

Common Specifications

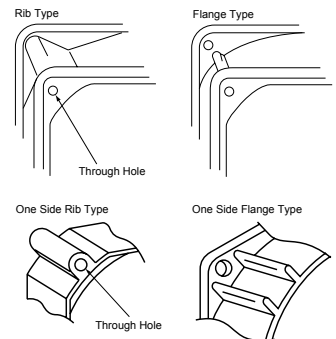
- Vibration Test:..... Conforms to JIS C 60068-2-6, Amplitude: 1.5mm, Frequency 10 to 55 Hz, 1 hour in each of the X, Y and Z directions.
- Shock Test: Conforms to JIS C 60068-2-27, Acceleration rate: 981 m/s2*, Application time: 6ms once each in the X, Y and Z directions. Note: For the 1604KL, 1608KL, and 2406KL series, the conditions of the shock test are as follows: Acceleration rate: 500 m/s2, Application time: 11ms once each in the X, Y and Z directions.
- Locked Rotor Protection : .. The motor is protected from burnout in the locked rotor condition for 72 hours at the rated voltage.
- Polarity Protection : The fans are Reverse Polarity protected at the rated voltage.
- Insulation Class : E class (UL: Class A)
- Auto Restart:..... Most fan models provide current shut-down/auto restart function under locked rotor conditions.

Notes: Additional performance requirements can be determined between manufacturer and customer, based on customer's request.
Ball bearing fans may be installed in a horizontal, vertical or angled position

Part Numbering System

24
①
10
②
M
③
L
④
- 04
⑤
W
⑥
- B
⑦
1 0
⑧ ⑨
- X 00
⑩ ⑪

- | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|------|----------------|----------------|----|----------------|----------|----|----------------|-------------|----|----------------|----------|----|----------------|-------------|----|----------------|----------|----|----------------|-------------|--|
| <p>1. Frame Size</p> <ul style="list-style-type: none"> 10:25mm 12:30mm 14:35mm 16:40mm 20:50mm 21:52mm 24:60mm 28:70mm 31:80mm 36:92mm 47:119mm 50:127mm 59:150mm 68:172mm <p>2. Overall Length (Thickness)</p> <ul style="list-style-type: none"> 04:10mm 06:15mm 08:20mm 10:25mm 12:32mm 15:38mm 20:50mm | <p>3. Series</p> <ul style="list-style-type: none"> P Series M Series N Series K Series H Series S Series F Series R Series V Series <p>4. Motor Function</p> <ul style="list-style-type: none"> Brushless Type DCM <p>5. Input Voltage</p> <ul style="list-style-type: none"> O: Standard Current C: Special Current D~Z: Special Current (A.B.O. are not used) 1: 5V 5: 24V 2: 6V 6: 36V 3: 9v 7: 48V 4: 12V 9: Other <p>6. Termination</p> <ul style="list-style-type: none"> W: Lead Wires T: Terminal (Terminal option on 3610KL and 4715KL Series) | <p>7. Bearing</p> <ul style="list-style-type: none"> B: Ball Bearing S: Sleeve Bearing <p>8. Speed</p> <ul style="list-style-type: none"> 1<2<3<4<5<6<7<8 low high <p>9. Special Control Function</p> <ul style="list-style-type: none"> 0: Standard Type 9: Sensor Type 7: Temperature Detecting Variable Speed Type/PWM Control Type 6: Temperature Detecting Variable Speed Type/Sensor Type 5: 2-Speed Type/Sensor Type 8: 2-Speed Type <p>10. Product Number</p> <table border="0" style="width: 100%;"> <tr> <td>Item</td> <td>Classification</td> <td>Mounting Style</td> </tr> <tr> <td>L:</td> <td>Standard Model</td> <td>Rib Type</td> </tr> <tr> <td>P:</td> <td>Standard Model</td> <td>Flange Type</td> </tr> <tr> <td>B:</td> <td>Standard Model</td> <td>Rib Type</td> </tr> <tr> <td>E:</td> <td>Standard Model</td> <td>Flange Type</td> </tr> <tr> <td>G:</td> <td>Standard Model</td> <td>Rib Type</td> </tr> <tr> <td>D:</td> <td>Standard Model</td> <td>Flange Type</td> </tr> </table> | Item | Classification | Mounting Style | L: | Standard Model | Rib Type | P: | Standard Model | Flange Type | B: | Standard Model | Rib Type | E: | Standard Model | Flange Type | G: | Standard Model | Rib Type | D: | Standard Model | Flange Type | <p>11. Individual Specifications</p> <p>Standard Type</p> <ul style="list-style-type: none"> 00 Standard 01~99: Custom <p>Sensor Type</p> <ul style="list-style-type: none"> 00: Locked Rotor Alarm Signal (Standard) 01~49: Locked Rotor Alarm Signal (Custom) 50: Tachometer Signal (Standard) 51~99: Tachometer Signal (Custom) |
| Item | Classification | Mounting Style | | | | | | | | | | | | | | | | | | | | | | |
| L: | Standard Model | Rib Type | | | | | | | | | | | | | | | | | | | | | | |
| P: | Standard Model | Flange Type | | | | | | | | | | | | | | | | | | | | | | |
| B: | Standard Model | Rib Type | | | | | | | | | | | | | | | | | | | | | | |
| E: | Standard Model | Flange Type | | | | | | | | | | | | | | | | | | | | | | |
| G: | Standard Model | Rib Type | | | | | | | | | | | | | | | | | | | | | | |
| D: | Standard Model | Flange Type | | | | | | | | | | | | | | | | | | | | | | |



Common Specifications

1. Tach Signal
2. Specification

V_{psmax} : +15VDC
 I_p max: 5mA [V_{LO} max = 1.2V]
 T_a = 25°C

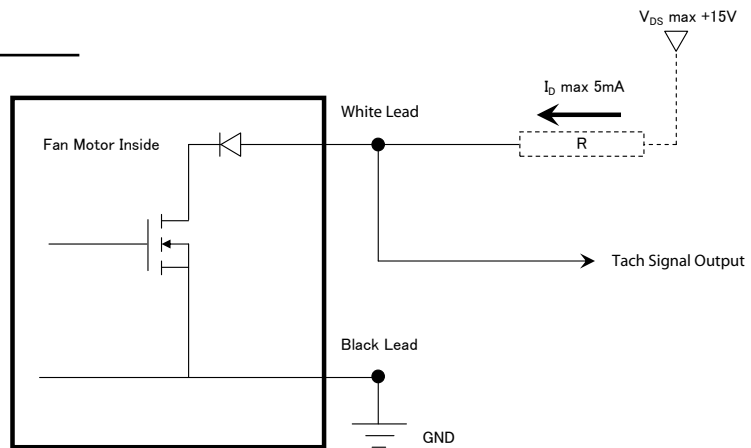
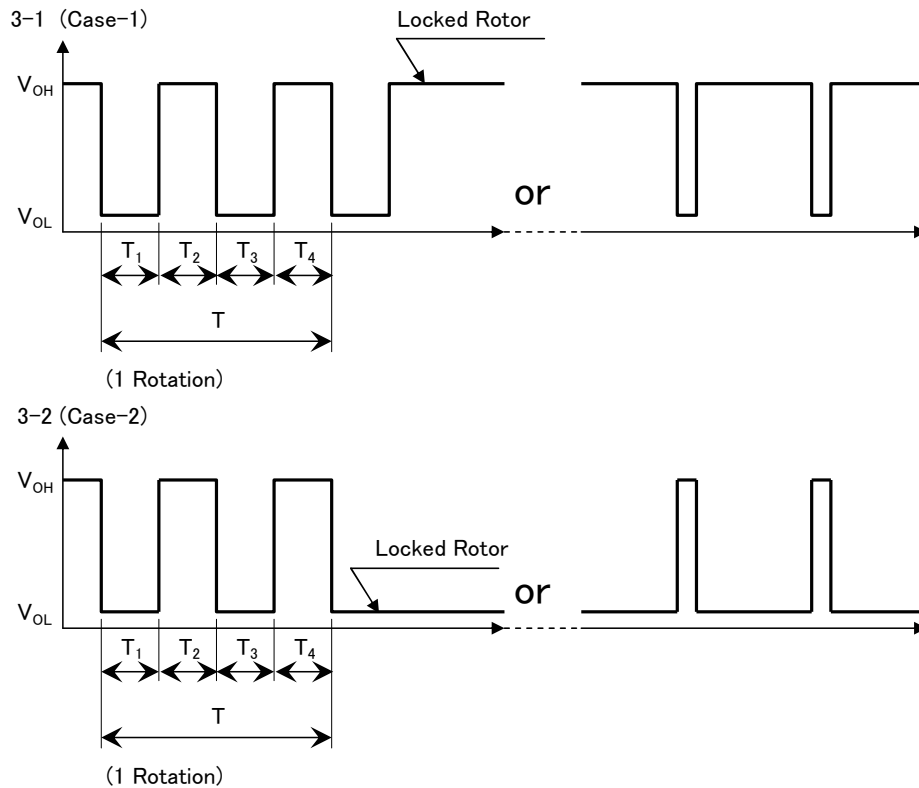


Fig. 1 Tach Signal Circuit

Warning: Improper connection of the sensor lead may cause damage to the motor drive IC. We shall be free from compensation, if trouble occurs due to insertion of opposite direction.



- 1.) When the rotor is locked at V_{OH} position of signal, signal keeps V_{OH} position or signal becomes to V_{OL} position for a few seconds at any time of the auto-restart motion.
- 2.) When the rotor is locked at V_{OL} position of signal, signal keeps V_{OL} position or signal becomes to V_{OH} position for a few seconds at any time of the auto-restart motion.
- 3.) $T=T_1+T_2+T_3+T_4= 1$ Rotation
 $T_1=T_2=T_3=T_4= 60/4m$ m:(min⁻¹)

General Specifications

Motor Protection:

Auto Restart/Polarity Protection

Insulation Resistance:

10M Ω or over with a DC500V Megger

Dielectric Withstand Voltage: AC 700V 1s

Allowable Ambient Temperature Range:

-10°C ~ +70°C (Operating)

-40°C ~ +70°C (Storage)

Expected Life

Failure Rate: 10%

25°C 60,000 Hours (B00)

Material

Casing : Plastic (Black) 94V-0

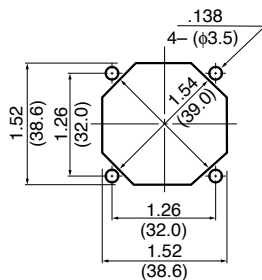
Impeller : Plastic (Black) 94V-0

Bearing : Ball Bearing

Lead Wire : UL1061, AWG26, +Red, -Black

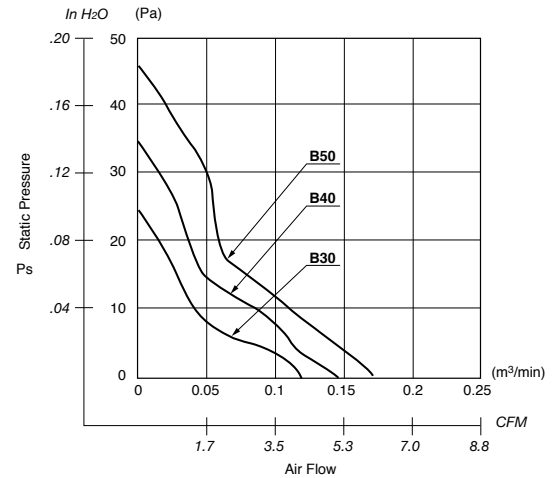
Panel Cut-Outs

Units: $\frac{\text{inch}}{\text{(mm)}}$

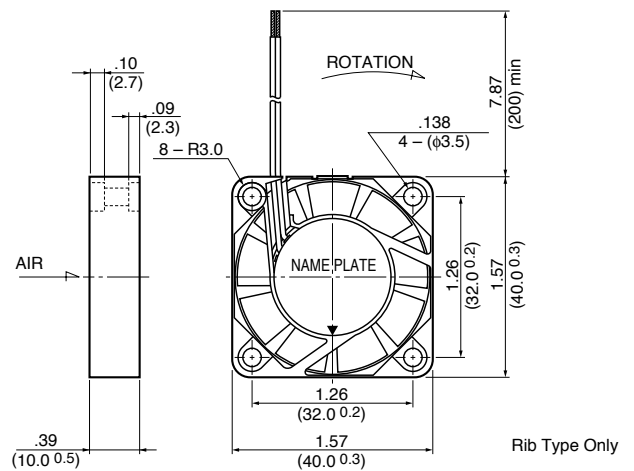


INLET SIDE / OUTLET SIDE

Characteristic Curves



Outline



Rib Type Only

Specifications

MODEL	Product No.	Rated Voltage	Operating Voltage	Current	Input Power	Speed	Max. Air Flow		Max. Static Pressure		Noise	Mass
		(V)	(V)	(A) ^{*1}	(W) ^{*1}	(min ⁻¹) ^{*1}	CFM ^{*1}	(m ³ /min) ^{*1}	in H ₂ O	(Pa) ^{*1}	(dB) ^{*1}	(g)
1604KL-01W-B30-	X00	5	4.5 ~ 5.5	0.075	0.375	4500	4.2	0.12	.096	24.0	22.0	15
1604KL-01W-B40-	X00	5	4.5 ~ 5.5	0.120	0.600	5500	5.3	0.15	.136	34.0	25.0	15
1604KL-01W-B50-	X00	5	4.5 ~ 5.5	0.155	0.775	6500	6.0	0.17	.184	46.0	29.0	15
1604KL-04W-B30-	X00	12	10.2 ~ 13.8	0.062	0.744	4500	4.2	0.12	.096	24.0	22.0	15
1604KL-04W-B40-	X00	12	10.2 ~ 13.8	0.073	0.876	5500	5.3	0.15	.136	34.0	25.0	15
1604KL-04W-B50-	X00	12	10.2 ~ 13.8	0.073	0.876	6500	6.0	0.17	.184	46.0	29.0	15

Rotation: Clockwise

Airflow Outlet: Air Out Over Struts

*1: Average Values in Free Air

General Specifications

Motor Protection:

Auto Restart/Polarity Protection

Insulation Resistance:

10M Ω or over with a DC500V Megger

Dielectric Withstand Voltage: AC 700V 1s

Allowable Ambient Temperature Range:

-10°C ~ +70°C (Operating)

-40°C ~ +70°C (Storage)

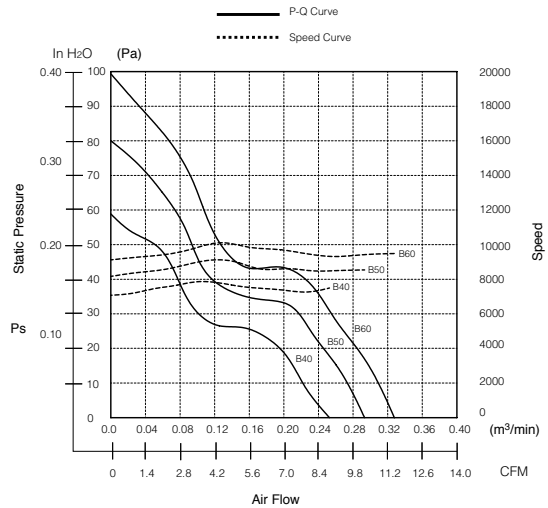
(non-condensing environment)

Expected Life

Failure Rate: 10%

25°C 50,000 Hours (B00)

Characteristic Curves



Material

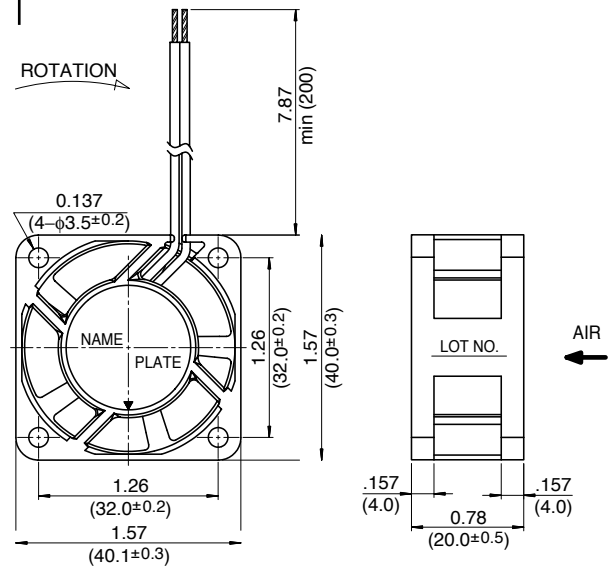
Casing : Plastic (Black) 94V-0

Impeller : Plastic (Black) 94V-0

Bearing : Ball Bearing

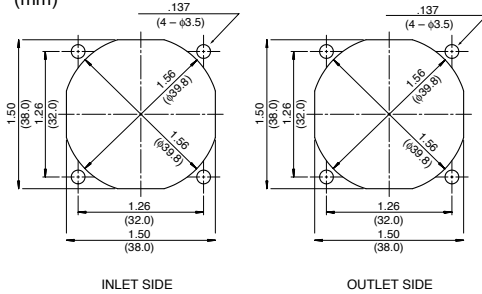
Lead Wire : UL1007, AWG26, +Red, -Black

Outline



Panel Cut-Outs

Units: $\frac{\text{inch}}{\text{mm}}$



Specifications

MODEL	Product No.	Rated Voltage	Operating Voltage	Current	Input Power	Speed	Max. Air Flow		Max. Static Pressure		Noise	Mass
		(V)	(V)	(A) ^{*1}	(W) ^{*1}	(min ⁻¹) ^{*1}	CFM ^{*1}	(m ³ /min) ^{*1}	in H ₂ O	(Pa) ^{*1}	(dB) ^{*1}	(g)
1608VL-04W-B40-	BXX	12	7.0 ~ 13.2	0.08	1.02	7500	8.8	0.25	.24	58.8	29.0	40
1608VL-04W-B50-	BXX	12	7.0 ~ 13.2	0.11	1.32	8500	10.2	0.29	.31	76.6	31.4	40
1608VL-04W-B60-	BXX	12	7.0 ~ 13.2	0.13	1.56	9500	11.3	0.32	.40	99.3	34.6	40
1608VL-05W-B40-	BXX	24	14.0 ~ 26.4	0.05	1.20	7500	8.8	0.25	.24	58.8	29.0	40
1608VL-05W-B50-	BXX	24	14.0 ~ 26.4	0.07	1.68	8500	10.2	0.29	.31	76.6	31.4	40
1608VL-05W-B60-	BXX	24	14.0 ~ 26.4	0.10	2.40	9500	11.3	0.32	.40	99.3	34.6	40

Rotation: Clockwise

Airflow Outlet: Air Out Over Struts

*1: Average Values in Free Air

General Specifications

Motor Protection:

Auto Restart/Polarity Protection

Insulation Resistance:

10M Ω or over with a DC500V Megger

Dielectric Withstand Voltage: AC 700V 1s

Allowable Ambient Temperature Range:

-10°C ~ +60°C (Operating)

-40°C ~ +70°C (Storage)

(non-condensing environment)

Expected Life

Failure Rate: 10%

40°C 70,000 Hours (B00)

Material

Casing : Plastic (Black) 94V-0

Impeller : Plastic (Black) 94V-0

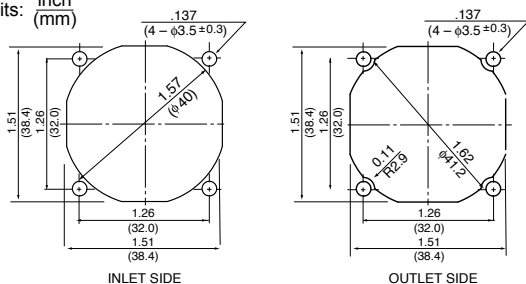
Bearing : Ball Bearing

Lead Wire : UL10368, AWG24, +Red, -Black

Tach Sig. : White PWM Control : Brown

Panel Cut-Outs

Units: inch (mm)



INLET SIDE

OUTLET SIDE

PWM Control Voltage

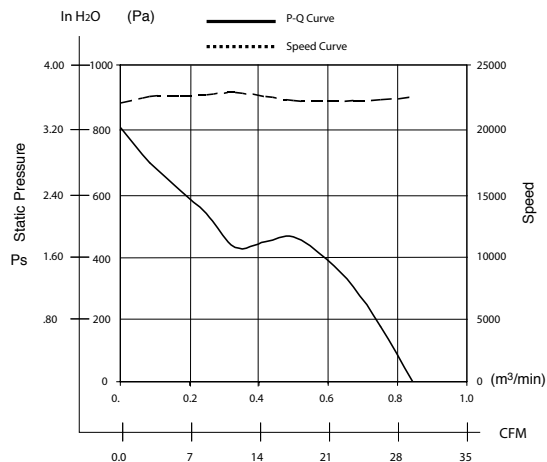
Vst = 0V ~ 0.5V Stop (On Duty 0%)

Vst = 3.3V ~ 5.0V Full Speed (On Duty 100%)

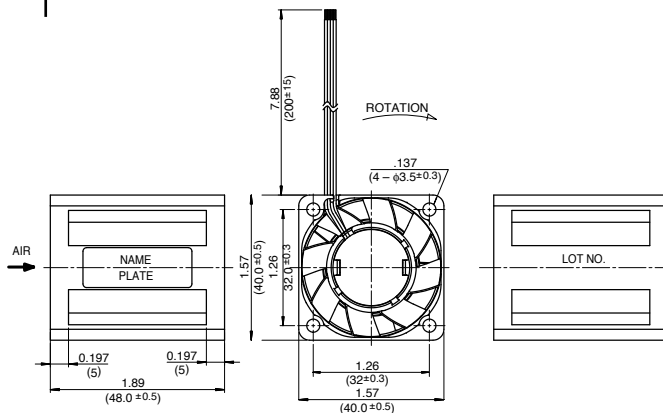
Vst = Open Full Speed

(At Ta = 25°C, rated voltage 12VDC)

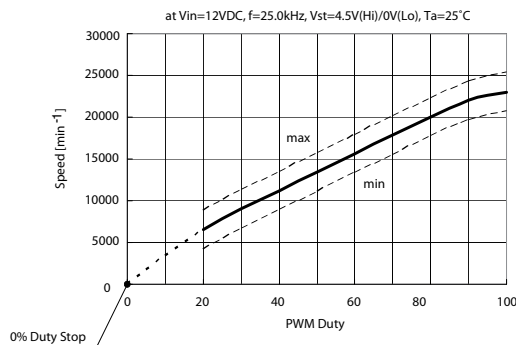
Characteristic Curves



Outline



Reference PWM Duty Vs. Speed Curve



Specifications

MODEL	Product No.	Rated Voltage	Operating Voltage	Current	Input Power	Speed	Max. Air Flow		Max. Static Pressure		Noise	Mass
		(V)	(V)	(A) ^{*1}	(W) ^{*1}	(min ⁻¹) ^{*1}	CFM ^{*1}	(m ³ /min) ^{*1}	in HzO	(Pa) ^{*1}	(dB) ^{*1}	(g)
1619FT-04W-B86-	BXX	12	10.8 ~ 13.2	1.05	12.60	23,000	28.9	0.82	3.29	820.0	62.0	71

Rotation: Clockwise

Airflow Outlet: Air Out Over Struts

*1: Average Values in Free Air

General Specifications

Motor Protection:

Auto Restart/Polarity Protection

Insulation Resistance:

10M Ω or over with a DC500V Megger

Dielectric Withstand Voltage: AC 700V 1s

Allowable Ambient Temperature Range:

-10°C ~ +70°C (Operating)

-40°C ~ +70°C (Storage)

(non-condensing environment)

Expected Life

Failure Rate: 10%

25°C 100,000 Hours (B00/E00)

Material

Casing : Plastic (Black) 94V-0

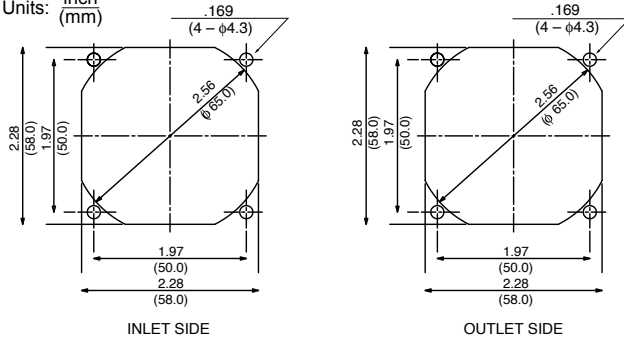
Impeller : Plastic (Black) 94V-0

Bearing : Ball Bearing

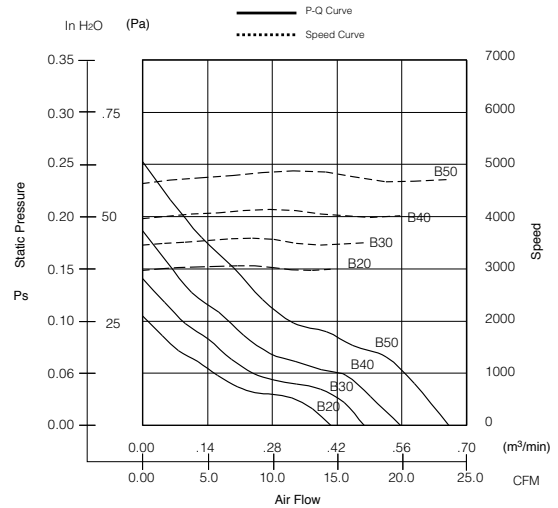
Lead Wire : UL3385, AWG26, +Red, -Black

Panel Cut-Outs

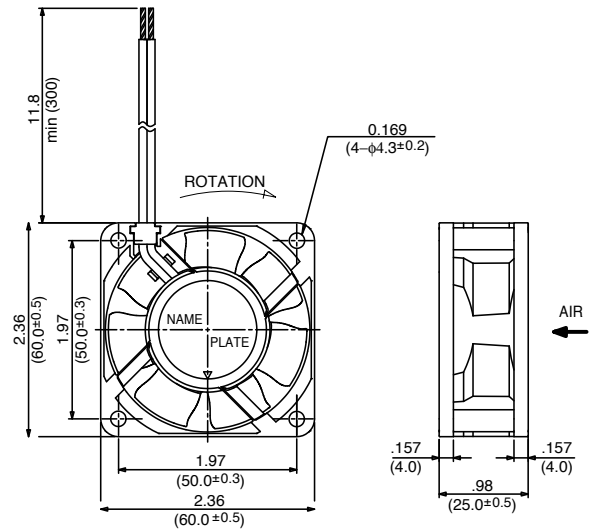
Units: inch (mm)



Characteristic Curves



Outline



Specifications

MODEL	Product No.	Rated Voltage	Operating Voltage	Current	Input Power	Speed	Max. Air Flow		Max. Static Pressure		Noise	Mass
		(V)	(V)	(A) ^{*1}	(W) ^{*1}	(min ⁻¹) ^{*1}	CFM ^{*1}	(m ³ /min) ^{*1}	in H ₂ O	(Pa) ^{*1}	(dB) ^{*1}	(g)
2410SB-04W-B20	B/EXX	12	6 ~ 13.8	0.06	0.72	3000	14.5	0.41	0.10	26	17.0	56
2410SB-04W-B30	B/EXX	12	6 ~ 13.8	0.08	0.96	3500	16.9	0.48	0.14	35	22.5	56
2410SB-04W-B40	B/EXX	12	6 ~ 13.8	0.10	1.20	4000	19.8	0.56	0.18	46	26.5	56
2410SB-04W-B50	B/EXX	12	6 ~ 13.8	0.15	1.80	4700	23.3	0.66	0.25	63	32.0	56
2410SB-05W-B20	B/EXX	24	12.0 ~ 27.6	0.03	0.72	3000	14.5	0.41	0.10	26	17.0	56
2410SB-05W-B30	B/EXX	24	12.0 ~ 27.6	0.04	0.96	3500	16.9	0.48	0.14	35	22.5	56
2410SB-05W-B40	B/EXX	24	12.0 ~ 27.6	0.06	1.44	4000	19.8	0.56	0.18	46	26.5	56
2410SB-05W-B50	B/EXX	24	12.0 ~ 27.6	0.08	1.92	4700	23.3	0.66	0.25	63	32.0	56

Rotation: Clockwise

Airflow Outlet: Air Out Over Struts

*1: Average Values in Free Air

General Specifications

Motor Protection:

Auto Restart/Polarity Protection

Insulation Resistance:

10M Ω or over with a DC500V Megger

Dielectric Withstand Voltage: AC 700V 1s

Allowable Ambient Temperature Range:

-10°C ~ +70°C (Operating)

-40°C ~ +70°C (Storage)

(non-condensing environment)

Expected Life

Failure Rate: 10%

25°C 100,000 Hours (B00/E00)

Material

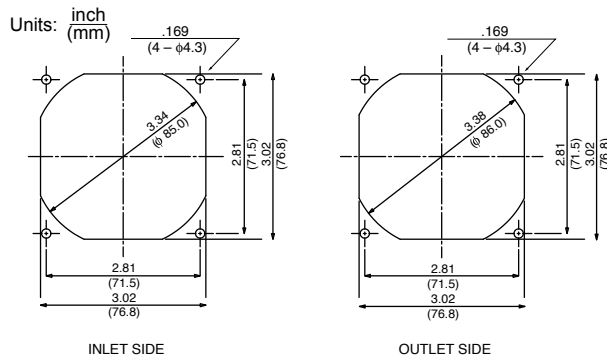
Casing : Plastic (Black) 94V-0

Impeller : Plastic (Black) 94V-0

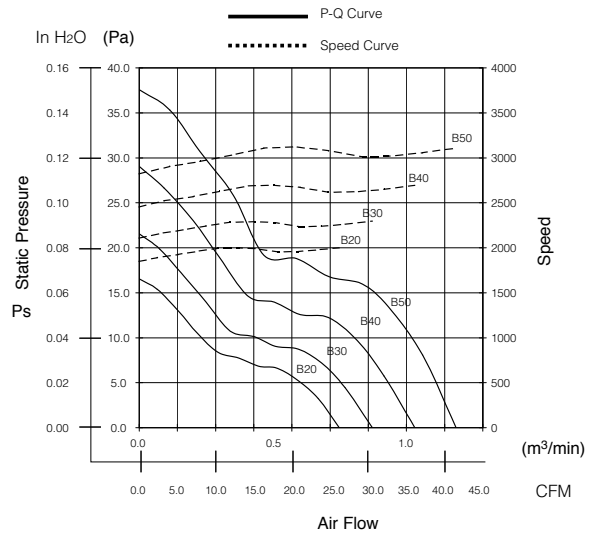
Bearing : Ball Bearing

Lead Wire : UL3385, AWG26, +Red, -Black

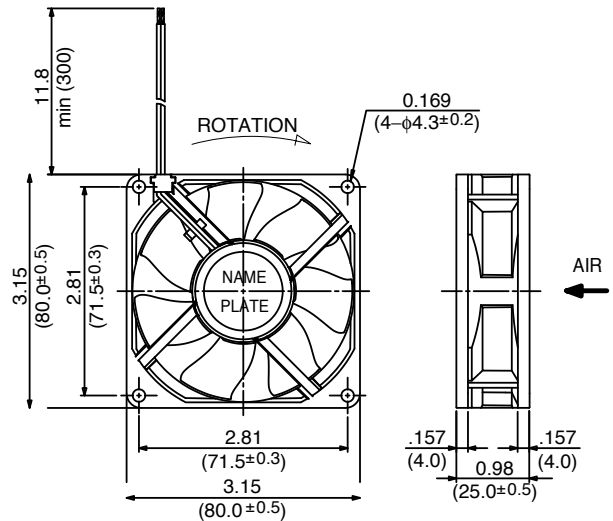
Panel Cut-Outs



Characteristic Curves



Outline



Specifications

MODEL	Product No.	Rated Voltage	Operating Voltage	Current	Input Power	Speed	Max. Air Flow		Max. Static Pressure		Noise	Mass
		(V)	(V)	(A) ^{*1}	(W) ^{*1}	(min ⁻¹) ^{*1}	CFM ^{*1}	(m ³ /min) ^{*1}	in H ₂ O	(Pa) ^{*1}	(dB) ^{*1}	(g)
3110SB-04W-B20	B/EXX	12	6 ~ 13.8	0.05	0.60	2000	26.1	0.74	0.07	16.5	19.0	80
3110SB-04W-B30	B/EXX	12	6 ~ 13.8	0.06	0.72	2300	30.4	0.86	0.09	21.5	22.0	80
3110SB-04W-B40	B/EXX	12	6 ~ 13.8	0.09	1.08	2700	36.0	1.02	0.12	29.0	26.0	80
3110SB-04W-B50	B/EXX	12	6 ~ 13.8	0.14	1.68	3100	41.3	1.17	0.15	37.5	30.0	80
3110SB-05W-B20	B/EXX	24	12.0 ~ 27.6	0.03	0.72	2000	26.1	0.74	0.07	16.5	19.0	80
3110SB-05W-B30	B/EXX	24	12.0 ~ 27.6	0.04	0.96	2300	30.4	0.86	0.09	21.5	22.0	80
3110SB-05W-B40	B/EXX	24	12.0 ~ 27.6	0.06	1.44	2700	36.0	1.02	0.12	29.0	26.0	80
3110SB-05W-B50	B/EXX	24	12.0 ~ 27.6	0.08	1.92	3100	41.3	1.17	0.15	37.5	30.0	80

Rotation: Clockwise

Airflow Outlet: Air Out Over Struts

*1: Average Values in Free Air

General Specifications

Motor Protection:

Auto Restart/Polarity Protection

Insulation Resistance:

10M Ω or over with a DC500V Megger

Dielectric Withstand Voltage: AC 700V 1s

Allowable Ambient Temperature Range:

-10°C ~ +70°C (Operating)

-40°C ~ +70°C (Storage)

(non-condensing environment)

Expected Life

Failure Rate: 10%

25°C 100,000 Hours (B00/E00)

Material

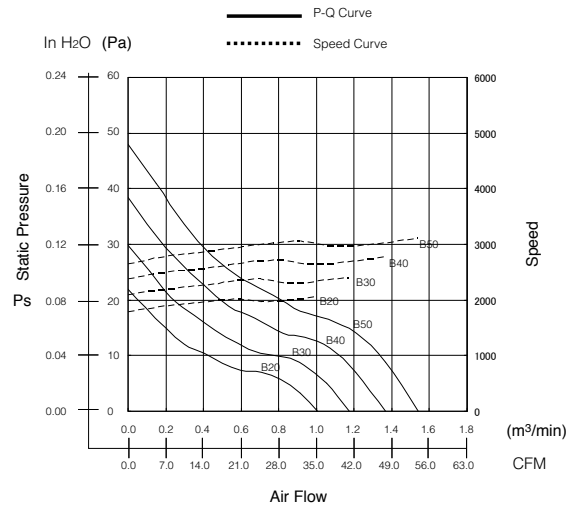
Casing : Plastic (Black) 94V-0

Impeller : Plastic (Black) 94V-0

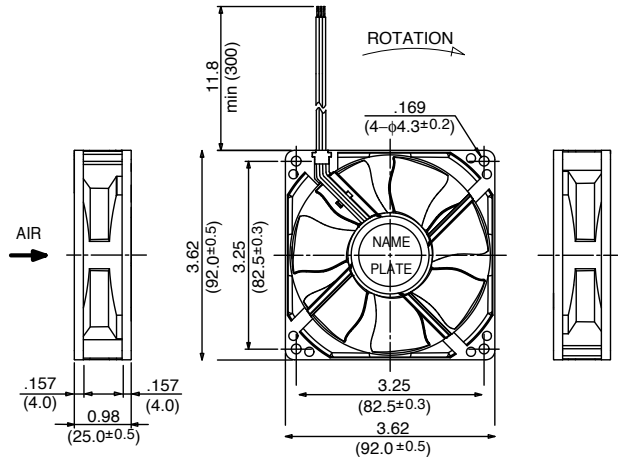
Bearing : Ball Bearing

Lead Wire : UL3385, AWG26, +Red, -Black

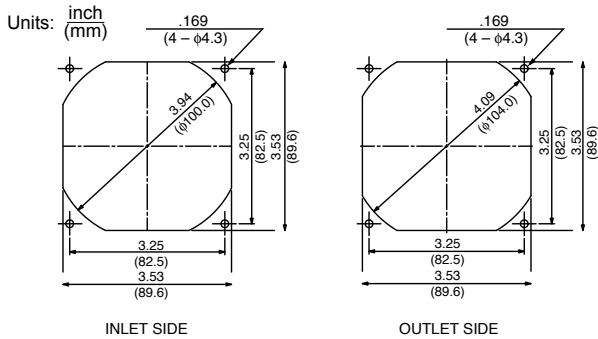
Characteristic Curves



Outline



Panel Cut-Outs



Specifications

MODEL	Product No.	Rated Voltage	Operating Voltage	Current	Input Power	Speed	Max. Air Flow		Max. Static Pressure		Noise	Mass
		(V)	(V)	(A) ^{*1}	(W) ^{*1}	(min ⁻¹) ^{*1}	CFM ^{*1}	(m ³ /min) ^{*1}	in H ₂ O	(Pa) ^{*1}	(dB) ^{*1}	(g)
3610SB-04W-B20-	B/EXX	12	6 ~ 13.8	0.07	0.84	2050	35.7	1.01	0.09	21.5	25.0	95
3610SB-04W-B30-	B/EXX	12	6 ~ 13.8	0.10	1.20	2400	41.3	1.17	0.12	29.5	28.0	95
3610SB-04W-B40-	B/EXX	12	6 ~ 13.8	0.13	1.56	2750	48.4	1.37	0.15	38.4	32.0	95
3610SB-04W-B50-	B/EXX	12	6 ~ 13.8	0.15	1.80	3100	54.4	1.54	0.19	47.9	35.0	95
3610SB-05W-B20-	B/EXX	24	12 ~ 27.6	0.04	0.84	2050	35.7	1.01	0.09	21.5	25.0	95
3610SB-05W-B30-	B/EXX	24	12 ~ 27.6	0.05	1.20	2400	41.3	1.17	0.12	29.5	28.0	95
3610SB-05W-B40-	B/EXX	24	12 ~ 27.6	0.07	1.56	2750	48.4	1.37	0.15	38.4	32.0	95
3610SB-05W-B50-	B/EXX	24	12 ~ 27.6	0.08	1.80	3100	54.4	1.54	0.19	47.9	35.0	95

Rotation: Clockwise

Airflow Outlet: Air Out Over Struts

*1: Average Values in Free Air

General Specifications

Motor Protection:

Auto Restart/Polarity Protection

Insulation Resistance:

10M Ω or over with a DC500V Megger

Dielectric Withstand Voltage: AC 700V 1s

Allowable Ambient Temperature Range:

-10°C ~ +70°C (Operating)

-40°C ~ +70°C (Storage)

(non-condensing environment)

Expected Life

Failure Rate: 10%

25°C 100,000 Hours (B00/E00)

Material

Casing : Plastic (Black) 94V-0

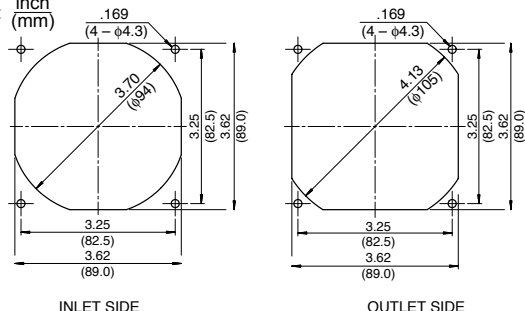
Impeller : Plastic (Black) 94V-0

Bearing : Ball Bearing

Lead Wire : UL3385, AWG26, +Red, -Black

Panel Cut-Outs

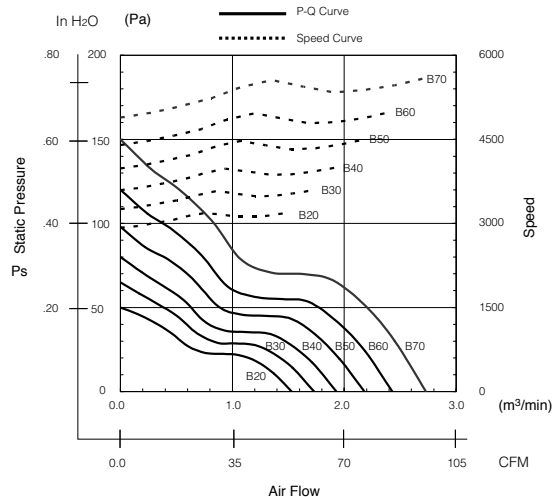
Units: inch (mm)



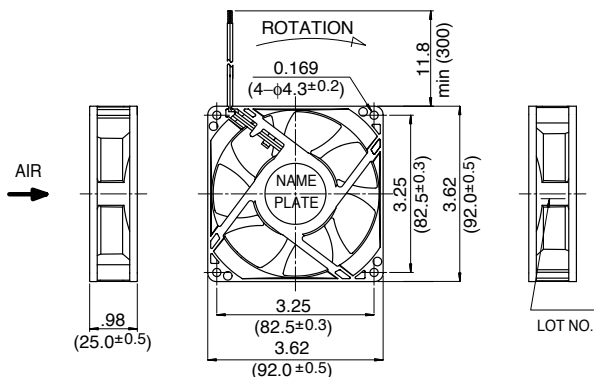
INLET SIDE

OUTLET SIDE

Characteristic Curves



Outline



Specifications

MODEL	Product No.	Rated Voltage	Operating Voltage	Current	Input Power	Speed	Max. Air Flow		Max. Static Pressure		Noise	Mass
		(V)	(V)	(A) ^{*1}	(W) ^{*1}	(min ⁻¹) ^{*1}	CFM ^{*1}	(m ³ /min) ^{*1}	in H ₂ O	(Pa) ^{*1}	(dB) ^{*1}	(g)
3610VL-04W-B20-	B/EXX	12	7.0 ~ 13.8	0.18	2.16	3200	54.0	1.53	.20	50	35.5	135
3610VL-04W-B30-	B/EXX	12	7.0 ~ 13.8	0.24	2.88	3600	61.1	1.73	.26	65	38.5	135
3610VL-04W-B40-	B/EXX	12	7.0 ~ 13.8	0.30	3.60	4000	68.1	1.93	.32	80	42.0	135
3610VL-04W-B50-	B/EXX	12	7.0 ~ 13.8	0.40	4.80	4500	77.0	2.18	.39	98	45.0	135
3610VL-04W-B60-	B/EXX	12	7.0 ~ 13.8	0.52	6.24	5000	85.8	2.43	.48	120	48.0	135
3610VL-04W-B70-	B/EXX	12	7.0 ~ 13.8	0.72	8.64	5600	96.4	2.73	.60	150	51.0	135
3610VL-05W-B20-	B/EXX	24	14.0 ~ 27.6	0.11	2.64	3200	54.0	1.53	.20	50	35.5	135
3610VL-05W-B30-	B/EXX	24	14.0 ~ 27.6	0.14	3.36	3600	61.1	1.73	.26	65	38.5	135
3610VL-05W-B40-	B/EXX	24	14.0 ~ 27.6	0.17	4.08	4000	68.1	1.93	.32	80	42.0	135
3610VL-05W-B50-	B/EXX	24	14.0 ~ 27.6	0.22	5.28	4500	77.0	2.18	.39	98	45.0	135
3610VL-05W-B60-	B/EXX	24	14.0 ~ 27.6	0.28	6.72	5000	85.8	2.43	.48	120	48.0	135
3610VL-05W-B70-	B/EXX	24	14.0 ~ 27.6	0.38	9.12	5600	96.4	2.73	.60	150	51.0	135

Rotation: Clockwise

Airflow Outlet: Air Out Over Struts

*1: Average Values in Free Air

General Specifications

Motor Protection:

Auto Restart/Polarity Protection

Insulation Resistance:

10M Ω or over with a DC500V Megger

Dielectric Withstand Voltage: AC 700V 1s

Allowable Ambient Temperature Range:

B50 Class: -10°C ~ +40°C (Operating)

B10 ~ B40 Class: -10°C ~ +70°C (Operating)

B10 ~ B40 Class: -40°C ~ +70°C (Storage)

B50 Class: -40°C ~ +60°C (Storage)

(non-condensing environment)

Expected Life

Failure Rate: 10%

25°C 50,000 Hours (P00)

Material

Casing : Plastic (Black) 94V-0

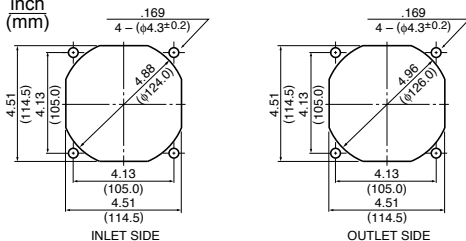
Impeller : Plastic (Black) 94V-0

Bearing : Ball Bearing

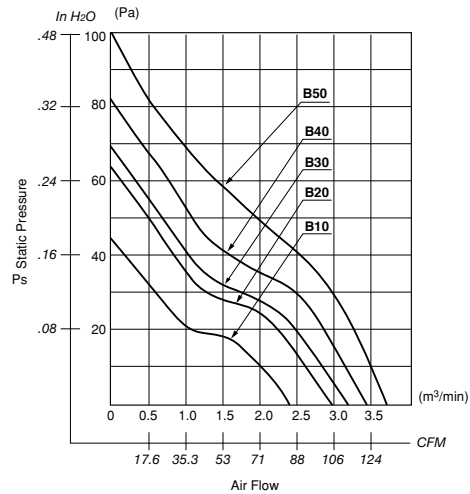
Lead Wire : UL1007, AWG24, +Red, -Black

Panel Cut-Outs

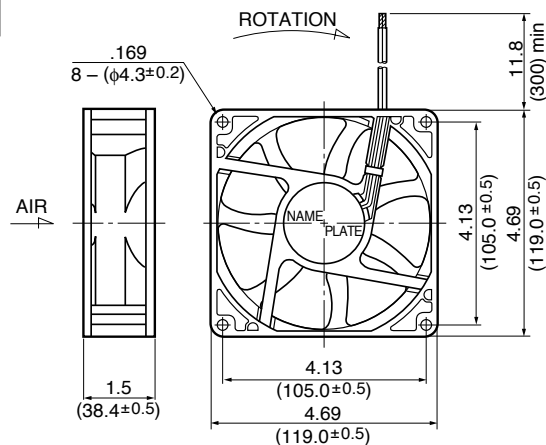
Units:
inch
(mm)



Characteristic Curves



Outline



Specifications

MODEL	Product No.	Rated Voltage	Operating Voltage	Current	Input Power	Speed	Max. Air Flow		Max. Static Pressure		Noise	Mass
		(V)	(V)	(A) ^{*1}	(W) ^{*1}	(min ⁻¹) ^{*1}	CFM ^{*1}	(m ³ /min) ^{*1}	in H ₂ O	(Pa) ^{*1}	(dB) ^{*1}	(g)
4715KL-04W-B10-	X00	12	6.0 ~ 13.8	0.27	3.24	2300	83.6	2.37	.17	44.1	37.0	260
4715KL-04W-B20-	X00	12	6.0 ~ 13.8	0.40	4.80	2650	97.0	2.75	.22	55.9	41.0	260
4715KL-04W-B30-	X00	12	6.0 ~ 13.8	0.55	6.60	2950	108.0	3.07	.27	68.2	42.5	260
4715KL-04W-B40-	X00	12	6.0 ~ 13.8	0.70	8.40	3200	118.0	3.34	.33	81.4	46.5	260
4715KL-04W-B50-	X00	12	9.5 ~ 12.6	1.00	12.00	3600	129.9	3.68	.44	110.0	50.0	260
4715KL-05W-B10-	X00	24	10.0 ~ 27.6	0.15	3.60	2300	83.6	2.37	.17	44.1	37.0	260
4715KL-05W-B20-	X00	24	10.0 ~ 27.6	0.21	5.04	2650	97.0	2.75	.22	55.9	41.0	260
4715KL-05W-B30-	X00	24	10.0 ~ 27.6	0.31	7.44	2950	108.0	3.07	.27	68.2	42.5	260
4715KL-05W-B40-	X00	24	10.0 ~ 27.6	0.35	8.40	3200	118.0	3.34	.33	81.4	46.5	260
4715KL-05W-B50-	X00	24	18.0 ~ 25.0	0.50	12.00	3600	130.0	3.68	.44	110.0	50.0	260
4715KL-07W-B10-	X00	48	25.0 ~ 55.2	0.08	3.84	2300	83.6	2.37	.17	44.1	37.0	260
4715KL-07W-B20-	X00	48	25.0 ~ 55.2	0.11	5.28	2650	97.0	2.75	.22	55.9	41.0	260
4715KL-07W-B30-	X00	48	25.0 ~ 55.2	0.16	7.68	2950	108.0	3.07	.27	68.2	42.5	260
** 4715KL-07W-B40-	X00	48	25.0 ~ 55.2	0.20	9.60	3200	118.0	3.34	.33	81.4	46.5	260
4715KL-07W-B50-	X00	48	30.0 ~ 60.0	0.16	7.68	3600	130.0	3.68	.44	110.0	50.0	260

Rotation: Clockwise

Airflow Outlet: Air Out Over Struts

*1: Average Values in Free Air

** Contact NMB for availability

General Specifications

Motor Protection:

Auto Restart/Polarity Protection

Insulation Resistance:

10M Ω or over with a DC500V Megger

Dielectric Withstand Voltage: AC 700V 1s

Allowable Ambient Temperature Range:

B50, B40 Class: -10°C ~ +45°C (Operating)

B30 Class: -10°C ~ +50°C (Operating)

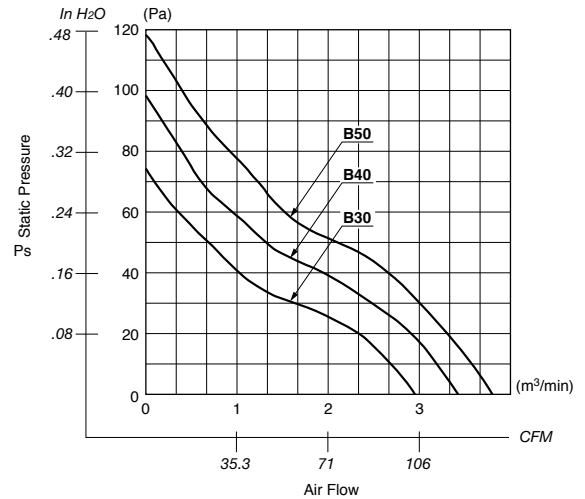
All Class: -40°C ~ +60°C (Storage)

Expected Life

Failure Rate: 10%

25°C 100,000 Hours (R00)

Characteristic Curves



Material

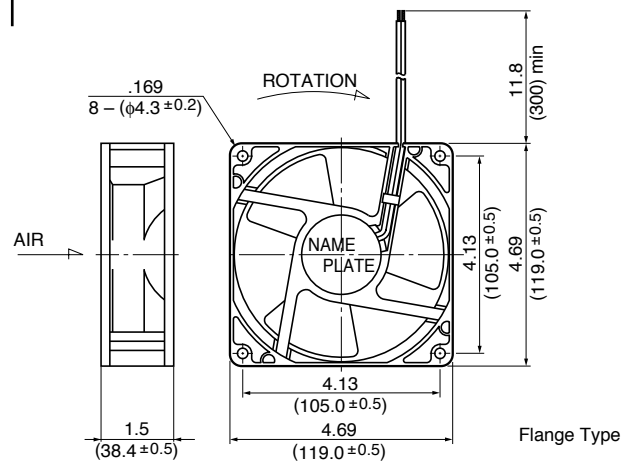
Casing : Plastic (Black) 94V-0

Impeller : Plastic (Black) 94V-0

Bearing : Ball Bearing

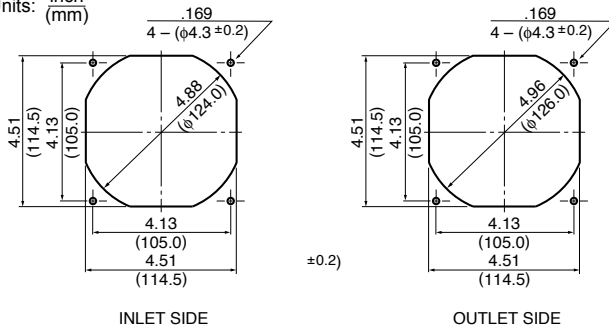
Lead Wire : UL1007, AWG26, +Red, -Black

Outline



Panel Cut-Outs

Units: inch (mm)



Specifications

MODEL	Product No.	Rated Voltage	Operating Voltage	Current	Input Power	Speed	Max. Air Flow		Max. Static Pressure		Noise	Mass
		(V)	(V)	(A) ^{*1}	(W) ^{*1}	(min ⁻¹) ^{*1}	CFM ^{*1}	(m ³ /min) ^{*1}	in H ₂ O	(Pa) ^{*1}	(dB) ^{*1}	(g)
4715KL-04W-B50-	R00	12	9.5 ~ 12.6	0.85	10.2	3900	132.0	3.73	.45	113.0	54.0	260
4715KL-05W-B50-	R00	24	20.0 ~ 25.0	0.48	11.5	3900	132.0	3.73	.45	113.0	54.0	260
** 4715KL-07W-B30-	R00	48	25.0 ~ 55.2	0.13	6.24	3100	105.0	2.97	.30	74.0	47.0	260
** 4715KL-07W-B40-	R00	48	25.0 ~ 50.4	0.16	7.68	3500	121.0	3.44	.39	97.5	51.0	260
** 4715KL-07W-B50-	R00	48	36.0 ~ 50.0	0.20	9.60	3900	132.0	3.73	.45	113.0	54.0	260

Rotation: Clockwise

Airflow Outlet: Air Out Over Struts

*1: Average Values in Free Air

** Contact NMB for availability

General Specifications

Motor Protection:

Auto Restart/Polarity Protection

Insulation Resistance:

10M Ω or over with a DC500V Megger

Dielectric Withstand Voltage: AC 700V 1s

Allowable Ambient Temperature Range:

-10°C ~ +70°C (Operating)

-40°C ~ +70°C (Storage)

(non-condensing environment)

Expected Life

Failure Rate: 10%

25°C 100,000 Hours (E00)

Material

Casing : Plastic (Black) 94V-0

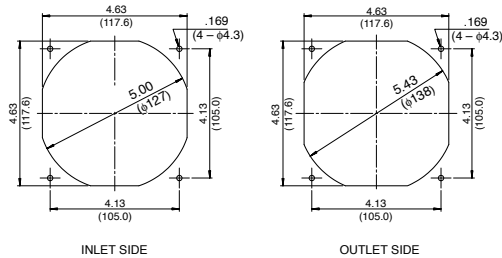
Impeller : Plastic (Black) 94V-0

Bearing : Ball Bearing

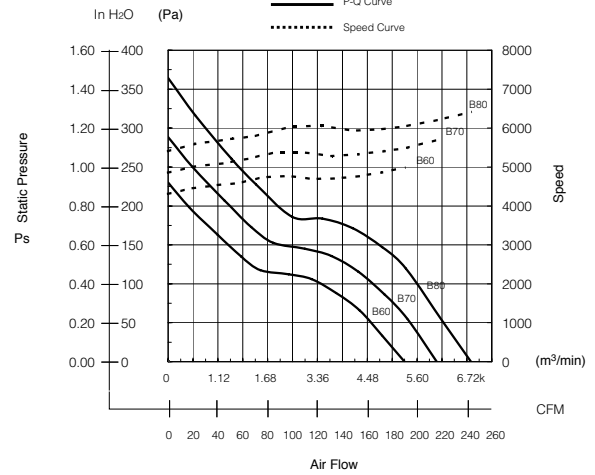
Lead Wire : UL1061, AWG24, +Red, -Black

Panel Cut-Outs

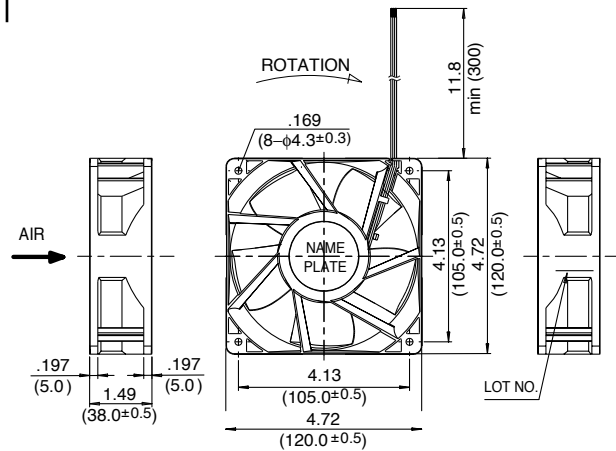
Units: $\frac{\text{inch}}{\text{(mm)}}$



Characteristic Curves



Outline



Specifications

MODEL	Product No.	Rated Voltage	Operating Voltage	Current	Input Power	Speed	Max. Air Flow		Max. Static Pressure		Noise	Mass
		(V)	(V)	(A) ¹	(W) ¹	(min ⁻¹) ¹	CFM ¹	(m ³ /min) ¹	in H ₂ O	(Pa) ¹	(dB) ¹	(g)
4715VL-04W-B60-	EXX	12	10.0 ~ 13.8	1.50	18.00	5000	189.9	5.38	0.92	229	59.5	370
4715VL-04W-B70-	EXX	12	10.0 ~ 13.8	2.25	27.00	5700	215.7	6.11	1.15	287	63.0	370
4715VL-04W-B80-	EXX	12	10.0 ~ 12.6	3.00	36.00	6400	243.2	6.89	1.46	363	66.0	370
4715VL-05W-B50-	EXX	24	18.0 ~ 27.6	0.76	18.24	4700	182.5	5.17	0.83	207	55.5	370
4715VL-05W-B60-	EXX	24	18.0 ~ 27.6	0.74	17.76	5000	189.9	5.38	0.92	229	59.5	370
4715VL-05W-B70-	EXX	24	18.0 ~ 27.6	1.04	24.96	5700	215.7	6.11	1.15	287	63.0	370
4715VL-05W-B80-	EXX	24	18.0 ~ 27.6	1.48	35.52	6400	243.2	6.89	1.46	363	66.0	370
4715VL-07W-B50-	EXX	48	40.0 ~ 52.8	0.37	17.80	4700	182.5	5.17	0.83	207	55.5	370
4715VL-07W-B60-	EXX	48	40.0 ~ 55.2	0.45	21.60	5000	189.9	5.38	0.92	229	59.5	370
4715VL-07W-B70-	EXX	48	40.0 ~ 55.2	0.60	28.80	5700	215.7	6.11	1.15	287	63.0	370
4715VL-07W-B80-	EXX	48	40.0 ~ 52.0	0.80	38.40	6400	243.2	6.89	1.46	363	66.0	370

Rotation: Clockwise

Airflow Outlet: Air Out Over Struts

*1: Average Values in Free Air

General Specifications

Motor Protection:

Auto Restart/Polarity Protection

Insulation Resistance:

10M Ω or over with a DC500V Megger

Dielectric Withstand Voltage: AC 700V 1s

Allowable Ambient Temperature Range:

-10°C ~ +70°C (Operating)

-40°C ~ +70°C (Storage)

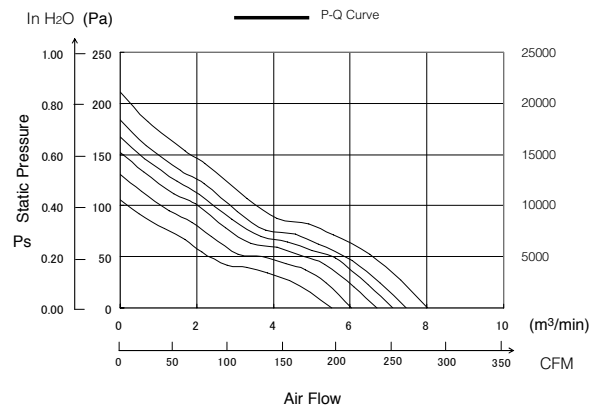
(non-condensing environment)

Expected Life

Failure Rate: 10%

25°C 100,000 Hours (D00)

Characteristic Curves



Material

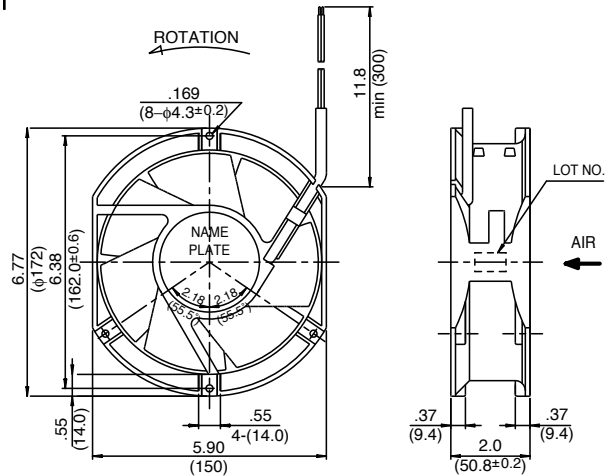
Casing : Plastic (Black) 94V-0

Impeller : Plastic (Black) 94V-0

Bearing : Ball Bearing

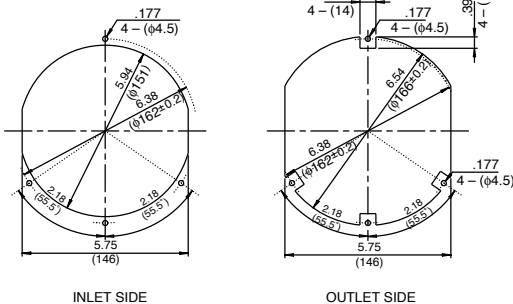
Lead Wire : UL1007, AWG26, +Red, -Black

Outline



Panel Cut-Outs

Units: $\frac{\text{inch}}{\text{mm}}$



Specifications

MODEL	Product No.	Rated Voltage	Operating Voltage	Current	Input Power	Speed	Max. Air Flow		Max. Static Pressure		Noise	Mass
		(V)	(V)	(A) ^{*1}	(W) ^{*1}	(min ⁻¹) ^{*1}	CFM ^{*1}	(m ³ /min) ^{*1}	in H ₂ O	(Pa) ^{*1}	(dB) ^{*1}	(g)
5920VL-07W-B10-	DXX	48	36 ~ 56	0.28	13.44	2550	194.5	5.51	.43	106	51.0	830
5920VL-07W-B20-	DXX	48	36 ~ 56	0.33	15.84	2850	213.2	6.04	.53	131	54.0	830
5920VL-07W-B30-	DXX	48	36 ~ 56	0.37	17.76	3150	236.5	6.70	.61	152	57.0	830
5920VL-07W-B40-	DXX	48	36 ~ 56	0.41	19.68	3350	251.0	7.11	.67	167	59.0	830
5920VL-07W-B50-	DXX	48	36 ~ 56	0.44	21.10	3500	263.3	7.46	.74	184	61.0	830
5920VL-07W-B60-	DXX	48	36 ~ 56	0.52	25.00	3750	283.1	8.02	.85	211	63.0	830

Rotation: Counterclockwise

Airflow Outlet: Air Out Over Struts

*1: Average Values in Free Air