



## Product Selection Manual

Focus on customer experience and help customers succeed



Wenzhou AB technology Co., Ltd



# ABOUT US

Our company adheres to the business philosophy of "People-Oriented, Shared Success," integrating responsibility with value creation. We are committed to becoming a leader in the automation industry and achieving excellence, making outstanding contributions to "intelligent manufacturing in China".



\*\*Yueqing A&B Electric Co., Ltd., Founded in 2005 with the website is: [www.abelec.com](http://www.abelec.com), specializes in electrical products, with a core focus on export, distributing globally. In the company strategically expanded into industrial automation by establishing its subsidiary: \*\*Wenzhou A&B Technologies Co., Ltd. The website is :[abtechup.com](http://abtechup.com).

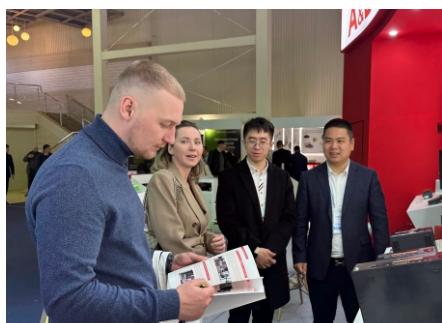
\*\*A&B Technologies\*\* concentrates on the R&D and manufacturing of core industrial control components like \*\*PLC controllers\*\* and \*\*servo drives\*\*. \*\*Leveraging switches, relays, and power supplies produced by our parent company, alongside the advantages of Yueqing's electrical industry cluster, we integrate local supply chain resources to establish an integrated industrial control ecosystem. Through rigorous OEM partnerships, we maintain stringent quality control while building our \*\*proprietary brand "A&B".

We provide global clients with:

- \* High-performance industrial control components
- \* Customized automation solutions
- \* Electrical control integration systems

Backed by a 50-member R&D team, 200+ production personnel, and an overseas service network, we guarantee technological leadership, lean manufacturing, and responsive global support.

Guided by our philosophy of "\*\*\*Innovation-driven, Quality-focused, Customer-centric\*\*\*", A&B is committed to becoming a trusted global provider of solutions and core components in industrial automation, driving the advancement of smart manufacturing.



Provide services and solutions for automation

# PROVIDE SERVICES AND SOLUTIONS FOR AUTOMATION

Servo/ PLC/HMI



## Technical Strength&Application

With core expertise in motion control, industrial inspection, and fault diagnosis, we hold 100+ intellectual property rights. Our key products include:

- AC/DC Servo Drives
- Servo Motors
- PLC and HMI
- Industrial automation control products

All products are CE-certified and widely applied in

- Robotics/Manipulators
- Construction Machinery
- Printing & Packaging
- 3C Automation

## R&D Team

Our multidisciplinary team collaborates with top universities (Hunan University, Central South University, Zhejiang University, etc.) to bridge industry-academia innovation. Expertise covers

- Smart Control
- Mechanical Engineering
- Computer Science
- Communication Engineering

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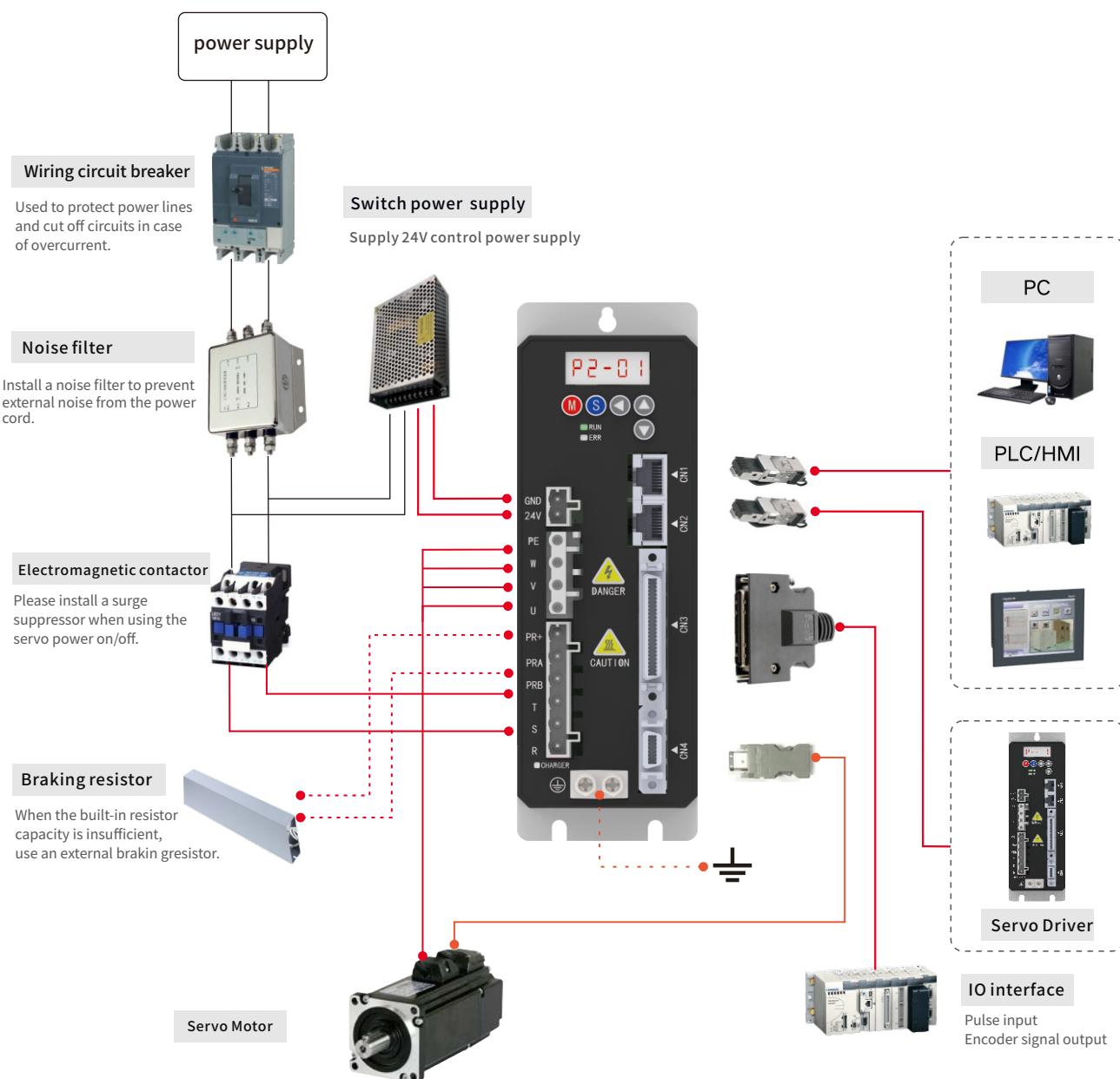


# DIRECTORY



# Open and flexible

Universal compatibility, supporting multiple fieldbus communication protocols and encoders



# Excellent performance

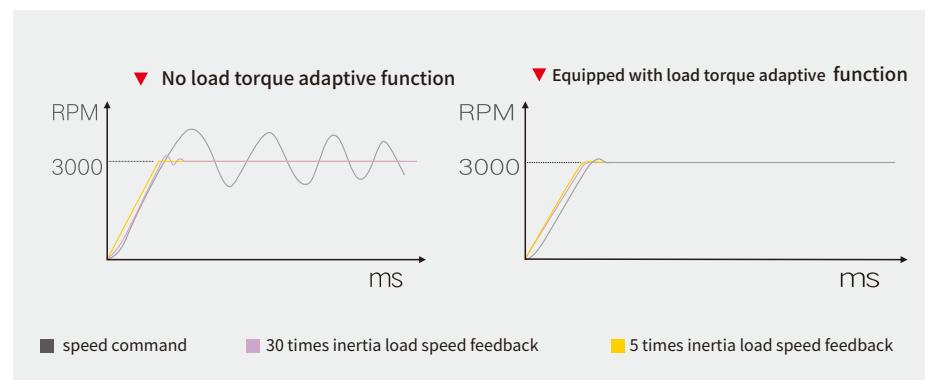
High precision and fast response, automatic identification and adjustment of parameters to achieve better configuration



## • Load adaptive



Automatic identification of system parameters such as load inertia and damping, online adjustment of control parameters, and algorithms with strong adaptability, fast response, and high accuracy. The experiment shows that it still has good tracking characteristics at 30 times the inertia.



## • Shock absorption



The position control algorithm combining hysteresis and variable parameters can reduce end effector vibration and improve positioning accuracy, especially suitable for high inertia systems, which can effectively suppress vibration near the target position.

## • special aoftware



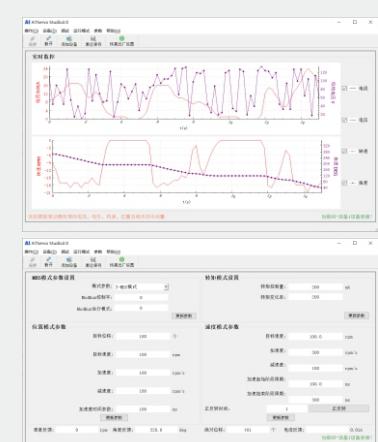
Equipped with dedicated upper computer software, it can set and regulate parameters on the PC end, and has online detection and analysis functions.



## • Self-diagnosis



Online status monitoring and fault diagnosis, built-in self repair and early health warning functions.



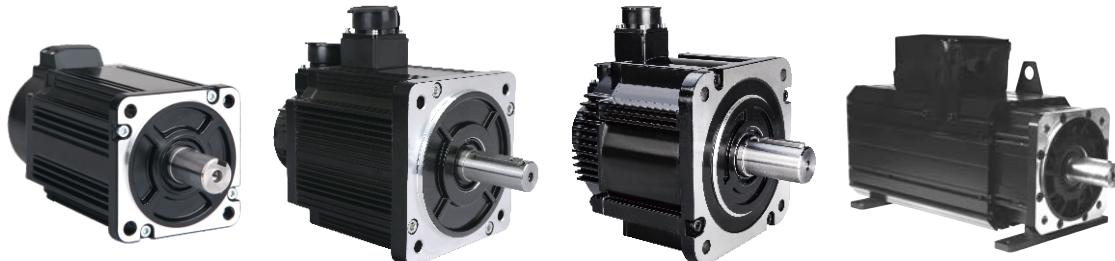
## • Safe torque



Optional Safe Torque Function (STO).

# A & B

## Servo Motor



### ► Overview

The rotor of the Aicortech servo motor is made of high-performance rare earth permanent magnet material, with high power density, excellent torque characteristics, low inertia, good dynamic performance, and strong overload capacity. And it adopts a three-phase sine wave design, with good low-speed smooth characteristics and extremely low torque ripple. It supports optional photoelectric encoders (incremental or absolute) and rotary variable voltage encoders. The servo motor has achieved F-level insulation and IP65 protection level, with built-in temperature protector that can adapt to harsh usage environments. At the same time, it has flexible installation methods and a beautiful appearance.



Low heat generation



Compact in size

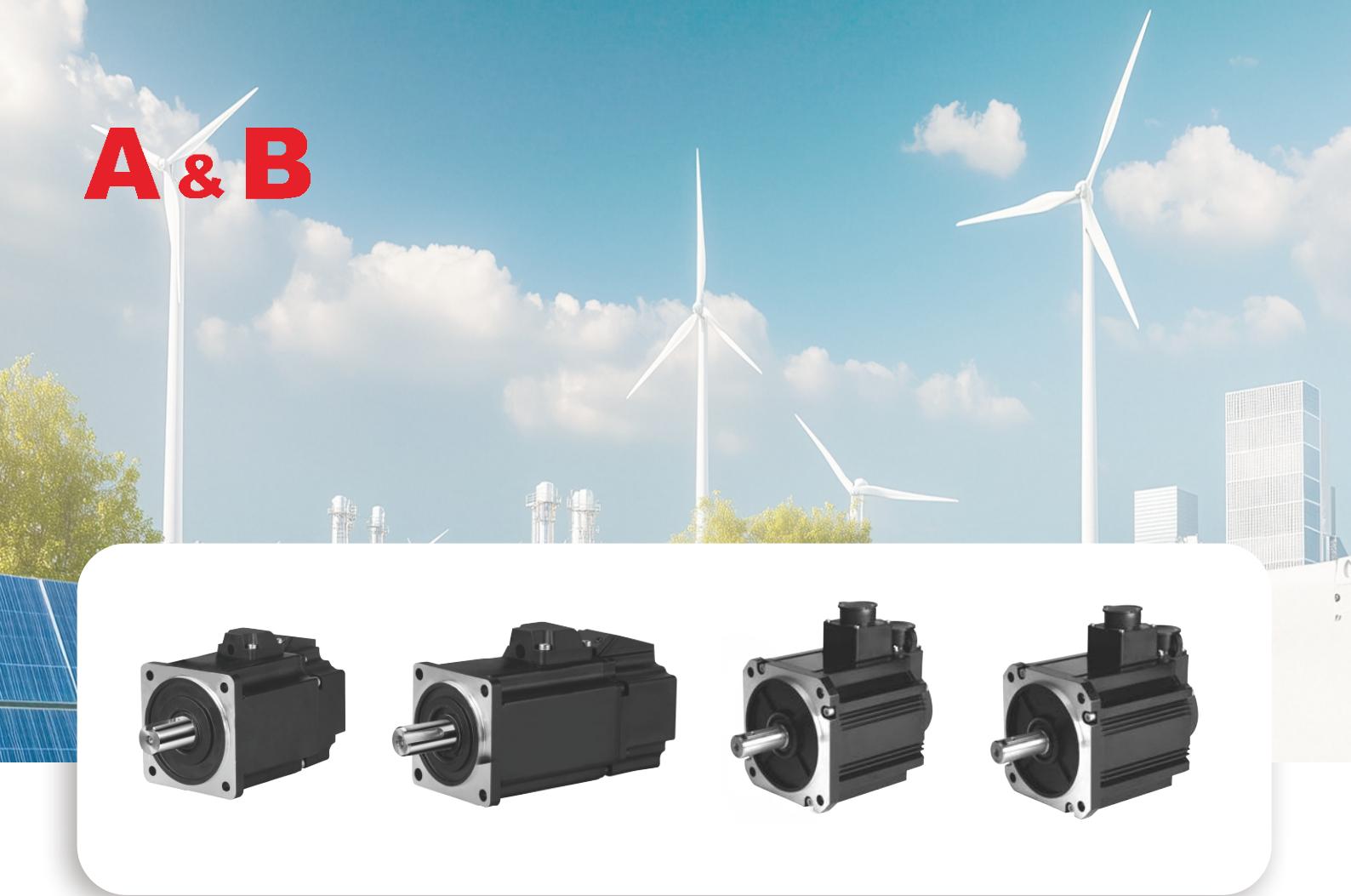


Stable operation



Strong load capacity

# A & B



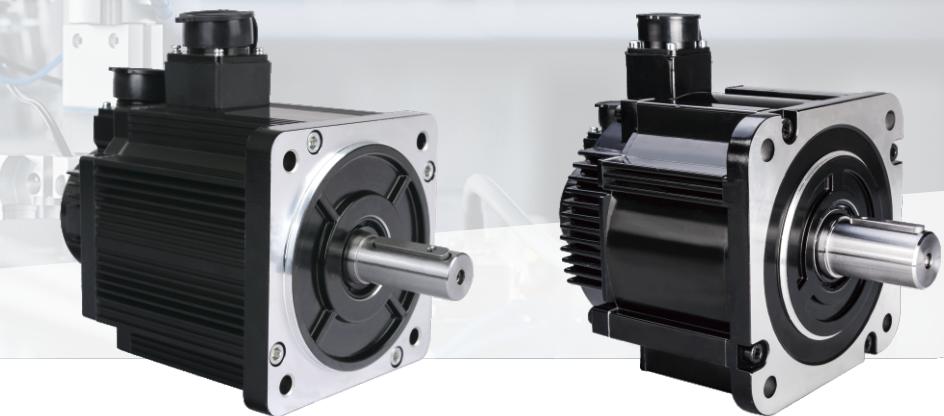
## ► Classification

ABM series AC servo motor

ABMD series Low - voltage DC servo motor

## ABTM Series

AC servo motor



Adapt to high-speed response requirements,  
wide temperature selection

### ► Performance characteristics

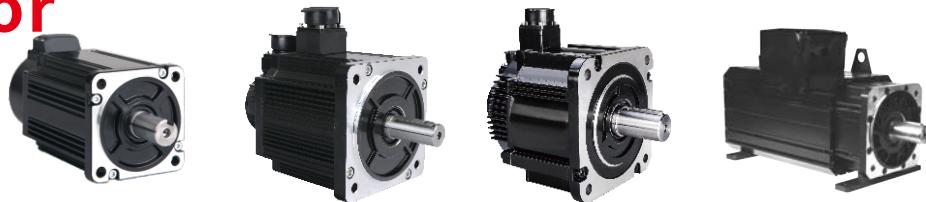
- High power density, wide speed range, and strong parameter compatibility.
- Rated voltage AC220V/AC380V.
- The transfer adopts high-performance rare earth permanent magnet materials, which are energy-saving and durable.
- The winding design adopts a compact structure to reduce winding resistance and lower motor temperature rise.
- Has good smoothness characteristics and extremely low torque ripple.
- Small inertia, strong overload capacity, and good stability.
- Optional photoelectric encoder and magnetic encoder, etc.
- Achieve F-level insulation, IP65 high protection level, suitable for various harsh environments.

# A & B



## Servo Motor

### Model Description



**ABTM 60 – 02 15 E1 2 N 01**

系列号

① ②

③

④

⑤

⑥

⑦

① Flange specifications(mm)

40 / 60 / 80 / 90 / 110 / 130 / 150 / 180 / 200

② Rated power(kW)\*

02: 0.2	04: 0.4	07: 0.75	10: 1.0	15: 1.5	22: 2.2
30: 3.0	55: 5.5	75: 7.5	100: 10	150: 15	

③ Rated speed((r/min)

15: 1500    20: 2000    30: 3000

④ Encoder

E1: Optical 2500 line incremental type   E2: Optical Encoder 17bit   E3: Optical Encoder 23bit  
M2: Magnetic 2500 line incremental type   R0: Magnetic Encoder 17bit   Ro: Rotating Transformer

⑤ Input Voltage(V)

2: AC220V    3: AC380V

⑥ Brake system

N: Without brake    B: With brake

⑦ Wiring Method

01:Anpu Head    02: Aviation plug

Note: For more labels such as "\* rated power",  
please call the sales hotline for consultation

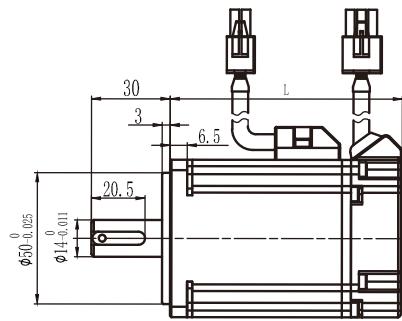
# ABTM 60 Flange

AC servo motor

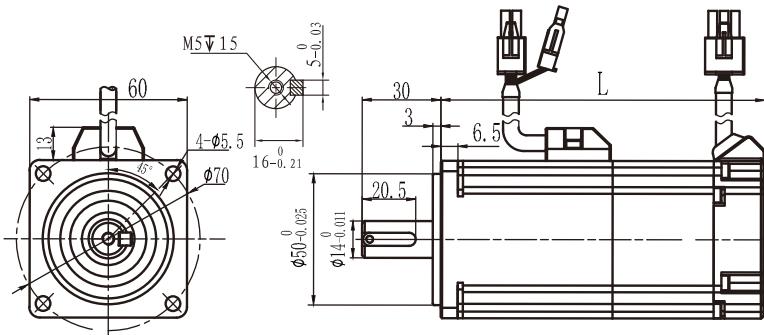
Model identification	ABTM	60	-----	02	30	E1	2	N	01
Series	Flange	power	Speed	Encoder	Voltage	Brake	Wiring Method		

Note: The part in the dashed box is replaced by "\*" in the technical parameter list (the same applies later)

▼ Without brake



▼ With brake



Motor model	ABTM60-0230*	ABTM60-0430*	ABTM60-0630*
Rated power (kW)	0.2	0.4	0.6
Rated current (A)	1.4	2.8	4.2
Rated torque (N·m)	0.64	1.27	1.91
Rated speed (N·m)	3000	3000	3000
Instantaneous maximum current (A)	4.2	8.4	12.6
Instantaneous maximum torque (N·m)	1.92	3.81	5.73
Instantaneous maximum speed (r/m)	6000	6000	6000
Rotor inertia (Kg · m <sup>2</sup> × 10 <sup>-4</sup> )	0.29(0.32)	0.53(0.56)	0.81(0.84)
Torque coefficient (N · m/A)	0.46	0.45	0.45
Line resistance (Ω)	8	3.7	2.3
Line inductance (m)	15	7.6	4.9
Helectrical time constant ms	1.9	2.1	2.1
Motor weight (Kg)	1	1.3	1.7
Lwithout brake (mm)	77.2(Thin style)	93.7(Thin style)	113.2(Thin style)
Lwith brake(mm)	109.2(Thin style)	125.7(Thin style)	138(Thin style)
Input voltage (V)	220	220	220
Extreme logarithm	5	5	5
Insulation level	F		
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%		
Protection level	IP 65		

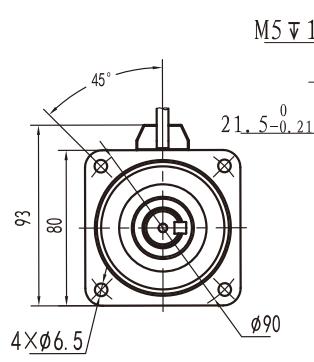
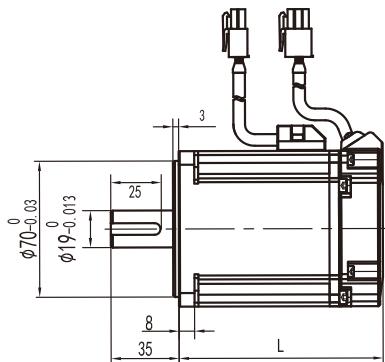
# ABTM 80 Flange

AC servo motor

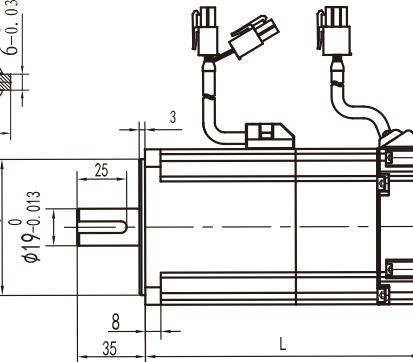
Model identification	ABTM 80 ----- 04 30 E1 2 N 01
Series	Flange power Speed Encoder Voltage Brake Wiring Method

Note: The part in the dashed box is replaced by "/\*" in the technical parameter list (the same applies later)

▼ Without brake



▼ With brake



\*图示为五对级尺寸图

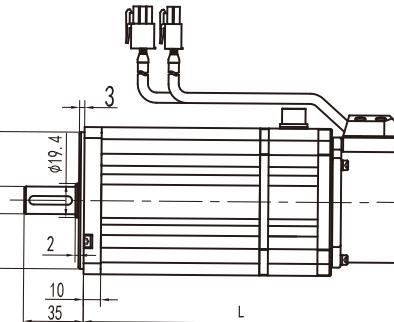
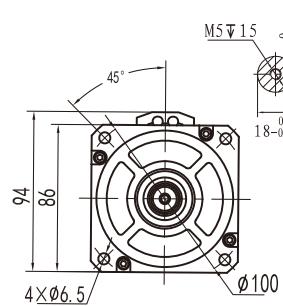
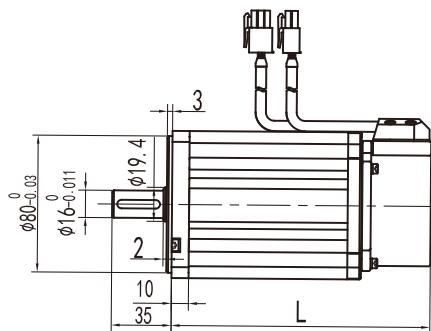
Motor model	ABTM80-0430*	ABTM80-0730*	ABTM80-1030*
Rated power (kW)	0.4	0.75	1.0
Rated current (A)	2	3.8	5.5
Rated torque (N·m)	1.27	2.4	3.2
Rated speed (N·m)	3000	3000	3000
Instantaneous maximum current (A)	6	11.4	16.3
Instantaneous maximum torque (N·m)	3.8	7.2	9.6
Instantaneous maximum speed (r/m)	3500	6000	6000
Rotor inertia (Kg· m <sup>2</sup> × 10 <sup>-4</sup> )	0.95(1.05)	1.62(1.72)	2.1(2.2)
Torque coefficient (N·m/A)	0.64	0.6	0.6
Line resistance (Ω)	2.5	1.33	1.1
Line inductance (m)	16	5.6	4.8
Electrical time constantms	6.4	4.2	4.4
Motor weight (Kg)	1.75	2.5	3.2
Lwithout brake (mm)	124	105(Thin style)	119(Thin style)
Lwith brake(mm)	164	142(Thin style)	156(Thin style)
Input voltage (V)	220	220	220
Extreme logarithm	4	5	5
Insulation level	F		
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%		
Protection level	IP 65		

# ABTM 90 Flange

<b>Model identification</b>	ABTM 90 ----- 07 30 E1 2 N 01
Series	Flange Power Speed Encoder Voltage Brake Wiring Method

Note: The part in the dashed box is replaced by "\*" in the technical parameter list (the same applies later)

▼ Without brake



▼ With brake

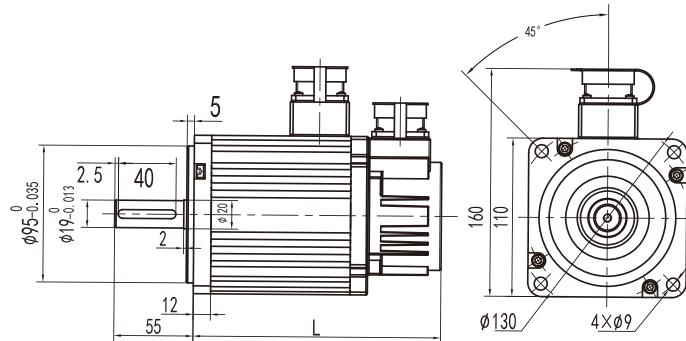
Motor model	ABTM90-0730*	ABTM90-0720*	ABTM90-1025*
Rated power (kW)	0.75	0.73	1.0
Rated current (A)	3	3	4
Rated torque (N·m)	2.39	3.5	4
Rated speed (N·m)	3000	2000	2500
Instantaneous maximum current (A)	9	9	12
Instantaneous maximum torque (N·m)	7.2	10.5	12
Instantaneous maximum speed (r/m)	3500	2500	3000
Rotor inertia (Kg· m <sup>2</sup> × 10 <sup>-4</sup> )	2.62(2.82)	3.2(3.4)	3.57(3.77)
Torque coefficient (N· m/A)	0.8	1.17	1
Line resistance (Ω)	2.47	2.45	1.99
Line inductance (m)	14	18.67	13.75
Helectrical time constantms	5.7	7.6	6.9
Motor weight (Kg)	3	3.7	4.1
Lwithout brake (mm)	150	172	182
Lwith brake(mm)	198	220	230
Input voltage (V)	220	220	220
Extreme logarithm	4	4	4
Insulation level	F		
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%		
Protection level	IP 65		

# ABTM 110 Flange

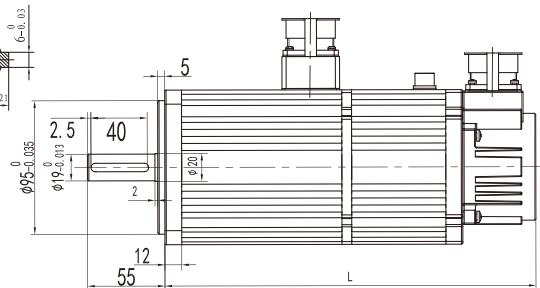
<b>Model identification</b>	ABTM	110	----	06	30	E1	2	N	01
	Series	Flange	Power Speed	Encoder	Voltage	Brake	Wiring Method		

Note: The part in the dashed box is replaced by "\*" in the technical parameter list (the same applies later)

▼ Without brake



▼ With brake



Motor model	ABTM110-0630*	ABTM110-0820*	ABTM110-1230	ABTM110-1530	ABTM110-1220	ABTM110-1830*
Rated power (kW)	0.6	0.8	1.2	1.5	1.2	1.8
Rated current (A)	2.5	3.5	5	6	4.5	7
Rated torque (N·m)	2	4	4	5	6	6
Rated speed (N·m)	3000	2000	3000	3000	2000	3000
Instantaneous maximum current (A)	7.5	10.5	15	18	13.5	21
Instantaneous maximum torque (N·m)	6	12	12	15	18	18
Instantaneous maximum speed (r/m)	3500	2500	3500	3500	2500	3500
Rotor inertia (Kg · m <sup>2</sup> × 10 <sup>-4</sup> )	4(4.2)	7.3(7.5)	7.3(7.5)	9.2(9.4)	10.8(11.0)	10.8(11.0)
Torque coefficient (N·m/A)	0.8	1.14	0.8	0.8	1.3	0.9
Line resistance (Ω)	3.13	2.49	1.48	1	1.9	0.8
Line inductance (m)	13.1	12.2	6.9	5	9.3	3.9
Electrical time constantms	4.2	4.9	4.7	5	5	4.7
Motor weight (Kg)	3.8	5.2	5.2	6.05	6.65	6.65
Lwithout brake (mm)	159	189	189	204	219	219
Lwith brake(mm)	233	263	263	278	293	293
Input voltage (V)	220	220	220	220	220	220
Extreme logarithm	4	4	4	4	4	4
Insulation level	F					
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%					
Protection level	IP 65					

# AC Servo Motor 220V

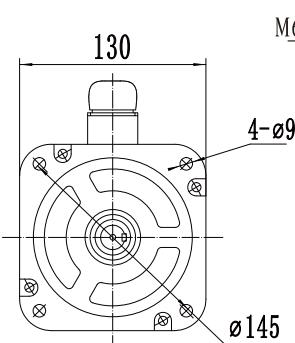
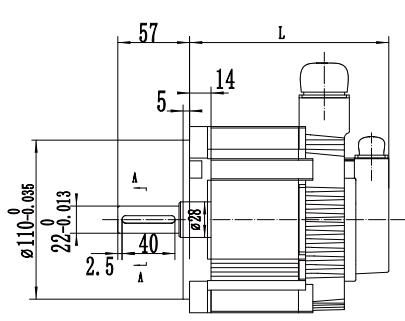
 ABTM 130 flang

Model identification

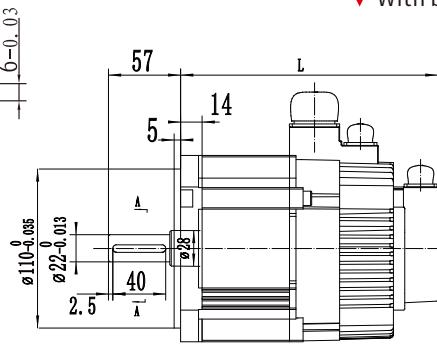
ABTM 130 ----- 10 25 E1 2 N 01  
Series Flange Power Speed Encoder Voltage Brake Wiring Method

Note: The part in the dashed box is replaced by "\*" in the technical parameter list (the same applies later)

▼ Without brake



▼ With brake



Motor model	ABTM130-0815*	ABTM130-1020*	ABTM130-1315*	ABTM130-1520*	ABTM130-1815*
Rated power (kW)	0.85	1.0	1.3	1.5	1.8
Rated current (A)	6.9	5.8	10.7	8	13.8
Rated torque (N·m)	5.39	4.77	8.34	7.16	11.5
Rated speed (N·m)	1500	2000	1500	2000	1500
Instantaneous maximum current (A)	20.7	11.6	32.1	16	41.4
Instantaneous maximum torque (N·m)	16.17	9.54	25.05	14.32	34.5
Instantaneous maximum speed (r/m)	3000	3000	3000	3000	3000
Rotor inertia (Kg· m <sup>2</sup> × 10 <sup>-4</sup> )	10.9(12..13)	6.18(7.41)	16.9(18.13)	9.16(10.39)	21.4(22.63)
Torque coefficient (N·m/A)	0.78	0.82	0.78	0.9	0.83
Line resistance (Ω)	1	0.85	0.5	0.65	0.35
Line inductance (m)	5	12.5	3.2	9.5	2.5
Electrical time constant ms	5	14.7	6.4	14.6	7.14
Motor weight (Kg)	5.4	5.5	7.2	6.9	9.3
Lwithout brake (mm)	135	135	152.5	152.5	170
Lwith brake(mm)	187	187	204.5	204.5	222
Input voltage (V)	220	220	220	220	220
Extreme logarithm	5	5	5	5	5
Insulation level	F				
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%				
Protection level	IP 65				

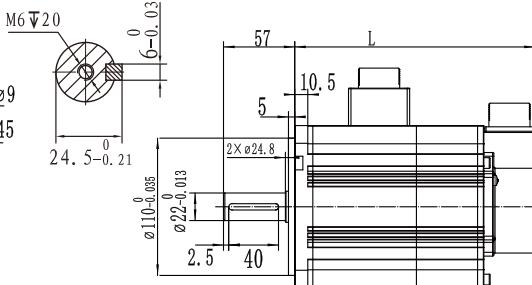
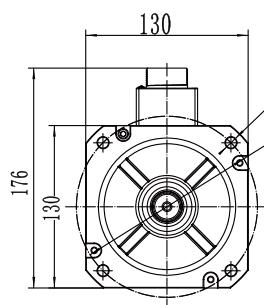
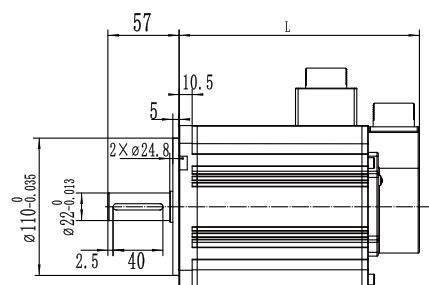
# AC Servo Motor380V

 ABTM 130 flang

Model identification	ABTM	130	----	26	25	E1	3	N	01
	Series	Flange	power	Speed	Encoder	Voltage	Brake	Wiring Method	

Note: The part in the dashed box is replaced by "\*" in the technical parameter list (the same applies later)

▼ Without brake



▼ With brake

Motor model	ABTM130-1315*	ABTM130-1520*	ABTM130-1815*	ABTM130-2020*	A BTM130-3020*
Rated power (kW)	1.3	1.5	1.8	2.0	3.0
Rated current (A)	6	4.7	8.5	6.2	11
Rated torque (N·m)	8.34	7.16	11.5	9.55	14.3
Rated speed (N·m)	1500	2000	1500	2000	2000
Instantaneous maximum current (A)	18	9.4	25.5	12.4	22
Instantaneous maximum torque (N·m)	25.02	14.32	34.5	19.1	28.6
Instantaneous maximum speed (r/m)	3000	3000	3000	3000	3000
Rotor inertia (Kg· m <sup>2</sup> × 10 <sup>-4</sup> )	16.9(18.13)	9.16(10.39)	21.4(22.63)	12.1(13.33)	18.6(19.83)
Torque coefficient (N· m/A)	1.39	1.52	1.35	1.54	1.3
Line resistance (Ω)	1.54	1.84	1.2	1.29	0.8
Line inductance (m)	10.5	29.5	8.3	23.5	14
Helectrical time constantms	6.8	16	6.9	18.2	17.5
Motor weight (Kg)	7.2	6.9	9.3	8.3	10.5
Lwithout brake (mm)	152.5	152.5	170	170	200
Lwith brake(mm)	204.5	204.5	222	220	252
Input voltage (V)	380	380	380	380	380
Extreme logarithm	5	5	5	5	5
Insulation level			F		
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%				
Protection level	IP 65				

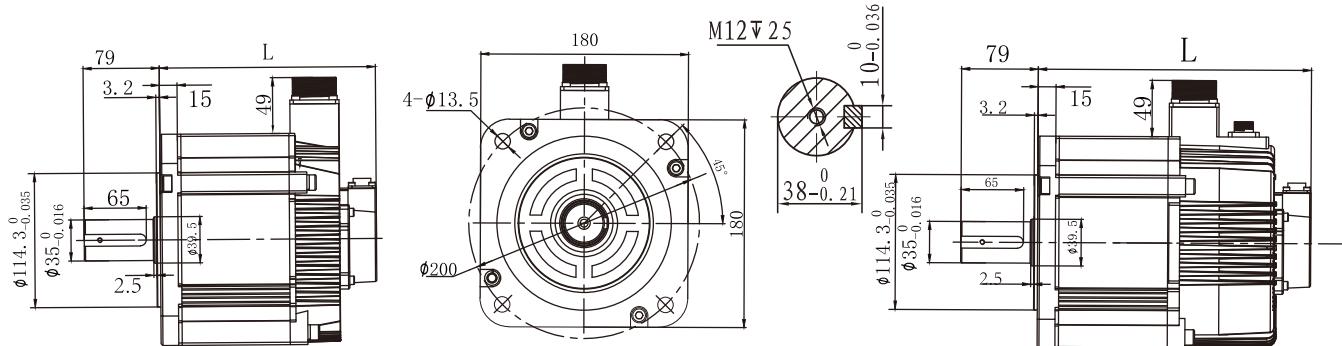
# ABTM 180 Flange

Model identification	ABTM	180	----	25	15	E1	3	N	01
Series	Flange	power	Speed	Encoder	Voltage	Brake	Wiring Method		

Note: The part in the dashed box is replaced by "\*\*\*\*" in the technical parameter list (the same applies later)

▼ Without brake

▼ With brake



\*图为五对级尺寸图

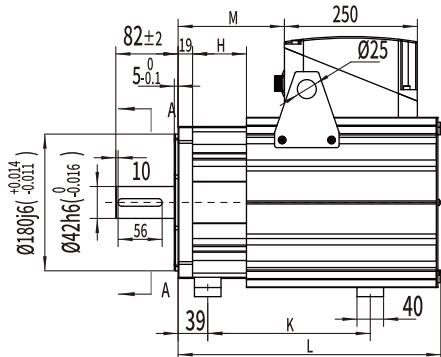
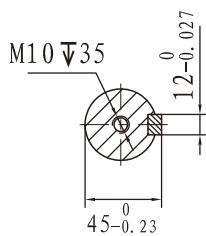
Motor model	ABTM180-2715*	ABTM180-3015*	ABTM180-4520*	ABTM180-2915*	ABTM180-4415*	ABTM180-5515*	ABTM180-7515*
Rated power (kW)	2.7	3.0	4.5	2.9	4.4	5.5	7.5
Rated current (A)	10.5	12	16	11.9	16.5	20.8	26
Rated torque (N·m)	17.2	19	21.5	18.6	28.4	35	48
Rated speed (N·m)	1500	1500	2000	1500	1500	1500	1500
Instantaneous maximum current (A)	31.5	36	48	35.7	49.5	62.4	65
Instantaneous maximum torque (N·m)	51.6	57	64.5	55.8	85.2	105	120
Instantaneous maximum speed (r/m)	1650	1800	2150	3000	3000	3000	3000
Rotor inertia (Kg· m <sup>2</sup> × 10 <sup>-4</sup> )	56.1(62.1)	63.5(69.5)	72.7(78.7)	63.5(69.5)	88.5(94.5)	114(120.4)	136.6(142.)
Torque coefficient (N·m/A)	1.64	1.58	1.34	1.56	1.7	1.7	1.85
Line resistance (Ω)	0.74	0.46	0.28	0.35	0.31	0.25	0.19
Line inductance (m)	7.3	4.7	3	4.3	3.7	2.9	2.3
Electrical time constant ms	9.9	10.2	10.7	12.3	11.9	11.6	12.1
Motor weight (Kg)	15.4	16.7	18.4	16.7	21.1	25.6	30.8
Lwithout brake (mm)	197	205	215	188	215	243	267
Lwith brake(mm)	244	252	262	235	262	290	314
Input voltage (V)	220	220	220	380	380	380	380
Extreme logarithm	4	4	4	5	5	5	5
Insulation level	F						
Usage environment	Ambient temperature:-20°C~+40°C; Relative humidity<90%						
Protection level	IP65						

# ABTM 200 Flange

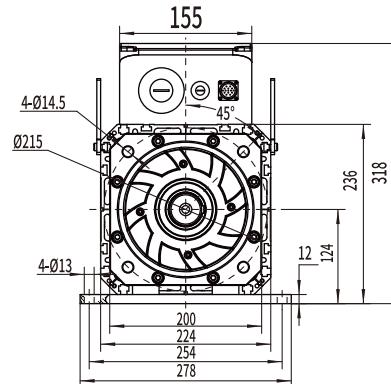
Model identification	ABTM 200 ----- 11 15 E1 3 N 01
Series	Flange power Speed Encoder Voltage Brake Wiring Method

Note: The part in the dashed box is replaced by "\*" in the technical parameter list (the same applies later)

▼ Without brake



▼ With brake



Motor model	ABTM200-10520*	ABTM200-15720*	ABTM200-18115*	ABTM200-23615*	ABTM200-31420*
Rated power (kW)	10.5	15.7	18.1	23.6	31.4
Rated current (A)	19.6	29.8	34.5	44.7	59
Rated torque (N·m)	50	75	115	150	150
Rated speed (N·m)	2000	2000	1500	1500	2000
Instantaneous maximum current (A)	48.3	67.6	78.9	112	147
Instantaneous maximum torque (N·m)	123	170	263	373	373
Instantaneous maximum speed (r/m)	2500	2500	1700	1700	2500
Rotor inertia (Kg· m <sup>2</sup> x 10 <sup>-4</sup> )	98(118)	128(148)	188(208)	248(268)	248(268)
Torque coefficient (N·m/A)	2.6	2.5	3.3	3.3	2.5
Line resistance (Ω)	0.47	0.35	0.38	0.28	0.12
Line inductance (m)	11	7.7	9.8	6.5	2.8
Electrical time constantms	23.4	22.0	25.8	23.2	23.3
Motor weight (Kg)	45.2	51.9	66	79.8	79.8
L without brake (mm)	381、285	416、312	486、395	556、471	556、471
L with brake(mm)	65.84	115.119	115.189	115.259	115.259
Input voltage (V)	380	380	380	380	380
Extreme logarithm	4	4	4	4	4
Insulation level	F				
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%				
Protection level	IP 54				

## ABTDM Series

low-voltage DC servo motor



Ultra small size, optimized performance,  
precise application

### ► Performance characteristics

- High power density, wide speed range, and strong parameter compatibility.
- Rated voltage DC12V/DC24V/DC36V/DC48V.
- The optimized magnetic circuit structure further shortens the size of the motor.
- The new pole slot matching method and optimized structural design ensure reliable axial positioning.
- The winding design adopts a block type centralized winding structure to reduce the temperature rise of the motor.
- Lower torque ripple and cogging torque.
- Supports various feedback methods such as incremental encoders and absolute value encoders.
- Achieve F-level insulation, IP65 high protection level, suitable for various harsh environments.

# A & B



## ABTDM40

### Model Description



**ABTDM40-D 005 15 E1 B K 01**

系列号 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Flange specifications(mm)	40 / 60 / 80 / 130
⑤ Input voltage(V)	D:DC12V E:DC24V G:DC36V F:DC48V
③ Rated POWER(KW)*	005:0.5 0.1:0.1 0.2: 0.2 0.4:0.4 07:0.75 10:1 15:1.5 24:2.4
④ Rated speed(r/min)	15: 1500 20: 2000 30: 3000
⑤ Encoder	E1: Optical 2500 line incremental type E2: Optical Encoder 17bit E3: Optical Encoder 23bit M1:Magnetic 2500 line incremental type M2: Magnetic Encoder 17bit RO: Rotating Transformer
⑥ Brake system	N:Without brake B: With brake
⑦ Output shaft method	K: Optic axis N: With key axis
⑧ Wiring Method	01:Anpu Head 02:Aviation plug

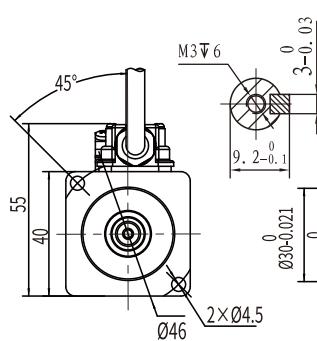
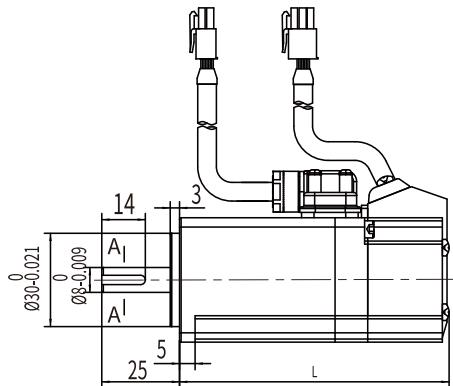
**Note:** For more labels such as "\* rated power", please call the sales hotline for consultation

# ABTDM 40 Flange

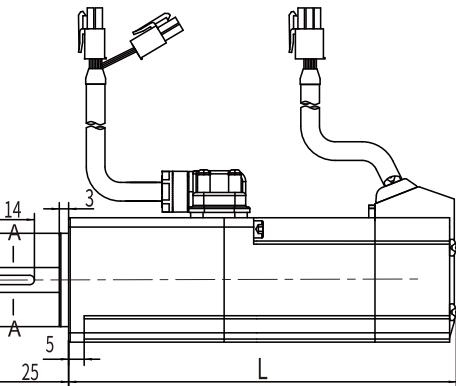
Model identification	ABTDM	40	-----	E	005	30	E1	B	K	01
	Series	Flange	Voltage	Power	Speed	Encoder	Brake	Out axis	style	Wiring Method

Note: The part in the dashed box is replaced by "\*" in the technical parameter list (the same applies later)

▼ Without brake



▼ With brake



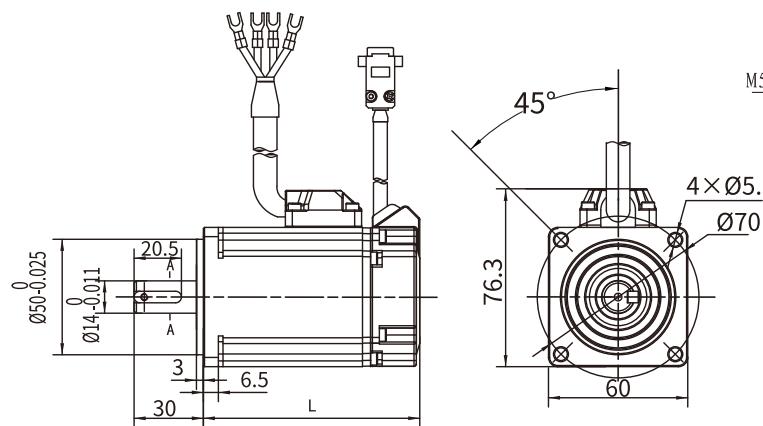
Motor model	ABTDM40-E00530*	ABTDM40-E0130*	ABTDM40-E0130*
Rated power (kW)	0.05	0.1	0.12
Rated voltage (V)	24	24	24
Rated current (A)	3.5	6.5	7
Rated torque(N·m)	0.16	0.32	0.38
Maximum torque(N·m)	0.32	0.64	0.76
Rated speed (r/m)	3000	3000	3000
Rotor inertia (Kg · m <sup>2</sup> )	$0.035 \times 10^{-4}$	$0.053 \times 10^{-4}$	$0.06 \times 10^{-4}$
Torque coefficient (N .m/A)	0.05	0.05	0.05
Line resistance (Ω)	1.06	0.4	0.47
Line inductance (Mh)	0.86	0.38	0.45
Helectrical time constant (Ms)	0.8	1.0	1.0
Motor weight (Kg)	0.4	0.5	0.6
L without brake (mm)	68.5	79.5	86.5
L with brake(mm)	101.5	112.5	119.5
Extreme logarithm	5	5	5
Insulation level	F		
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%		
Protection level	IP 65		

# ABTDM 60 Flange

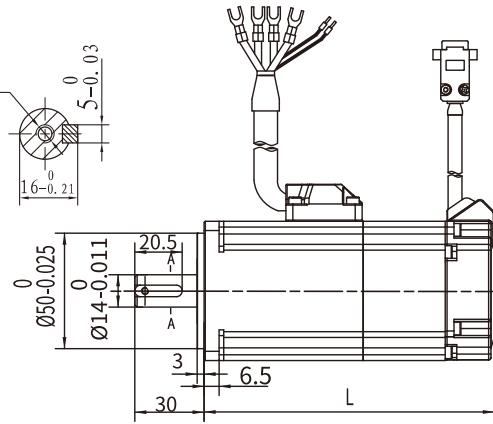
Model identification	ABTDM Series	60 ----- E	005 Power	30 Speed	E1 Encoder	B	K	01 Wiring Method
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Note: The part in the dashed box is replaced by "\*" in the technical parameter list (the same applies later)

▼ Without brake



▼ With brake



Motor model	ABTDM60-E0230*	ABTDM60-E0430*	ABTDM60-F0230*	ABTDM60-F0430*	ABTDM60-F0630*
Rated power (kW)	0.2	0.4	0.2	0.4	0.6
Rated voltage (V)	24	24	48	48	48
Rated current (A)	12	20	6	10	15
Rated torque(N·m)	0.64	1.27	0.64	1.27	1.91
Maximum torque(N·m)	1.91	3.81	1.91	3.81	3.81
Rated speed (r/m)	3000	3000	3000	3000	3000
Rotor inertia (Kg · m <sup>2</sup> )	$0.29 \times 10^{-4}$	$0.53 \times 10^{-4}$	$0.29 \times 10^{-4}$	$0.53 \times 10^{-4}$	$0.81 \times 10^{-4}$
Torque coefficient (N .m/A)	0.053	0.053	0.107	0.127	0.127
Line resistance (Ω)	0.17	0.1	0.63	0.39	0.25
Line inductance (mh)	0.27	0.17	1.12	0.72	0.43
Helectrical time constant (ms)	1.6	1.7	1.8	1.8	1.7
Motor weight (Kg)	1.0	1.4	1.0	1.4	1.7
L without brake (mm)	77.2(Thin style)	93.7(Thin style)	96.2	112.7	132.2
L with brake(mm)	109.2(Thin style)	125.7(Thin style)	128.2	144.7	157
Extreme logarithm			5		
Insulation level			F		
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%				
Protection level	IP 65				

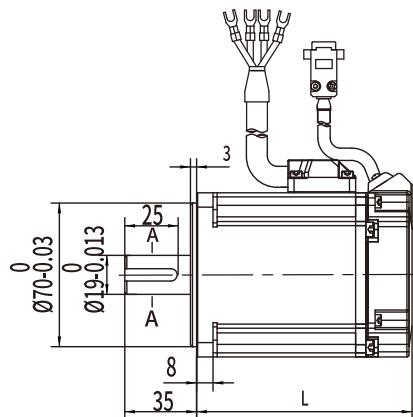
# ABTDM 80 Flange

## Model identification

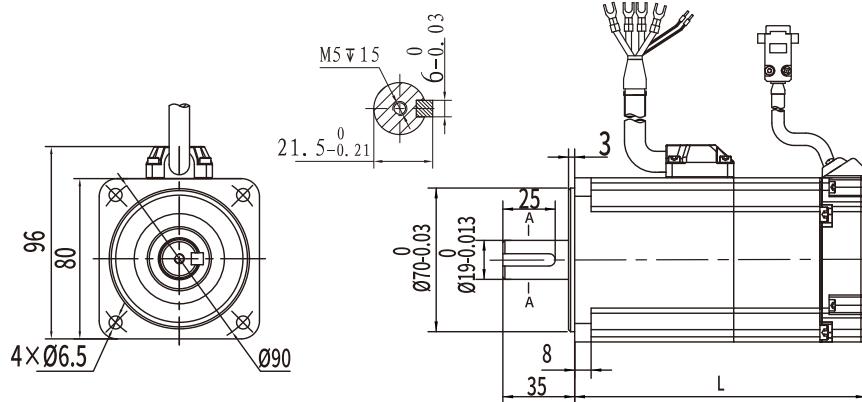
ABTDM 80 ----- F 10 30 E1 B K 01  
 Series Flange Voltage Power Speed Encoder Brake Out axis style Wiring Method

Note: The part in the dashed box is replaced by "\*" in the technical parameter list (the same applies later)

▼ Without brake



▼ With brake



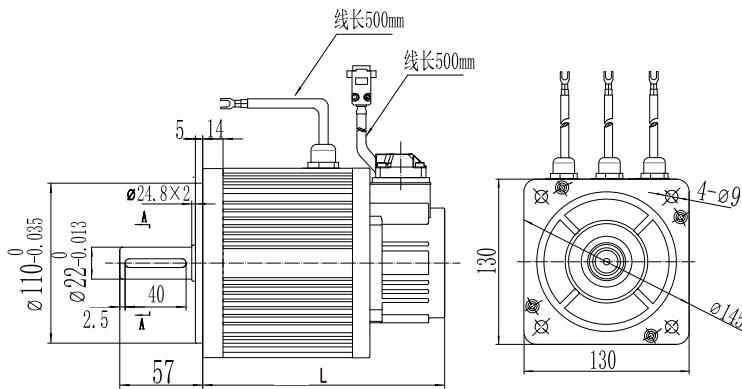
Motor model	ABTDM80-F0730*	ABTDM80-F1030*
Rated power (kW)	0.75	1.0
Rated voltage (V)	48	48
Rated current (A)	20	25
Rated torque(N·m)	2.4	3.2
Maximum torque(N·m)	4.8	6.4
Rated speed (r/m)	3000	3000
Rotor inertia (Kg · m <sup>2</sup> )	$1.62 \times 10^{-4}$	$2.1 \times 10^{-4}$
Torque coefficient (N .m/A)	0.12	0.13
Line resistance (Ω)	0.08	0.05
Line inductance (mh)	0.27	0.17
Electrical time constant (ms)	3.4	3.4
Motor weight (Kg)	2.5	3.4
L without brake (mm)	105	119
L with brake(mm)	142	156
Extreme logarithm	5	
Insulation level	F	
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%	
Protection level	IP65	

# ABTDM 130 Flange

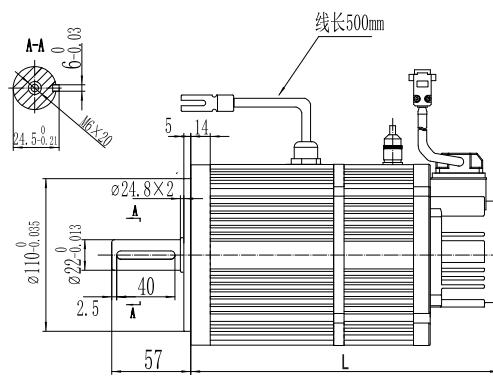
Model identification	ABTDM	130	-----	F	10	30	E1	B	K	01
	Series	Flange	Voltage	Power	Speed		Encoder	Brake	Out axis style	Wiring Method

Note: The part in the dashed box is replaced by "\*" in the technical parameter list (the same applies later)

▼ Without brake



▼ With brake



Motor model	ABTDM130-F1025*	ABTDM130-F1325*	ABTDM130-F1525*	ABTDM130-F2025*	ABTDM130-F2630
Rated power (kW)	1.0	1.3	1.5	2.0	5.6
Rated voltage (V)	48	48	48	48	48
Rated current (A)	28	31	38	54	70
Rated torque(N·m)	4	5	6	7.7	10
Maximum torque(N·m)	8	10	12	15.4	20
Rated speed (r/m)	2500	2500	2500	2500	3000
Rotor inertia (Kg · m <sup>2</sup> )	$9.6 \times 10^{-4}$	$10.7 \times 10^{-4}$	$12.9 \times 10^{-4}$	$14.1 \times 10^{-4}$	$18.8 \times 10^{-4}$
Torque coefficient (N .m/A)	0.14	0.16	0.16	0.14	0.14
Line resistance (Ω)	0.056	0.044	0.038	0.026	0.012
Line inductance (mh)	0.25	0.2	0.14	0.13	0.05
Helectrical time constant(ms)	4.5	4.5	3.7	5.0	4.2
Motor weight (Kg)	5.5	5.8	6.6	7.1	8.7
L without brake (mm)	166	171	179	192	209
L with brake(mm)	224	229	237	250	282
Extreme logarithm	4	4	4	4	4
Insulation level	F	F	F	F	F
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%				
Protection level	IP65				

# Selection and matching table

## AC servo system

Rated voltage (V)	Rated power (kW)	Rated current (A)	Rated torque (N.m)	Rated speed (r/min)	Servo motor model	Servo drive model
AC220V	0.05	0.6	0.16	3000	ABTM 40-00530*	ABS10-005* /ABS20-005*
AC220V	0.1	1.0	0.32	3000	ABTM 40-0130*	ABS10-01* /ABS20-01*
AC220V	0.2	1.4	0.64	3000	ABTM 60-0230*	ABS10-02* /ABS20-02*
AC220V	0.4	2.8	1.27	3000	ABTM 60-0430*	ABS10-04* /ABS20-04*
AC220V	0.6	4.2	1.91	3000	ABTM 60-0630*	ABS10-06* /ABS20-06*
AC220V	0.4	2.0	1.27	3000	ABTM 80-0430*	ABS10-04* /ABS20-04*
AC220V	0.75	3.8	2.4	3000	ABTM 80-0730*	ABS10-07* /ABS20-07*
AC220V	1.0	5.5	3.2	3000	ABTM 80-1030*	ABS10-10* /ABS20-10*
AC220V	0.75	3	2.39	3000	ABTM 90-0730*	ABS10-07* /ABS20-07*
AC220V	0.73	3	3.5	2000	ABTM 90-0720*	ABS10-07* /ABS20-07*
AC220V	1.0	4	4	2500	ABTM 90-1025*	ABS10-10* /ABS20-10*
AC220V	0.6	2.5	2	3000	ABTM 110-0630*	ABS10-06* /ABS20-06*
AC220V	0.8	3.5	4	2000	ABTM 110-0820*	ABS10-08* /ABS20-08*
AC220V	1.2	5	4	3000	ABTM 110-1230*	ABS10-12* /ABS20-12*
AC220V	1.5	6	5	3000	ABTM 110-1530*	ABS10-15* /ABS20-15*
AC220V	1.2	4.5	6	2000	ABTM 110-1220*	ABS10-12* /ABS20-12*
AC220V	1.8	7	6	3000	ABTM 110-1830*	ABS10-18* /ABS20-18*
AC220V	0.85	6.9	5.39	1500	ABTM 130-0815*	ABS10-08* /ABS20-08*
AC220V	1.0	5.8	4.77	2000	ABTM 130-1020*	ABS10-10* /ABS20-10*
AC220V	1.3	10.7	8.34	1500	ABTM 130-1315*	ABS10-13* /ABS20-13*
AC220V	1.5	8.0	7.16	2000	ABTM 130-1520*	ABS10-15* /ABS20-15*
AC220V	1.8	13.8	11.5	1500	ABTM 130-1815*	ABS10-18* /ABS20-18*
AC220V	2.7	10.5	17.2	1500	ABTM 180-2715*	ABS10-27* /ABS20-27*
AC220V	3.0	12	19	1500	ABTM 180-3015*	ABS10-30* /ABS20-30*
AC220V	4.5	16	21.5	2000	ABTM 180-4520*	ABS10-45* /ABS20-45*
AC380V	1.3	6.0	8.34	1500	ABTM 130-1315*	ABS10-13* /ABS20-13*
AC380V	1.5	4.7	7.16	2000	ABTM 130-1520*	ABS10-15* /ABS20-15*
AC380V	1.8	8.5	11.5	1500	ABTM 130-1815*	ABS10-18* /ABS20-18*
AC380V	2.0	6.2	9.55	2000	ABTM 130-2020*	ABS10-20* /ABS20-20*
AC380V	3.0	11	14.3	2000	ABTM 130-3020*	ABS10-30* /ABS20-30*

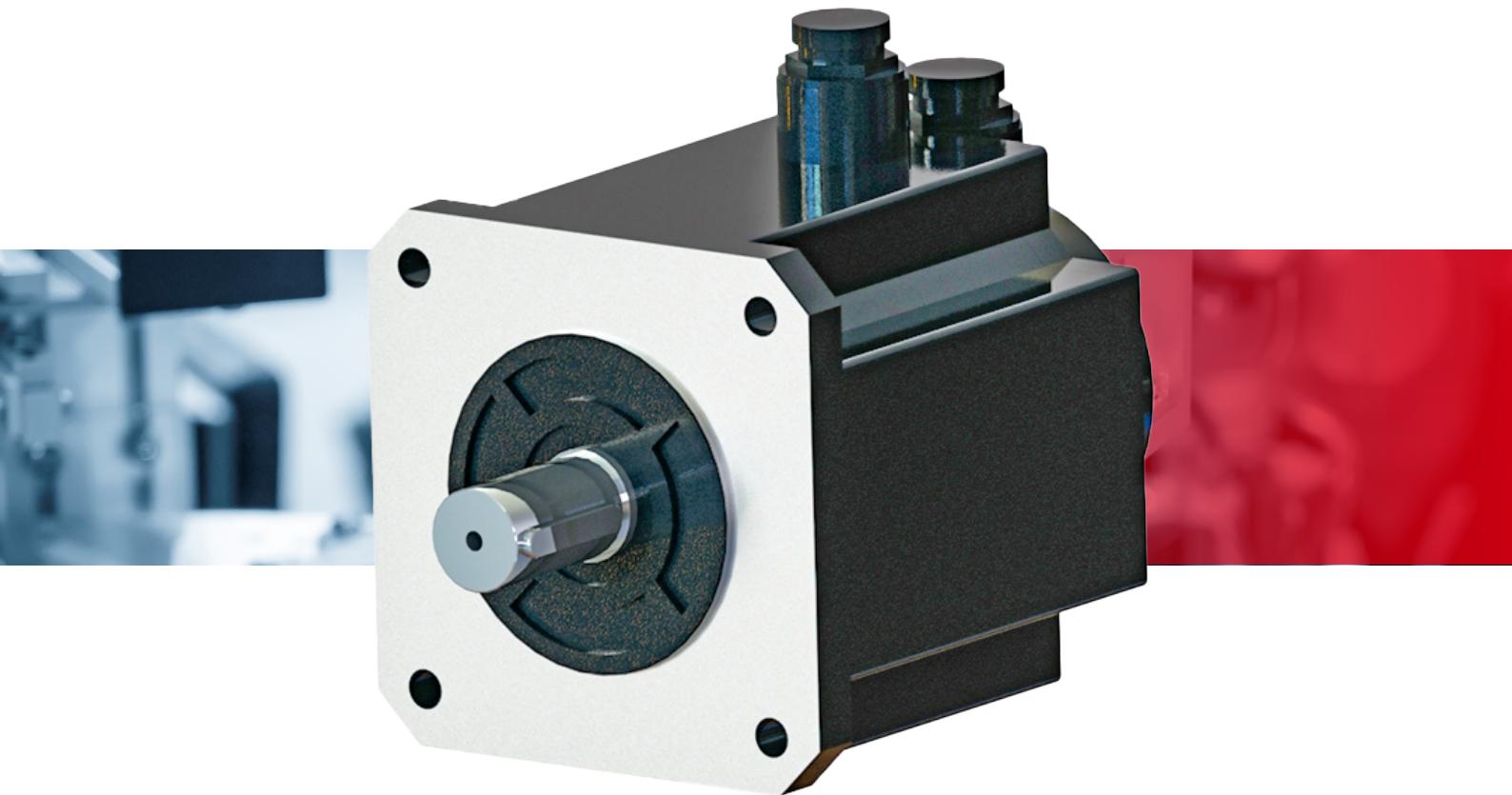
Rated voltage (V)	Rated power (kW)	Rated current (A)	Rated torque (N.m)	Rated speed (r/min)	Servo motor model	Servo drive model
AC380V	2.9	11.9	18.6	1500	A BTM180-2915*	ABS10-29* / ABS20-29*
AC380V	4.4	16.5	28.4	1500	A BTM180-4415*	ABS10-44* / ABS20-44*
AC380V	5.5	20.8	35	1500	A BTM180-5515*	ABS10-55* / ABS20-55*
AC380V	7.5	26	48	1500	A BTM180-7515*	ABS10-75* / ABS20-75*
AC380V	10.5	19.6	50	2000	A BTM200-10520*	ABS20-105*
AC380V	15.7	29.8	75	2000	A BTM200-15720*	ABS20-157*
AC380V	18.1	34.5	115	1500	A BTM200-18115*	ABS20-181*
AC380V	23.6	44.7	150	1500	A BTM200-23615*	ABS20-236*
AC380V	31.4	59	150	2000	A BTM200-31420*	ABS20-314*

## DC servo system

Rated voltage (V)	Rated power (kW)	Rated current (A)	Rated torque (N.m)	Rated speed (r/min)	Servo motor model	Servo drive model
24	0.05	3.5	0.16	3000	ABTDM40-E00530*	ABS60-05E*
24	0.1	6.5	0.32	3000	ABTDM40-E0130*	ABS60-05E*
24	0.12	7	0.38	3000	ABTDM40-E0130*	ABS60-05E*
24	0.2	12	0.64	3000	ABTDM60-E0230*	ABS60-15E*
24	0.4	20	1.27	3000	ABTDM60-E0430*	ABS60-25E*
48	0.2	6	0.64	3000	ABTDM60-F0230*	ABS60-15F*
48	0.4	10	1.27	3000	ABTDM60-F0430*	ABS60-15F*
48	0.6	15	1.91	3000	ABTDM60-F0630*	ABS60-25F*
48	0.75	20	2.4	3000	ABTDM80-F0730*	ABS60-25F*
48	1.0	25	3.2	3000	ABTDM80-F1030*	ABS60-40F*
48	1.0	28	4	2500	ABTDM130-F1025*	ABS60-40F*
48	1.3	31	5	2500	ABTDM130-F1325*	ABS60-40F*
48	1.5	38	6	2500	ABTDM130-F1525*	ABS60-40F*
48	2.0	54	7.7	2500	ABTDM130-F2025*	ABS60-40F*
48	2.6	70	10	3000	ABTDM130-F2630*	ABS60-60F*

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