

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 BM4515, BM5115, BM5125 and BM6015 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 and blowers may be installed in a horizontal, vertical or angled position

BM Part Numbering System

BM 51 15 - 04 W - B 3 0 - L 00
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

- | | | | |
|--|--|---|---|
| <p>1. Series
BM Series</p> <p>2. Size
45: 45mm
51: 51mm
60: 60mm</p> <p>3. Thickness
15: 15mm
25: 25mm</p> <p>4. Input Voltage
O: Standard Current
C: Special Current
D~Z: Special Current
(A.B.O. are not used)</p> | <p>5. Termination
Lead Wire</p> <p>6. Bearing
B: Ball Bearing
S: Sleeve Bearing</p> <p>7. Speed
1<2<3<4<5
low high</p> | <p>8. Special Control Function
0: Standard Type
9: Sensor Type
8: 2-Speed Type
7: Temperature Detecting Variable Speed Type/PWM Control Type
6: Temperature Detecting Variable Speed Type/Sensor Type
5: 2-Speed Type/Sensor Type</p> <p>9. Classification
L-Standard Model/Rib Type
T-Value Model/Rib Type</p> | <p>10. Individual Specifications
Standard Type
00: Standard
01~99: Custom
Sensor Type
00: Locked Rotor Alarm Signal (Standard Type)
01~49: Locked Rotor Alarm Signal (Custom Type)
50: Tachometer Signal (Standard Type)
51~99: Tachometer Signal (Custom Type)</p> |
|--|--|---|---|

BG Part Numbering System

BG 07 03 - B 04 - 4 - 000 - 00
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- | | | | |
|--|--|--|--|
| <p>1. Series
BG Series</p> <p>2. Size
07: 75mm
08: 80mm
09: 95mm
10: 100mm
12: 120mm</p> <p>3. Thickness
01: 18mm
02: 25mm
03: 30~33mm</p> | <p>4. Bearing
B: Ball Bearing
S: Sleeve Bearing</p> <p>5. Input Voltage
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> | <p>6. Speed
1<2<3<4<5
low high</p> <p>7. Special Control Function
0 0 0
A B C
A: Special Control Function
O: Fix Speed Type
2: 2-Speed Type
V: Temperature Detecting Variable Speed Type
P: PWM Control Type</p> | <p>B: Thermistor Mounting Position
O: No Thermistor
T: Thermistor On PCB
C: Output Signal
O: No Signal
L: Locked Rotor Alarm Signal
S: Tachometer Signal</p> <p>8. Product Number
00: Standard
01~ : Customized Standard
T0: Standard Value
T1~ : Customized Value</p> |
|--|--|--|--|

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%

25°C 50,000 Hours (L00)

Material

Casing : Plastic (Black) 94V-0

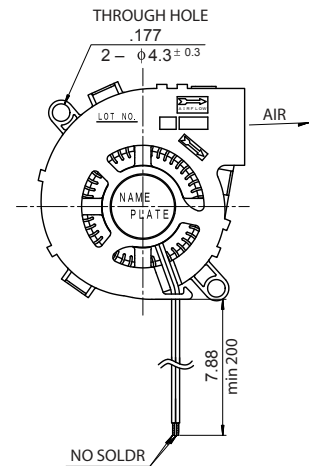
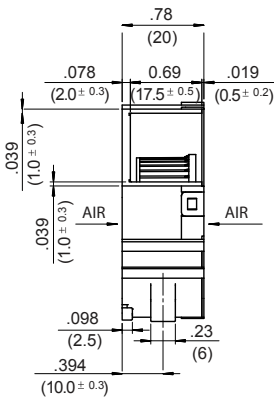
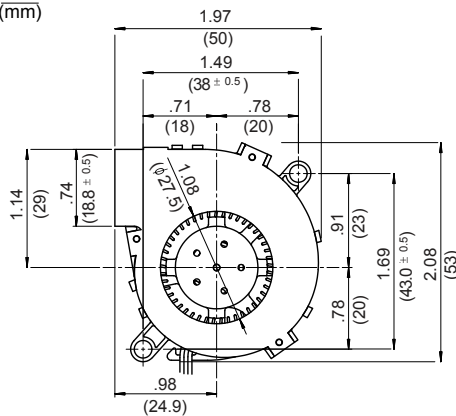
Impeller : Plastic (Black) 94V-0

Bearing : Ball Bearing

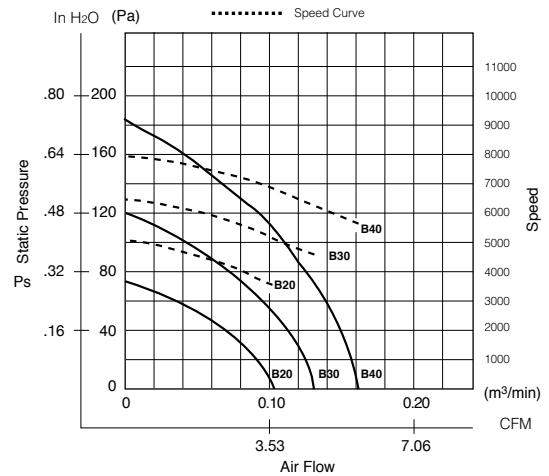
Lead Wire : UL1061, AWG26, +Red, -Black

Outline

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



Characteristic Curves



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)
BM5020-01W-B30-	L00	5	4.5 ~ 5.5	0.34	1.70	4600	4.6	0.13	.50	124	27.0	30
BM5020-04W-B20-	L00	12	4.5 ~ 13.8	0.07	0.84	3600	3.5	0.10	.30	75	20.0	30
BM5020-04W-B30-	L00	24	4.5 ~ 13.8	0.12	1.44	4600	4.6	0.13	.50	124	27.0	30
BM5020-04W-B40-	L00	24	4.5 ~ 13.8	0.18	2.16	5600	5.6	0.16	.74	184	32.0	30
BM5020-05W-B40-	L00	24	12.0 ~ 25.2	0.08	1.92	5600	5.6	0.16	.74	184	32.0	30

Rotation: Counterclockwise

*1: Average Values in Free Air

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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 70,000 Hours (00)

Material

Casing : Plastic (Black) 94V-0

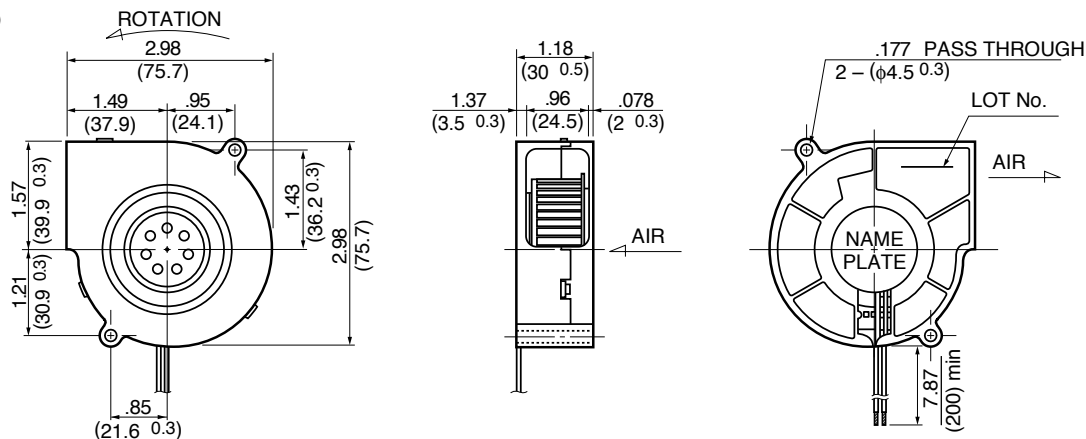
Impeller : Plastic (Black) 94V-0

Bearing : Ball Bearing

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

Outline

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



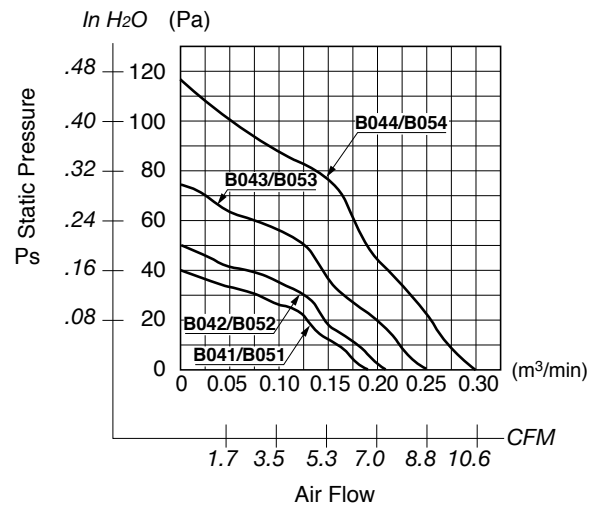
Specifications

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)
BG0703-B041-000-	X0	12	6 ~ 13.8	0.10	1.20	2000	6.7	0.19	.16	40	28.0	90
BG0703-B042-000-	X0	12	6 ~ 13.8	0.12	1.44	2200	7.4	0.21	.20	50	29.5	90
BG0703-B043-000-	X0	12	6 ~ 13.8	0.18	2.16	2550	8.8	0.25	.30	75	34.5	90
BG0703-B044-000-	X0	12	6 ~ 13.0	0.29	3.48	3000	10.6	0.30	.44	110	38.5	90
BG0703-B051-000-	X0	24	10 ~ 27.6	0.06	1.44	2000	6.7	0.19	.16	40	28.0	90
BG0703-B052-000-	X0	24	10 ~ 27.6	0.07	1.68	2200	7.4	0.21	.20	50	29.5	90
BG0703-B053-000-	X0	24	10 ~ 27.6	0.09	2.16	2550	8.8	0.25	.30	75	34.5	90
BG0703-B054-000-	X0	24	10 ~ 26.0	0.15	3.60	3000	10.6	0.30	.44	110	38.5	90

Rotation: Counterclockwise

*1: Average Values in Free Air

Characteristic Curves



General Specifications

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- Insulation Resistance:**
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- Dielectric Withstand Voltage:** AC 700V 1s
- Allowable Ambient Temperature Range:**
-10°C ~ +60°C (Operating)
-40°C ~ +70°C (Storage)
(non-condensing environment)

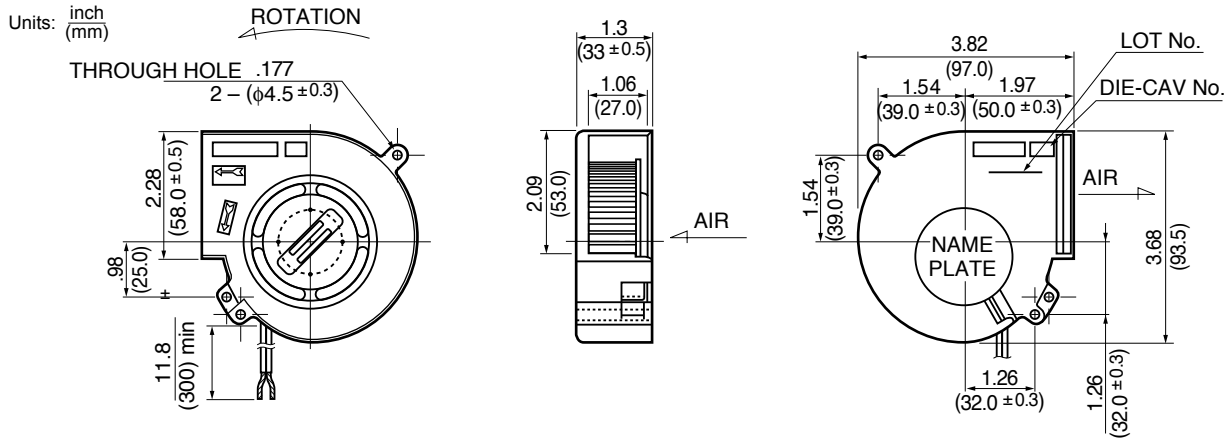
Expected Life

Failure Rate: 10%
25°C 100,000 Hours (00)

Material

- Casing : Plastic (Black) 94V-0
- Impeller : Plastic (Black) 94V-0
- Bearing : Ball Bearing
- Lead Wire : UL1007, AWG26, +Red, -Black

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)
BG0903-B042-000-	00	12	8 ~ 13.8	0.40	4.80	2700	20.5	0.58	.61	152	47.5	210
BG0903-B043-000-	00	12	8 ~ 13.8	0.64	7.68	3200	24.7	0.70	.90	225	51.5	210
BG0903-B044-000-	00	12	8 ~ 12.6	1.03	12.40	3700	28.6	0.81	1.4	342	54.5	210
BG0903-B052-000-	00	24	10 ~ 27.6	0.21	5.04	2700	20.5	0.58	.61	152	47.5	210
BG0903-B053-000-	00	24	10 ~ 27.6	0.33	7.92	3200	24.7	0.70	.90	225	51.5	210
BG0903-B054-000-	00	24	10 ~ 25.0	0.49	11.80	3700	28.6	0.81	1.4	342	54.5	210
HIGH SPEED												
** BG0903-B040-000-	00	12	10.8 ~ 13.6	2.4	28.90	5700	42.0	1.19	2.2	549	65	210
** BG0903-B047-000-	00	12	10.8 ~ 12.6	1.6	19.20	5200	38.1	1.08	1.9	482	-	210

Rotation: Counterclockwise

*1: Average Values in Free Air

** Contact NMB for availability

Characteristic Curves

