BFB0505L	-R00/ -F00	5	4.0 to 5.5	0.14	0.70						
BFB0512L	-R00/ -F00	12	10.0 to 13.8	0.07	0.84	3500	0.070	2.47	7.00	0.276	26.5
BFB0524L	-R00/ -F00	24	14.0 to 27.6	0.05	1.20						
BFB0505M	-R00/ -F00	5	4.0 to 5.5	0.33	1.65						
BFB0512M	-R00/ -F00	12	10.0 to 13.8	0.10	1.20	4500	0.090	3.18	11.00	0.433	32.5
BFB0524M	-R00/ -F00	24	14.0 to 27.6	0.07	1.68						
BFB0512H	-R00/ -F00	12	10.0 to 13.8	0.16	1.92	5500	0.110	3.88	18.00	0.709	38.0
BFB0524H	-R00/ -F00	24	14.0 to 27.6	0.09	2.16	3300	0.110	5.00	10.00	0.709	50.0
BFB0512HH	-R00/ -F00	12	10.0 to 13.8	0.21	2.52	6500 0.130	30 4.59	22.00	0.866	45.0	
BFB0524HH	-R00/ -F00	24	14.0 to 27.6	0.11	2.64	0300	0.130   4.59		22.00	0.000	43.0

\* Function type is optional.

\*The max, air flow and the speed are measured in free air; max, air pressure is measured at zero air flow.

Noise is measured in anechoic chamber in free air, one meter from intake side.

\*All readings are typical values at rated voltage.

\*Specifications are subject to change without notice.





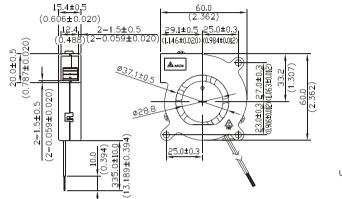




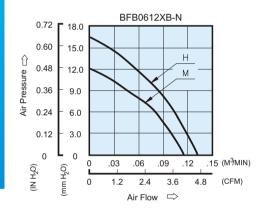
- \* Bearing Type Ball Bearings
- \* Material Impeller & Frame : Plastic(UL 94V-0)
- \* Lead Wires :
- UL 1430 AWG #26 OR Equivalent Red Wire Positive(+)
- Black Wire Negative(-)
- \* Weight: 45g (1.59 OZ)

# 60 x 60 x 15 MM SERIES

### **■ DIMENSIONS DRAWING**



UNIT:  $\frac{11111.}{\text{(INCH)}}$ 



N	10DE	L	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	REV.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
BFB0612MB	-N	-R00 / -F00	12	5.0 to 13.8	0.15	1.80	4200	0.114	4.04	12.08	0.476	32.0
BFB0612HB	-N	-R00 / -F00	12	5.0 to 13.8	0.18	2.16	4800	0.132	4.67	16.53	0.651	37.0

<sup>\*</sup> Function type is optional.
\* The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.

<sup>\*</sup> Noise is measured in anechoic chamber in free air, one meter from intake side.

<sup>\*</sup> All readings are typical values at rated voltage.
\* Specifications are subject to change without notice

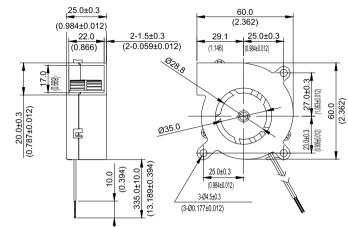






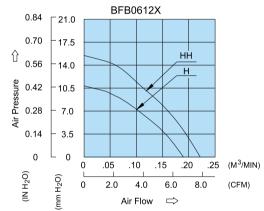
# BFB 60 x 60 x 25 MM SERIES

### **■ DIMENSIONS DRAWING**



mm UNIT: -(INCH)

- \* Bearing Type Ball Bearings
- Material Impeller & Frame: Plastic (UL94V-0)
- \* Lead Wires : UL 1430 AWG#26 OR Equivalent Red Wire Positive (+) Black Wire Negative (-)
- \* Weight: 51.0g (1.80 oz)



MO	DEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow			Maximum Air Pressure	
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH₂O	IN H <sub>2</sub> O	dB-A
BFB0612H	-R00 / -F00	12	5.0 to 13.8	0.18	2.16	3200	0.190	6.71	10.86	0.428	34.0
BFB0612HH	-R00 / -F00	12	5.0 to 13.8	0.24	2.88	3700	0.223	7.88	15.49	0.610	39.0

<sup>\*</sup> Function type is optional.

<sup>\*</sup> The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
\* Noise is measured in anechoic chamber in free air, one meter from intake side.

<sup>\*</sup> All readings are typical values at rated voltage.
\* Specifications are subject to change without notice.



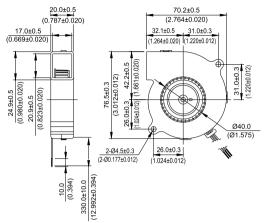




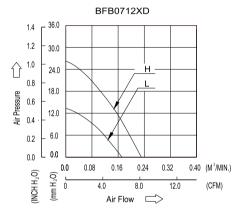
- \*Bearing Type **Ball Bearings**
- \* Material Impeller & Frame: Plastic (UL94V-0)
- \*Lead Wires:
- UL 1007 AWG #24 OR Equivalent Red Wire Positive (+)
- Black Wire Negative (-) \*Weight: 58g (2.05 oz)

### **BFB** 70 x 70 x 20 MM SERIES

#### DIMENSIONS DRAWING



mm UNIT: -(INCH)



MOI	DEL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F	mum Flow	_	mum essure	Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
BFB0712LD	-R00/-F00	12	7.0 to 13.8	0.13	1.56	2800	0.172	6.07	13.36	0.562	32.5
BFB0712HD	-R00 / -F00	12	7.0 to 13.8	0.31	3.72	4000	0.231	8.52	26.27	1.034	42.0

<sup>\*</sup> Function type is optional.

<sup>\*</sup> The max, air flow and the speed are measured in free air; max, air pressure is measured at zero air flow.

\* Noise is measured in anechoic chamber in free air, one meter from intake side.

<sup>\*</sup> All readings are typical values at rated voltage.

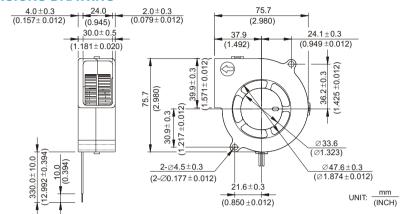




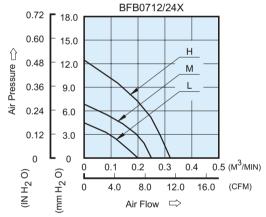


### **BFB** 75 x 75 x 30 MM SERIES

### **■ DIMENSIONS DRAWING**



### ■ P & Q CURVE (AT RATED VOLTAGE)



MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F		Maxi Air Pre		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H₂O	dB-A
BFB0712L	-R00 / -F00	12	7.0 to 13.8	0.06	0.72	4000	0.400	7.00	4.00	0.457	00.0
BFB0724L	-R00 / -F00	24	14.0 to 27.6	0.05	1.20	1900	0.198	7.00	4.00	0.157	26.0
BFB0712M	-R00 / -F00	12	7.0 to 13.8	0.13	1.56	2250	0.055	0.00	0.00	0.000	22.0
BFB0724M	-R00 / -F00	24	14.0 to 27.6	0.07	1.68	2350	0.255	9.00	6.80	0.268	32.0
BFB0712H	-R00 / -F00	12	7.0 to 13.8	0.22	2.64	2900	0.320	11 20	12.20	0.480	20.0
BFB0724H	-R00 / -F00	24	14.0 to 27.6	0.12	2.88	2900	0.320	11.30	12.20	0.400	38.0

<sup>\*</sup> Function type is optional.

\*Bearing Type

\*Lead Wires:

Red Wire Positive (+)

Black Wire Negative (-) \* Weight: 95g (3.35 oz)

\* Material

**Ball Bearings** 

Impeller & Frame: Plastic (UL 94V-0)

UL 1007 AWG #24 OR Equivalent

<sup>\*</sup> The max, air flow and the speed are measured in free air ; max, air pressure is measured at zero air flow \* Noise is measured in anechoic chamber in free air, one meter from intake side.

<sup>\*</sup> All readings are typical values at rated voltage. \* Specifications are subject to change without notice.

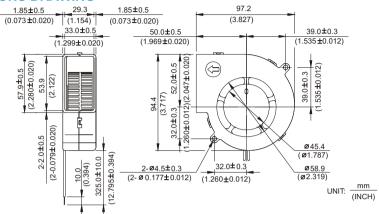




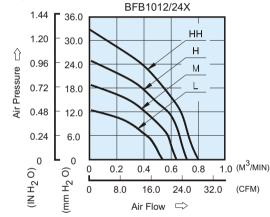


### 97 x 94 x 33 MM SERIES

#### DIMENSIONS DRAWING



### ■ P & Q CURVE (AT RATED VOLTAGE)



MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F		Maxi Air Pre		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
BFB1012L	-R00 / -F00	12	4.0 to 13.8	0.32	3.84	2700	0.540	40.07	40.70	0.500	45.0
BFB1024L	-R00 / -F00	24	7.0 to 27.6	0.16	3.84	2700	0.540	19.07	12.70	0.500	45.0
BFB1012M	-R00 / -F00	12	4.0 to 13.8	0.57	6.84	3200	0.640	22.60	19.00	0.748	49.0
BFB1024M	-R00 / -F00	24	7.0 to 27.6	0.26	6.24	3200	0.040	22.00	19.00	0.746	49.0
BFB1012H	-R00 / -F00	12	4.0 to 13.8	0.80	9.60	3600	0.720	25.43	25.40	1.000	52.0
BFB1024H	-R00 / -F00	24	7.0 to 27.6	0.40	9.60	3000	0.720	25.45	25.40	1.000	32.0
BFB1012HH	-R00 / -F00	12	4.0 to 13.2	1.10	13.20	4000	0.000	20.25	22.00	4 200	55.0
BFB1024HH	-R00 / -F00	24	7.0 to 27.6	0.55	13.20	4000	0.800	28.25	33.00	1.299	55.0

\*Bearing Type

\*Lead Wires:

Red Wire Positive (+)

Black Wire Negative (-) \* Weight: 160g (5.64 oz)

\* Material

**Ball Bearings** 

Impeller & Frame: Plastic (UL 94V-0)

UL 1007 AWG #24 OR Equivalent

<sup>\*</sup> Function type is optional.

\* The max, air flow and the speed are measured in free air; max, air pressure is measured at zero air flow.

<sup>\*</sup> Noise is measured in anechoic chamber in free air, one meter from intake side.
\* All readings are typical values at rated voltage.

<sup>\*</sup> Specifications are subject to change without notice.



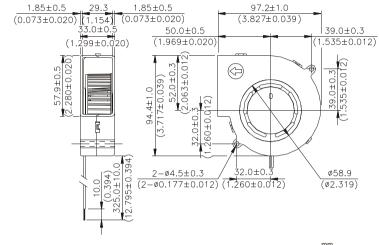




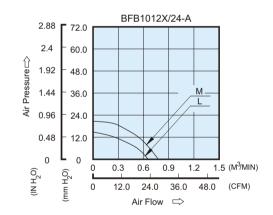
- \* Bearing Type **Ball Bearings**
- \* Material Impeller & Frame : Plastic (UL 94V-0)
- \*Lead Wires:
- UL 1007 AWG #24 OR Equivalent Red Wire Positive (+)
- Black Wire Negative (-) \* Weight: 166g (5.85 oz)

# **BFB** 97 x 94 x 33 MM SERIES

#### DIMENSIONS DRAWING



UNIT: (INCH)



М	ODEL	-	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	REV.	<b>FUNCTION</b>	VDC	VDC	Amp	Watt	R.P.M·	m³/min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
BFB1012L	-A	R00/F00	12	4.0 to 13.2	0.37	4.44	2700	0.656	23.17	14.85	0.585	49.5
BFB1012M	-A	R00/F00	12	4.0 to 13.2	0.55	6.60	3200	0.777	27.44	22.68	0.893	52.5

<sup>\*</sup> Function type is optional.

<sup>\*</sup> The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.

<sup>\*</sup> Noise is measured in anechoic chamber in free air, one meter from intake side.

<sup>\*</sup> All readings are typical values at rated voltage.
\* Specifications are subject to change without notice.



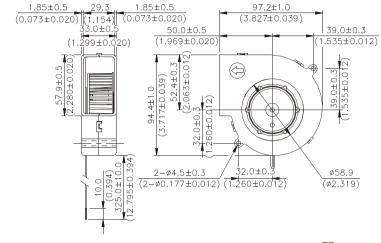




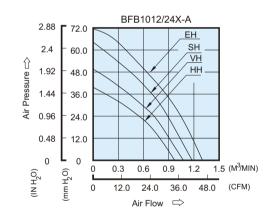
- \* Bearing Type **Ball Bearings**
- \* Material Impeller & Frame : Plastic (UL 94V-0)
- \*Lead Wires: UL 1007 AWG #24 OR Equivalent
- Red Wire Positive (+) Black Wire Negative (-)
- \* Weight: 180g (6.35 oz)

# **BFB** 97 x 94 x 33 MM SERIES

#### DIMENSIONS DRAWING



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



М	ODEL	-	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	REV.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M·	m³/min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
BFB1012HH	-A	R00/F00	12	7.0 to 13.2	1.25	15.00	4000	0.971	34.28	39.70	1.564	57.0
BFB1012VH	-A	R00/F00	12	7.0 to 13.2	1.50	18.00	4500	1.075	37.97	49.58	1.952	60.0
BFB1012SH	-A	R00/F00	12	7.0 to 12.6	2.00	24.00	5000	1.179	41.65	64.23	2.529	63.0
BFB1012EH	-A	R00/F00	12	7.0 to 12.6	2.45	29.40	5300	1.302	46.00	71.48	2.814	64.0

<sup>\*</sup> Function type is optional.

\* The max, air flow and the speed are measured in free air; max, air pressure is measured at zero air flow.

<sup>\*</sup> Noise is measured in anechoic chamber in free air, one meter from intake side.

\* All readings are typical values at rated voltage.

\* Specifications are subject to change without notice.







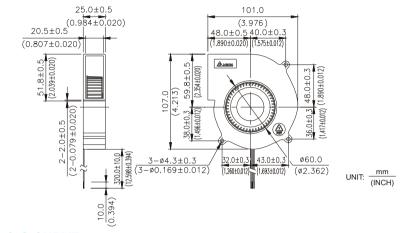
- \* Bearing Type Ball Bearings
- \* Material Impeller & Frame : Plastic(UL 94V-0)
- \* Lead Wires :

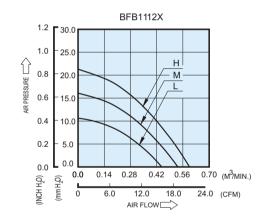
UL 1007 AWG #24 OR Equivalent Red Wire Positive(+)

- Black Wire Negative(-)
- \* Weight: 140.0g (4.94 OZ)

### 101 x 107 x 25 MM SERIES

#### DIMENSIONS DRAWING





MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed		Maximum Air Flow		mum essure	Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH₂ O	IN H₂O	dB-A
BFB1112L	-R00 / -F00	12	4.0 to 13.8	0.19	2.28	2400	0.447	15.79	10.65	0.413	41.0
BFB1112M	-R00 / -F00	12	4.0 to 13.8	0.30	3.60	2800	0.533	18.82	16.09	0.633	45.0
BFB1112H	-R00 / -F00	12	4.0 to 13.2	0.51	6.12	3150	0.595	21.02	21.31	0.839	49.0

<sup>\*</sup> The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.

<sup>\*</sup> Noise is measured in anechoic chamber in free air, one meter from intake side.

<sup>\*</sup> All readings are typical values at rated voltage.

\* Specifications are subject to change without notice

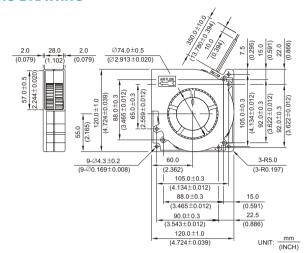






### **BFB** 120 x 120 x 32 MM SERIES

#### DIMENSIONS DRAWING



### Impeller & Frame : Plastic (UL 94V-0)

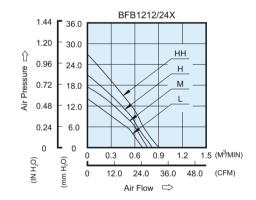
\*Lead Wires:

\*Bearing Type

**Ball Bearings** \* Material

UL 1007 AWG #24 OR Equivalent Red Wire Positive (+)

Black Wire Negative (-) \* Weight: 230g (8.11 oz)



MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F		Maxi Air Pre	mum essure	Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H₂O	dB-A
BFB1212L	-R00 / -F00	12	4.0 to 13.8	0.40	4.80	2100	0.699	24.70	14.00	0.551	47.0
BFB1224L	-R00 / -F00	24	7.0 to 27.6	0.24	5.76	2100	0.699	24.70	14.00	0.551	47.0
BFB1212M	-R00 / -F00	12	4.0 to 13.8	0.58	6.96	2300	0.760	26.85	17.50	0.689	48.5
BFB1224M	-R00 / -F00	24	7.0 to 27.6	0.28	6.72	2300	0.760	20.00	17.50	0.009	40.5
BFB1212H	-R00 / -F00	12	4.0 to 13.8	0.82	9.84	2500	0.821	29.00	21.00	0.827	51.0
BFB1224H	-R00 / -F00	24	7.0 to 27.6	0.35	8.40	2300	0.021	29.00	21.00	0.021	31.0
BFB1212HH	-R00 / -F00	12	4.0 to 13.8	1.10	13.20	2800	0.920	32.49	27.00	1.063	54.0

<sup>\*</sup> Function type is optional.

<sup>\*</sup> The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.

\* Noise is measured in anechoic chamber in free air, one meter from intake side.

\* All readings are typical values at rated voltage.

\* Specifications are subject to change without notice.







\* Bearing Type **Ball Bearings** 

\* Material

Impeller & Frame : Plastic (UL 94V-0)

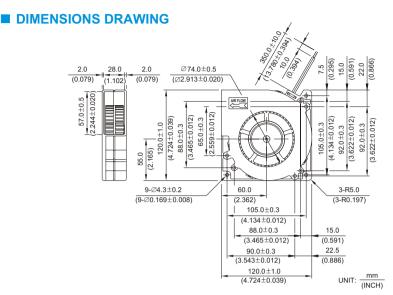
\*Lead Wires:

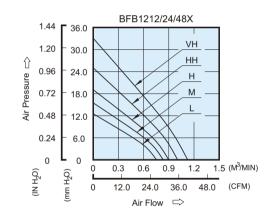
UL 1007 AWG #24 OR Equivalent Red Wire Positive (+)

Black Wire Negative (-)

\* Weight: 230g (8.11 oz)

# **BFB** 120 x 120 x 32 MM SERIES





MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F		Maxi Air Pre		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H₂O	dB-A
BFB1248L	-R00 / -F00	48	28.0 to 56.0	0.09	4.32	2100	0.750	26.49	12.50	0.492	47.0
BFB1248M	-R00 / -F00	48	28.0 to 56.0	0.12	5.76	2300	0.830	29.31	15.50	0.610	48.5
BFB1248H	-R00 / -F00	48	28.0 to 56.0	0.15	7.20	2500	0.890	31.43	19.00	0.748	51.0
BFB1224HH	-R00 / -F00	24	7.0 to 27.6	0.54	12.96	2800	1.000	35.31	25.00	0.984	54.0
BFB1248HH	-R00 / -F00	48	28.0 to 56.0	0.22	10.56	2000	1.000	33.31	25.00	0.964	34.0
BFB1212VH	-R00 / -F00	12	4.0 to 13.8	1.25	15.00	3100 1.120		39.55	33.00	1.299	56.5
BFB1224VH	-R00 / -F00	24	7.0 to 27.6	0.60	14.40	3100	1.120	39.33	33.00	1.299	30.3

<sup>\*</sup> Function type is optional.
\* The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
\* Noise is measured in anechoic chamber in free air, one meter from intake side.
\* All readings are typical values at rated voltage.
\* Specifications are subject to change without notice.







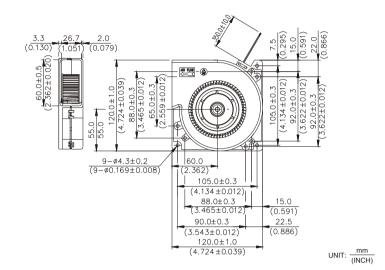
- \* Bearing Type **Ball Bearings**
- \* Material

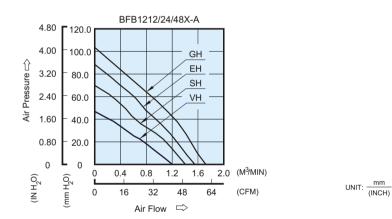
Impeller & Frame : Plastic (UL 94V-0)

- \*Lead Wires:
- UL 1430 AWG #22 OR Equivalent Red Wire Positive (+)
- Black Wire Negative (-)
- \* Weight: 295.0g (10.40 oz)

### 120 x 120 x 32 MM SERIES

### DIMENSIONS DRAWING





М	ODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F			Maximum Air Pressure	
PART NO.	REV.	<b>FUNCTION</b>	VDC	VDC	Amp	Watt	R.P.M·	m³/min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
BFB1212VH	-A	R00/F00	12	5.5 to 13.8	1.47	17.64						
BFB1224VH	-A	R00/F00	24	14.0 to 27.6	0.70	16.80	3100	1.203	42.47	46.94	1.848	57.0
BFB1248VH	-A	R00/F00	48	24.0 to 56.0	0.37	17.39						
BFB1212SH	-A	R00/F00	12	5.5 to 13.8	1.75	21.00						
BFB1224SH	-A	R00/F00	24	14.0 to 27.6	0.90	21.60	3600	1.406	49.67	69.95	2.754	59.5
BFB1248SH	-A	R00/F00	48	24.0 to 56.0	0.49	23.52						
BFB1212EH	-A	R00/F00	12	5.5 to 13.8	2.37	28.44						
BFB1224EH	-A	R00/F00	24	14.0 to 27.6	1.12	26.88	4000	1.553	54.85	88.51	3.485	62.0
BFB1248EH	-A	R00/F00	48	24.0 to 56.0	0.61	29.28						
BFB1212GH	-A	R00/F00	12	5.5 to 13.2	3.30	39.60						
BFB1224GH	-A	R00/F00	24	14.0 to 27.6	1.60	38.40	4400	1.710	60.39	104.00	00 4.094	65.0
BFB1248GH	-A	R00/F00	48	24.0 to 53.0	0.80	38.40						

<sup>\*</sup> Function type is optional.

<sup>\*</sup> The max, air flow and the speed are measured in free air; max, air pressure is measured at zero air flow.

\* Noise is measured in anechoic chamber in free air, one meter from intake side.

<sup>\*</sup> All readings are typical values at rated voltage.
\* Specifications are subject to change without notice.



\*Bearing Type

\* Lead Wires

**Ball Bearings** \* Material

Impeller: Plastic (UL 94V-0)

Red Wire Positive (+)

Black Wire Negative (-) \* Weight : 325g (11.46 oz)

Frame: Plastic (UL 94V-0) & SECC

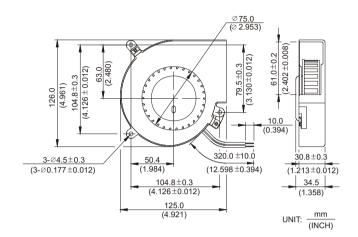
UL 1007 AWG #24 OR Equivalent



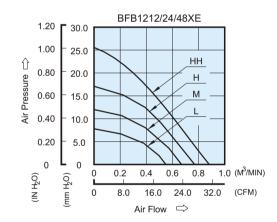


### **BEB** 125 x 126 x 34 MM SERIES

#### DIMENSIONS DRAWING



### ■ P & Q CURVE (AT RATED VOLTAGE)



MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxii Air F		Maxii Air Pre		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H₂O	dB-A
BFB1212LE	-R00 / -F00	12	7.0 to 13.8	0.24	2.88						
BFB1224LE	-R00 / -F00	24	14.0 to 27.6	0.13	3.12	1700	0.550	19.42	7.77	0.306	42.0
BFB1248LE	-R00 / -F00	48	38.0 to 56.0	0.08	3.84						
BFB1212ME	-R00 / -F00	12	7.0 to 13.8	0.42	5.04						
BFB1224ME	-R00 / -F00	24	14.0 to 27.6	0.23	5.52	2000	0.670	23.66	12.00	0.472	46.0
BFB1248ME	-R00 / -F00	48	38.0 to 56.0	0.12	5.76						
BFB1212HE	-R00 / -F00	12	7.0 to 13.8	0.68	8.16						
BFB1224HE	-R00 / -F00	24	14.0 to 27.6	0.34	8.16	2300	0.770	27.19	17.80	0.701	51.5
BFB1248HE	-R00 / -F00	48	38.0 to 56.0	0.17	8.16						
BFB1212HHE	-R00 / -F00	12	7.0 to 13.2	1.06	12.70	2650	0.870	30.72	25.20	0.992	55.0
BFB1224HHE	-R00 / -F00	24	14.0 to 26.0	0.60	14.40	2000	0.670	30.72	25.20	0.992	55.0

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\* Function type is optional.

\* The max, air flow and the speed are measured in free air; max, air pressure is measured at zero air flow.

\* Noise is measured in anechoic chamber in free air, one meter from intake side \* All readings are typical values at rated voltage.

\* Specifications are subject to change without notice.



\* Bearing Type

\*Lead Wires:

Red Wire Positive (+) Black Wire Negative (-) \* Weight: 588g (20.74 oz)

\* Material

**Ball Bearings** 

Impeller & Frame: Plastic (UL 94V-0)

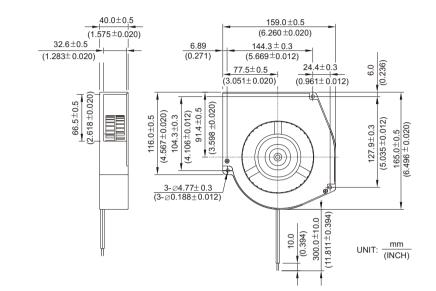
UL 1007 AWG #24 OR Equivalent



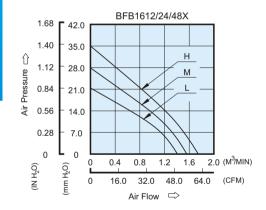


### 159 x 165 x 40 MM SERIES

#### DIMENSIONS DRAWING



#### ■ P & Q CURVE (AT RATED VOLTAGE)



MOD	EL	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maxi Air F	mum Flow	Maxi Air Pre		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H₂O	dB-A
BFB1612L	-R00 / -F00	12	7.0 to 13.2	0.80	9.60						
BFB1624L	-R00 / -F00	24	14.0 to 26.4	0.40	9.60	1800	1.410	49.79	21.50	0.846	51.5
BFB1648L	-R00 / -F00	48	28.0 to 56.0	0.22	10.56						
BFB1612M	-R00 / -F00	12	7.0 to 13.2	1.10	13.20						
BFB1624M	-R00 / -F00	24	14.0 to 26.4	0.56	13.44	2000	1.560	55.09	28.00	1.102	54.5
BFB1648M	-R00 / -F00	48	28.0 to 56.0	0.28	13.44						
BFB1612H	-R00 / -F00	12	7.0 to 13.2	1.43	17.16	2200	1.750	61.80	35.00	1.378	56.5
BFB1624H	-R00 / -F00	24	14.0 to 26.4	0.74	17.16	2200	1.730	01.00	33.00	1.570	56.5

- \* Function type is optional.

  \* The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- \* Noise is measured in anechoic chamber in free air, one meter from intake side.
  \* All readings are typical values at rated voltage.
- \* Specifications are subject to change without notice.

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