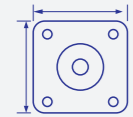


07

ACM/BLM Series AC/BLDC Servo Motors



Frame Size ACM Series: 60mm (NEMA24) BLM Series: 57mm (NEMA23)



Rated Power
ACM Series: 100W 200W 400W
BLM Series: 25W 50W 90W 130W 180W

The ACM series of AC servo motors and BLM series of brushless DC servo motors offer high performance with models ranging from 25W to 400W. Mounting is compatible with NEMA24 and NEMA23 motors on the market. Standard models come with a standard 2500-line or 1000-line differential encoder with index signal (A, B, Z), and Hall sensors (U, V, W).

When driven by Leadshine ACS series servo drives, these motors can meet application requirements from as low as 1 rpm to as high as 4000 rpm, offering high reliability, high speed, high precision, low motor noise and heating motion control solutions. The 57BL180 features a compact, screw-mount body.

7.1 Part Number

ACM **60** **2** **V36** — **01** — **2500**
① ② ③ ④ ⑤ ⑥

①	Series	ACM: ACM Series			
②	Frame Size	60: 60mm (NEMA24)			
③	Power	1: 100W	2: 200W	4: 400W	
④	Rated Voltage	V36: 36 VDC	V48: 48VDC	V60: 60 VDC	
⑤	Motor Type	01: White	T : Black		
⑥	Encoder Resolution	1000: 1000-line(4000ppr)	2500: 2500-line(10000ppr)		

Notes:

The ACM motors with brakes or different rated voltages are also available. Contact Leadshine or visit our website for more information please.

BLM **57** **025** — **1000**
① ② ③ ④

①	Series	BLM: BLM Series				
②	Frame Size	57: 57mm (NEMA23)				
③	Power	025: 25W	050: 50W	090: 90W	130: 130W	180: 180W
④	Encoder Resolution	1000: 1000-line(4000ppr)	2500: 2500-line(10000ppr)			

Notes:

- The 57BL180 is a screw mounted model and the above "Part Number" does not apply.
- Rated voltage of the BLM57025, BLM57050 is 24VDC, and rated voltage of the BLM57090, BLM57130, BLM57180 and 57BL180 is 36VDC.
- Standard models of the BLM series come with a standard 1000-line differential encoder with index slits (A, B, Z), and Hall Sensors (U, V, W).

7.2

Electrical Specifications

ACM Series, NEMA24 (□ 60 mm)
Power: 100W, 200W, 400W



Specifications

Parameters	Units	ACM601V36-01	ACM602V36-01	ACM604V60-01
Rated Voltage	VDC	36	36	60
Rated Power	W	100	200	400
Rated Torque	Nm	0.31	0.64	1.27
Rated Current	A	3.7	7.6	8.4
Rated Speed	RPM	3000	3000	3000
Peak speed	RPM	3500	3500	3500
Peak Torque	Nm	0.93	1.91	3.82
Peak Current	A	11	22	25
Torque Constant	Nm/A	0.084	0.092	0.161
Back EMF Constant	V/krpm	7	3.21	5.54
Inertia	Kg*m ² ×10 ⁻⁵	1.1	1.76	3.55
Poles	-	8	8	8

Operating Environment

Parameters	Descriptions	Parameters	Descriptions
Insulation Level	B	Insulation Voltage	DC 500V, 60seconds
Insulation Resistance	DC 500V, above 10M Ω	Vibration	<2.5 G
Ambient Temperature	0 to 40 °C	Humidity	20%RH to 90%RH
Storage Temperature	-20 to 70 °C	Mounting Method	Flange Mounted

ACM Series, NEMA24 (□ 60 mm)
Power: 100W, 200W, 400W



Specifications

Parameters	Units	ACM601V36-T	ACM602V36-T	ACM604V48-T	ACM604V60-T
Rated Voltage	VDC	36	36	48	60
Rated Power	W	100	200	400	400
Rated Torque	Nm	0.318	0.637	1.27	1.27
Rated Current	A	4.6	7.5	10.25	8.5
Rated Speed	RPM	3000	3000	3000	3000
Peak Speed	RPM	4500	4500	4500	4500
Peak Torque	Nm	0.954	1.91	3.82	3.82
Peak Current	A	13.8	31.5	31.8	26.4
Torque Constant	Nm/A	0.0918	0.085	0.124	0.149
Back EMF Constant	V/krpm	5.535	5.4	7	9.2
Inertia	Kg*m ² ×10 ⁻⁵	0.0588	0.189	0.342	0.342
Poles	-	8	8	8	8

Operating Environment

Parameters	Descriptions	Parameters	Descriptions
Insulation Level	B	Insulation Voltage	DC500V, 60seconds
Insulation Resistance	DC 500V, above 10M Ω	Vibration	<2.5 G
Ambient Temperature	0 to 40 °C	Humidity	20%RH to 90%RH
Storage Temperature	-20 to 70 °C	Mounting Method	Flange Mounted

7.2 Electrical Specifications(Con't)

BLM Series, NEMA23 (□ 57 mm)
Power: 25W to 180W



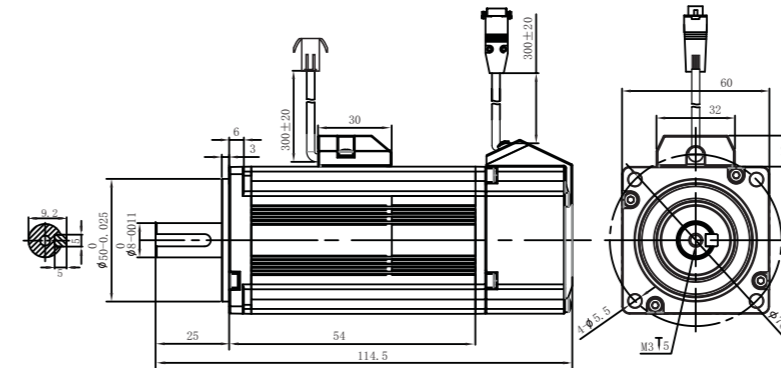
Specifications

Parameters	Units	BLM57025	BLM57050	BLM57090	BLM57130	BLM57180	57BL180
Rated Voltage	VDC	24	24	36	36	36	36
Rated Power	W	25	50	90	130	180	180
Rated Torque	Nm	0.08	0.16	0.29	0.41	0.57	0.57
Rated Current	A	1.6	3	3.45	5.3	6.7	7
Rated Speed	RPM	3000	3000	3000	3000	3000	3000
Peak Torque	Nm	0.24	0.48	0.87	1.23	1.71	1.71
Peak Current	A	4.8	9	10.35	15.9	20	20.5
Torque Constant	Nm/A	0.05	0.053	0.084	0.078	0.085	0.089
Back EMF Constant	V/krpm	5.2	5.55	8.8	8.2	8.9	9.3
Inertia	Kg*m ² ×10 ⁻⁵	0.3	0.75	1.19	1.73	2.3	2.3
Poles	-	4	4	4	4	4	4

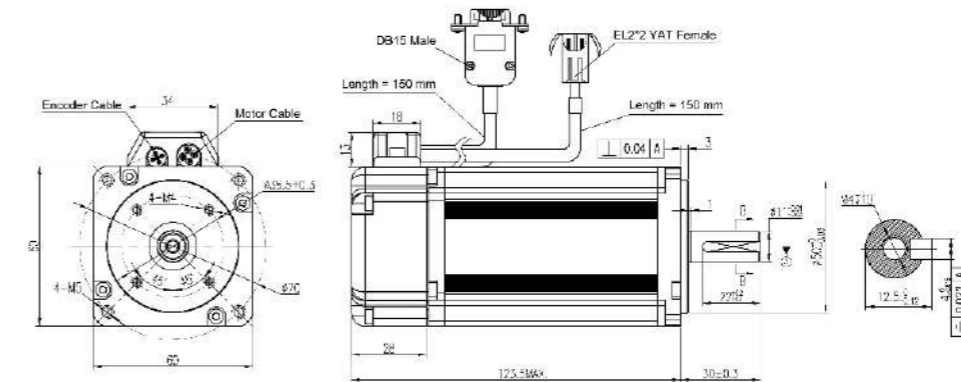
Operating Environment

Parameters	Descriptions	Parameters	Descriptions
Insulation Level	B	Insulation Voltage	DC500V, 60seconds
Insulation Resistance	DC 500V, above 10MΩ	Vibration	<2.5 G
Ambient Temperature	0 to 40 °C	Humidity	20%RH to 90%RH
Storage Temperature	-20 to 70 °C	Mounting Method	Flange Mounted

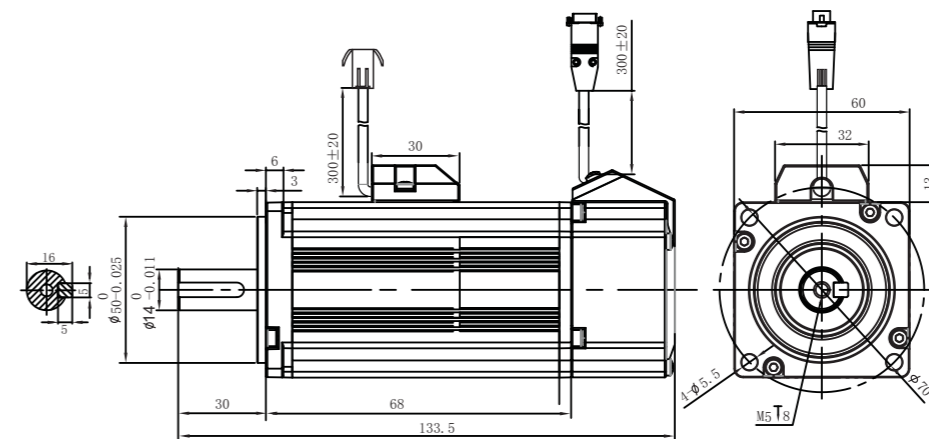
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•ACM602V36-01



•ACM602V36 - T



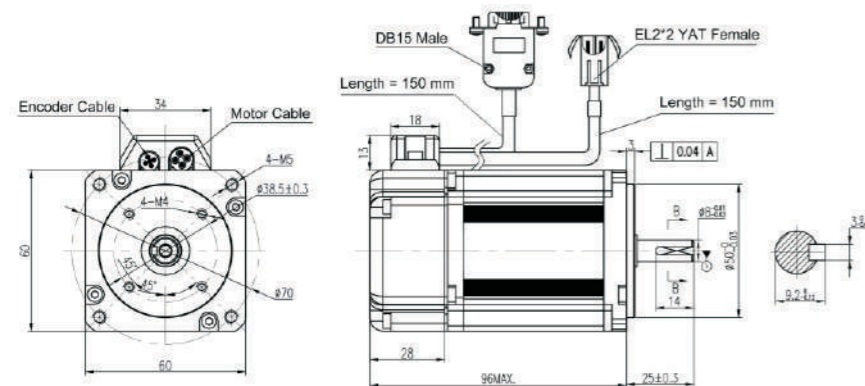
Installation Notes:

- (1) Do not give strong impact shock to the motor shaft.
- (2) Make sure the hall sensor signals U/V/W are connected to the drive correctly.
- (3) The motors are not water proof. Please contact Leadshine if you need a water proof product.
- (4) Keep the ambient temperature within the permissible temperature range (0 to 40 °C) for the product. Use force cooling method if necessary.
- (5) Motors with brakes and oil seal are available. Please contact Leadshine if you need.

7.3 Mechanical Specifications

Units: mm 1 inch = 25.4 mm

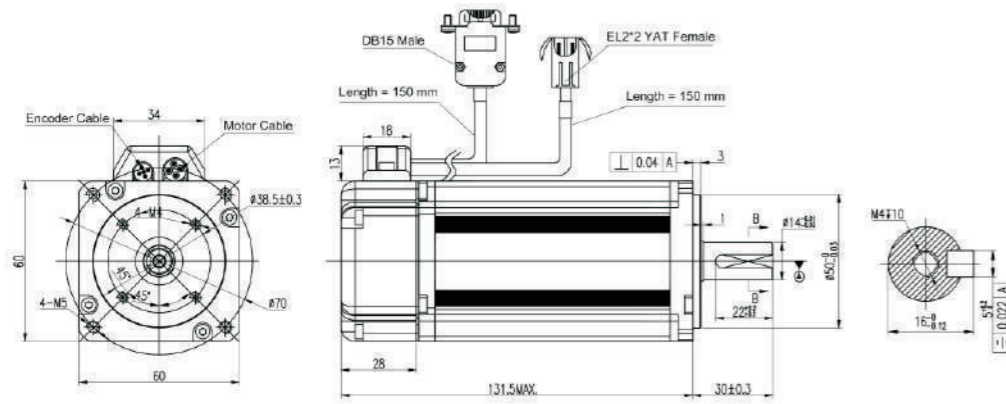
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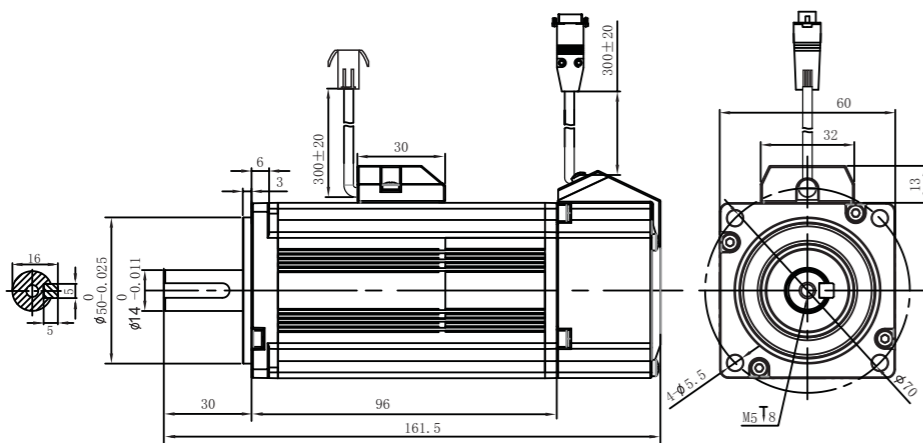
7.3 Mechanical Specifications(con't)

Units: mm 1 inch = 25.4 mm

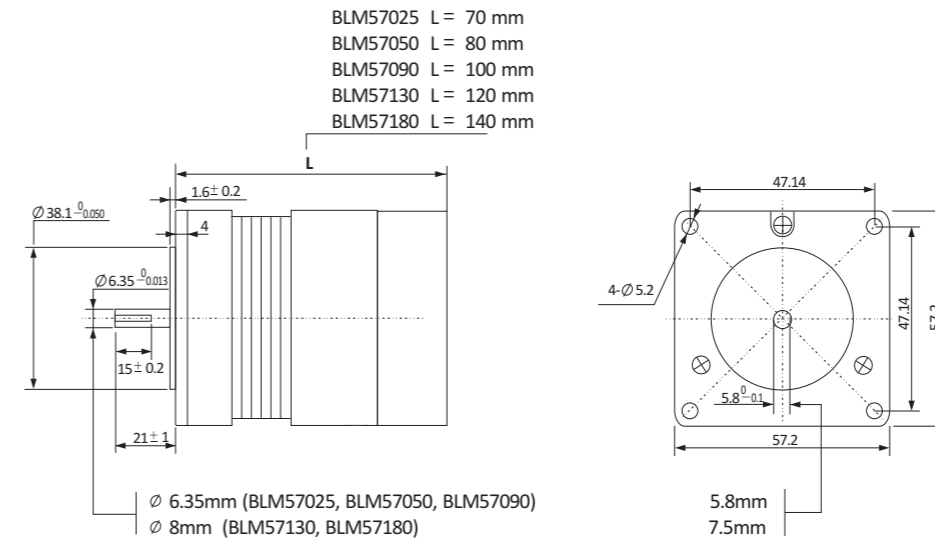
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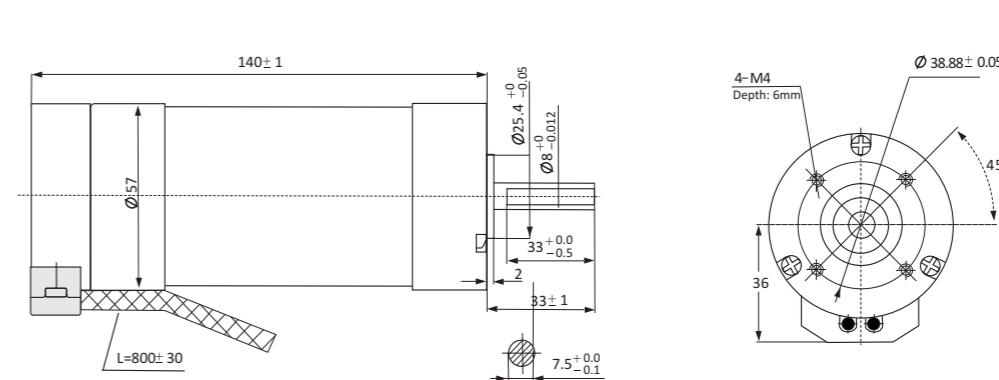
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•BLM57025, BLM57050, BLM57090, BLM57130, BLM57180



•57BL180



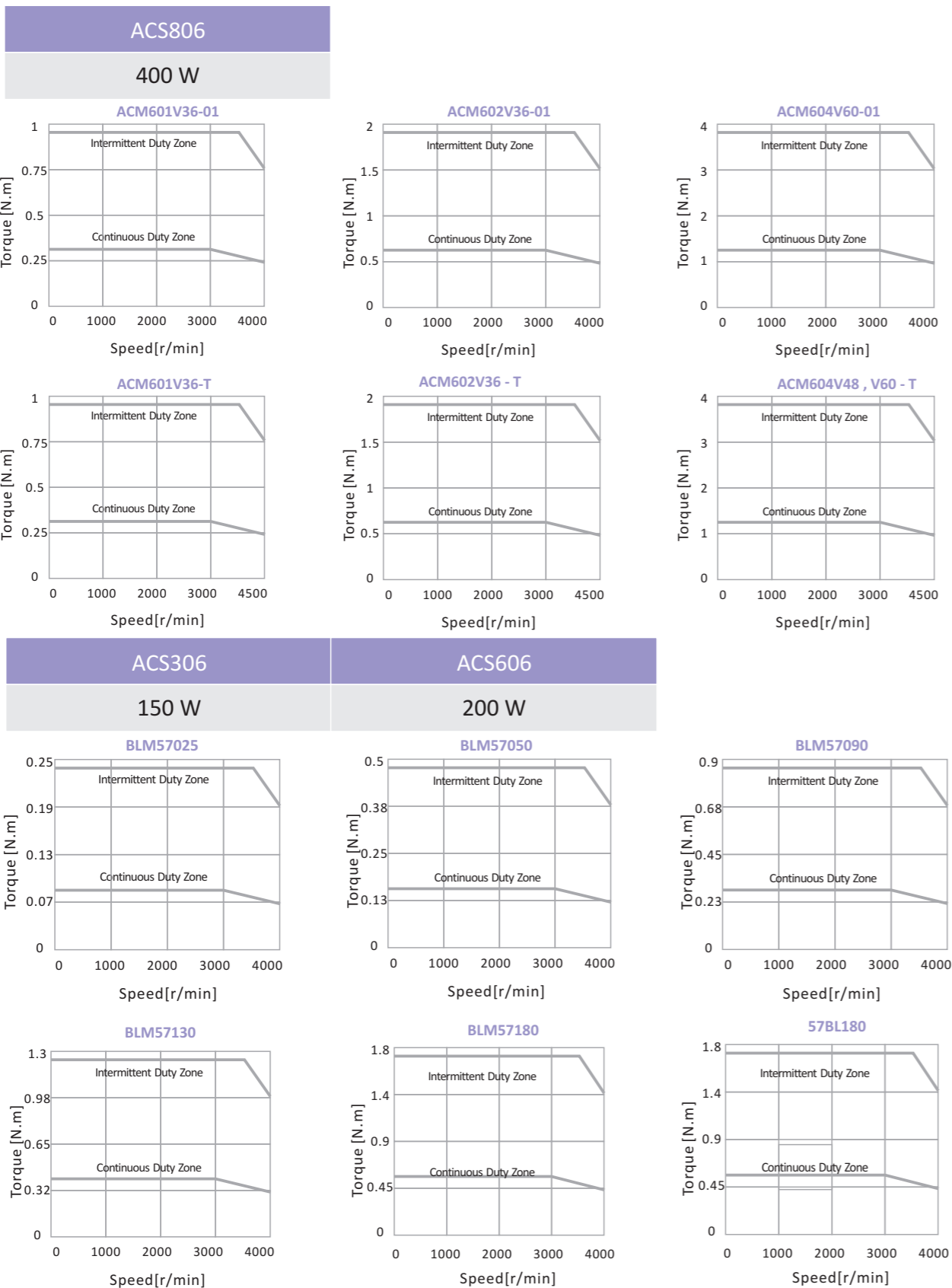
Installation Notes:

- (1) Do not give strong impact shock to the motor shaft.
- (2) Make sure the hall sensor signals U/V/W are connected to the drive correctly.
- (3) The motors are not water proof. Please contact Leadshine if you need a water proof product.
- (4) Keep the ambient temperature within the permissible temperature range (0 to 40 °C) for the product. Use force cooling method if necessary.
- (5) Motors with brakes and oil seal are available. Please contact Leadshine if you need.

Installation Notes:

- (1) Do not give strong impact shock to the motor shaft.
- (2) Make sure the hall sensor signals U/V/W are connected to the drive correctly.
- (3) The motors are not water proof. Please contact Leadshine if you need a water proof product.
- (4) Keep the ambient temperature within the permissible temperature range (0 to 40 °C) for the product. Use force cooling method if necessary.
- (5) The thread depth of the M4 mounting holes of the 57BL180 is 6.0 mm. Do not screw more than 6.0 mm as this will cause damage to the motor.

7.4 Speed-Torque Curves



08 Low-Medium Brushless Servos Order Information

Power	Drive	Motor	Accessories
100 W	ACS806	ACM601V36	CABLE-ENCODER (Encoder cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-ACM WINDING (Motor cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-PC (RS232 cable for using ProTuner. 1.5m standard.) CABLE-DB26 (Control signal cable. Length is optional, 2.2m standard, 0.6m, 1.2m optional.)
200 W	ACS806	ACM602V36	CABLE-ENCODER (Encoder cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-ACM WINDING (Motor cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-PC (RS232 cable for using ProTuner. 1.5m standard.) CABLE-DB26 (Control signal cable. Length is optional, 2.2m standard, 0.6m, 1.2m optional.)
400 W	ACS806	ACM604V60	CABLE-ENCODER (Encoder cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-ACM WINDING (Motor cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-PC (RS232 cable for using ProTuner. 1.5m standard.) CABLE-DB26 (Control signal cable. Length is optional, 2.2m standard, 0.6m, 1.2m optional.)
25 W	ACS306/ACS606	BLM57025	CABLE-ENCODER (Encoder cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-BLM WINDING (Motor cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-PC (RS232 cable for using ProTuner. 1.5m standard.)
50 W	ACS306/ACS606	BLM57050	CABLE-ENCODER (Encoder cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-BLM WINDING (Motor cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-PC (RS232 cable for using ProTuner. 1.5m standard.)
90 W	ACS606	BLM57090	CABLE-ENCODER (Encoder cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-BLM WINDING (Motor cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-PC (RS232 cable for using ProTuner. 1.5m standard.)
130 W	ACS606	BLM57130	CABLE-ENCODER (Encoder cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-BLM WINDING (Motor cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-PC (RS232 cable for using ProTuner. 1.5m standard.)
180 W	ACS606	BLM57180	CABLE-ENCODER (Encoder cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-BLM WINDING (Motor cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-PC (RS232 cable for using ProTuner. 1.5m standard.)
180 W	ACS606	57BL180	CABLE-ENCODER (Encoder cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-BLM WINDING (Motor cable. Length is optional, 3m standard, 1.2m, 5m,10m optional.) CABLE-PC (RS232 cable for using ProTuner. 1.5m standard.)