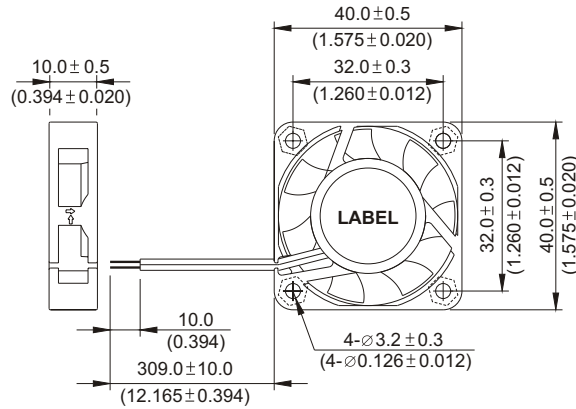


# EFB 40 x 40 x 10 MM SERIES

## DIMENSIONS DRAWING

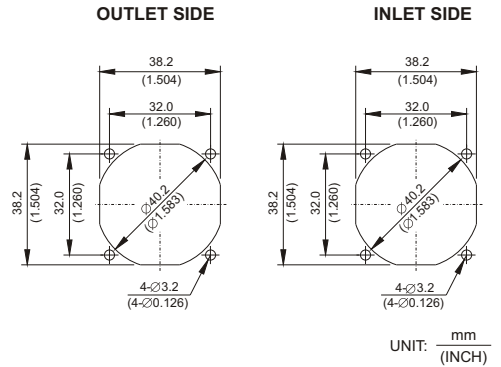
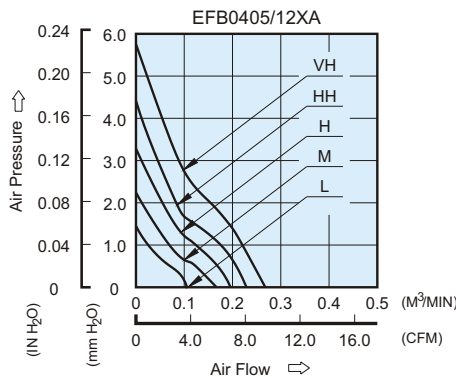


- \* Bearing Type  
Ball Bearings
- \* Material  
Impeller & Frame : Plastic(UL 94V-0)
- \* Lead Wires :  
UL 1007 AWG #28 OR Equivalent  
Red Wire Positive(+)  
Black Wire Negative(-)
- \* Weight : 14.5g (0.51 OZ)
- \* Rib Type Only



## P & Q CURVE (AT RATED VOLTAGE)

## MOUNTING PANEL CUTOUT



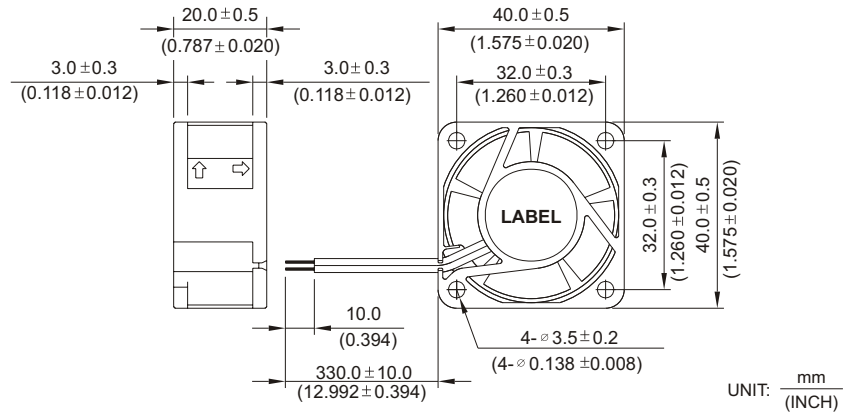
UNIT:  $\frac{\text{mm}}{\text{(INCH)}}$

MODEL		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.	m <sup>3</sup> /min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
EFB0405LA	-R00 / -F00	5	4.5 to 5.5	0.07	0.35	4000	0.106	3.74	1.45	0.057	20.5
EFB0412LA	-R00 / -F00	12	9.0 to 13.8	0.05	0.60						
EFB0405MA	-R00 / -F00	5	4.5 to 5.5	0.10	0.50	5000	0.167	5.90	2.24	0.088	24.5
EFB0412MA	-R00 / -F00	12	7.0 to 13.8	0.06	0.72						
EFB0405HA	-R00 / -F00	5	4.5 to 5.5	0.13	0.65	6000	0.196	6.92	3.28	0.129	28.5
EFB0412HA	-R00 / -F00	12	7.0 to 13.8	0.08	0.96						
EFB0405HHA	-R00 / -F00	5	4.5 to 5.5	0.19	0.95	7000	0.229	8.09	4.42	0.174	33.0
EFB0412HHA	-R00 / -F00	12	7.0 to 13.8	0.10	1.20						
EFB0412VHA	-R00 / -F00	12	7.0 to 13.8	0.15	1.80						

\* 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.

# EFB 40 x 40 x 20 MM SERIES

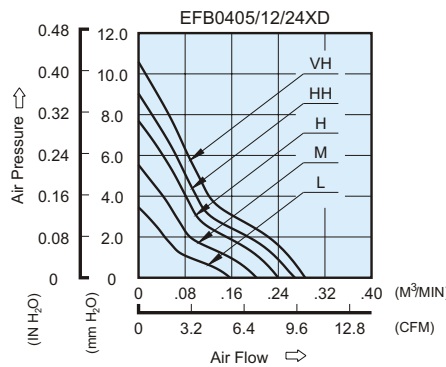
## DIMENSIONS DRAWING



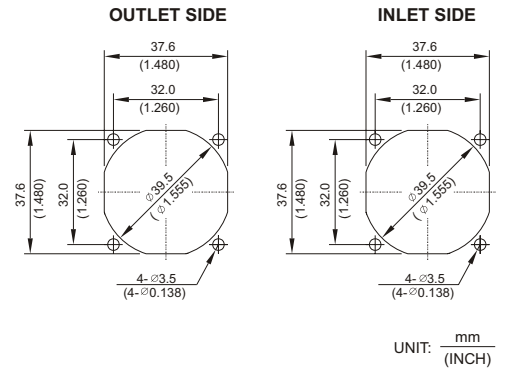
UNIT:  $\frac{\text{mm}}{\text{(INCH)}}$

- \* 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 : 33g (1.16 oz)
- \* Rib Type Only

## P & Q CURVE (AT RATED VOLTAGE)



## MOUNTING PANEL CUTOUT



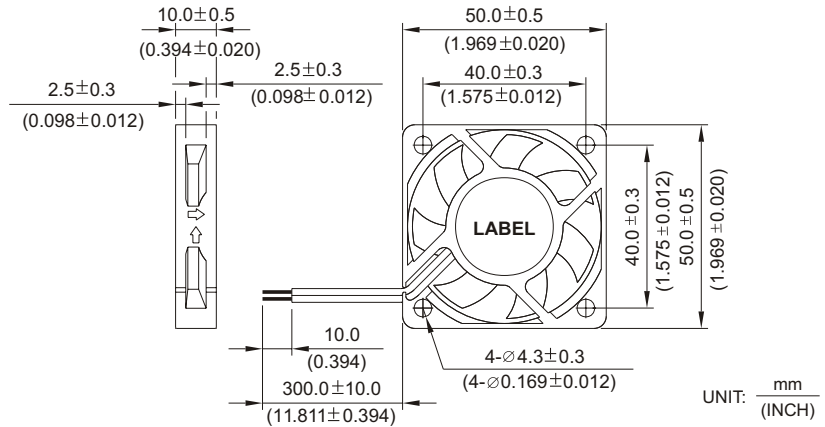
UNIT:  $\frac{\text{mm}}{\text{(INCH)}}$

MODEL		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.	m <sup>3</sup> /min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
EFB0405LD	-R00 / -F00	5	4.5 to 5.5	0.10	0.50	5000	0.157	5.54	3.45	0.136	22.0
EFB0412LD	-R00 / -F00	12	7.0 to 13.8	0.05	0.60						
EFB0424LD	-R00 / -F00	24	14.0 to 27.6	0.04	0.96						
EFB0405MD	-R00 / -F00	5	4.5 to 5.5	0.15	0.75	6300	0.203	7.17	5.54	0.218	24.0
EFB0412MD	-R00 / -F00	12	7.0 to 13.8	0.06	0.72						
EFB0424MD	-R00 / -F00	24	14.0 to 27.6	0.05	1.20						
EFB0405HD	-R00 / -F00	5	4.5 to 5.5	0.25	1.25	7600	0.242	8.54	7.69	0.303	28.5
EFB0412HD	-R00 / -F00	12	7.0 to 13.8	0.08	0.96						
EFB0424HD	-R00 / -F00	24	14.0 to 27.6	0.06	1.44						
EFB0405HHD	-R00 / -F00	5	4.5 to 5.5	0.30	1.50	8200	0.267	9.43	9.00	0.354	30.5
EFB0412HHD	-R00 / -F00	12	7.0 to 13.8	0.10	1.20						
EFB0424HHD	-R00 / -F00	24	14.0 to 27.6	0.07	1.68						
EFB0405VHD	-R00 / -F00	5	4.5 to 5.5	0.32	1.60	9000	0.286	10.10	10.57	0.416	32.5
EFB0412VHD	-R00 / -F00	12	7.0 to 13.8	0.12	1.44						
EFB0424VHD	-R00 / -F00	24	14.0 to 27.6	0.09	2.16						

\* 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.

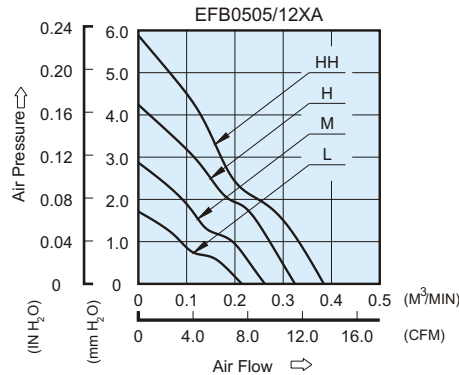
# EFB 50 x 50 x 10 MM SERIES

## DIMENSIONS DRAWING

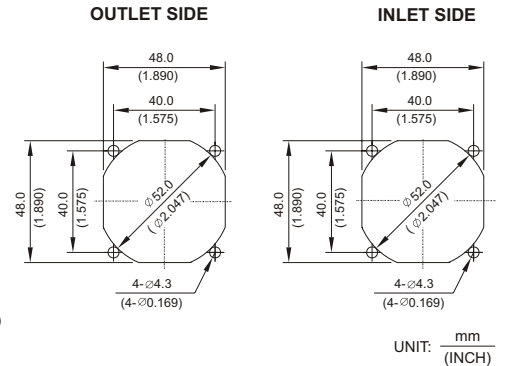


- \* Bearing Type  
Ball Bearings
- \* Material :  
Impeller & Frame : Plastic (UL 94V-0)
- \* Lead Wires :  
UL 2468 AWG #28 OR Equivalent  
Red Wire Positive (+)  
Black Wire Negative (-)
- \* Weight : 25g (0.88 oz)
- \* Rib Type Only

## P & Q CURVE (AT RATED VOLTAGE)



## MOUNTING PANEL CUTOUT

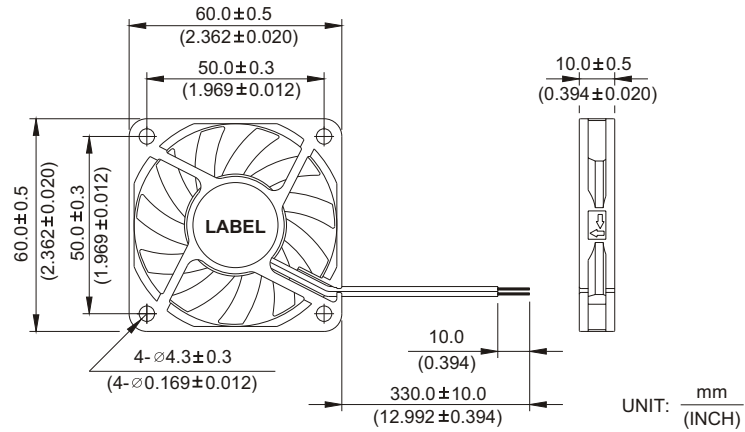


MODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m <sup>3</sup> /min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
EFB0505LA	-R00 / -F00	5	4.5 to 5.5	0.07	0.35	3500	0.212	7.50	1.72	0.068	18.0
EFB0512LA	-R00 / -F00	12	7.0 to 13.8	0.05	0.60						
EFB0505MA	-R00 / -F00	5	4.5 to 5.5	0.13	0.65	4500	0.261	9.21	2.87	0.113	25.0
EFB0512MA	-R00 / -F00	12	7.0 to 13.8	0.08	0.96						
EFB0505HA	-R00 / -F00	5	4.5 to 5.5	0.20	1.00	5500	0.323	11.40	4.24	0.167	30.0
EFB0512HA	-R00 / -F00	12	7.0 to 13.8	0.10	1.20						
EFB0512HHA	-R00 / -F00	12	7.0 to 13.8	0.15	1.80	6500	0.384	13.57	5.89	0.232	35.0

\* 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.  
 \* Both of the ball bearing and the 1 ball + 1 sleeve type are available.

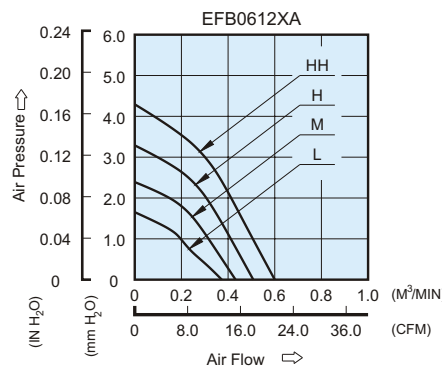
# EFB 60 x 60 x 10 MM SERIES

## DIMENSIONS DRAWING

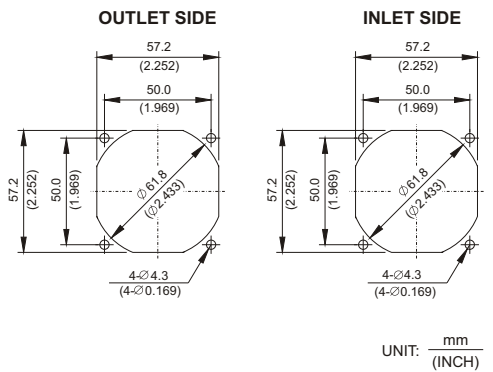


- \* Bearing Type  
Ball Bearings
- \* Material  
Impeller & Frame : Plastic (UL 94V-0)
- \* Lead Wires :  
UL 2468 AWG #28 OR Equivalent  
Red Wire Positive (+)  
Black Wire Negative (-)
- \* Weight : 28g (0.99 oz)
- \* Rib Type Only

## P & Q CURVE (AT RATED VOLTAGE)



## MOUNTING PANEL CUTOUT

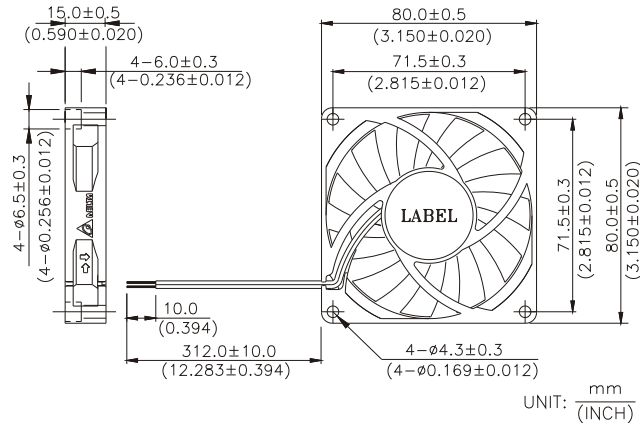


MODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m <sup>3</sup> /min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
EFB0612LA	-R00 / -F00	12	7.0 to 13.8	0.07	0.84	3000	0.380	13.42	1.65	0.065	24.5
EFB0612MA	-R00 / -F00	12	7.0 to 13.8	0.08	0.96	3600	0.440	15.54	2.40	0.094	29.0
EFB0612HA	-R00 / -F00	12	7.0 to 13.8	0.12	1.44	4200	0.510	18.01	3.35	0.132	33.0
EFB0612HHA	-R00 / -F00	12	7.0 to 13.8	0.18	2.16	4800	0.600	21.19	4.30	0.169	36.5

\* 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.  
 \* Both of the ball bearing and the 1 ball + 1 Sleeve type are available.

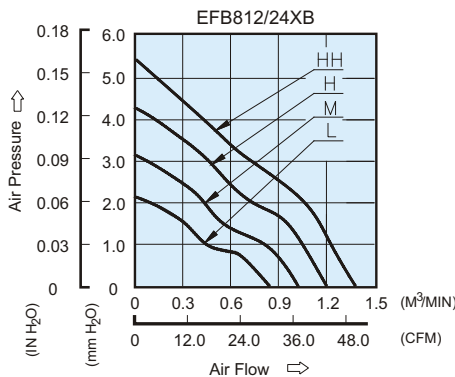
# EFB 80 x 80 x 15 MM SERIES

## DIMENSIONS DRAWING

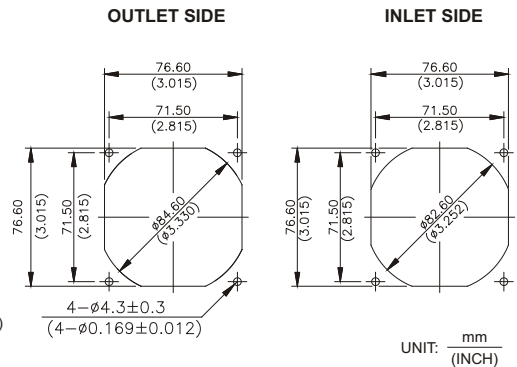


- \* Bearing Type  
Ball Bearings
- \* Material  
Impeller & Frame : Plastic(UL 94V-0)
- \* Lead Wires :  
UL 1007 AWG #24 OR Equivalent  
Red Wire Positive(+)  
Black Wire Negative(-)
- \* Weight : 67g (2.36 OZ)
- \* Rib Type Only

## P & Q CURVE (AT RATED VOLTAGE)



## MOUNTING PANEL CUTOUT

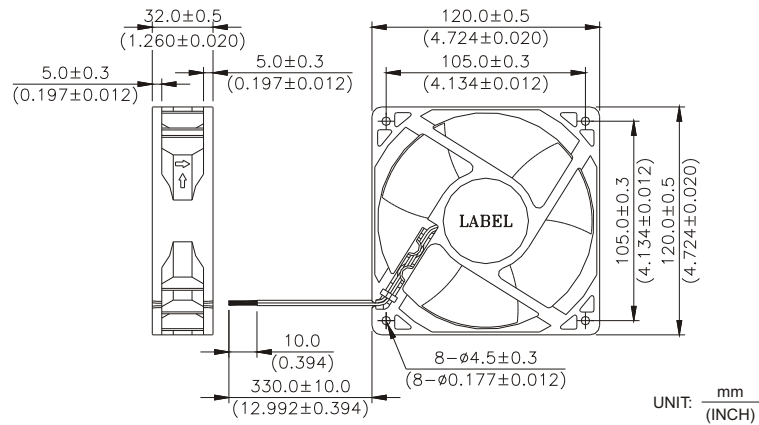


MODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m³/min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
EFB0812LB	-R00 / -F00	12	5.0 to 13.8	0.10	1.20	2300	0.839	29.62	1.71	0.067	30.0
EFB0824LB	-R00 / -F00	24	14.0 to 27.6	0.08	1.92						
EFB0812MB	-R00 / -F00	12	5.0 to 13.8	0.13	1.56	2800	1.020	36.02	2.51	0.099	33.0
EFB0824MB	-R00 / -F00	24	14.0 to 27.6	0.11	2.64						
EFB0812HB	-R00 / -F00	12	5.0 to 13.8	0.21	2.52	3300	1.200	42.37	3.42	0.134	37.0
EFB0824HB	-R00 / -F00	24	14.0 to 27.6	0.14	3.36						
EFB0812HHB	-R00 / -F00	12	5.0 to 13.2	0.33	3.96	3800	1.382	48.80	4.35	0.171	41.0
EFB0824HHB	-R00 / -F00	24	14.0 to 27.6	0.20	4.80						

- \* 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.
- \* Both of the ball bearing and the 1 ball + 1 Sleeve type are available.

# EFB 120 x 120 x 32 MM SERIES

## DIMENSIONS DRAWING

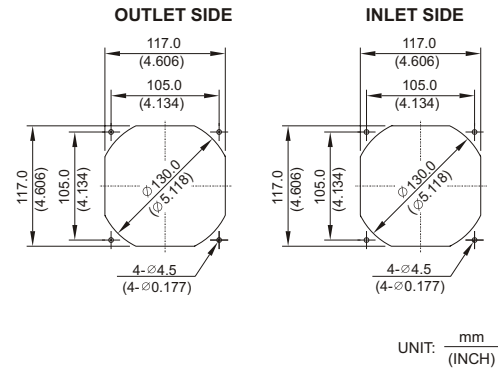
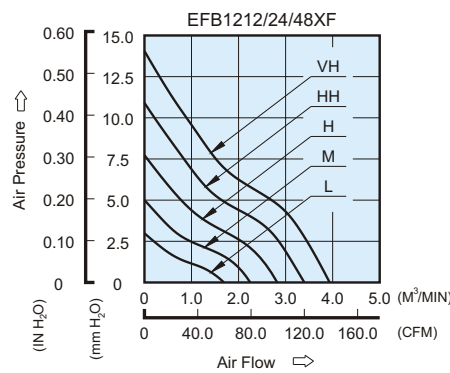


UNIT:  $\frac{\text{mm}}{\text{(INCH)}}$

- \* 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 : 250g (8.82 oz)

## P & Q CURVE (AT RATED VOLTAGE)

## MOUNTING PANEL CUTOUT



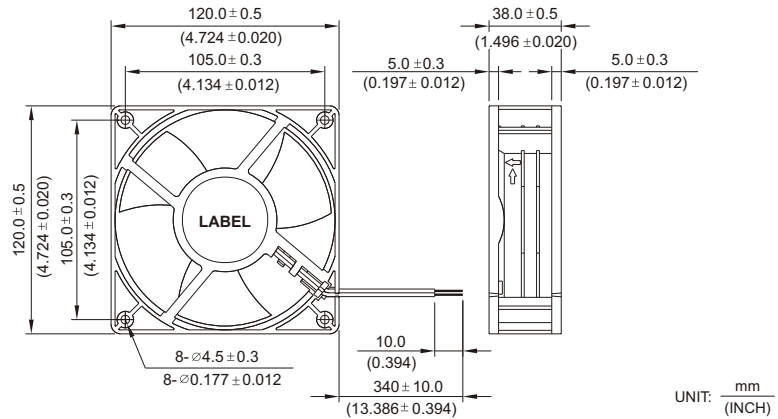
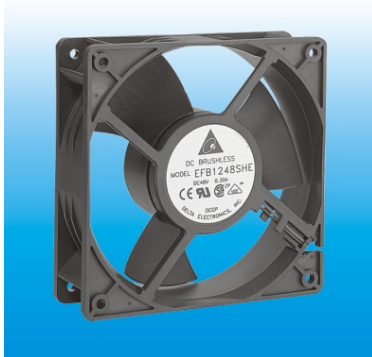
UNIT:  $\frac{\text{mm}}{\text{(INCH)}}$

MODEL		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.	m <sup>3</sup> /min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
EFB1212LF	-R00 / -F00	12	4.0 to 13.8	0.13	1.56	1900	1.700	60.03	3.00	0.118	33.5
EFB1224LF	-R00 / -F00	24	7.0 to 27.6	0.09	2.16						
EFB1248LF	-R00 / -F00	48	28.0 to 56.0	0.04	1.92						
EFB1212MF	-R00 / -F00	12	4.0 to 13.8	0.22	2.64	2500	2.270	80.16	5.00	0.197	40.5
EFB1224MF	-R00 / -F00	24	7.0 to 27.6	0.13	3.12						
EFB1248MF	-R00 / -F00	48	28.0 to 56.0	0.07	3.36						
EFB1212HF	-R00 / -F00	12	4.0 to 13.8	0.32	3.84	3150	2.830	99.94	7.73	0.304	45.5
EFB1224HF	-R00 / -F00	24	7.0 to 27.6	0.19	4.56						
EFB1248HF	-R00 / -F00	48	28.0 to 56.0	0.10	4.80						
EFB1212HHF	-R00 / -F00	12	4.0 to 13.8	0.51	6.12	3800	3.400	120.07	10.90	0.429	50.5
EFB1224HHF	-R00 / -F00	24	7.0 to 27.6	0.28	6.72						
EFB1248HHF	-R00 / -F00	48	28.0 to 56.0	0.14	6.72						
EFB1212VHF	-R00 / -F00	12	4.0 to 13.2	0.74	8.88	4400	3.960	139.85	14.30	0.563	55.5
EFB1224VHF	-R00 / -F00	24	7.0 to 26.4	0.40	9.60						
EFB1248VHF	-R00 / -F00	48	28.0 to 56.0	0.22	10.56						

\* 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.

# EFB 120 x 120 x 38 MM SERIES

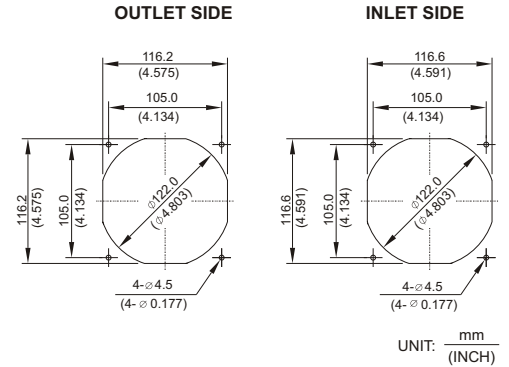
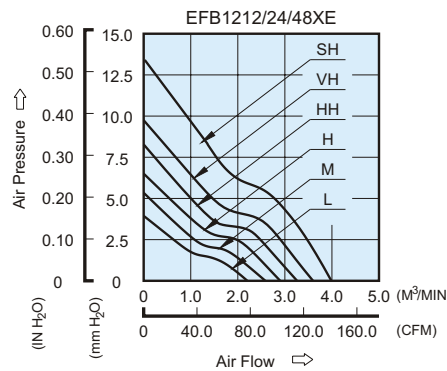
## DIMENSIONS DRAWING



- \* 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 : 290g (10.23 oz)

## P & Q CURVE (AT RATED VOLTAGE)

## MOUNTING PANEL CUTOUT

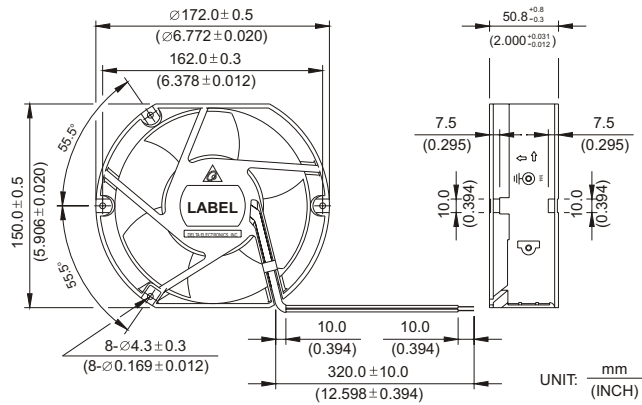


MODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m <sup>3</sup> / min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
EFB1212LE	-R00 / -F00	12	4.0 to 13.2	0.16	1.92	2000	2.150	75.93	4.00	0.157	34.0
EFB1224LE	-R00 / -F00	24	7.0 to 27.6	0.10	2.40						
EFB1248LE	-R00 / -F00	48	28.0 to 56.0	0.05	2.40						
EFB1212ME	-R00 / -F00	12	4.0 to 13.2	0.23	2.76	2300	2.500	88.29	5.21	0.205	38.0
EFB1224ME	-R00 / -F00	24	7.0 to 27.6	0.14	3.36						
EFB1248ME	-R00 / -F00	48	28.0 to 56.0	0.06	2.88						
EFB1212HE	-R00 / -F00	12	4.0 to 13.2	0.27	3.24	2600	2.900	102.41	6.60	0.260	41.0
EFB1224HE	-R00 / -F00	24	7.0 to 27.6	0.18	4.32						
EFB1248HE	-R00 / -F00	48	28.0 to 56.0	0.09	4.32						
EFB1212HHE	-R00 / -F00	12	4.0 to 13.2	0.39	4.68	2900	3.200	113.01	8.00	0.315	44.0
EFB1224HHE	-R00 / -F00	24	7.0 to 27.6	0.20	4.80						
EFB1248HHE	-R00 / -F00	48	28.0 to 56.0	0.12	5.76						
EFB1212VHE	-R00 / -F00	12	4.0 to 13.2	0.48	5.76	3200	3.510	123.95	9.70	0.382	47.5
EFB1224VHE	-R00 / -F00	24	7.0 to 27.6	0.27	6.48						
EFB1248VHE	-R00 / -F00	48	28.0 to 56.0	0.14	6.72						
EFB1212SHE	-R00 / -F00	12	4.0 to 13.2	0.80	9.60	3700	4.020	141.96	13.21	0.520	52.5
EFB1224SHE	-R00 / -F00	24	7.0 to 27.6	0.44	10.56						
EFB1248SHE	-R00 / -F00	48	28.0 to 56.0	0.20	9.60						

\* 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.

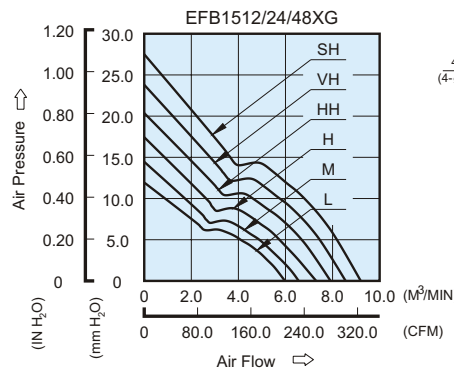
# EFB 172 x 150 x 50.8 MM SERIES

## DIMENSIONS DRAWING

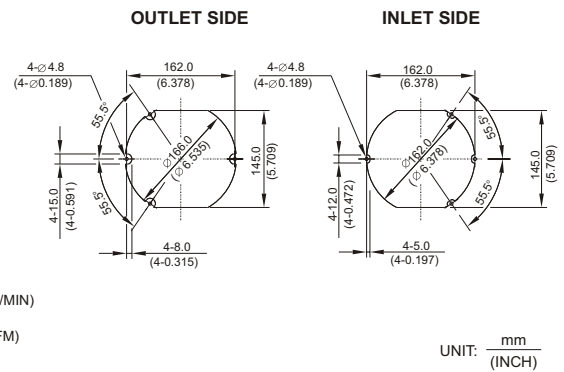


- \* Bearing Type: Ball Bearings
- \* Material: Impeller : Plastic (UL 94V-0), Frame : Die-Cast Aluminum
- \* Lead Wires : UL 1007 AWG #24 OR Equivalent, Red Wire Positive (+), Black Wire Negative (-)
- \* Weight : 840g (29.62 oz)

## P & Q CURVE (AT RATED VOLTAGE)



## MOUNTING PANEL CUTOUT



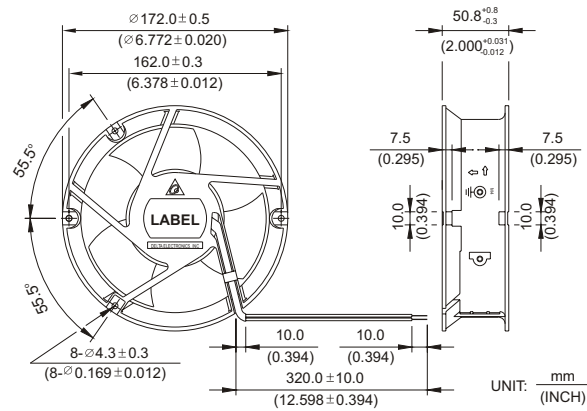
MODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m <sup>3</sup> /min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
EFB1512LG	-R00 / -F00	12	8.0 to 14.0	0.79	9.48	2800	5.950	210.12	11.90	0.469	50.0
EFB1524LG	-R00 / -F00	24	12.0 to 28.0	0.39	9.36						
EFB1548LG	-R00 / -F00	48	24.0 to 60.0	0.19	9.12						
EFB1512MG	-R00 / -F00	12	8.0 to 14.0	0.99	11.88	3050	6.520	230.25	14.50	0.571	52.0
EFB1524MG	-R00 / -F00	24	12.0 to 28.0	0.47	11.28						
EFB1548MG	-R00 / -F00	48	24.0 to 60.0	0.25	12.00						
EFB1512HG	-R00 / -F00	12	8.0 to 14.0	1.35	16.20	3350	7.130	251.79	17.49	0.689	55.0
EFB1524HG	-R00 / -F00	24	12.0 to 28.0	0.56	13.44						
EFB1548HG	-R00 / -F00	48	24.0 to 60.0	0.31	14.88						
EFB1512HHG	-R00 / -F00	12	8.0 to 14.0	1.79	21.48	3700	7.920	279.69	20.30	0.800	57.5
EFB1524HHG	-R00 / -F00	24	12.0 to 28.0	0.77	18.48						
EFB1548HHG	-R00 / -F00	48	24.0 to 60.0	0.38	18.24						
EFB1524VHG	-R00 / -F00	24	12.0 to 28.0	0.97	23.28	4000	8.560	302.29	23.80	0.937	60.0
EFB1548VHG	-R00 / -F00	48	24.0 to 60.0	0.49	23.52						
EFB1524SHG	-R00 / -F00	24	12.0 to 28.0	1.17	28.08	4300	9.203	325.00	27.5	1.083	63.0

\* 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.



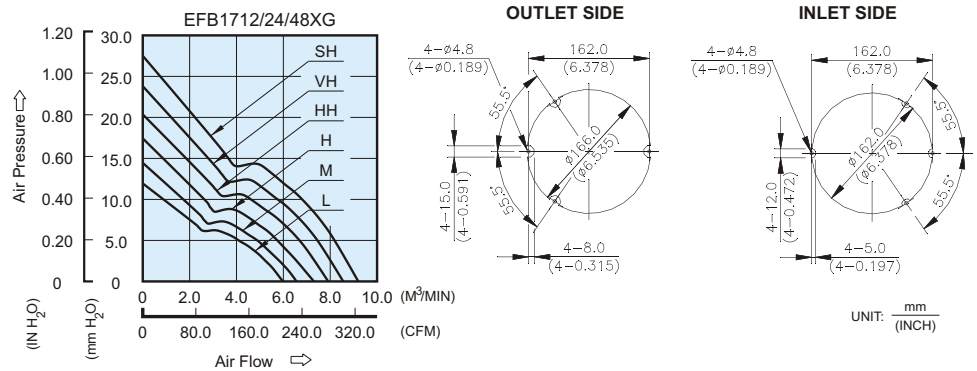
# EFB Ø172 x 50.8 MM SERIES

## DIMENSIONS DRAWING



- \* Bearing Type: Ball Bearings
- \* Material: Impeller : Plastic (UL 94V-0), Frame : Die-Cast Aluminum
- \* Lead Wires : UL 1007 AWG #24 OR Equivalent, Red Wire Positive (+), Black Wire Negative (-)
- \* Weight : 840g (29.62 oz)

## P & Q CURVE (AT RATED VOLTAGE) ■ MOUNTING PANEL CUTOUT



MODEL		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.	m <sup>3</sup> /min	CFM	mmH <sub>2</sub> O	IN H <sub>2</sub> O	dB-A
EFB1712LG	-R00 / -F00	12	8.0 to 14.0	0.79	9.48	2800	5.950	210.12	11.90	0.469	48.0
EFB1724LG	-R00 / -F00	24	12.0 to 28.0	0.39	9.36						
EFB1748LG	-R00 / -F00	48	24.0 to 60.0	0.19	9.12						
EFB1712MG	-R00 / -F00	12	8.0 to 14.0	0.99	11.88	3050	6.520	230.25	14.50	0.571	50.0
EFB1724MG	-R00 / -F00	24	12.0 to 28.0	0.47	11.28						
EFB1748MG	-R00 / -F00	48	24.0 to 60.0	0.25	12.00						
EFB1712HG	-R00 / -F00	12	8.0 to 14.0	1.35	16.20	3350	7.130	251.79	17.49	0.689	53.0
EFB1724HG	-R00 / -F00	24	12.0 to 28.0	0.56	13.44						
EFB1748HG	-R00 / -F00	48	24.0 to 60.0	0.31	14.88						
EFB1712HHG	-R00 / -F00	12	8.0 to 14.0	1.79	21.48	3700	7.920	279.69	20.30	0.800	55.0
EFB1724HHG	-R00 / -F00	24	12.0 to 28.0	0.77	18.48						
EFB1748HHG	-R00 / -F00	48	24.0 to 60.0	0.38	18.24						
EFB1724VHG	-R00 / -F00	24	12.0 to 28.0	0.97	23.28	4000	8.560	302.29	23.80	0.937	57.0
EFB1748VHG	-R00 / -F00	48	24.0 to 60.0	0.49	23.52						
EFB1724SHG	-R00 / -F00	24	12.0 to 28.0	1.17	28.08	4300	9.203	325.00	27.5	1.083	59.0

\* 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.