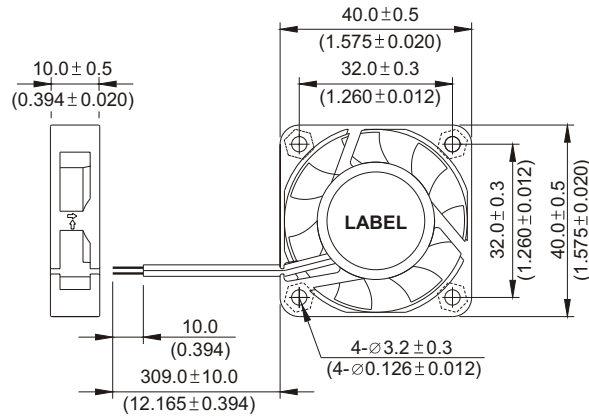


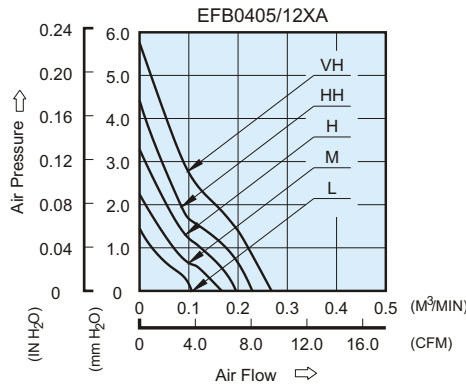
EFB 40 x 40 x 10 MM SERIES

DIMENSIONS DRAWING

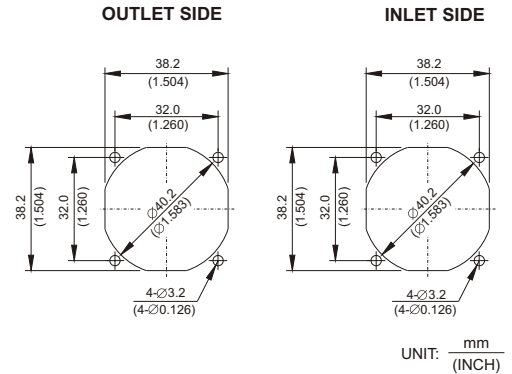


- * Bearing Type
Ball Bearings
- * Material
Impeller & Frame : Plastic(UL 94V-0)
- * Lead Wires :
UL 1007 AWG #28 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- * Weight : 14.5g (0.51 OZ)
- * Rib Type Only

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

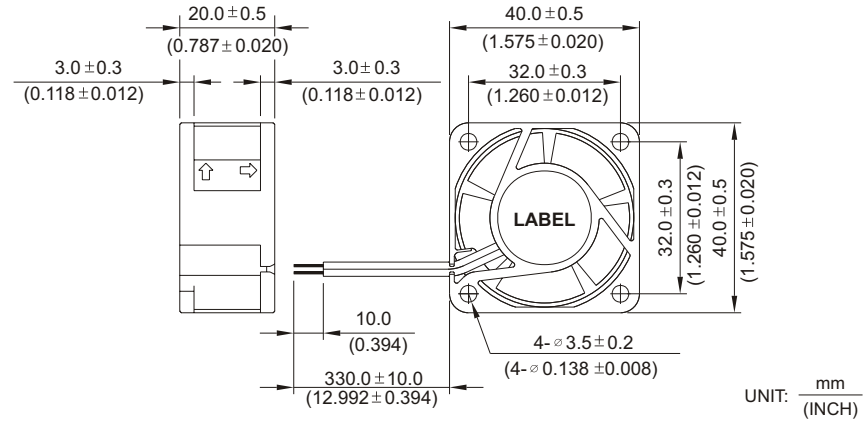


MODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m ³ /min	CFM	mmH ₂ O	IN H ₂ O	dB-A
EFB0405LA	-R00 / -F00	5	4.5 to 5.5	0.07	0.35	4000	0.106	3.74	1.45	0.057	20.5
EFB0412LA	-R00 / -F00	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	8000	0.268	9.46	5.76	0.227	37.5

* 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.

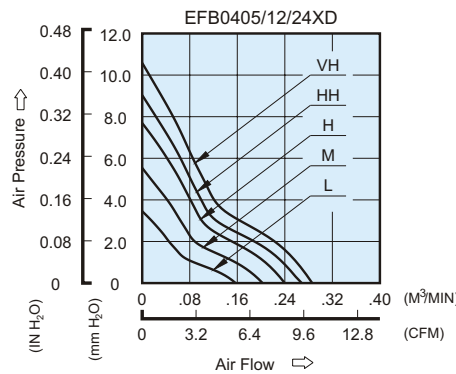
EFB 40 x 40 x 20 MM SERIES

DIMENSIONS DRAWING

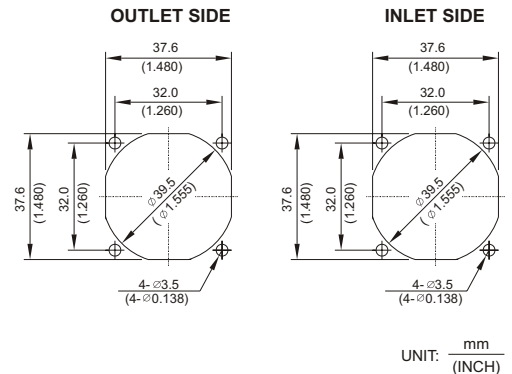


- * Bearing Type
Ball Bearings
- * Material
Impeller & Frame : Plastic (UL 94V-0)
- * Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- * Weight : 33g (1.16 oz)
- * Rib Type Only

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

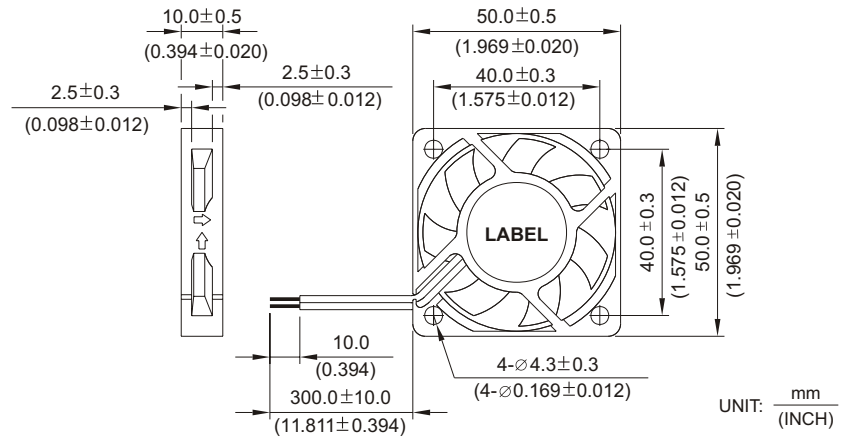


MODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m ³ /min	CFM	mmH ₂ O	IN H ₂ O	dB-A
EFB0405LD	-R00 / -F00	5	4.5 to 5.5	0.10	0.50	5000	0.157	5.54	3.45	0.136	22.0
EFB0412LD	-R00 / -F00	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.

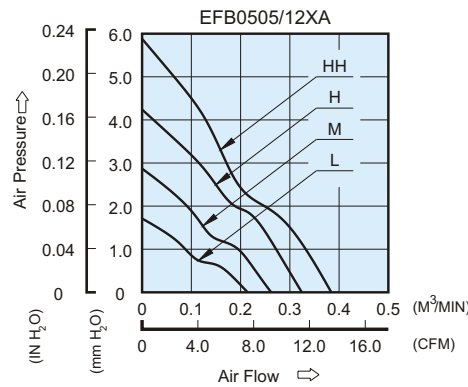
EFB 50 x 50 x 10 MM SERIES

DIMENSIONS DRAWING



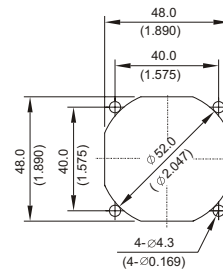
- * Bearing Type
Ball Bearings
- * Material :
Impeller & Frame : Plastic (UL 94V-0)
- * Lead Wires :
UL 2468 AWG #28 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- * Weight : 25g (0.88 oz)
- * Rib Type Only

P & Q CURVE (AT RATED VOLTAGE)

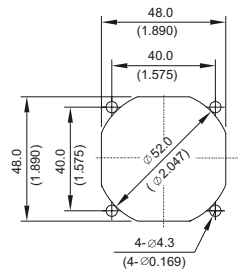


MOUNTING PANEL CUTOUT

OUTLET SIDE



INLET SIDE

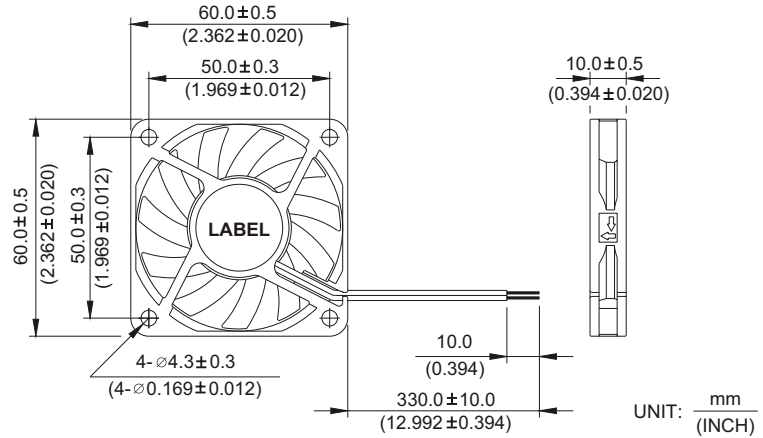


MODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m ³ /min	CFM	mmH ₂ O	IN H ₂ O	dB-A
EFB0505LA	-R00 / -F00	5	4.5 to 5.5	0.07	0.35	3500	0.212	7.50	1.72	0.068	18.0
EFB0512LA	-R00 / -F00	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.

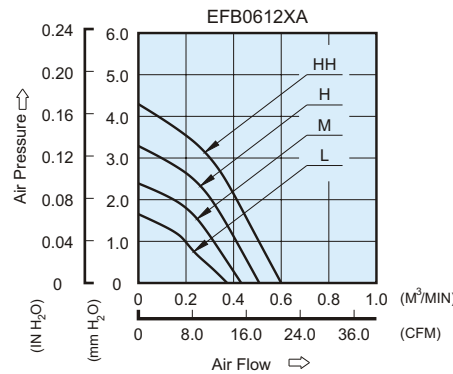
EFB 60 x 60 x 10 MM SERIES

DIMENSIONS DRAWING

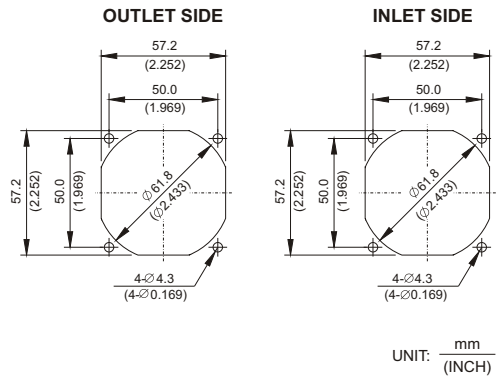


- * Bearing Type
Ball Bearings
- * Material
Impeller & Frame : Plastic (UL 94V-0)
- * Lead Wires :
UL 2468 AWG #28 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- * Weight : 28g (0.99 oz)
- * Rib Type Only

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

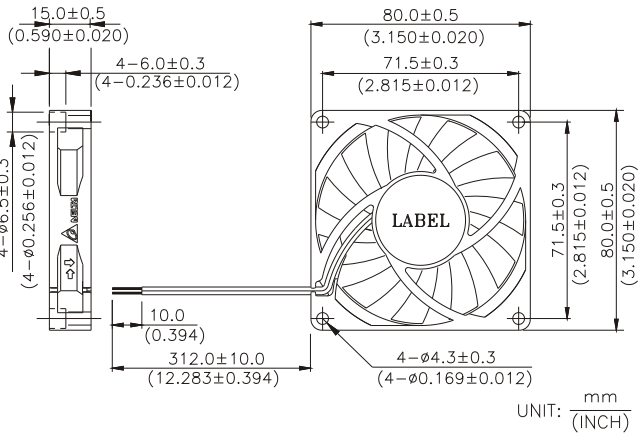


MODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m ³ /min	CFM	mmH ₂ O	IN H ₂ O	dB-A
EFB0612LA	-R00 / -F00	12	7.0 to 13.8	0.07	0.84	3000	0.380	13.42	1.65	0.065	24.5
EFB0612MA	-R00 / -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.

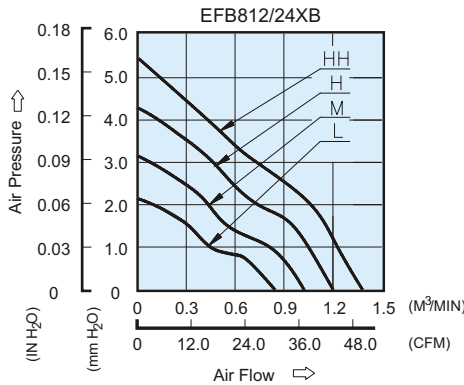
EFB 80 x 80 x 15 MM SERIES

DIMENSIONS DRAWING

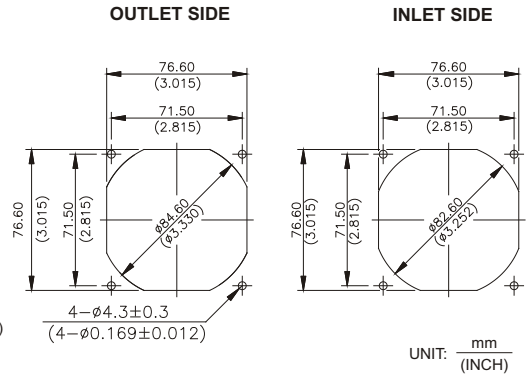


- * Bearing Type
Ball Bearings
- * Material
Impeller & Frame : Plastic(UL 94V-0)
- * Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- * Weight : 67g (2.36 OZ)
- * Rib Type Only

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

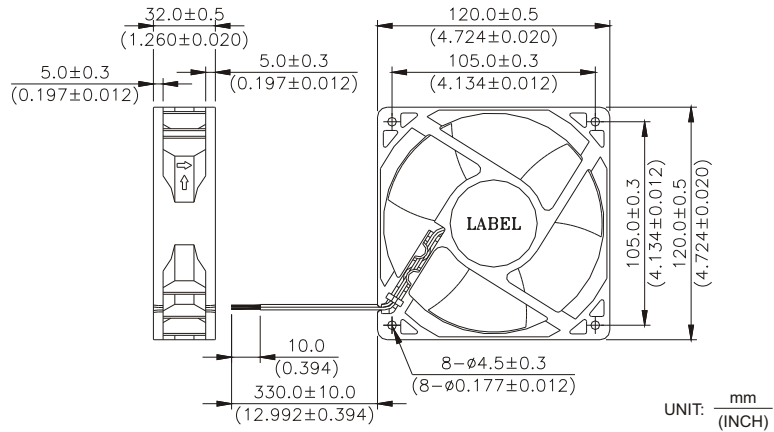


MODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m ³ /min	CFM	mmH ₂ O	IN H ₂ O	dB-A
EFB0812LB	-R00 / -F00	12	5.0 to 13.8	0.10	1.20	2300	0.839	29.62	1.71	0.067	30.0
EFB0824LB	-R00 / -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.

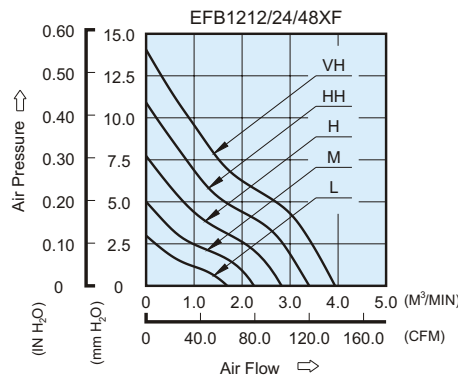
EFB 120 x 120 x 32 MM SERIES

DIMENSIONS DRAWING

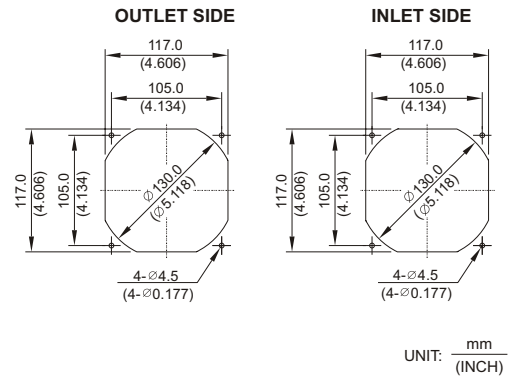


- * Bearing Type
Ball Bearings
- * Material
Impeller & Frame : Plastic (UL 94V-0)
- * Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- * Weight : 250g (8.82 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

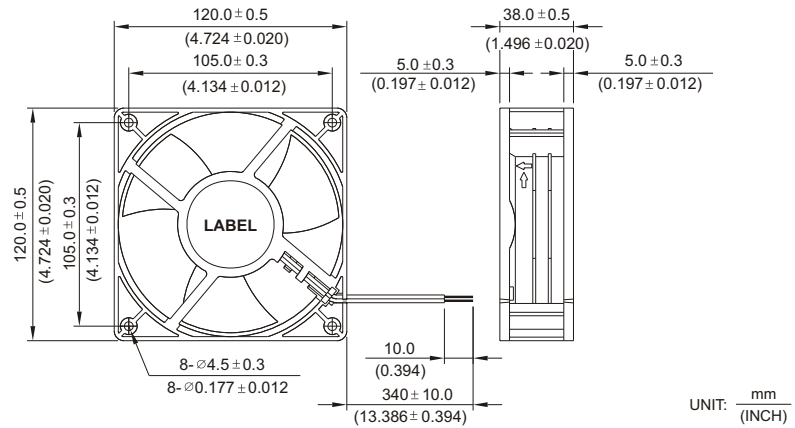


MODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m ³ /min	CFM	mmH ₂ O	IN H ₂ O	dB-A
EFB1212LF	-R00 / -F00	12	4.0 to 13.8	0.13	1.56	1900	1.700	60.03	3.00	0.118	33.5
EFB1224LF	-R00 / -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.

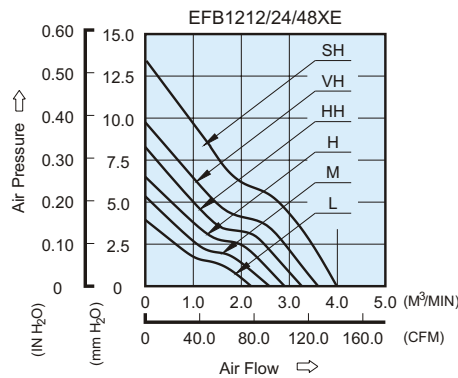
EFB 120 x 120 x 38 MM SERIES

DIMENSIONS DRAWING

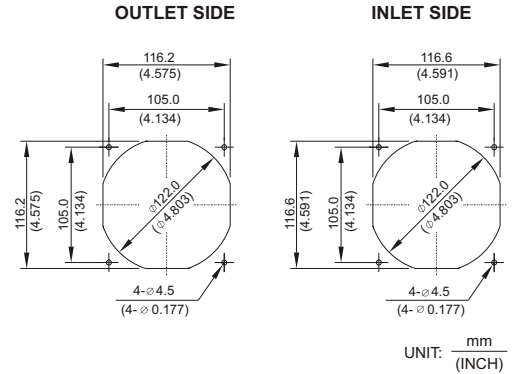


- * Bearing Type
Ball Bearings
- * Material
Impeller & Frame : Plastic (UL 94V-0)
- * Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- * Weight : 290g (10.23 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

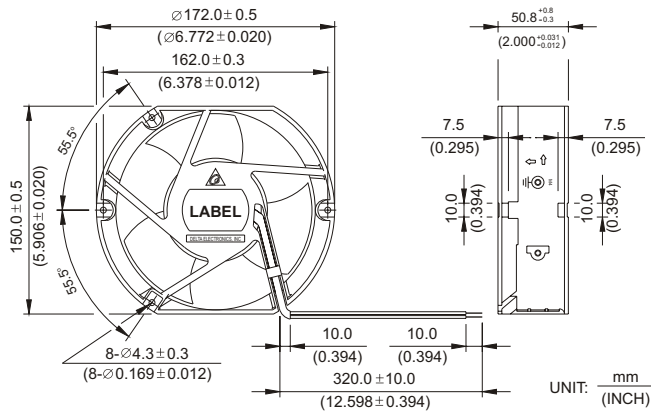


MODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m ³ /min	CFM	mmH ₂ O	IN H ₂ O	dB-A
EFB1212LE	-R00 / -F00	12	4.0 to 13.2	0.16	1.92	2000	2.150	75.93	4.00	0.157	34.0
EFB1224LE	-R00 / -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.

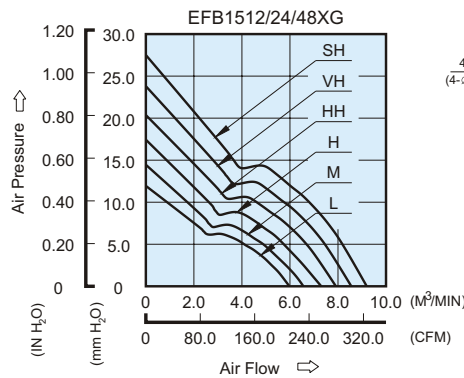
EFB 172 x 150 x 50.8 MM SERIES

DIMENSIONS DRAWING

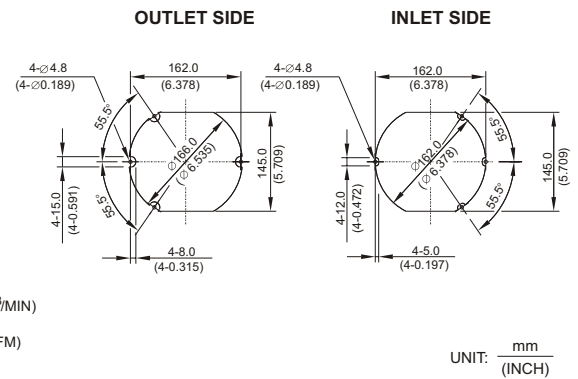


- * Bearing Type
Ball Bearings
- * Material
Impeller : Plastic (UL 94V-0)
Frame : Die-Cast Aluminum
- * Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- * Weight : 840g (29.62 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

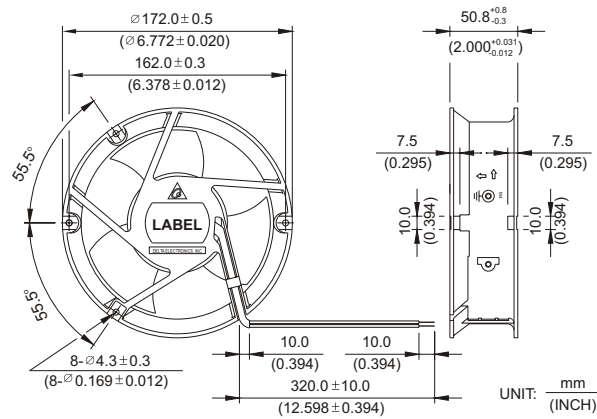


MODEL		Rated Voltage	Operating Voltage Range	Rated Current	Rated Input Power	Speed	Maximum Air Flow		Maximum Air Pressure		Noise
PART NO.	FUNCTION	VDC	VDC	Amp	Watt	R.P.M.	m ³ /min	CFM	mmH ₂ O	IN H ₂ O	dB-A
EFB1512LG	-R00 / -F00	12	8.0 to 14.0	0.79	9.48	2800	5.950	210.12	11.90	0.469	50.0
EFB1524LG	-R00 / -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.

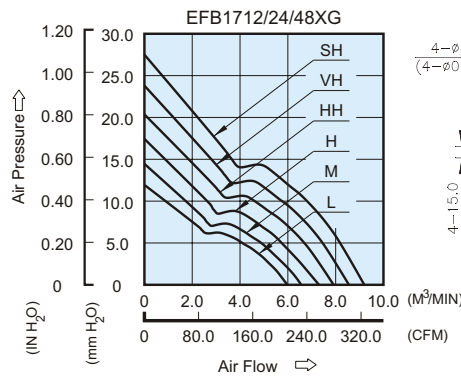
EFB Ø172 x 50.8 MM SERIES

■ DIMENSIONS DRAWING

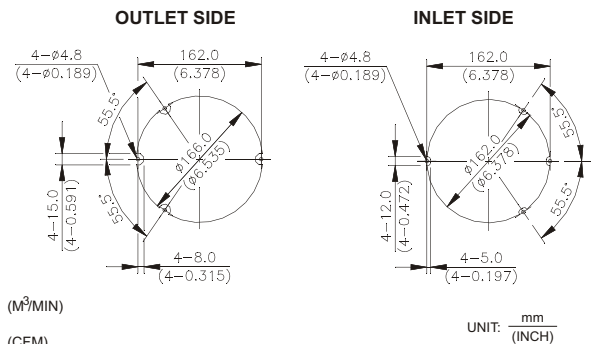


- * Bearing Type
Ball Bearings
- * Material
Impeller : Plastic (UL 94V-0)
Frame : Die-Cast Aluminum
- * Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- * Weight : 840g (29.62 oz)

■ 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 ³ /min	CFM	mmH ₂ O	IN H ₂ 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.