

SAFETY PRECAUTIONS



The incorrect connection and operation may cause the accident, so before using and operating the motor, please read the manual carefully!

1. The motor is installed with the photoelectric encoder, and it's not allowed to hit the motor. And the user can't disassemble the photoelectric encoder by himself; otherwise, the relative position (zero position) between the encoder and the motor winding is changed, which causes the motor out of running!
2. In the normal climate, measure the insulation resistance which the motor winding is against with the case, by 500V megameter, and the value should NOT be less than 20 MΩ.
3. The motor and the drive should be connected correctly based on the manual to guarantee the protective grounding stable and reliable.
4. The motor can run with load only after the motor is free of noise and vibration during running from zero speed to the maximum speed in the dry run state.
5. During the motor running, it's not allowed to touch the motor shaft and case.
6. Only the qualified person can adjust and maintain the motor.
7. It is forbidden to move the motor by dragging the wire (cable) or the motor shaft.
- 8 **CNCmakers** NOT take any responsibility for any change on the product by the user, and the warranty bill becomes invalid.

All specifications and designs are subject to change without notice.

RESPONSIBILITY

Responsibility of the manufacturer

- The manufacturer should be in charge of the design and the structure of the motor and its accessories.
- The manufacturer should be responsible for the safety of the motor and its accessories.
- The manufacturer should be in charge of the provided information and suggestion for the user.

Responsibility of the end user

- The user should be very familiar with the safety operation through learning the motor safety operation or participating in the training session.
- The user should be responsible for the safety after adding, changing or modifying the original motor and its accessories by himself.
- The user should be in charge of the danger resulted from the operation, adjusting, maintenance, installation and storage which are not complied with the manual regulation.

The manual is kept by **the end user**.

Thank you for your friendly support during using our product.

CONTENT

RESPONSIBILITY	IV
I PRODUCT CHARACTERISTICS	1
II RUNNING CONDITIONS	1
III MODELS of the MACHINE	2
IV MAIN TECHNICAL PARAMETERS of the MOTOR	3
V MOTOR OVERALL and INSTALLATION DIMENSION	13
VI CONNECTION between the MOTOR and the DRIVE	17
VII STORAGE of the MOTOR	19
VIII TRANSPORTATION of the MOTOR	19
IX PROTECTION of the MOTOR	19
X WARRANTY	20
XI ORDER	21

I PRODUCT CHARACTERISTICS

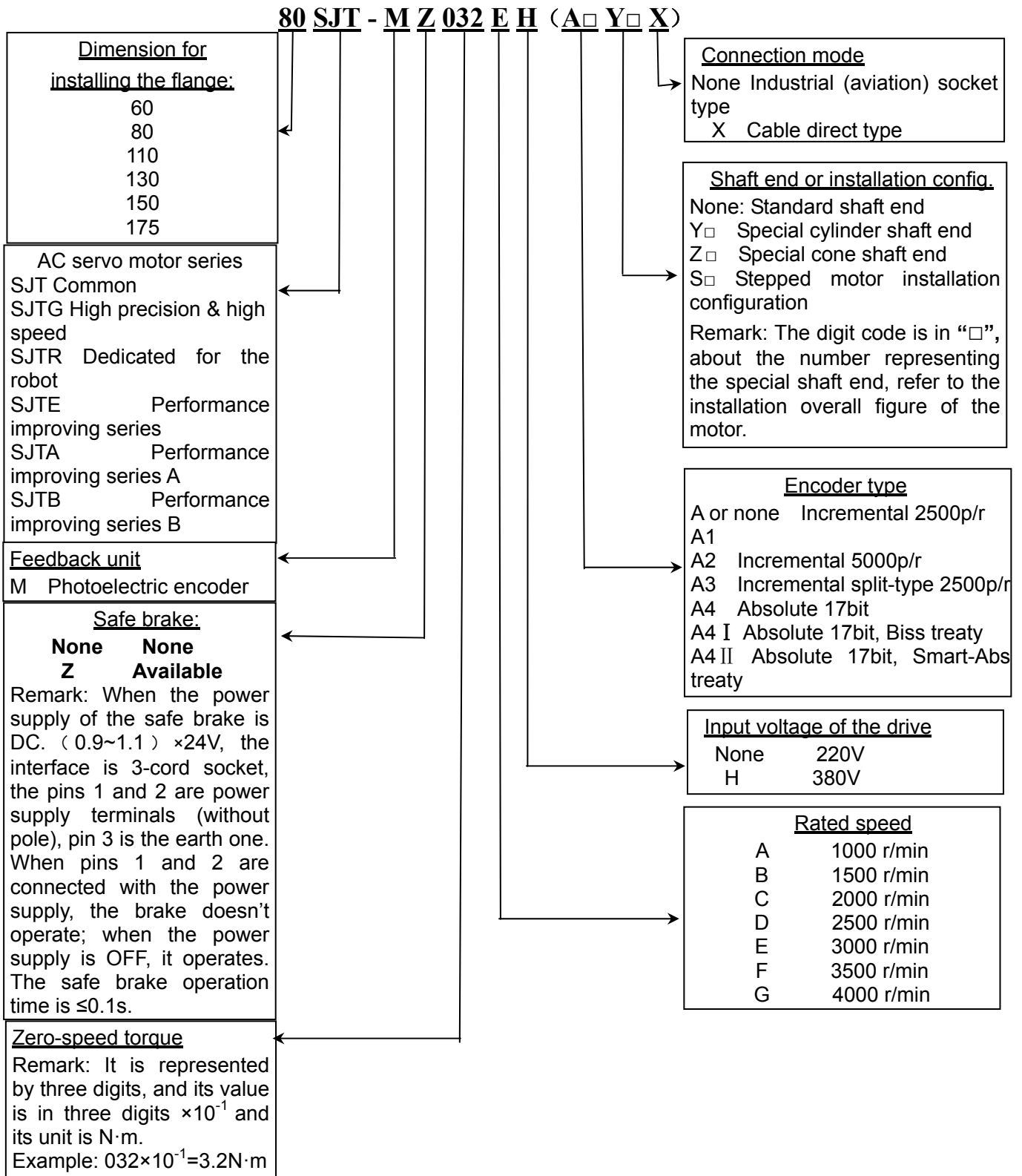
SJT series sine shaped AC permanent magnet synchronous servo motor, which is researched, developed and manufactured by us adopts the rare earth permanent magnet material of high performance, with the characteristics of high torque inertia ratio, low speed performance, strong overload capacity and high reliability etc, which can widely satisfy the requirements of the machine CNC system and automation.

II RUNNING CONDITIONS

- 2.1 The height above sea level should NOT exceed 1000m. If it's more than 1000m, some performance may get affected due to the air cooling.
- 2.2 The environment temperature should be in the range of $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$.
- 2.3 The relative air humidity is $\leq 90\%$ (without the condensation).
- 2.4 AC voltage value of steady state is: **(0.85 ~1.1) multiplies the rated voltage value.**

III MODELS of the MACHINE

Example: **80SJT-MZ032EH (A4Y1X)**



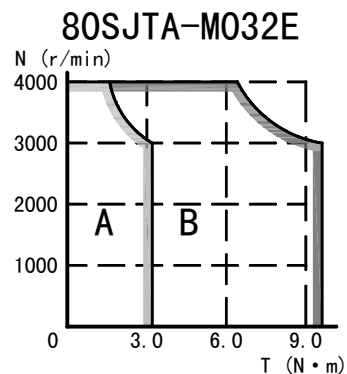
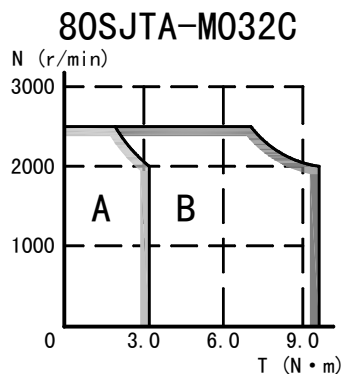
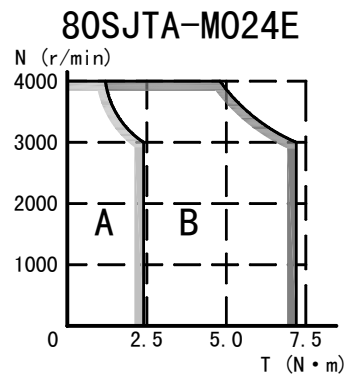
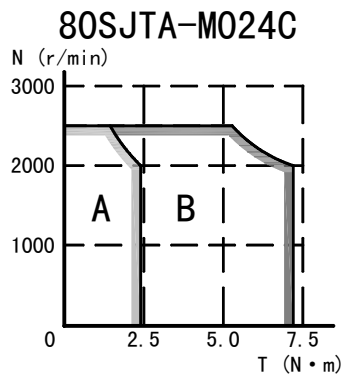
IV MAIN TECHNICAL PARAMETERS of the MOTOR

4.1 Refer to list 1 about the main technical parameters of **80SJTA** serial motor.

List 1

ITEM \ TYPE	80SJTA-M024C	80SJTA-M024E	80SJTA-M032C	80SJTA-M032E
Rated power (kW)	0.5	0.75	0.66	1.0
Pole pairs	4			
Drive input voltage (V)	AC220, three-phase (or single phase)			AC220, three-phase
Rated current (A)	2.5	3.8	3.2	5.5
Zero-speed torque (N·m)	2.4	2.4	3.2	3.2
Rated torque (N·m)	2.4	2.4	3.2	3.2
Max. torque (N·m)	7.2	7.2	9.6	9.6
Rated speed (r/min)	2000	3000	2000	3000
Max. speed (r/min)	2500	4000	2500	4000
Moment of inertia (kg·m ²)	0.91×10 ⁻⁴	0.91×10 ⁻⁴	1.18×10 ⁻⁴	1.18×10 ⁻⁴
Weight (kg)	3.1	3.1	3.7	3.7
Insulation grade	F (GB 755—2008/IEC 60034-1:2004)			
Vibration grade	A (GB 10068—2008/IEC 60034-14:2007)			
Protection level	IP65 (GB 4208—2008/IEC 60529: 2001, GB/T 4942.1—2006)			
Installation type	IMB5 (flange installation) (GB/T 997—2008 / IEC 60034-7:2001)			
Working mode	S1 (Continuous working system) (GB 755—2008)			
Encoder pulses (p/r)	Incremental 2500 (standard configuration)			
Safe brake	DC24V, 3.2N·m, 11.5W, the weight of the corresponding motor is increased by 0.9 kg.			

Torque-speed characteristics (T—N) (A: Continuous working zone; B: Intermittent working zone)

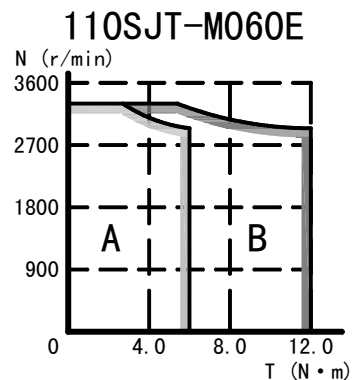
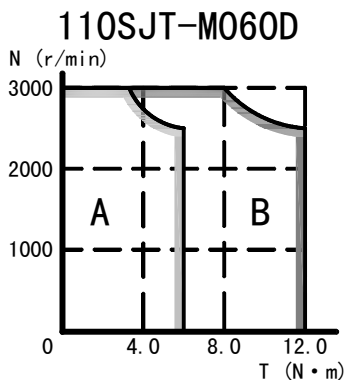
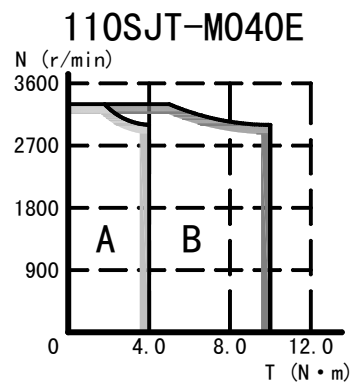
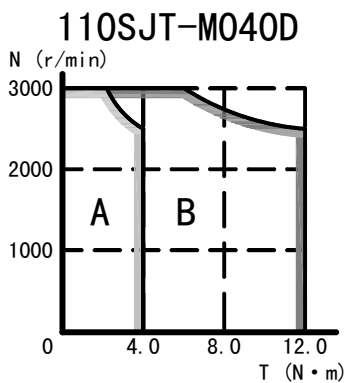


4.2 Refer to list 2 about the main technical parameters of 110SJT series motor.

List 2

ITEM \ TYPE	110SJT-M040D	110SJT-M040E	110SJT-M060D	110SJT-M060E
Rated power (kW)	1.0	1.2	1.5	1.8
Pole pairs	4			
Drive input voltage (V)	AC220 three-phase (or single phase)	AC220, three-phase		
Rated current (A)	4.5	5	7	8
Zero-speed torque (N·m)	4	4	6	6
Rated torque (N·m)	4	4	6	6
Max. torque (N·m)	12	10	12	12
Rated speed (r/min)	2500	3000	2500	3000
Max. speed (r/min)	3000	3300	3000	3300
Moment of inertia (kg·m ²)	0.68×10 ⁻³	0.68×10 ⁻³	0.95×10 ⁻³	0.95×10 ⁻³
Weight (kg)	6.1	6.1	7.9	7.9
Insulation grade	B (GB 755—2008/IEC 60034-1:2004)			
Vibration grade	A (GB 10068—2008/IEC 60034-14:2007)			
Protection level	IP65 (GB 4208—2008/IEC 60529:2001, GB/T 4942.1—2006)			
Installation type	IMB5 (flange installation) (GB/T 997—2008 / IEC 60034-7:2001)			
Working mode	S1 (Continuous working system) (GB 755—2008)			
Encoder pulses (p/r)	Incremental 2500 (Standard configuration)			
Safe brake	DC24V, 6N·m, 20W, the weight of the corresponding motor is increased by 1.6kg.			

Torque-speed characteristics (T—N) (A: Continuous working zone; B: Intermittent working zone)

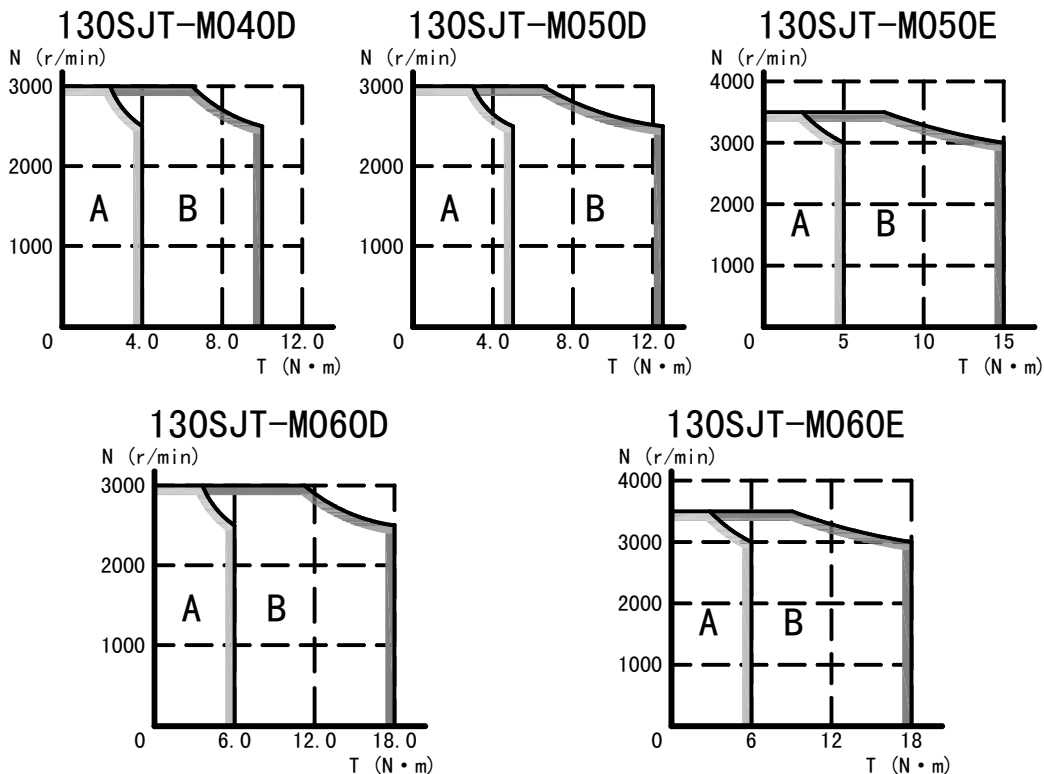


4.3 Refer to list 3 about the main technical parameters of **130SJT**, **130SJTE** and **130SJT B** series motor.

List 3

ITEM \ TYPE	130SJT-M 040D	130SJT-M 050D	130SJT-M 050E	130SJT-M 060D	130SJT-M 060E
Rated power (kW)	1.0	1.3	1.57	1.5	1.88
Pole pairs	4				
Drive input voltage (V)	AC220, three-phase				
Rated current (A)	4	5	7.2	6	7.8
Zero-speed torque (N·m)	4	5	5	6	6
Rated torque (N·m)	4	5	5	6	6
Max. torque (N·m)	10	12.5	15	18	18
Rated speed (r/min)	2500	2500	3000	2500	3000
Max. speed (r/min)	3000	3000	3500	3000	3500
Moment of inertia (kg·m ²)	1.1×10 ⁻³	1.1×10 ⁻³	1.1×10 ⁻³	1.33×10 ⁻³	1.33×10 ⁻³
Weight (kg)	6.5	6.5	6.6	7.2	7.3
Insulation grade	B (GB 755—2008/IEC 60034-1: 2004)				
Vibration grade	A (GB 10068—2008/IEC 60034-14: 2007)				
Protection level	IP65 (GB 4208—2008/IEC 60529: 2001, GB/T 4942.1—2006)				
Installation type	IMB5 (Flange installation) (GB/T 997—2008 / IEC 60034-7:2001)				
Working mode	S1 (Continuous working system) (GB 755—2008)				
Encoder pulses (p/r)	Incremental 2500 (Standard configuration)				
Safe brake	DC24V, 12N·m, 28W, the weight of the corresponding motor is increased by 2.9kg.				

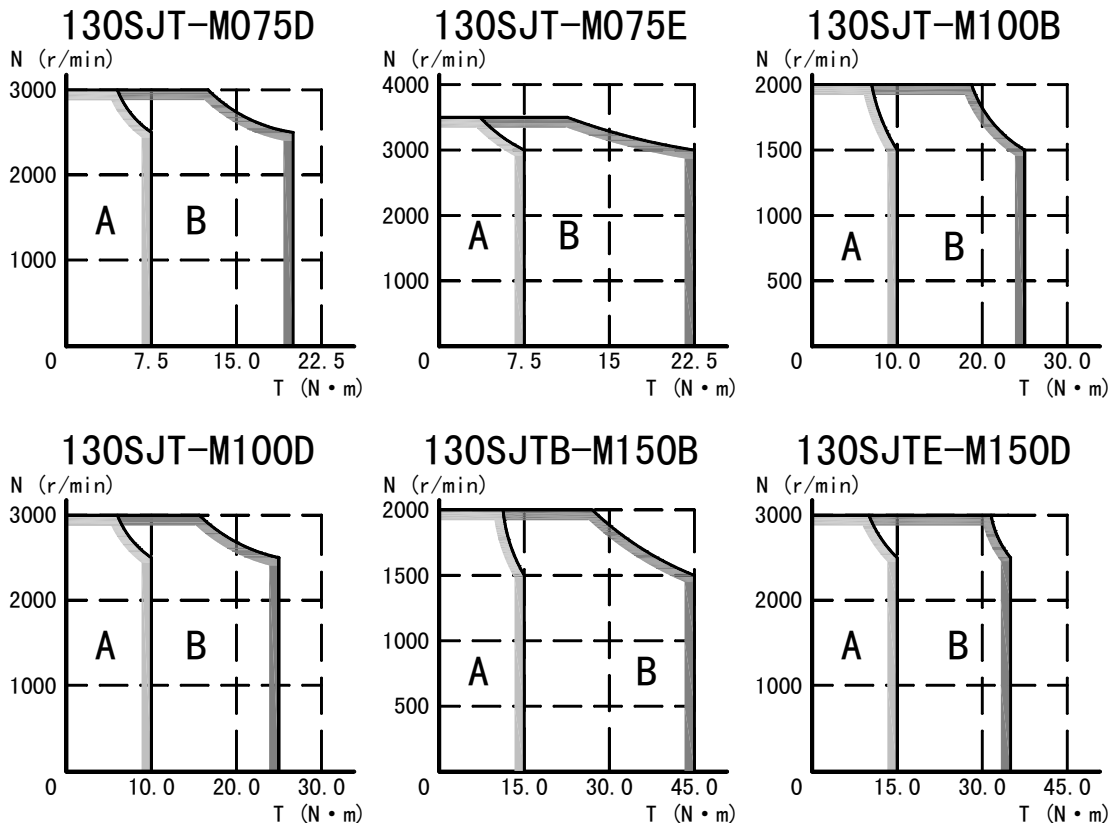
Torque-speed characteristics (T—N) (A: Continuous working zone; B: Intermittent working zone)



List 3 (Continued)

ITEM \ TYPE	130SJT-M075D	130SJT-M075E	130SJT-M100B	130SJT-M100D	130SJT-B-M150B	130SJT-E-M150D
Rated power (kW)	1.88	2.36	1.5	2.5	2.4	3.9
Pole pairs	4					
Drive input voltage (V)	AC220, three-phase					
Rated current (A)	7.5	9.9	6	10	10	19.5
Zero-speed torque (N·m)	7.5	7.5	10	10	15	15
Rated torque (N·m)	7.5	7.5	10	10	15	15
Max. torque (N·m)	20	22.5	25	25	45	35
Rated speed (r/min)	2500	3000	1500	2500	1500	2500
Max. speed (r/min)	3000	3500	2000	3000	2000	3000
Moment of inertia (kg·m ²)	1.85×10 ⁻³	1.85×10 ⁻³	2.42×10 ⁻³	2.42×10 ⁻³	2.7×10 ⁻³	2.89×10 ⁻³
Weight (kg)	8.1	8.2	9.6	9.7	12.8	13.7
Insulation grade	B (GB 755—2008/IEC 60034-1: 2004)					
Vibration grade	A (GB 10068—2008/IEC 60034-14: 2007)					
Protection level	IP65 (GB 4208—2008/IEC 60529: 2001, GB/T 4942.1—2006)					
Installation type	IMB5 (Flange installation) (GB/T 997—2008 / IEC 60034-7:2001)					
Working mode	S1 (Continuous working system) (GB 755—2008)					
Encoder pulses (p/r)	Incremental 2500 (Standard configuration)					
Safe brake	DC24V, 12N·m, 28W, the weight of the corresponding motor is increased by 2.9kg				DC24V, 15N·m, 28W, the weight of the corresponding motor is increased by 2.9kg	

Torque-speed characteristics (T—N) (A: Continuous working zone; B: Intermittent working zone)

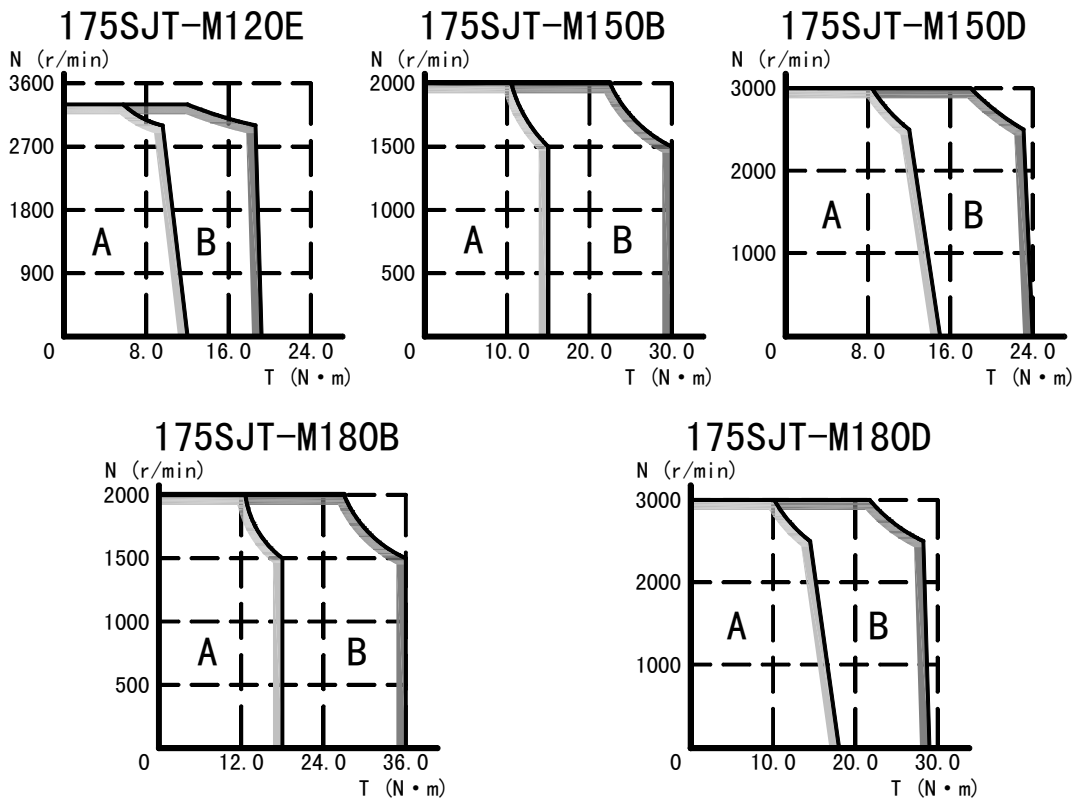


4.4 Refer to list 4 about the main technical parameters of 175SJT series motor.

List 4

ITEM \ TYPE	175SJT-M 120E	175SJT-M 150B	175SJT-M 150D	175SJT-M 180B	175SJT-M 180D
Rated power (kW)	3	2.4	3.1	2.8	3.8
Pole pairs	3				
Drive input voltage (V)	AC220, three-phase				
Rated current (A)	13	11	14	15	16.5
Zero-speed torque (N·m)	12	15	15	18	18
Rated torque (N·m)	9.6	15	12	18	14.5
Max. torque (N·m)	19.2	30	24	36	29
Rated speed (r/min)	3000	1500	2500	1500	2500
Max. speed (r/min)	3300	2000	3000	2000	3000
Moment of inertia (kg·m ² P)	5.1×10 ⁻³	5.1×10 ⁻³	5.1×10 ⁻³	6.5×10 ⁻³	6.5×10 ⁻³
Weight (kg)	18.9	18.5	19	22.8	22.9
Insulation grade	F (GB 755—2008/IEC 60034-1: 2004)				
Vibration grade	A (GB 10068—2008/IEC 60034-14: 2007)				
Protection level	IP65 (GB 4208—2008/IEC 60529: 2001, GB/T 4942.1—2006)				
Installation type	IMB5 (flange installation) (GB/T 997—2008 / IEC 60034-7:2001)				
Working mode	S1 (Continuous working system) (GB 755—2008)				
Encoder pulses (p/r)	Incremental 2500 (Standard configuration)				
Safe brake	DC24V, 23N·m, 30W, the weight of the corresponding motor is increased by 5.6 kg.				

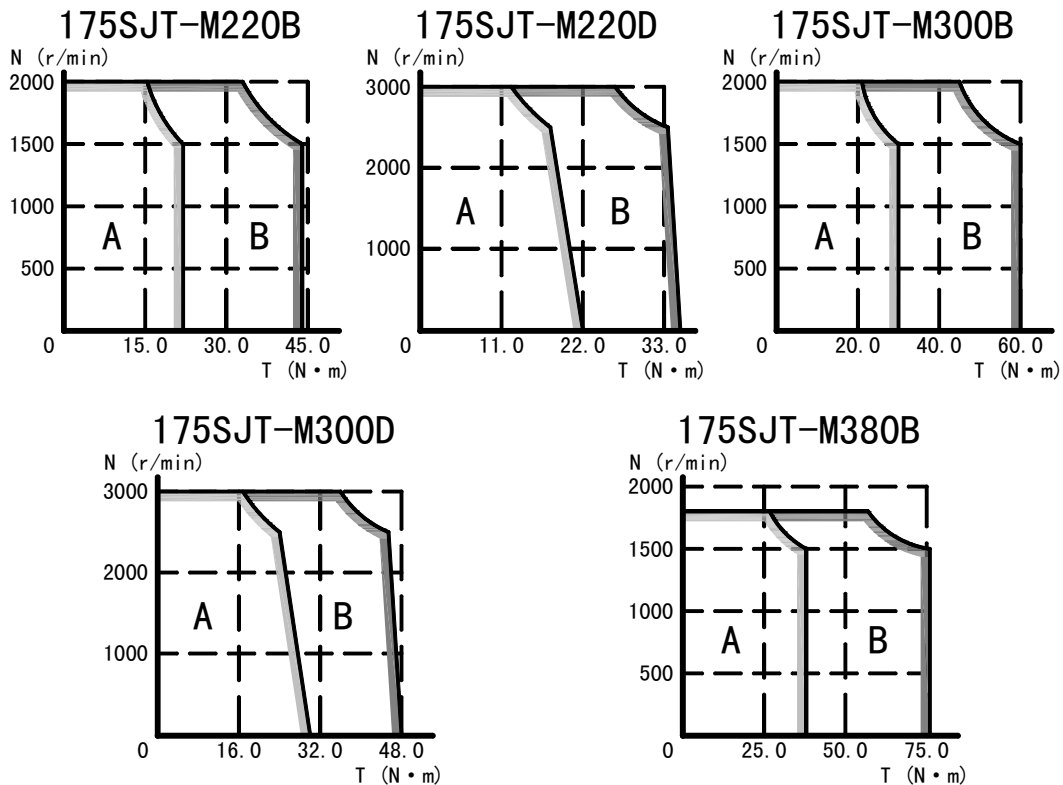
Torque-speed characteristics (T—N) (A: Continuous working zone; B: Intermittent working zone)



List 4 (Continued 1)

ITEM \ TYPE	175SJT-M 220B	175SJT-M 220D	175SJT-M 300B	175SJT-M 300D	175SJT-M 380B
Rated power (kW)	3.5	4.5	4.7	6	6
Pole pairs	3				
Drive input voltage (V)	AC220, three-phase				
Rated current (A)	17.5	19	24	27.5	29
Zero-speed torque (N·m)	22	22	30	30	38
Rated torque (N·m)	22	17.6	30	24	38
Max. torque (N·m)	44	35.2	60	48	76
Rated speed (r/min)	1500	2500	1500	2500	1500
Max. speed (r/min)	2000	3000	2000	3000	1800
Moment of inertia (kg·m ²)	9.0×10 ⁻³	9.0×10 ⁻³	11.2×10 ⁻³	11.2×10 ⁻³	14.8×10 ⁻³
Weight (kg)	28.9	29.2	34.3	34.4	42.4
Insulation grade	F (GB 755—2008/IEC 60034-1: 2004)				
Vibration grade	A (GB 10068—2008/IEC 60034-14: 2007)				
Protection level	IP65 (GB 4208—2008/IEC 60529: 2001, GB/T 4942.1—2006)				
Installation type	IMB5 (flange installation) (GB/T 997—2008 / IEC 60034-7:2001)				
Working mode	S1 (Continuous working system) (GB 755—2008)				
Encoder pulses (p/r)	Incremental 2500 (standard configuration)				
Safe brake	DC24V, 23N·m, 30W, the weight of the corresponding motor is increased by 5.6 kg.		DC24V, 46N·m, 40W, the weight of the corresponding motor is increased by 7.7kg.		

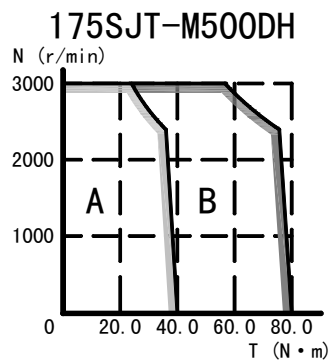
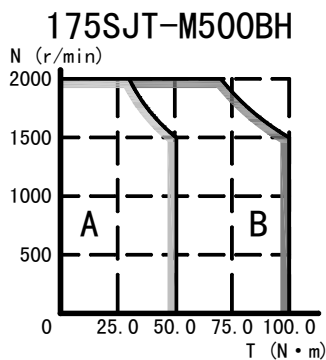
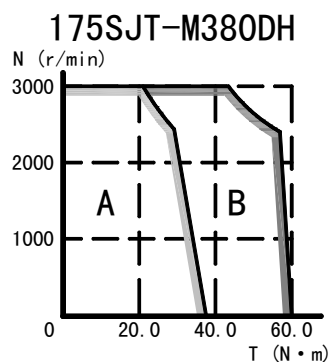
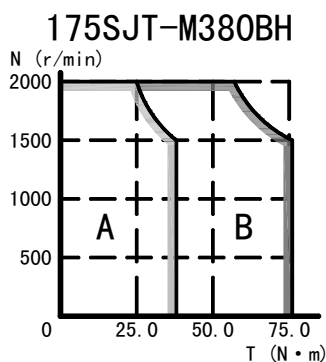
Torque-speed characteristics (T—N) (A: Continuous working zone; B: Intermittent working zone)



List 4 (Continued 2)

ITEM \ TYPE	175SJT-M 380BH	175SJT-M 380DH	175SJT-M 500BH	175SJT-M 500DH
Rated power (kW)	6	7.9	7.8	10.5
Pole pairs	3			
Drive input voltage (V)	AC 380, three-phase			
Rated current (A)	15	26	20	33
Zero-speed torque (N·m)	38	38	50	50
Rated torque (N·m)	38	30	50	40
Max. torque (N·m)	76	60	100	80
Rated torque (r/min)	1500	2500	1500	2500
Max. speed (r/min)	2000	3000	2000	3000
Moment of inertia (kg·m ²)	14.8×10 ⁻³	14.8×10 ⁻³	14.8×10 ⁻³	14.8×10 ⁻³
Weight (kg)	42.2	42.4	48.7	48.9
Insulation grade	F (GB 755—2008/IEC 60034-1: 2004)			
Vibration grade	A (GB 10068—2008/IEC 60034-14: 2007)			
Protection level	IP65 (GB 4208—2008/IEC 60529: 2001, GB/T 4942.1—2006)			
Installation type	IMB5 (Flange installation) (GB/T 997—2008 / IEC 60034-7:2001)			
Working mode	S1 (Continuous working system) (GB 755—2008)			
Encoder pulses (p/r)	Incremental 2500 (Standard configuration)			
Safe brake	DC24V, 46N·m, 40W, the weight of the corresponding motor is increased by 7.7kg.		DC24V, 46N·m, 40W, the weight of the corresponding motor is increased by 8.5kg.	
Cooling fan	Not available		AC380 three-phase, 50Hz (terminal 1 earth connection, terminals 2,3 and 4 connected with the power supply), 30W, IP54	

Torque-speed characteristics (T—N) (A:Continuous working zone; B:Intermittent working zone)

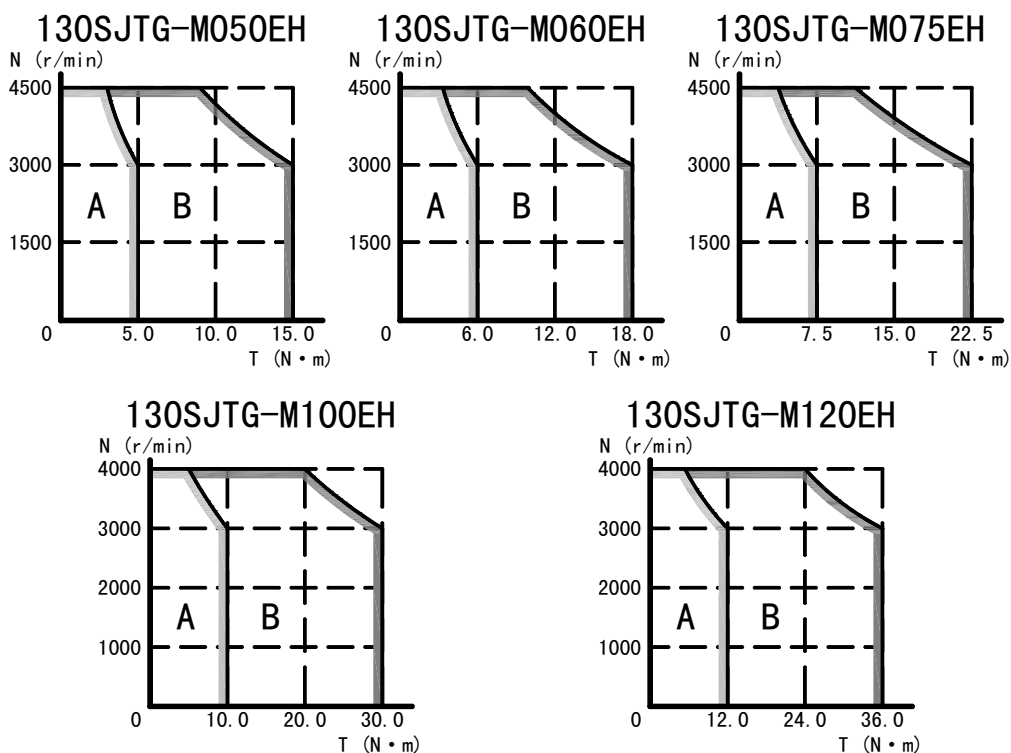


4.5 Refer to list 5 about the main technical parameters of 130SJTG series motor.

List 5

ITEM \ TYPE	130SJTG-M050EH	130SJTG-M060EH	130SJTG-M075EH	130SJTG-M100EH	130SJTG-M120EH
Rated power (kW)	1.6	1.9	2.4	3.1	3.8
Pole pairs	4				
Drive input voltage (V)	AC380 three-phase				
Rated current (A)	5.3	6.4	8	8.2	10.2
Zero-speed torque (N·m)	5	6	7.5	10	12
Rated torque (N·m)	5	6	7.5	10	12
Max. torque (N·m)	15	18	22.5	30	36
Rated speed (r/min)	3000	3000	3000	3000	3000
Max. speed (r/min)	4500	4500	4500	4000	4000
Moment of inertia (kg·m ²)	1.0×10 ⁻³	1.2×10 ⁻³	1.5×10 ⁻³	1.9×10 ⁻³	2.5×10 ⁻³
Weight (kg)	6.6	7.5	8.4	9.9	11.9
Insulation grade	F (GB 755—2008/IEC 60034-1: 2004)				
Vibration grade	A (GB 10068—2008/IEC 60034-14: 2007)				
Protection level	IP65 (GB 4208—2008/IEC 60529: 2001, GB/T 4942.1—2006)				
Installation type	IMB5 (Flange installation) (GB/T 997—2008 / IEC 60034-7:2001)				
Working mode	S1 (Continuous working mode) (GB 755—2008)				
Encoder pulses (p/r)	Absolute 17bit (Standard configuration)				
Safe brake	DC24V, 12N·m, 28W, the weight of the corresponding motor is increased by 2.9kg.				

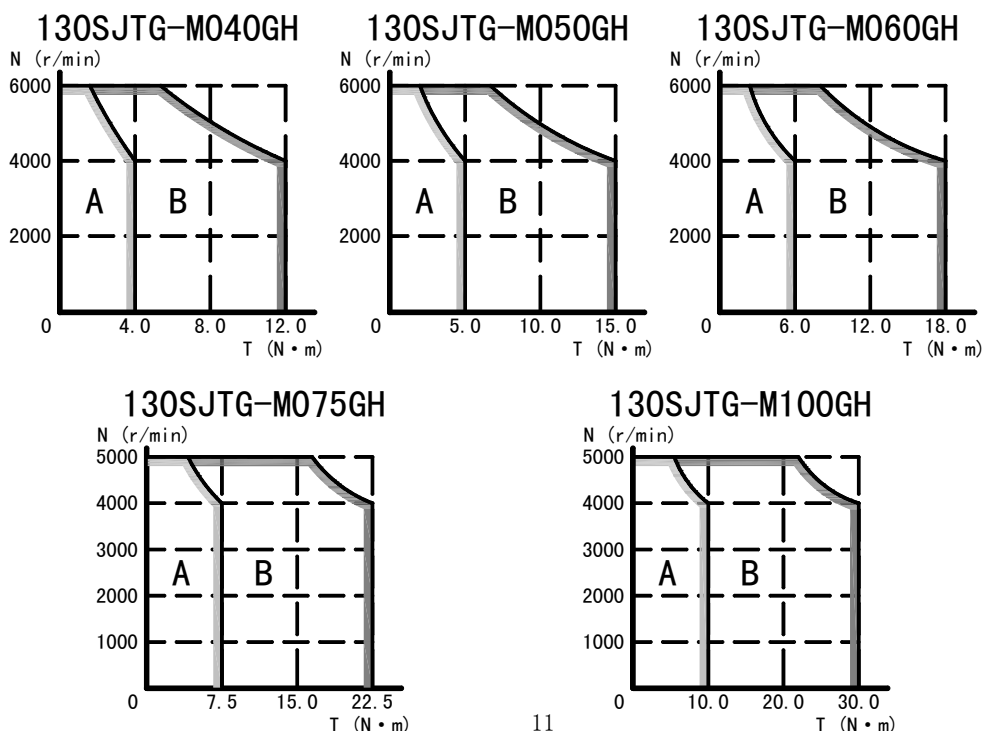
Torque-speed characteristics (T—N) (A:Continuous working zone; B:Intermittent working zone)



List 5 (continued)

ITEM \ TYPE	130SJTG-M040GH	130SJTG-M050GH	130SJTG-M060GH	130SJTG-M075GH	130SJTG-M100GH
Rated power (kW)	1.7	2.1	2.5	3.1	4.2
Pole pairs	4				
Drive input voltage (V)	AC380 three-phase				
Rated current (A)	4.8	6	7.2	7.5	10
Zero-speed torque (N·m)	4	5	6	7.5	10
Rated torque (N·m)	4	5	6	7.5	10
Max. torque (N·m)	12	15	18	22.5	30
Rated speed (r/min)	4000	4000	4000	4000	4000
Max. speed (r/min)	6000	6000	6000	5000	5000
Moment of inertia (kg·m ²)	1.0×10 ⁻³	1.2×10 ⁻³	1.5×10 ⁻³	1.9×10 ⁻³	2.5×10 ⁻³
Weight (kg)	6.6	7.5	8.4	9.9	11.9
Insulation grade	F (GB 755—2008/IEC 60034-1: 2004)				
Vibration grade	A (GB 10068—2008/IEC 60034-14: 2007)				
Protection level	IP65 (GB 4208—2008/IEC 60529: 2001, GB/T 4942.1—2006)				
Installation type	IMB5 (Flange installation) (GB/T 997—2008 / IEC 60034-7:2001)				
Working mode	S1 (Continuous working mode) (GB 755—2008)				
Encoder pulses (p/r)	Absolute 17bit (Standard configuration)				
Safe brake	DC24V, 12N·m, 28W, the weight of the corresponding motor is increased by 2.9kg.				

Torque-speed characteristics (T—N) (A:Continuous working zone; B:Intermittent working zone)

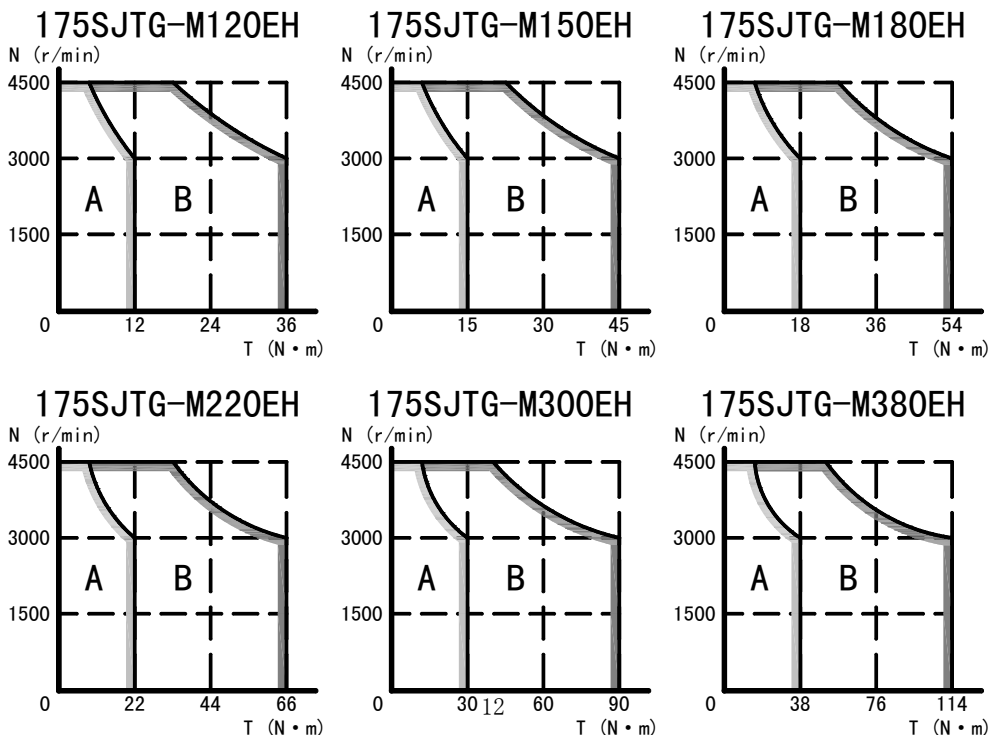


4.6 Refer to list 6 about the main technical parameters of 175SJTG series motor.

List 6

ITEM \ TYPE	175SJTG-M120EH	175SJTG-M150EH	175SJTG-M180EH	175SJTG-M220EH	175SJTG-M300EH	175SJTG-M380EH
Rated power (kW)	3.8	4.7	5.7	6.9	9.4	11.9
Pole pairs	4					
Drive input voltage (V)	AC380 three-phase					
Rated current (A)	10.5	12.5	15.5	18.5	25	32
Zero-speed torque (N·m)	12	15	18	22	30	38
Rated torque (N·m)	12	15	18	22	30	38
Max. torque (N·m)	36	45	54	66	90	114
Rated speed (r/min)	3000	3000	3000	3000	3000	3000
Max. speed (r/min)	4500	4500	4500	4500	4500	4500
Moment of inertia (kg·m ²)	4.1×10 ⁻³	4.9×10 ⁻³	6.1×10 ⁻³	7.2×10 ⁻³	9.5×10 ⁻³	12.1×10 ⁻³
Weight (kg)	18.8	21.2	24.5	27.8	34.4	41.8
Insulation grade	F (GB 755—2008/IEC 60034-1: 2004)					
Vibration grade	A (GB 10068—2008/IEC 60034-14: 2007)					
Protection level	IP65 (GB 4208—2008/IEC 60529: 2001, GB/T 4942.1—2006)					
Installation type	IMB5 (Flange installation) (GB/T 997—2008 / IEC 60034-7:2001)					
Working mode	S1 (Continuous working mode) (GB 755—2008)					
Encoder pulses (p/r)	Absolute 17bit (Standard configuration)					
Safe brake	DC24V,23N·m,30W, the corresponding motor is increased by 5.6 kg.			DC24V, 46N·m、40W, the corresponding motor is increased by 7.7 kg.		

Torque-speed characteristics (T—N) (A:Continuous working zone; B:Intermittent working zone)



V MOTOR OVERALL and INSTALLATION DIMENSION

5.1 Refer to figure 1 and list 7 about **80SJTA** serial motor overall installation dimension and connection mode.

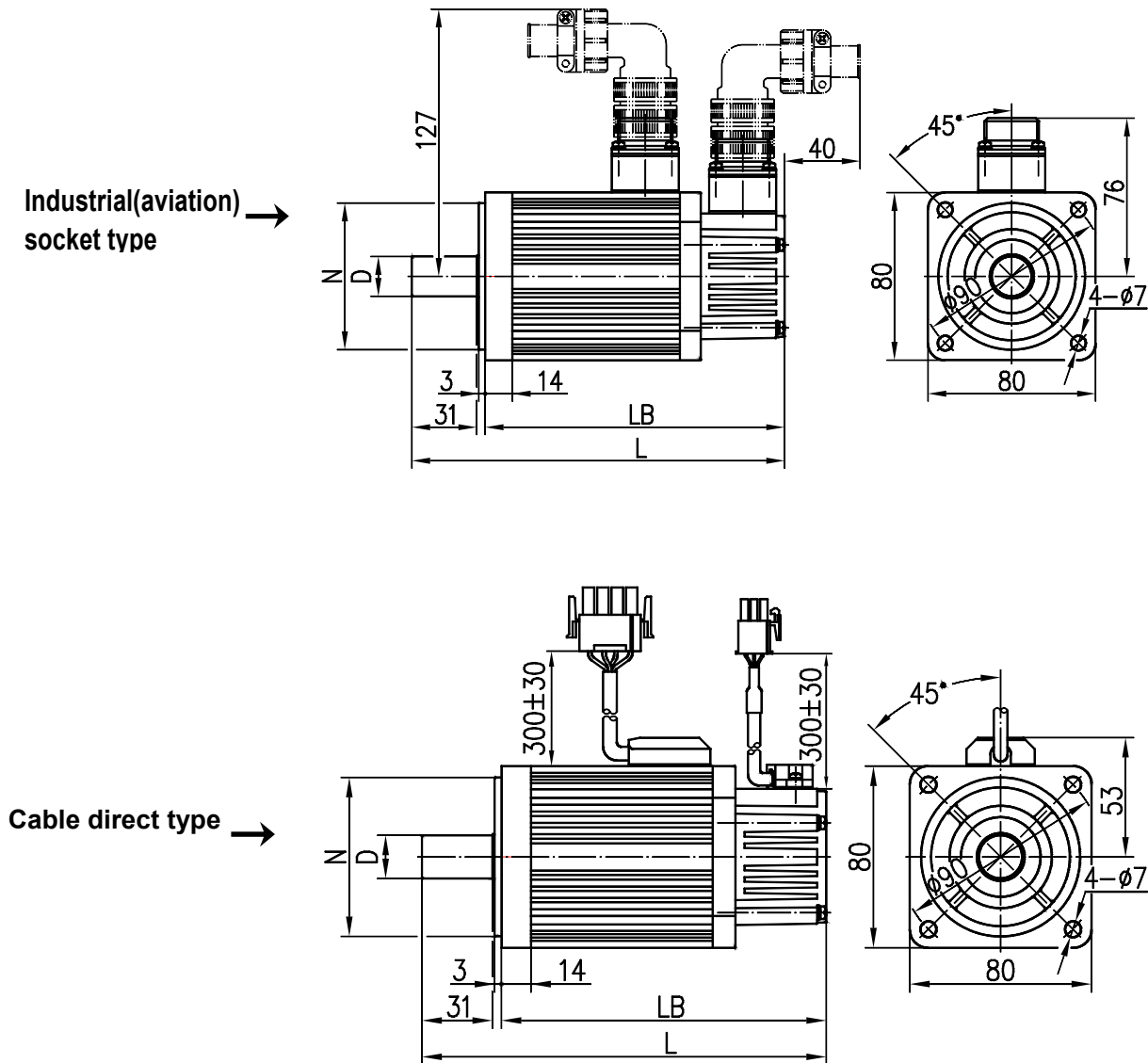


Fig. 1

List 7

TYPE	D(mm)	N(mm)	LB(mm)	L(mm)
80SJTA—M024C	$\phi 19^{0}_{-0.013}$	$\phi 70^{0}_{-0.03}$	171(213)	206(248)
80SJTA—M024E	$\phi 19^{0}_{-0.013}$	$\phi 70^{0}_{-0.03}$	171(213)	206(248)
80SJTA—M032C	$\phi 19^{0}_{-0.013}$	$\phi 70^{0}_{-0.03}$	189(231)	224(266)
80SJTA—M032E	$\phi 19^{0}_{-0.013}$	$\phi 70^{0}_{-0.03}$	189(231)	224(266)

Remark: The values of the bracketed LB and L are the length values of the motors of the corresponding specification, which are with the safe brakes.

5.2 Refer to figure 2 and list 8 about 110SJT series motor overall installation dimension.

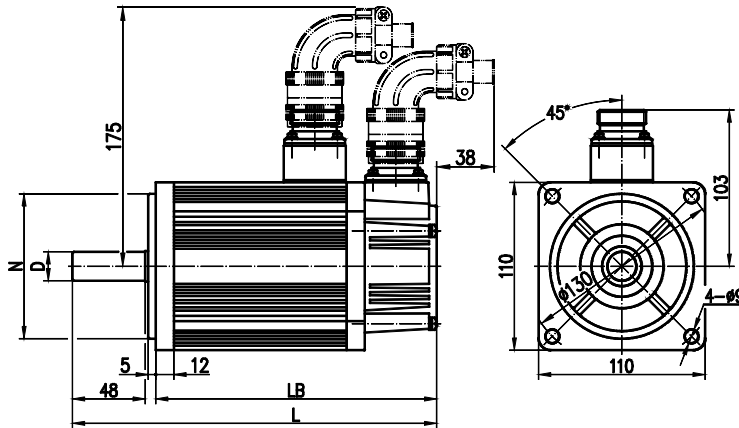


Fig. 2

List 8

TYPE	D(mm)	N(mm)	LB(mm)	L(mm)
110SJT-M040D	$\phi 19^{0}_{-0.013}$	$\phi 95^{0}_{-0.035}$	186 (237)	241 (292)
110SJT-M040E	$\phi 19^{0}_{-0.013}$	$\phi 95^{0}_{-0.035}$	186 (237)	241 (292)
110SJT-M060D	$\phi 19^{0}_{-0.013}$	$\phi 95^{0}_{-0.035}$	212 (263)	267 (318)
110SJT-M060E	$\phi 19^{0}_{-0.013}$	$\phi 95^{0}_{-0.035}$	212 (263)	267 (318)

Remark: The values of the bracketed LB and L are the length values of the motors of the corresponding specification, which are with the safe brakes.

5.3 Refer to figure 3 and list 9 about 130SJT, 130SJTE and 130SJTA series motor overall installation dimension.

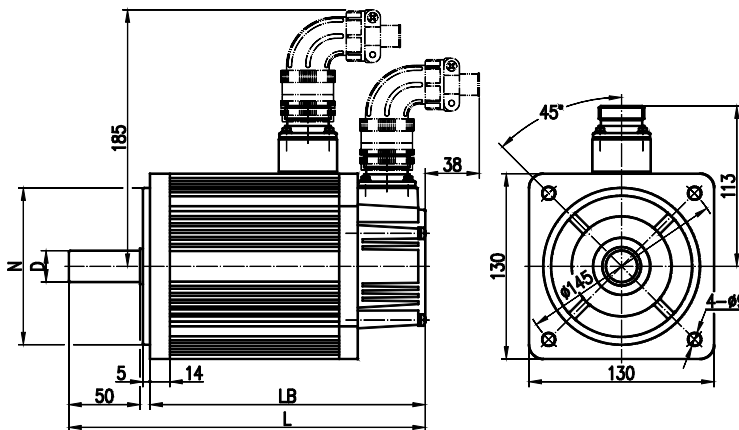


Fig. 3

List 9

TYPE	D(mm)	N(mm)	LB(mm)	L(mm)
130SJT-M040D	$\phi 22^{0}_{-0.013}$	$\phi 110^{0}_{-0.035}$	168 (227)	225 (284)
130SJT-M050D	$\phi 22^{0}_{-0.013}$	$\phi 110^{0}_{-0.035}$	168 (227)	225 (284)
130SJT-M050E	$\phi 22^{0}_{-0.013}$	$\phi 110^{0}_{-0.035}$	168 (227)	225 (284)
130SJT-M060D	$\phi 22^{0}_{-0.013}$	$\phi 110^{0}_{-0.035}$	176 (235)	233 (292)
130SJT-M060E	$\phi 22^{0}_{-0.013}$	$\phi 110^{0}_{-0.035}$	176 (235)	233 (292)
130SJT-M075D	$\phi 22^{0}_{-0.013}$	$\phi 110^{0}_{-0.035}$	188 (247)	245 (304)
130SJT-M075E	$\phi 22^{0}_{-0.013}$	$\phi 110^{0}_{-0.035}$	188 (247)	245 (304)
130SJT-M100B	$\phi 22^{0}_{-0.013}$	$\phi 110^{0}_{-0.035}$	208 (267)	265 (324)
130SJT-M100D	$\phi 22^{0}_{-0.013}$	$\phi 110^{0}_{-0.035}$	208 (267)	265 (324)
130SJT-M150B	$\phi 22^{0}_{-0.013}$	$\phi 110^{0}_{-0.035}$	248 (307)	305 (364)
130SJT-M150D	$\phi 22^{0}_{-0.013}$	$\phi 110^{0}_{-0.035}$	264 (323)	321 (380)

Remark: The values of the bracketed LB and L are the length values of the motors of the corresponding specification, which are with the safe brakes.

5.4 Refer to figure 4 and list 10 about 175SJT series motor overall installation dimension.

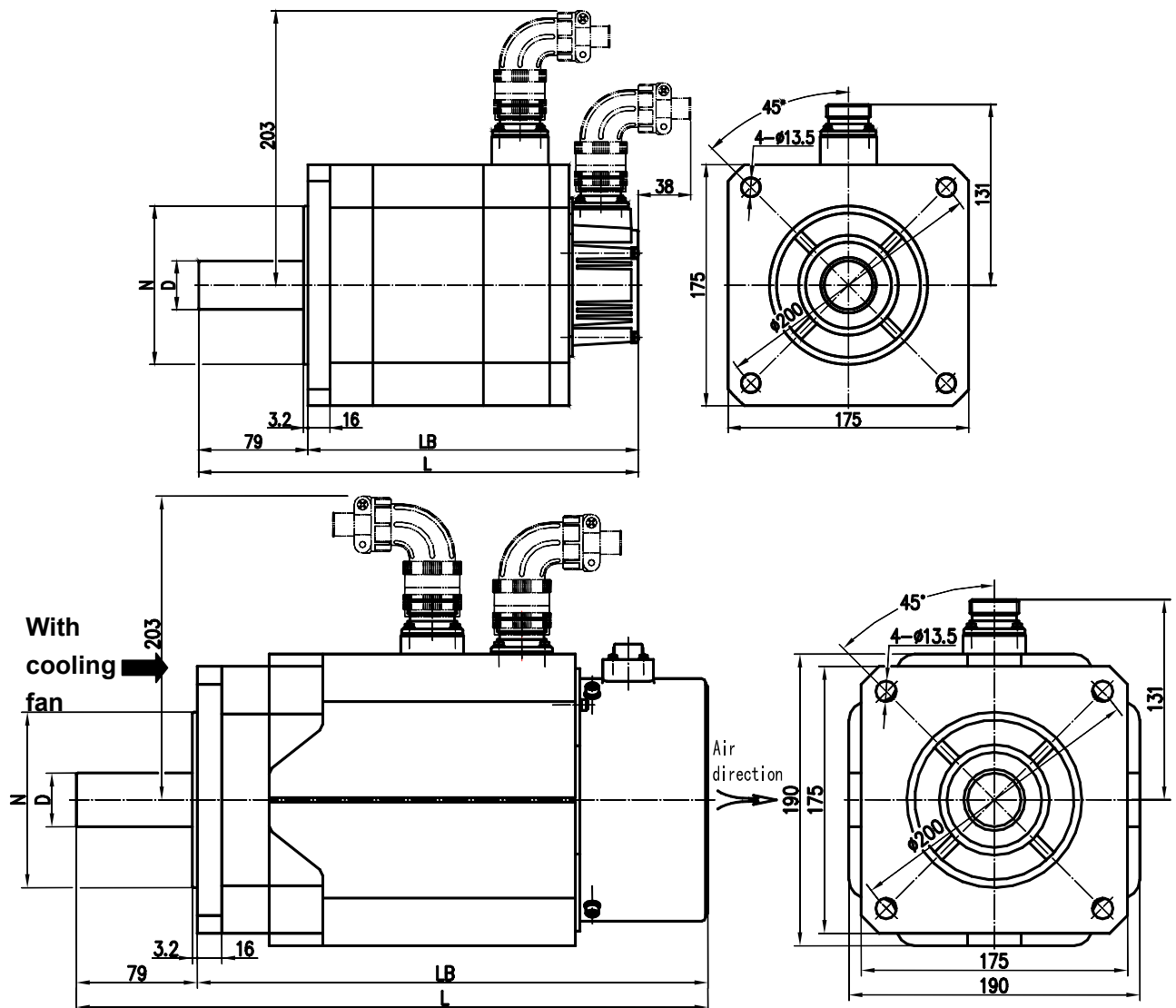


Fig.4

List 10

TYPE	D(mm)	N(mm)	LB(mm)	L(mm)
175SJT-M120E	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	224 (291)	303 (370)
175SJT-M150B	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	224 (291)	303 (370)
175SJT-M150D	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	224 (291)	303 (370)
175SJT-M180B	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	244 (311)	323 (390)
175SJT-M180D	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	244 (311)	323 (390)
175SJT-M220B	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	279 (346)	358 (425)
175SJT-M220D	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	279 (346)	358 (425)
175SJT-M300B	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	309 (382)	388 (461)
175SJT-M300D	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	309 (382)	388 (461)
175SJT-M380B	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	359 (432)	438 (511)
175SJT-M380BH	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	359 (432)	438 (511)
175SJT-M380DH	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	359 (432)	438 (511)
175SJT-M500BH	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	454 (527)	533 (606)
175SJT-M500DH	$\phi 35_{0}^{+0.01}$	$\phi 114.3_{-0.025}^0$	454 (527)	533 (606)

Remark: The values of the bracketed LB and L are the length values of the motors of the corresponding specification, which are with the safe brakes.

5.5 Refer to figure 5 and list 11 about 130SJTG series motor overall installation dimension.

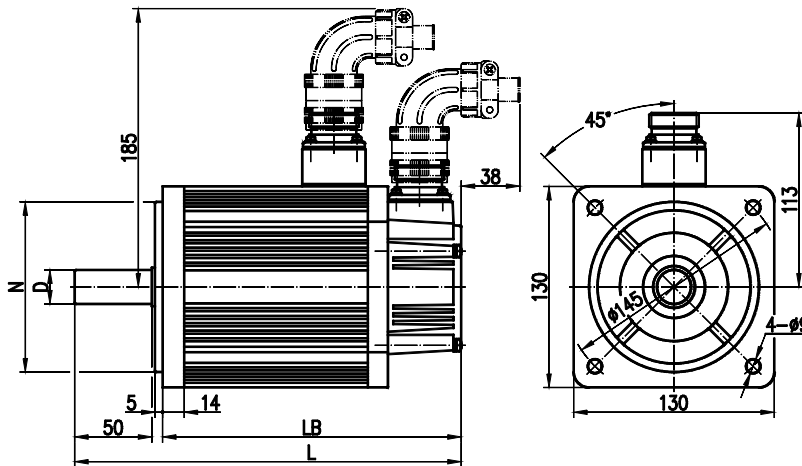


Fig. 5

List 11

TYPE	D(mm)	N(mm)	LB(mm)	L(mm)
130SJTG-M040GH	$\phi 22_{-0.013}^0$	$\phi 110_{-0.035}^0$	172(231)	229(288)
130SJTG-M050EH	$\phi 22_{-0.013}^0$	$\phi 110_{-0.035}^0$	172(231)	229(288)
130SJTG-M050GH	$\phi 22_{-0.013}^0$	$\phi 110_{-0.035}^0$	183(242)	240(299)
130SJTG-M060EH	$\phi 22_{-0.013}^0$	$\phi 110_{-0.035}^0$	183(242)	240(299)
130SJTG-M060GH	$\phi 22_{-0.013}^0$	$\phi 110_{-0.035}^0$	194(253)	251(310)
130SJTG-M075EH	$\phi 22_{-0.013}^0$	$\phi 110_{-0.035}^0$	194(253)	251(310)
130SJTG-M075GH	$\phi 22_{-0.013}^0$	$\phi 110_{-0.035}^0$	212(271)	269(328)
130SJTG-M100EH	$\phi 22_{-0.013}^0$	$\phi 110_{-0.035}^0$	212(271)	269(328)
130SJTG-M100GH	$\phi 22_{-0.013}^0$	$\phi 110_{-0.035}^0$	238(297)	295(354)
130SJTG-M120EH	$\phi 22_{-0.013}^0$	$\phi 110_{-0.035}^0$	238(297)	295(354)

Remark: The values of the bracketed LB and L are the length values of the motors of the corresponding specification, which are with the safe brakes.

5.6 Refer to figure 6 and list 12 about 175SJTG series motor overall installation dimension.

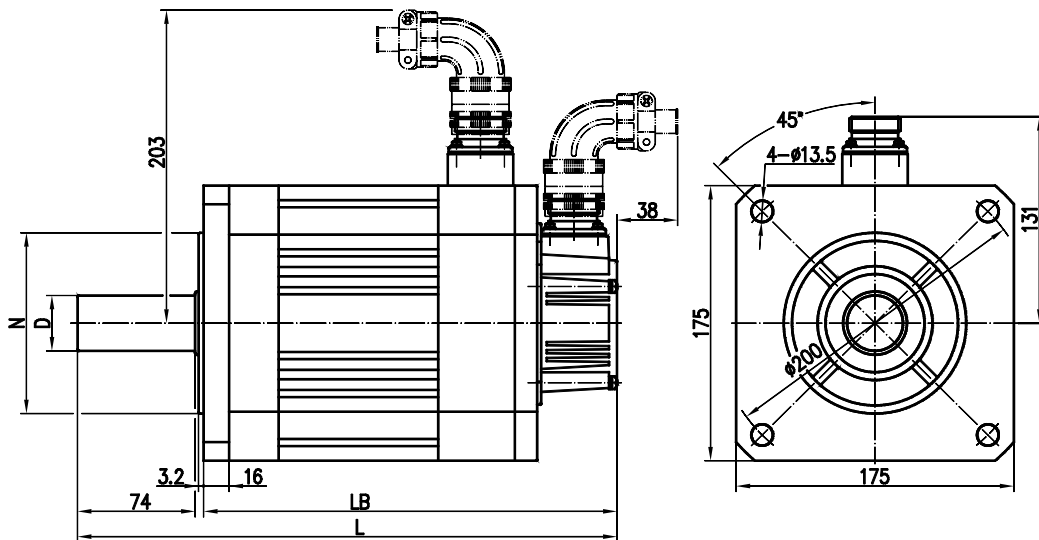


Fig. 6

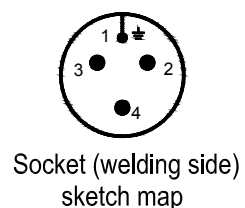
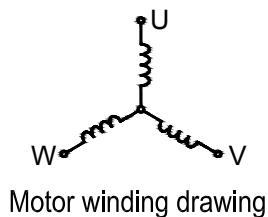
List 12

TYPE	D (mm)	N (mm)	LB (mm)	L (mm)
175SJTG-M120EH	$\phi 35_0^{+0.01}$	$\phi 114.3_0^{-0.025}$	224 (291)	303 (370)
175SJTG-M150EH	$\phi 35_0^{+0.01}$	$\phi 114.3_0^{-0.025}$	239 (306)	318 (385)
175SJTG-M180EH	$\phi 35_0^{+0.01}$	$\phi 114.3_0^{-0.025}$	259 (326)	338 (405)
175SJTG-M220EH	$\phi 35_0^{+0.01}$	$\phi 114.3_0^{-0.025}$	279 (346)	358 (425)
175SJTG-M300EH	$\phi 35_0^{+0.01}$	$\phi 114.3_0^{-0.025}$	319 (392)	398 (471)
175SJTG-M380EH	$\phi 35_0^{+0.01}$	$\phi 114.3_0^{-0.025}$	364 (437)	443 (516)

Remark: The values of the bracketed LB and L are the length values of the motors of the corresponding specification, which are with the safe brakes.

VI CONNECTION between the MOTOR and the DRIVE

6.1 The three-phase winding U,V and W of the motor and the case (GND) are led out by one 4-core connector pin; about the corresponding relation, refer to list 10. U, V, W and the case (GND) are respectively connected with the main return circuit U, V, W and PE terminals of the drive.



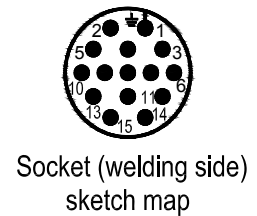
List 13

Motor lead	U	V	W	Case (GND)
Socket NO.	2	3	4	1

6.2 The photoelectric encoder lead is led out by a 15-core connector pin. About the corresponding relation of the incremental encoder signals, refer to list 14; about the corresponding relation of the absolute encoder “A4 type” signals, refer to list 15; “A4 I type” signals, refer to list 16; “A4 II type” signals refer to list 17. The lead is connected with the drive feedback signal CN2 plug based on the drive requirement.

List 14

Encoder lead	PE (GND)		V _{CC}	GND	A+	A-	B+	B-
Socket NO.	1		2	3	4	7	5	8
Encoder lead	Z+	Z-	U+	U-	V+	V-	W+	W-
Socket NO.	6	9	10	13	11	14	12	15



List 15

Encoder lead	PE (GND) +CASE GND	SD-	GND	V _{CC}	SD+	VB	—
Socket NO.	1	2	3	5	6	13	Others

List 16

Encoder lead	PE (GND)	Up	0V	A+	B-	Up _{Sensor}	A-
Socket NO.	1	2	3	4	5	6	7
Encoder lead	B+	0V _{sensor}	Data-	—	Clock-	Data+	Clock+
Socket NO.	8	9	10	11	12	13	15

List 17

Encoder lead	PE (GND)	V _{CC}	GND	SD-	VB	SD+	—
Socket NO.	1	2	3	10	11	13	Others

VII STORAGE of the MOTOR

The motor should be stored in the room of which temperature should be among $-40^{\circ}\text{C}\sim+55^{\circ}\text{C}$, and the relative air humidity of the storeroom should NOT be more than 95%; Moreover, the storeroom should be clean, ventilated and free of the corrosive gas.

VIII TRANSPORTATION of the MOTOR

The motor should be put carefully and avoided hitting and impacting during transportation. And the corrosion substance, such as the sour and alkali, etc should not be put with the motor. Moreover, the motor should not be transported in the open, and pay attention to the waterproof and dustproof, and avoid the rain, snow and the mechanical damage.

IX PROTECTION of the MOTOR

9.1 The motor structure is protected based on GB 4208—2008/IEC 60529: 2001 *Case Protection Grade (IP Code)*, and IP65 grade of GB/T 4942.1—2006 *Protection Grade (IP Code) of Rotation Motor Overall Structure*. It prevents the human body from touching the dangerous parts in the motor and interference from the external substance to guarantee the motor working normally. However, most of the liquid, such as the cutting fluid and lubricant, etc is with the strong seepage force, and if the motor touches such liquid for a long time, it may cause the motor can't work normally or shorten the service life. Therefore, the proper protection measure should be taken during the motor installation and try to avoid contacting the above liquid and soaking the motor in the liquid, which is shown as figure 7.

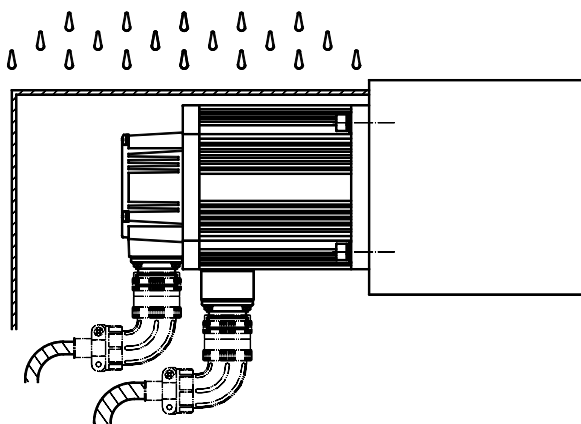


Fig. 7

9.2 When the motor cables are arranged improperly, it may result the liquid, such as the cutting fluid, gets together at the connector along the cable lead-in, further the motor malfunction. Therefore, the motor connector side should try to get down or along the horizontal direction during installation, which is shown as figure 5.

9.3 When the motor connector side gets along the horizontal direction, the cable should be bent as the semi-circle of drop shape before connecting the connector, which is shown as figure 8.

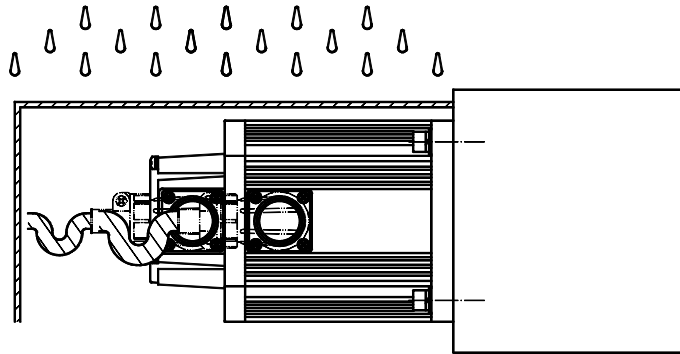


Fig. 8

9.4 Because of the motor structure, when the connector should be put upside, the protection measure should be taken, which is shown as figure 9.

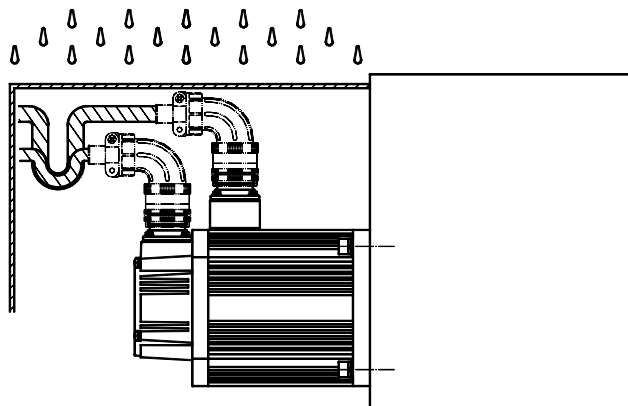


Fig. 9

X WARRANTY

On condition that the motor is transported, stored, installed, debugged and repaired based on the operation regulations, We is responsible for the motor repair free in 12 months from the delivery date (on the basis of the dispatch voucher) if the motor is damaged or can't be used normally due to the quality.

CNCmakers Limited

Address: No.168, Xiadu Road, Haizhu District, Guangzhou, China 510300

Email: info@CNCmakers.com

Website: www.CNCmakers.com

Tel: +86-138-24444158

Fax: +86-20-84185336