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HCFA

Innovation Integrity Service

Zhejiang Hechuan Technology Co.LTD
WWW.HCFA.COM.CN

Headquarter address
No.9,Fucai Road, Longyou industrial Zone, Quzhou City, Zhejiang Province, P.R.C
Hangzhou R&D Center
Floor 4, Block D, Quzhou Overseas Haichuang Park, No.1001, Wenyi West Road, Yuhang District, Hangzhou City, Zhejiang Province, P.R.C

WhatsApp LINE

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Due to the delay in updating the paper version, please refer to the official website for the latest product information

Y7 Smart High-end Servo System

2023.06

With 5S design concept, move towards a higher goal!

Smart !

Strong !

Super !

Safety !

Satisfied !

HN-Y7S Servo System

Y7S the new generation of servo system, to make our customer more satisfied!

Smart!

Rich voltage levels and power specifications

Power specifications

- AC220V — 50W ~ 2KW
- AC380V — 1KW ~ 3KW ~ 22KW

The whole series of Y7S servo drives can match with our X2/X6 series servo motor, which is able to provide 14 different servo drive power specifications of 220v 50W~2KW and 380v 1KW~22KW and 76 kinds of servo motor specifications to choose from. It can meet the application requirements of different customers.

Naming Rule HN-Y7 E A 300 T- S

(1) (2) (3) (4) (5)

1 Functional classification	
N	General-purpose type
E	Standard type
F	Full-functional type

2 Product type note 1	
A	Pulse
B	EtherCAT bus
K	MIII bus
R	profinet bus

3 Power specifications	
010	100W
020	200W
040	400W
075	750W
100	1KW
150	1.5KW
200	2KW
300	3KW
500	5KW
600	6KW
750	7.5KW
111	11KW
151	15KW
221	22KW

4 Voltage specifications	
A	AC220V
T	AC380V

5 Product series branch	
S	Smart type

Same model for 400W or below -- Easier model selection

Old Y7 series model selection

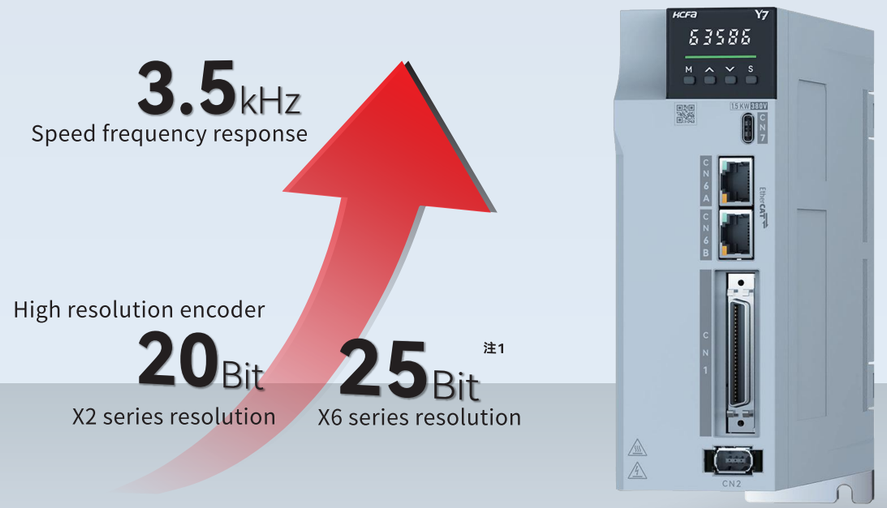
New Y7S series model selection

More flexible system matching, for servo motor with power below 400W, customers can order 400W servo drive, which can reduce stock categories of dealers and shorten delivery time.

Note 1:MECHATROLINK bus and PROFINET bus models will be launched in 2024

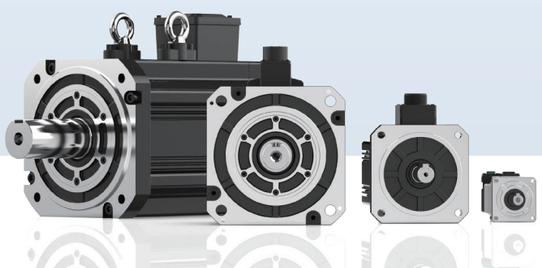
Strong!

Faster response, higher precision, maximize the system performance



The speed loop has a high response of 3.5kHZ, and the accuracy of the encoder is increased to 20bit with X2 series servo motor, and the accuracy of the encoder is increased to a higher 25bit with X6 series servo motor,maximizing the performance of the system and equipment!

Higher speed, higher torque, to realize high-speed equipment!



6500 Low power rpm

350 MAX %

4000 High power rpm

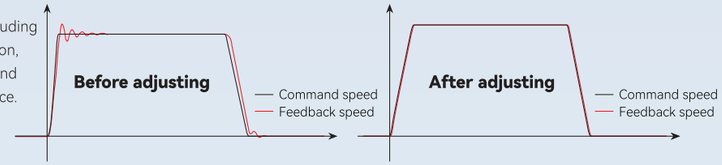
300 MAX %

Y7S series is equipped with X2 and X6 series servo motors,which can obtain higher speed and higher torque, shorten positioning time andimprove production efficiency!

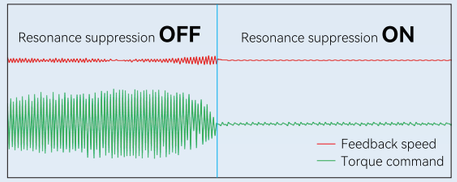
Note 1:X6 series 25Bit servo motor will be launched in Q4 of 2023

One-button self-tuning

Only one button is needed to do the advanced auto-tuning, including resonance suppression, model tracking, and friction compensation, which can be adjusted easily according to different equipment and operating characteristics to maximize the mechanical performance.



Advanced frequency vibration suppression capability

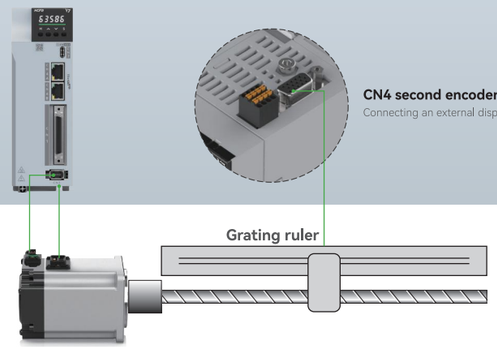


Through the advanced control algorithm, 6 groups of vibrations with different frequencies can be suppressed at the same time, 3 groups of which can suppress low frequency vibrations below about 100Hz, effectively solving the vibration at the end of the cantilever beam mechanism;The other three groups can effectively suppress high-frequency vibrations of 100Hz~5000HZ, improve the gain and rigidity of the mechanism, and effectively suppress the resonance phenomenon of the mechanical structure.

Friction compensation

Improve the accuracy of circular arc trajectory in the trajectory interpolation control of XY mechanism. It can effectively reduce the over-quadrant protrusion caused by the different friction of the mechanism when the servo motor is commutated.

Support full-closed loop control



CN4 second encoder interface
Connecting an external displacement sensor

Full-closed loop control can be externally connected to a grating ruler or an encoder to achieve high-precision positioning by reading the position of the mechanism!

Super!

Super motion bus controlled by "Chip"

The models of Ethercat, MECHATROLINK or profnet, are supported by the same bus chip which is independently developed by HCFA.[note 1]

EtherCAT

Transmission speed	Command communication cycle	Transmission distance
100 Mbps	125 µs	100 m

IoT function to control devices remotely

With the design concept of convenient application, the new wireless Bluetooth[note 2] function is added in Y7S standard model. Relying on Bluetooth, it not only enables convenient commissioning such as parameter editing, status monitoring, trial run through cell phones and tablets, but also extends the remote IoT function.

MECHATROLINK

Transmission speed	Command communication cycle	Transmission distance
100 Mbps	125 µs	100 m

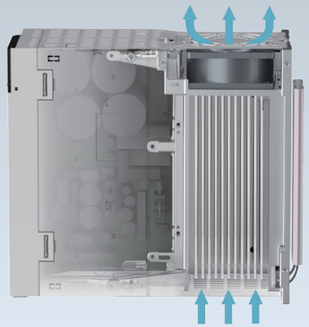
Note 1: MECHATROLINK bus and PRODINET bus model will be launched in 2024

Note 2: Bluetooth function will be launched in Q2 2023

Safety!

Keep safety of users and machines

Withstand Extreme Test



Optimized independent heat dissipation air duct design not only improves heat dissipation efficiency but also isolates from power components to avoid dust and high humidity intrusion into the servo drive. Reliability of products is greatly improved.

Some of the models are built-in brake resistor, the base plate is in hidden installation for a larger heat dissipation area.

Safety function

Safe Torque Off

STO

STO （Safe Torque Off)

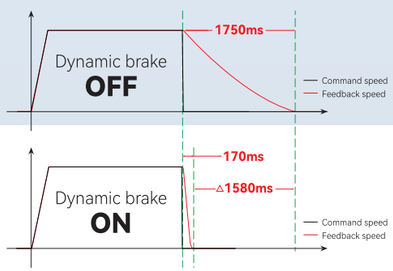
When danger comes, the system triggers the base blocking function of the servo drive, which can cut off the current of the motor in hardware and stop the operation of the equipment as fast as possible to protect users and machines.

Dynamic brake

DB

DB （Dynamic Brake)

When the servo motor is running, if the power failure or alarm occurs, the servo will turn OFF, quickly to protect users and machines.



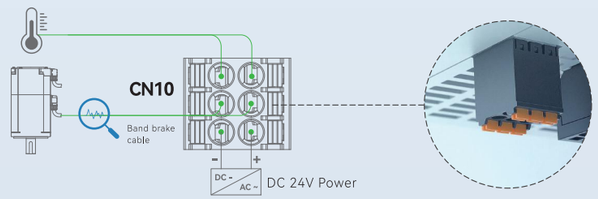
Temperature Detection and Brake Detection

Temperature detection

TD

TD(Temperature Detection)

Y7S standard type is built-in temperature detection unit and can be connected with external temperature sensor, note 1 which can better protect the stable operation of the motor.



Brake detection

BD

BD(Brake Detection)

Y7S standard type is built-in brake control relay, with brake disconnection detection function to make brake control more reliable. note 2

Note 1: KTY84 temperature sensor is recommended

Note 2: BD function will be launched in Q2 2023

AC 220V Servo Drive Specifications

Power(KW)	Pulse	EtherCAT	MECHATROLINK-III[note1]	PROFINET[note1]	Power supply	Control power
0.4	HN-Y7□A040A-S	HN-Y7□B040A-S	HN-Y7□K040A-S	HN-Y7□R040A-S	Single/Three-phase AC 220V	Common main circuit power
0.75	HN-Y7□A075A-S	HN-Y7□B075A-S	HN-Y7□K075A-S	HN-Y7□R075A-S		
1	HN-Y7□A100A-S	HN-Y7□B100A-S	HN-Y7□K100A-S	HN-Y7□R100A-S	Single/Three-phase AC 220V	
1.5	HN-Y7□A150A-S	HN-Y7□B150A-S	HN-Y7□K150A-S	HN-Y7□R150A-S		
2	HN-Y7□A200A-S	HN-Y7□B200A-S	HN-Y7□K200A-S	HN-Y7□R200A-S		

Note 1: E:Standard type, F:Full function type, K: MECHATROLINK-III, R: PROFINET will be launched in 2024

AC380V Servo Drive Specifications

Power(KW)	Pulse	EtherCAT	MECHATROLINK-III[note1]	PROFINET[note1]	Power supply	Control power
1	HN-Y7□A100T-S	HN-Y7□B100T-S	HN-Y7□K100T-S	HN-Y7□R100T-S	Three-phase AC 380V	Common main circuit power
1.5	HN-Y7□A150T-S	HN-Y7□B150T-S	HN-Y7□K150T-S	HN-Y7□R150T-S		
2	HN-Y7□A200T-S	HN-Y7□B200T-S	HN-Y7□K200T-S	HN-Y7□R200T-S		
3	HN-Y7□A300T-S	HN-Y7□B300T-S	HN-Y7□K300T-S	HN-Y7□R300T-S		
5	HN-Y7□A500T-S	HN-Y7□B500T-S	HN-Y7□K500T-S	HN-Y7□R500T-S		AC380V
6	HN-Y7□A600T-S	HN-Y7□B600T-S	HN-Y7□K600T-S	HN-Y7□R600T-S		
7.5	HN-Y7□A750T-S	HN-Y7□B750T-S	HN-Y7□K750T-S	HN-Y7□R750T-S		
11	HN-Y7□A111T-S	HN-Y7□B111T-S	HN-Y7□K111T-S	HN-Y7□R111T-S		
15	HN-Y7□A151T-S	HN-Y7□B151T-S	HN-Y7□K151T-S	HN-Y7□R151T-S		
22	HN-Y7□A221T-S	HN-Y7□B221T-S	HN-Y7□K221T-S	HN-Y7□R221T-S		

Note 1: E:Standard type, F:Full function type, K: MECHATROLINK-III, R: PROFINET will be launched in 2024

Specifications

Function	Pulse HN-Y7□A****-S			EtherCATbus HN-Y7□B****-S		
	Full-functional type	Standard type	General-purpose type	Full-functional type	Standard type	General-purpose type
I/O	7DI / 5DO	7DI / 5DO	7DI / 5DO	5DI / 2HDO / 3DO	5DI / 3DO	-
Analog input	2 AI	2 AI	-	2 AI	-	-
Analog output	1 AO	1 AO	-	1 AO	1 AO	-
Pulse dividing output	✓	✓	✓	✓	-	-
Full-closed loop	✓	-	-	✓	-	-
STO	✓	-	-	✓	✓	-
Dynamic brake	✓	✓	-	✓	✓	-
Built-in brake	✓	✓	-	✓	✓	✓
RS485	✓	✓	-	-	-	-
Bluetooth	✓	✓	-	✓	✓	-

Note: "✓" :With the function,"-":Without the function

AC220V General Specifications

Items			Specification				
Name HN-Y7E□***A-S[Note1]			040	075	100	150	200
Max. applicable motor capacity(kW)			0.4	0.75	1.0	1.5	2.0
Continuous output current(Arms)			2.8	5.5	7.6	11.6	15.6
Max. instantaneous output current(Arms)			9.3	16.9	17	28	39
Main circuit	Supply voltage(Vrms)		Single phase AC200~240V, 50/60Hz		Three-phase AC200~240V, 50/60Hz		
	Current(Arms)		2.5	4.1	5.7	7.3	10
Control power			Common main circuit power				
Regenerative resistor	Built-in resistor	Resistance(Ω)	-	50	50	50	20
		Capacity(W)	-	40	80	100	100
	External mini. allowable resistance(Ω)		40	40	35	20	20
Over-voltage class			III				

AC380V General Specifications

Items			Specification								
Name HN-Y7E□***A-S[Note1]			100	150	200	300	500	600	750	111	151	221
Max. applicable motor capacity(kW)			1.0	1.5	2.0	3.0	5.0	6.0	7.5	11	15	22
Continuous output current(Arms)			4.7	5.4	8.4	11.9	16.5	20.8	25.7	28.1	37.2	52
Max. instantaneous output current(Arms)			16.9	17	24	31	44	52	65	70	88	105
Main circuit	Supply voltage(Vrms)		Three-phase AC330~440V,50/60Hz									
	Current(Arms)		2.9	4.3	5.8	8.6	14.5	17.4	21.7	23.4	29.6	43.4
Control power			Common main circuit power				AC330V~440V,50/60Hz					
Regenerative resistor	Built-in resistor	Resistance(Ω)	50	50	50	40	25	20	20	-	-	-
		Capacity(W)	80	80	100	100	100	100	100	-	-	-
	External min. allowable resistance(Ω)		40	40	40	35	25	20	20	15	10	10
Over-voltage class			III									

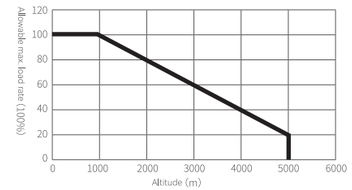
Note 1: □ indicates control mode. A is Pulse type, B is EtherCAT, K is MECHATROLINK-III, R is PROFINET. Type K and R will be launched in 2024

Technical Specifications

Items			Specification
Control mode			Position control, speed control, torque control, internal speed control Internal speed control - speed control, internal speed control - position control, internal speed control - torque control Position control - Speed control, Position control - Torque control, Torque control - Speed control Speed control - Speed control with zero fix function Position control - Position control with command pulse prohibition function Full closed-loop control (only full-function type supported)
Position control	Note 2 Pulse input	Max. input pulse frequency	Open collector pulse input: frequency not more than 200KHz, pulse width larger than 2.5us
			Differential common pulse input: frequency not more than 500KHz, pulse width larger than 1us
			Differential high-speed pulse input: frequency not more than 4MHz, pulse width larger than 125ns
		Input pulse form	Pulse + direction, A-Phase + B-Phase, CW+CCW
		Electronic gear setting	B/A
		Command filter	Acceleration and deceleration filters, moving average filter
	Note 2 Pulse output	Frequency division	< 16384
		Output pulse form	Differential Output: A/B/Z; Collector output: Z signal
Speed control	Control method		External analog input
	Analog input voltage range		DC±10V (Default 6V, corresponding rated speed can be modified by parameters)
	Torque limit function		Parameter setting, parameter setting+I/O control, analog input
Torque control	Control mode		External analog input
	Analog input voltage range		DC±10V (Default 3V, corresponding rated speed can be modified by parameters)
	Speed limit function		Parameter setting, parameter setting+I/O control, analog input
Internal speed control	Control mode		I/O Control
	Movement speed selection		Support three speed switching by parameters setting
General function	Control signal	Input/Output	7IN/5OUT Note 2
	Analog signal	Input/Output	2IN (For speed control, torque control) /1OUT (For motor speed and torque monitoring) Note 2
	STO		Supported only for some models Note 2
	Second encoder interface		Supported only for some models Note 2
	Inertia self-estimation		Provided
	Tuning-less function		Provided
	One-button tuning		Provided
	Friction compensation		Provided
	Vibration suppression frequency 1		Provided
	Vibration suppression frequency 2		Provided
	Adaptive notch filter		Provided
	Encoder output division and multiplication		Provided
	Dynamic brake		Built-in, supported only for some models Note 2
	Regeneration function		Built-in resistor, A larger power braking resistor can be connected
	Protective function		Over-voltage, low-voltage, phase loss, over-current, overheat, overload, encoder error, over speed, excessive position deviation, parameter error, etc.
	Communication	USB	For PC communication(Used for HCServoWorks.Y7)
		Industrial Networks	RS-485、EtherCAT、MECHATROLINK-III、Note 1 PROFINET Note 1

Note 1: The models of MECHATROLINK-III&PROFINET will be launched in 2024
Note 2: Refer to page 11 for details

Environmental Specifications

Items	Specifications
Ambient temperature	0℃ ~ + 55℃ (10% reduction for every 5 degrees of increase in ambient temperature above 45 degrees)
Ambient temperature for storage	-20℃ ~ + 65℃ (Max.temperature : 80℃ 72 hours without condensation)
Ambient humidity for use	20% ~ 85%RH or less(Without condensation)
Ambient humidity for storage	20% ~ 85%RH or less(Without condensation)
Vibration resistance	5.88m/s^2 (0.6G) or less, 10-60Hz (Avoid being used at resonance frequency)
Impact resistance	Acceleration up to 100m/s^2 or less (XYZ)
Protection level	IP20
Cleanliness	No corrosive gas, combustible gas No water, oil, chemical splash
Altitude	1000m or below. When the altitude exceeds 1000m, derating before use. It is recommended to refer to the following table or consult our technical staff 
Others	Strong magnetic field, radiation, etc

Note: Interface Difference Specifications

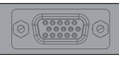
Due to different servo drives, the interface differences between models are as follows:

Interface	Function	Pulse HN-Y7□A****-S			EtherCAT bus HN-Y7□B****-S		
		Full-functional type	Standard type	General-purpose type	Full-functional type	Standard type	General-purpose type
CN1	IO signal	✓	✓	✓	✓	✓	-
CN3	STO security interface	✓	-	-	✓	✓	-
CN4	Second encoder interface	✓	-	-	✓	-	-
CN6	Communication interface	RS485	RS485	-	EtherCAT	EtherCAT	EtherCAT
CN10	Brake interface	✓	✓	-	✓	✓	✓

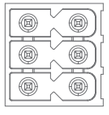
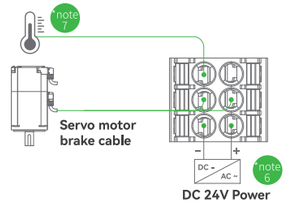
Note 3: CN3 STO security interface definition

STO interface	STO connector	Interface layout	pin1	pin2	pin3	pin4	pin5	pin6	pin7	pin8
		EDM+ 8 7 EDM- HWBB2+ 6 5 HWBB2- HWBB1+ 4 3 HWBB1- NC- 2 1 NC+	NC+	NC-	HWBB1-	HWBB1+	HWBB2-	HWBB2+	EDM-	EDM+
			-	-	Input1-	Input1+	Input2-	Input2+	Output-	Output+

Note 4: CN4 second encoder interface definition

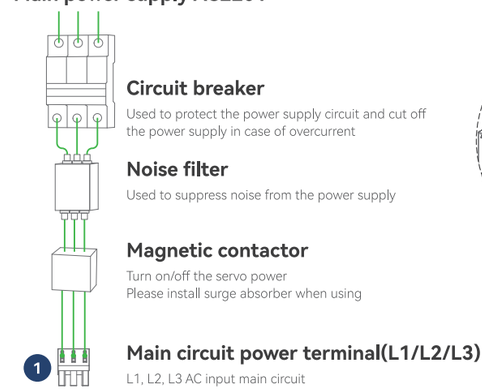
	pin1	pin2	pin3	pin4	pin5	pin6	pin7	pin8	pin9	pin10	pin11	pin12	pin13	pin14	pin15
Incremental ABZ	5V	0V	Hall U+	Hall U-	Hall V+	EXA-	EXB-	EXZ-	Hall W+	Hall V-	EXA+	EXB+	EXZ+	Hall W-	-
sine cosine	5V	0V	Hall U+	Hall U-	Hall V+	Sin-	Cos-	-	Hall W+	Hall V-	Sin+	Cos+	-	Hall W-	-
BiSS-C	5V	0V	-	-	-	CLK-	DATA-	-	-	-	CLK+	DATA+	-	-	-
Tamagawa	5V	0V	-	-	-	DATA-	-	-	-	-	DATA+	-	-	-	-

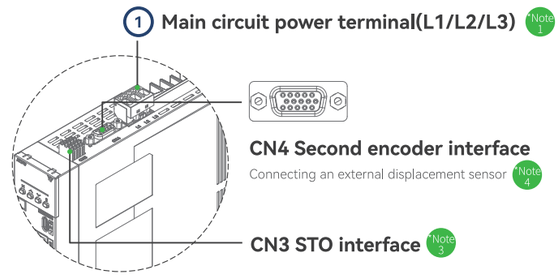
Note 5: CN10 brake and temperature detection interface definition

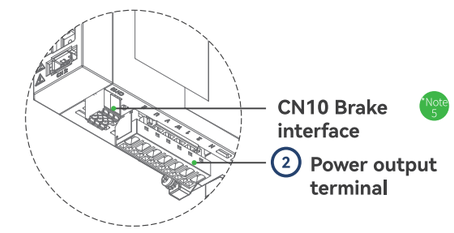
Drive brake interface	Brake and temperature detection connector	Interface layout	pin1	pin2	pin3	pin4	pin5	pin6
		T- 6 5 T+ BK- 4 3 BK+ 0V 2 1 24V	24V	0V	BK+	BK-	T+	T-
			24V Power		Brake cable		Temperature control+	Temperature control-

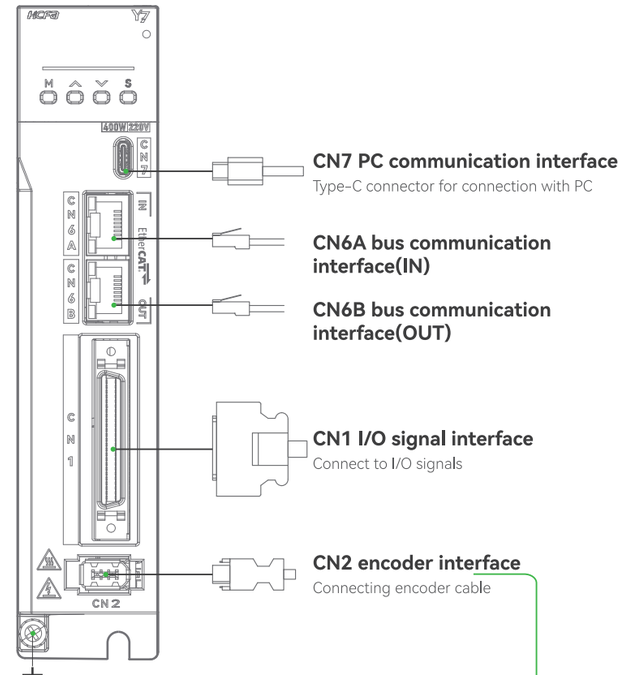
Note 6: Please do not share the power supply of DC24V brake with CN1 control circuit
Note 7: The specification of NTC is KTY84

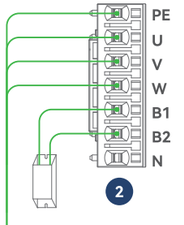
AC220V 2kW and below





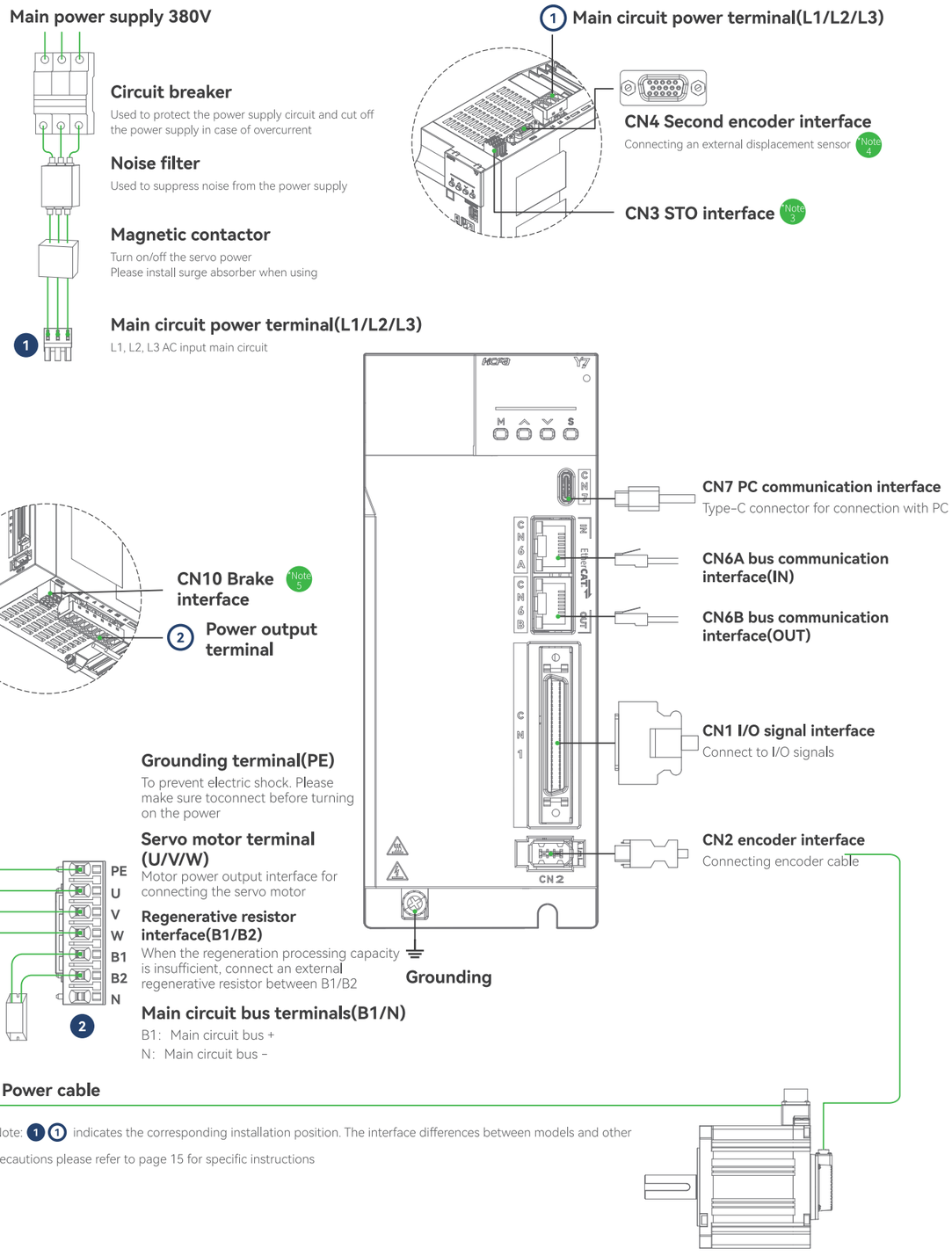






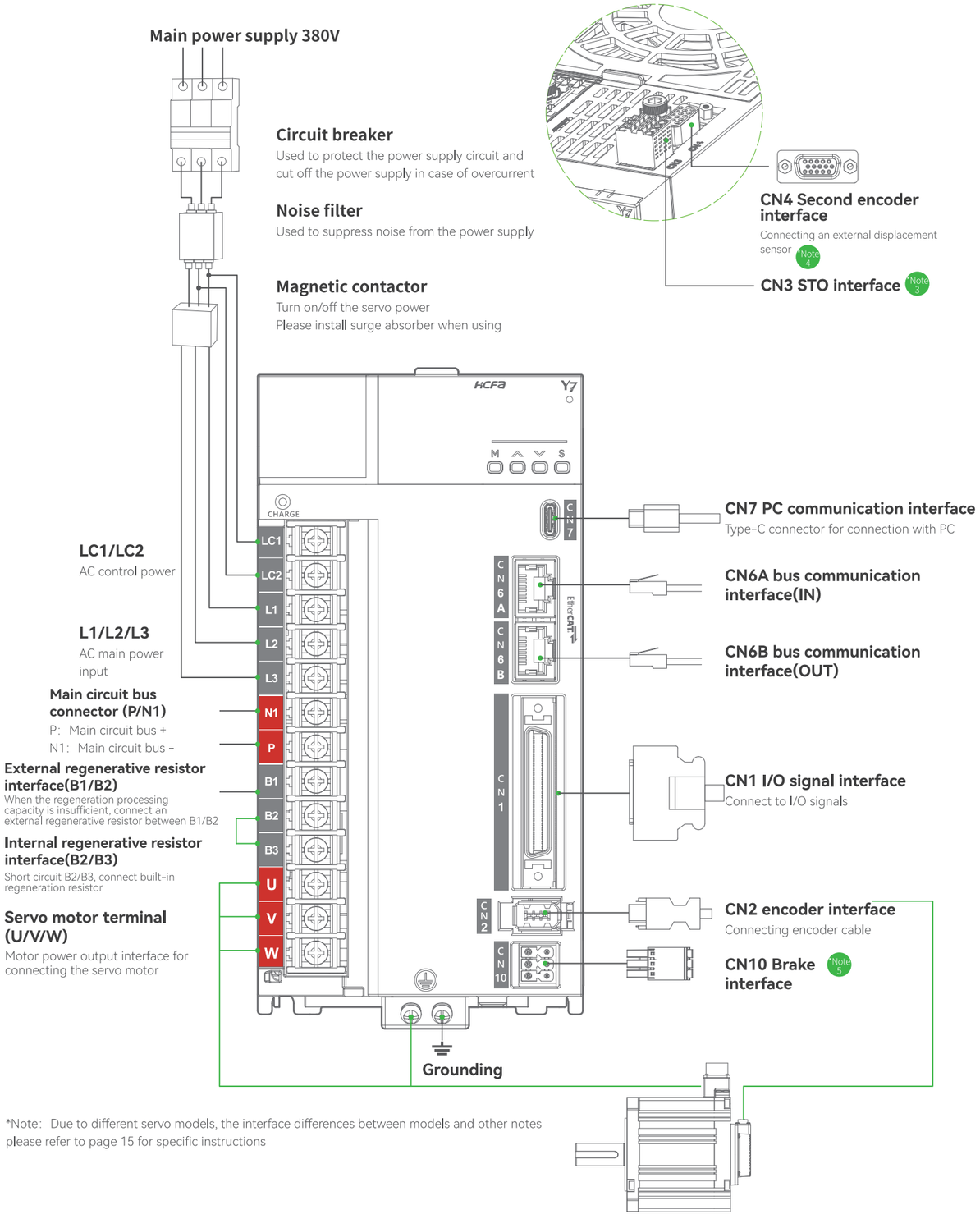
*Note: 1 1 indicates the corresponding installation position. The interface differences between models and other precautions please refer to page 15 for specific instructions

AC380V 3kW and below



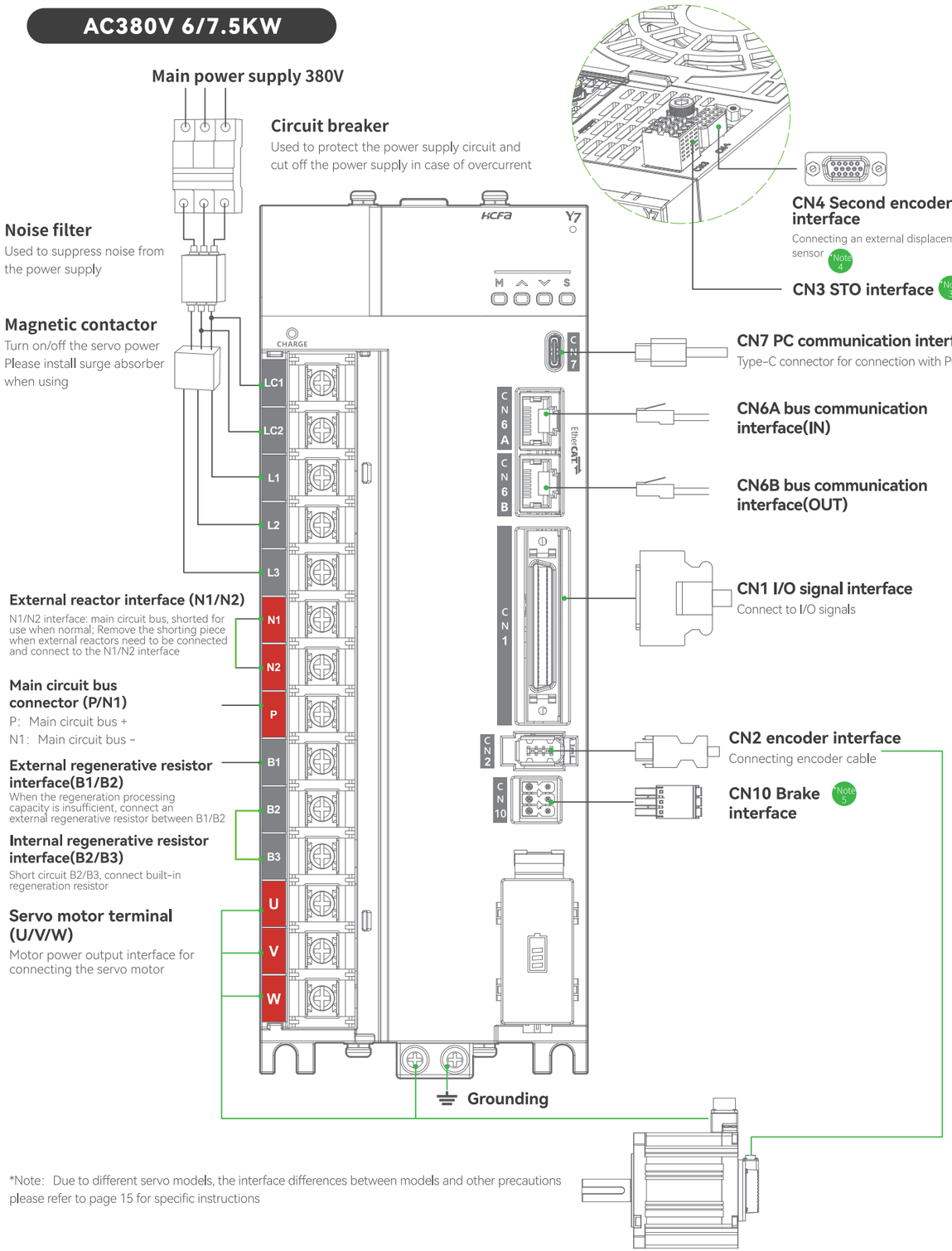
*Note: 1 1 indicates the corresponding installation position. The interface differences between models and other precautions please refer to page 15 for specific instructions

AC380V 5kW



*Note: Due to different servo models, the interface differences between models and other notes please refer to page 15 for specific instructions

AC380V 6/7.5KW

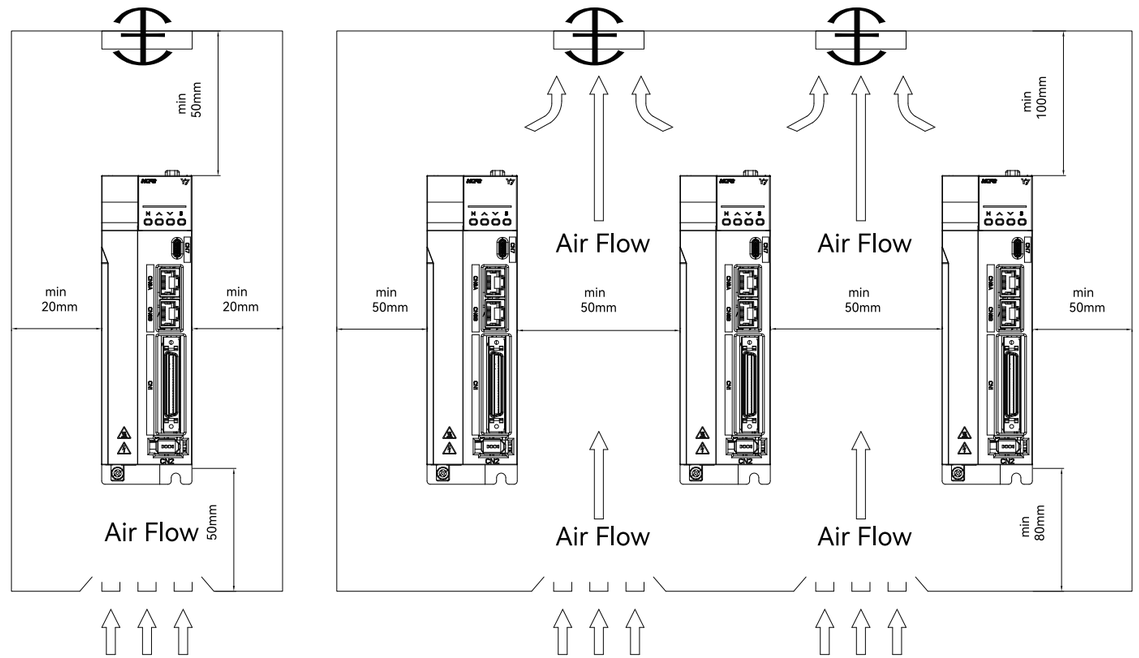


*Note: Due to different servo models, the interface differences between models and other precautions please refer to page 15 for specific instructions

Points for Correct Wiring

1. The power supply of control circuit and main circuit should be wired from the same main power supply.
2. Please use Shielded Twisted Pair for user I/O cable.
3. Use thicker wire (2.0mm² or more) for the grounding cable if possible.
4. Ground the 220V power input type servo unit with a grounding resistance of 100Ω or less; Ground the 380V power input type servo unit with a grounding resistance of 10Ω or less.
5. Single-point grounding must be done.
6. When servo motor and machinery is insulated, please ground the servo motor directly.

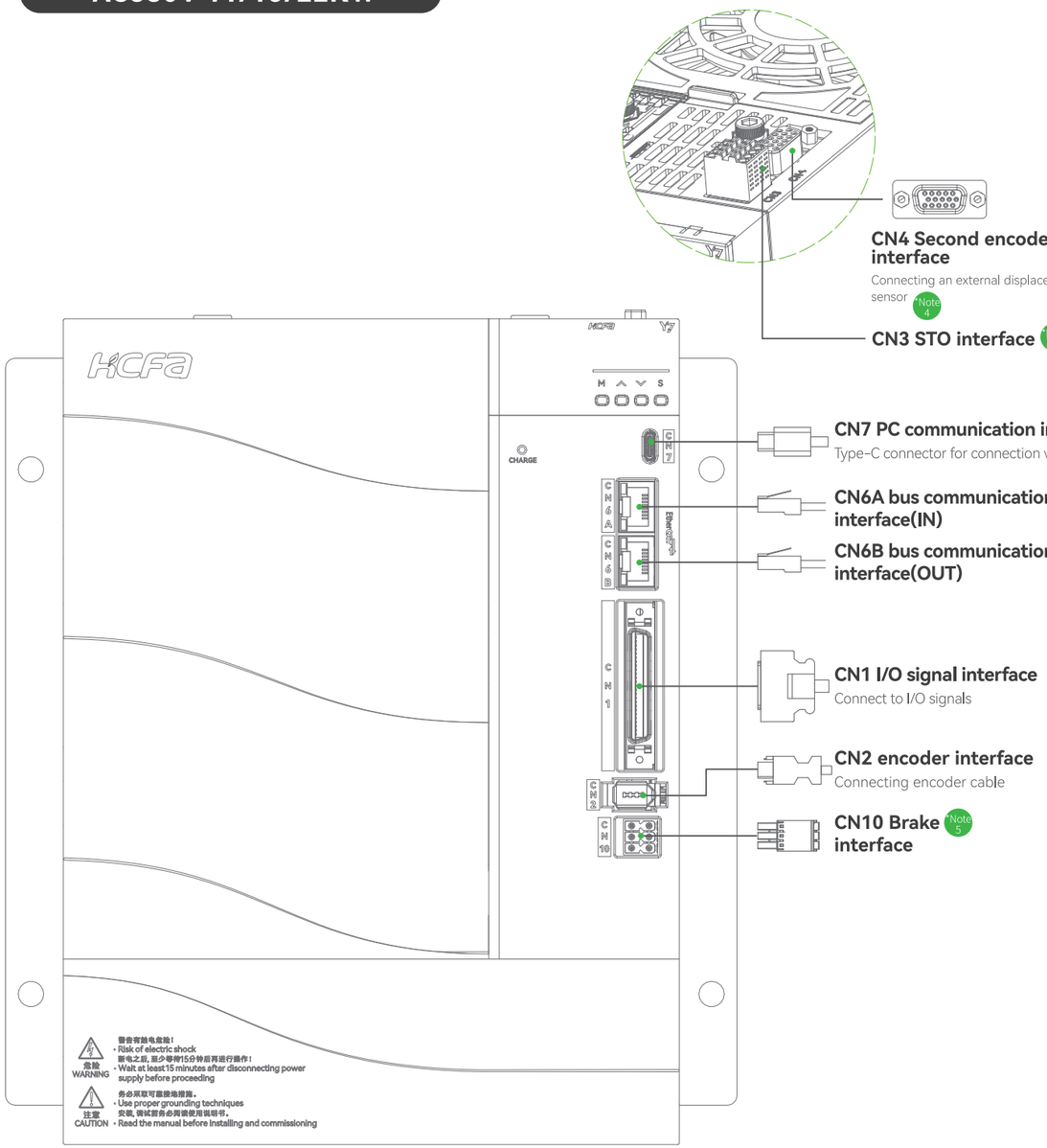
When installing more than one servo drive in the control cabinet, ensure that the following space are left around the servo drives.

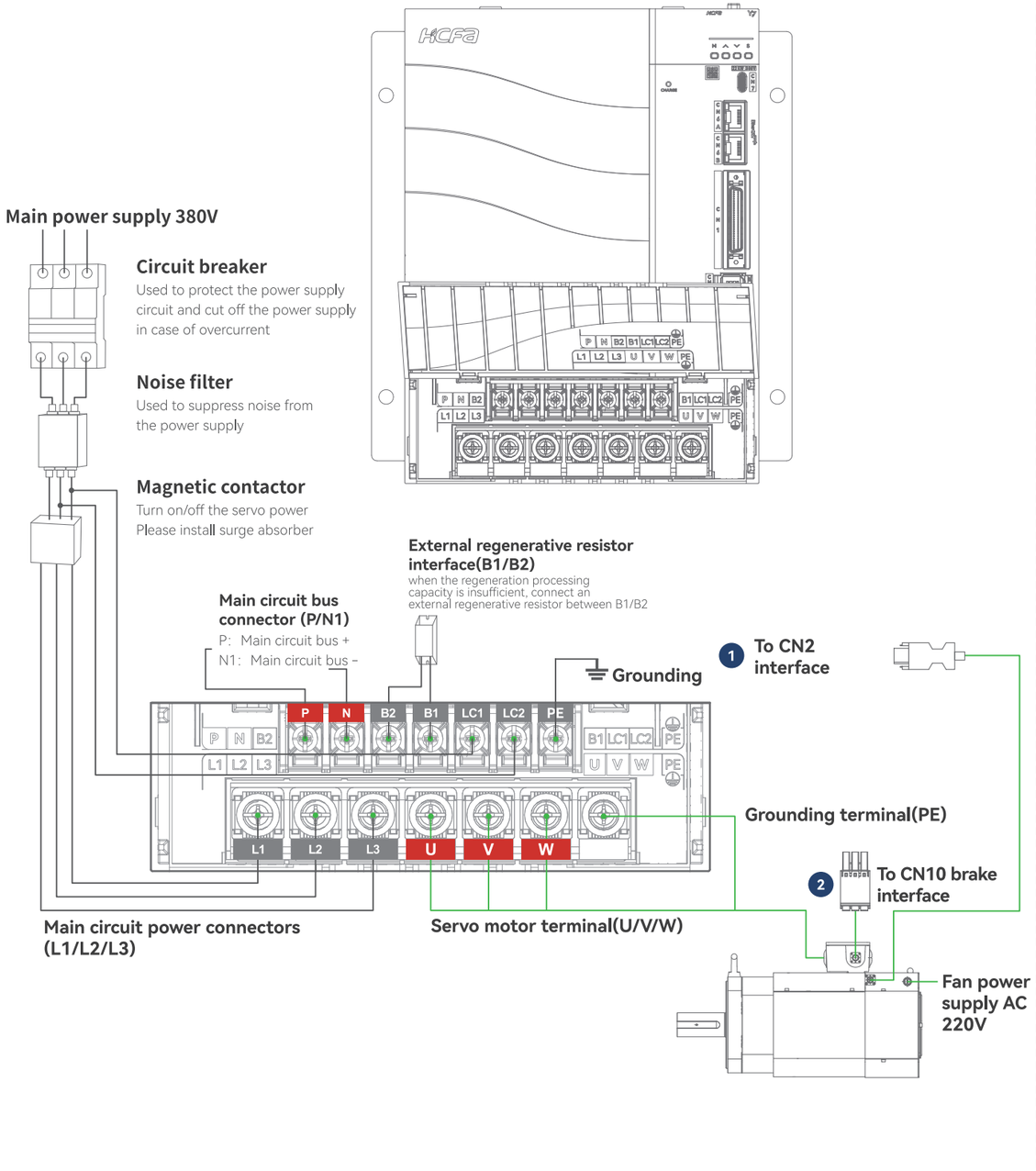


Installation Precautions

- 1. When installing the servo driver, do not seal its suction and discharge holes or place it upside down, otherwise it will cause malfunction.
- 2. In order to get a relatively low air resistance for the cooling fan to effectively dissipate heat, please follow the recommended installation space distance when installing more than one servo drive.
- 3. Please avoid being installed on the other servo drives, because the heat generated by the lower servo drive rises during operation, easily causing unnecessary temperature increase.
- 4. Do not install heat source components such as braking resistors near the servo drive.
- 5. When the electric cabinet environment is in a high humidity environment, install a dehumidification device to avoid condensation.

AC380V 11/15/22KW



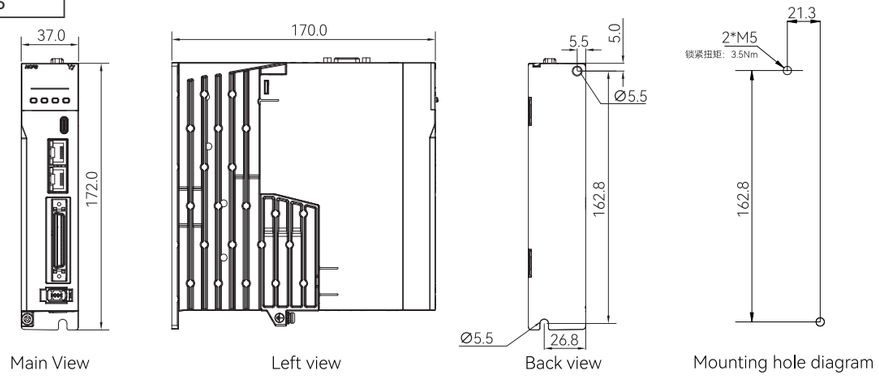


*Note: 1 1 indicates the corresponding installation position. The interface differences between models and other precautions please refer to page 15 for specific instructions

For 220V models of 400W

Unit: mm

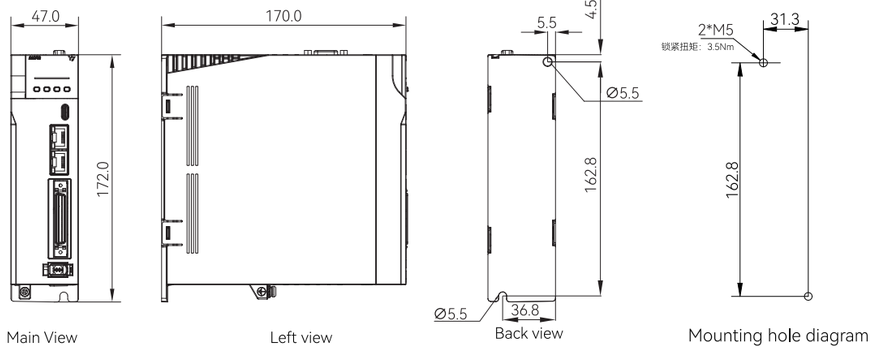
Weight (KG)
0.76



For 220V models of 750W/1KW

Unit: mm

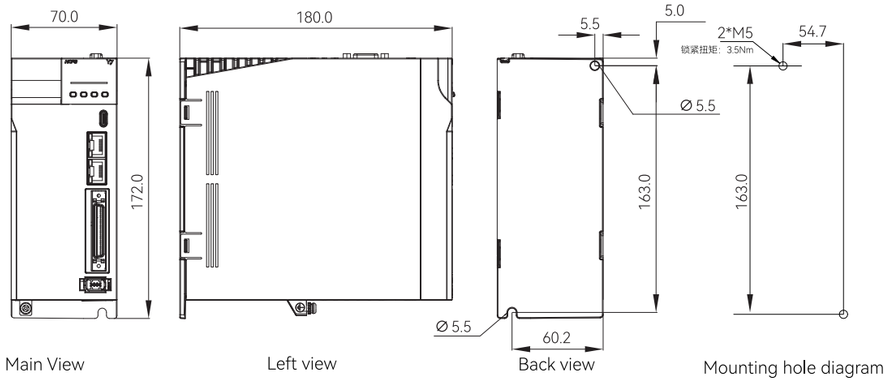
Weight (KG)
1.01



For 220V models of 1.5KW/2KW

Unit: mm

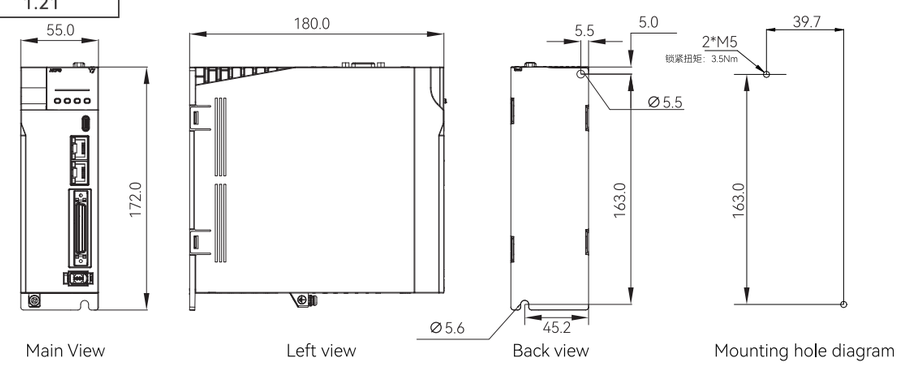
Weight (KG)
1.45



For 380V models of 1KW/1.5KW

Unit: mm

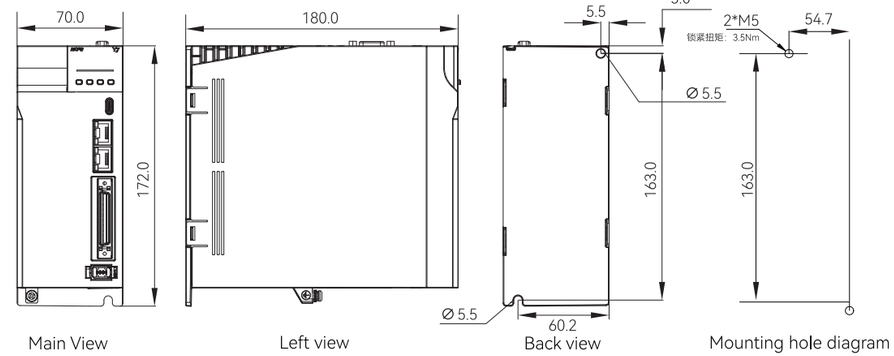
Weight (KG)
1.21



For 380V models of 2KW/3KW

Unit: mm

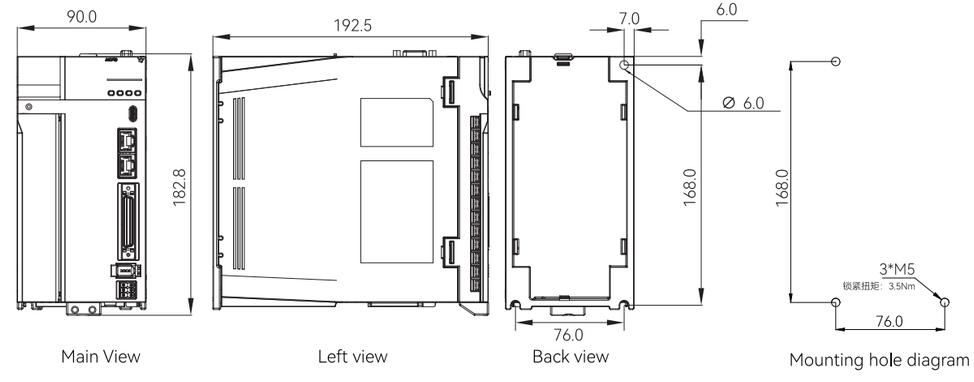
Weight (KG)
1.5



For 380V models of 5KW

Unit: mm

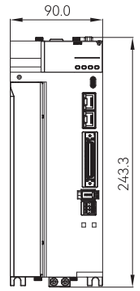
Weight (KG)
2.2



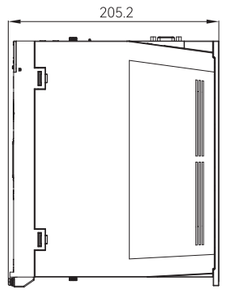
For 380V models of 6KW/7.5KW

Unit: mm

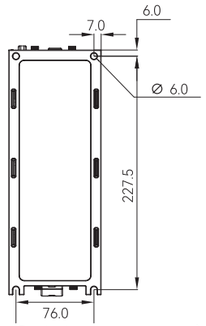
Weight (KG)
3.6



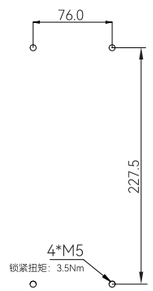
Main View



Left view



Back view

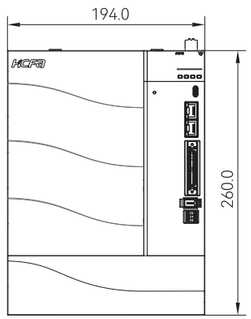


Mounting hole diagram

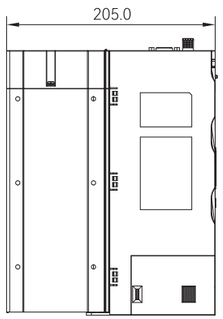
For 380V models of 11KW/15KW/22KW

Unit: mm

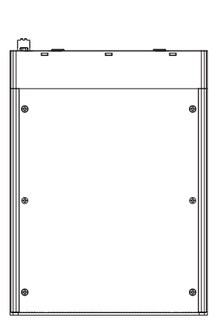
Weight (KG)
8.77



Main View

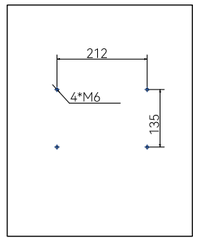


Left view

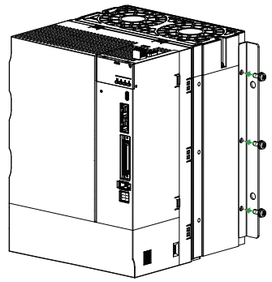


Back view

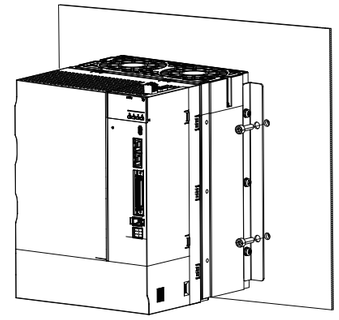
Base-mounted



Step1
Make four M6 threaded holes in the back panel of the electrical cabinet, the specific dimensions are shown in the figure

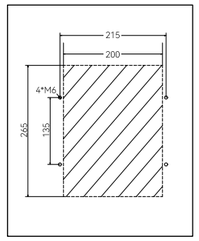


Step2
Take out the mounting bracket and six M5*12 screws from the package, fix the mounting bracket on both sides of the drive with screws, as shown in the figure

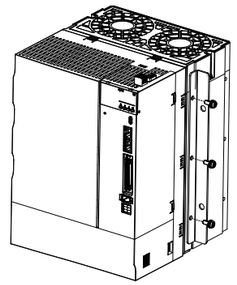


Step3
Use M6 socket head cap screws to fix the drive to the back panel of the cabinet and ensure that it is secure with recommended locking torque of 3N-m

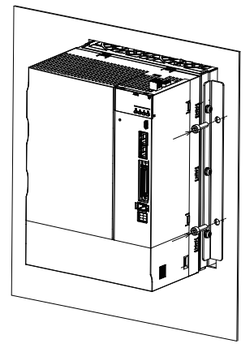
Rack-mounted



Step1
Make four M6 threaded holes in the back panel of the electrical cabinet and remove the shaded area with the specific dimensions shown in the figure



Step2
Take out the mounting bracket and six M5*12 screws from the package, fix the mounting bracket on both sides of the drive with screws, as shown in the figure



Step3
Push the drive into the hole, and use M6 socket head cap screws to fix the drive to the back panel of the cabinet and ensure that it is secure with recommended locking torque of 3N-m

Precautions

- 1. When installing the servo driver, do not seal its suction and discharge holes or place it upside down, otherwise it will cause malfunction.
- 2. In order to get a relatively low air resistance for the cooling fan to effectively dissipate heat, please follow the recommended installation space distance when installing more than one servo drive.
- 3. Please avoid being installed on the other servo drives, because the heat generated by the lower servo drive rises during operation, easily causing unnecessary temperature increase.
- 4. Do not install heat source components such as braking resistors near the servo drive.
- 5. When the electric cabinet environment is in a high humidity environment, install a dehumidification device to avoid condensation.
- 6. Please refer to page 20 for other precautions.

X2 Series Servo Motor

AC220V **8** Major Series

43 Models

50W-2.3KW

0.16N.m-15N.m

Adopt 17/20bit*Note1 high precision magnetic encoder

- With an x8 encoder resolution from 17bit to 20bit, now up to 1.04 million pulses per revolution, the higher positioning accuracy achieved.

Motor Electronic Label

The encoder stores motor specifications, parameters and other information, the drive will be automatically matched and plug-and-play

- Higher protection level, easily cope with a variety of harsh applications

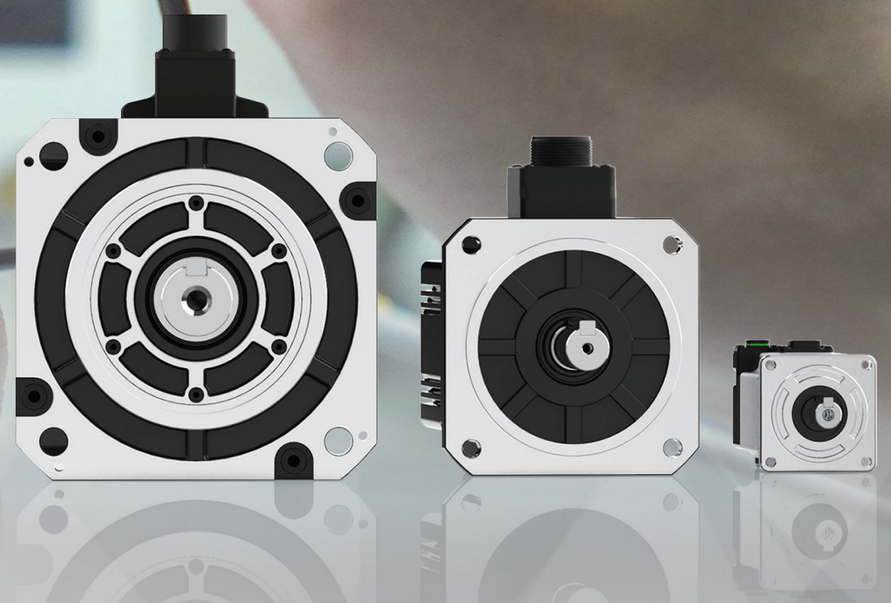
High precision

Anti-earthquake

Oil-resistant

Dustproof

*Note1: X2 series servo motor (PNXXXM version) has 20bit resolution when matching with Y7 series servo drives, and 17bit resolution when matching with other servo drives.



SV-X2 MA 040 A - N 2 C A - ****

1 2 3 4 5 6 7 8 Special specifications

1	Series name
SV-X2series	20BIT(PNXXXM Version)

2	Inertia specifications
MA	Low inertia
MM	Middle inertia
MMS	Middle inertia & high speed
MH	High inertia
MHH	Ultra high inertia
MQ	Special flange/Flat-type/small flange
MG	Low-speed & high-torque
MGS	Low-cogging cutting

3	Power specification
005	50W
010	100W
015	150W
020	200W
040	400W
075	750W
080	800W
085	850W
100	1KW
130	1.3KW
150	1.5KW
180	1.8KW
200	2KW
230	2.3KW

4	Design number
A/B/C/S	A: Standard speed B/C/S... Indicates a design sequence different from the standard speed
E/F	Indicates the design sequence of special flange specifications under the same index
H/K	Indicates the design sequence of special inertia

5	Brake specifications
N	No brake
B	With brake

6	Voltage specifications
2	AC220V

7	Specifications
K	Lead wire type/Keyway shaft/no oil seal
L	Lead wire type/Keyway shaft/with oil seal
C	Connector type/keyway shaft/with oil seal*1
D	Connector type/keyway shaft/ no oil seal*1
J	Compact type(customized)

8	Encoder specifications
N	Single-turn 20bit incremental (PNXXXM version)
A	Multi-turn 20bit absolute (PNXXXM version)
C	Multi-turn 20bit absolute

9	Customization
**	N/A

Note *1: Note 1: From the 2nd quarter of 2021, our company started releasing connector-type servo motor with 40~80 flanges as the regular model.
Lead-wire servo motors will be discontinued from December 2021, if still needed, the customized application process is required.
For details, refer to page 123 or consult our sales staff.

*2: The PNXXXM version of the X2 series motor has 20-bit resolution for Y7 drives and 17-bit resolution for other series drives.

E.g.

20bit Incremental 220v 400W MA Low Inertia Series Naming rule SV-X2 MA 040A-N2CN

20bit Absolute 220v 400W MALow Inertia Series Naming rule SV-X2 MA 040A-N2CA

X2 Series Servo Motor

Series Name	Specifications	50W	100W	150W	200W	400W	600W	750W	900W	1.0KW	1.2KW	1.5KW		1.8KW	2.0KW
	Model name		X2MA010A		X2MA020A	X2MA040A	X2MA060E	X2MA075A	X2MA090E	X2MA100A	X2MA120E	X2MA150A	X2MA150E	X2MA180E	X2MA200A
X2-MA Low inertia	Flange		□40		□60	□60	□110	□80	□110	□100	□110	□100	□110	□110	□100
	Rated [Peak torque]		0.32[1.12]		0.64[1.91]	1.27[3.82]	1.91[5.73]	2.39[7.16]	2.86[8.6]	3.185[9.55]	4[12]	4.77[14.3]	4.77[14.3]	5.73[17.2]	6.37[19.1]
	Inertia: No brake [with brake]		0.041[0.042]		0.16[0.17]	0.28[0.29]	3.1[4.2]	0.96[1.07]	4.5[5.6]	2.03[2.35]	5.9[7]	2.84[3.17]	7.3[8.4]	8.6[9.7]	3.68[4.01]
	Rotation speed: Rated [Max. speed]		3000[6500]		3000[6000]	3000[6000]	3000[5000]	3000[6000]	3000[5000]	3000[5000]	3000[5000]	3000[5000]	3000[5000]	3000[5000]	3000[5000]
	220V		20		20	20	20	20	20	20	20	20	20	20	20
	Model name									X2MM100A		X2MM150A			X2MM200A
X2-MM Middle inertia	Flange									□130		□130			□130
	Rated [Peak torque]									4.77[14.3]		7.16[21.5]			9.55[28.6]
	Inertia: No brake [with brake]									6.18[7.4]		9.16[10.4]			12.1[13.3]
	Rotation speed: Rated [Max. speed]									2000[3000]		2000[3000]			2000[3000]
	220V									20		20			20
	Model name									X2MM100S		X2MM150S			X2MM200S
X2-MMS Middle inertia high speed series	Flange									□130		□130			□130
	Rated [Peak torque]									4.77[14.3]		7.16[21.5]			9.55[28.6]
	Inertia: No brake [with brake]									9.16[10.4]		12.1[13.3]			16.85[18.05]
	Rotation speed: Rated [Max. speed]									2000[5000]		2000[5000]			2000[5000]
	220V									20		20			20
	Model name	X2MH005A	X2MH010A	X2MH015A	X2MH020A	X2MH040A		X2MH075A		X2MH100A		X2MH150A			
X2-MH High inertia	Flange	□40	□40	□40	□60	□60		□80		□130		□130			
	Rated [Peak torque]	0.16[0.56]	0.32[1.11]	0.477[1.43]	0.64[2.23]	1.27[4.46]		2.39[8.36]		4.77[14.3]		7.16[21.5]			
	Inertia: No brake [with brake]	0.038[0.042]	0.071[0.074]	0.13[0.133]	0.29[0.31]	0.56[0.58]		1.56[1.66]		30.8[32]		38.5[39.7]			
	Rotation speed: Rated [Max. speed]	3000[6500]	3000[6500]	3000[6000]	3000[6500]	3000[6500]		3000[6000]		2000[3000]		2000[3000]			
	220V	20	20	20	20	20		20		20		20			
	Model name		X2MH010H		X2MH020H	X2MH040H		X2MH075H							
X2-MHH Ultra high inertia	Flange		□40		□60	□60		□80							
	Rated [Peak torque]		0.32[1.11]		0.64[2.23]	1.27[4.46]		2.39[8.36]							
	Inertia: No brake [with brake]		0.092[0.095]		0.47[0.49]	0.73[0.75]		3.15[3.2]							
	Rotation speed: Rated [Max. speed]		3000[6500]		3000[6500]	3000[6500]		3000[6000]							
	220V		20		20	20		20							
	Model name		X2MQ010A		X2MQ020A	X2MQ040A				X2MQ100E					
X2-MQ Special flange Flat-type/ small flange	Flange		□60		□80	□80				□80					
	Rated [Peak torque]		0.32[0.96]		0.637[1.91]	1.27[3.82]				3.185[11.13]					
	Inertia: No brake [with brake]		0.14[0.16]		0.47[0.5]	0.87[0.9]				2[2.1]					
	Rotation speed: Rated [Max. speed]		3000[6500]		3000[6500]	3000[6500]				3000[6000]					
	220V		20		20	20				20					

Series Name	Specifications	750W	1KW	850W	1.3KW	1.8KW	2.3KW
	Model name	X2MG075A	X2MG100A	X2MG085A	X2MG130A	X2MG180A	X2MG230A
X2-MG Low-speed & high-torque	Flange	□80	□130	□130	□130	□130	□130
	Rated [Peak torque]	4.77[14.3]	9.55[28.6]	5.41[16.2]	8.28[24.84]	11.5[34.5]	15[33]
	Inertia: No brake [with brake]	2.88[3]	12.1[13.3]	14[15.2]	20.2[21.4]	26[27.2]	12.7[14.2]
	Rotation speed: Rated [Max. speed]	1500[2000]	1000[1500]	1500[3000]	1500[3000]	1500[3000]	1500[2000]
	220V	20	20	20	20	20	20
	Model name			X2MG085S	X2MG130S	X2MG180S	
X2-MGS Low-cogging cutting series	Flange			□130	□130	□130	
	Rated [Peak torque]			5.39[16.2]	8.28[24.84]	11.5[34.5]	
	Inertia: No brake [with brake]			13.9[16]	19.9[22]	26[28.1]	
	Rotation speed: Rated [Max. speed]			1500[4000]	1500[4000]	1500[4000]	
	220V			20	20	20	

Note 23 20 23 Indicates the encoder bits; The color indicates the voltage specification, orange: 220V, blue: 380V.

*2: X:2 series servo motor (Version:PNXXXM) is 20bit resolution when matching with Y7 series servo drive, and it is 17bit resolution when matching with other servo drives.

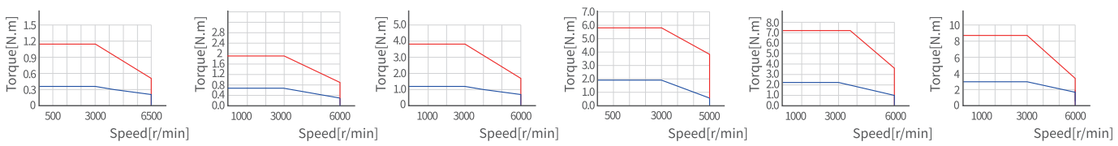
Servo Motor Specifications

100 W | 200 W | 400 W | 600 W | 750 W | 900 W

Items		Unit	X2MA010A	X2MA020A	X2MA040A	X2MA060E	X2MA075A	X2MA090E
Rated power		W	100	200	400	600	750	900
Rated voltage		V	220	220	220	220	220	220
Fitting flange size		mm	40	60	60	110	80	110
Rated torque		N.m	0.32	0.64	1.27	1.91	2.39	2.86
Instantaneous max. torque		N.m	1.12	1.91	3.82	5.73	7.16	8.6
Rated speed		r/min	3000	3000	3000	3000	3000	3000
Max. speed		r/min	6500	6000	6000	5000	6000	5000
		Note	*1	*1	*1		*1	
		*1: The above data is only the theoretical performance of the motor design, so the motor performance may vary according to the different series of servo drives						
Rated current		Arms	1.2	1.7	2.7	3	4.2	4.5
Instantaneous max. current		Arms	4.6	6.5	10.2	9	17.4	13.5
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	0.041	0.16	0.28	3.1	0.96	4.5
	With brake	$x10^{-4}Kg.m^2$	0.042	0.17	0.29	4.2	1.07	5.6
Torque constant		N.m/A	0.265	0.427	0.488	0.63	0.583	0.63
Induced voltage constant per phase		mV[r/min]	10.05	14.5	17.9	24.48	21.33	24.52
Rated power rate	No brake	KW/S	29.1	25.6	57.6	11.3	59.5	17.1
	With brake	KW/S	27.5	24.1	55.6	10.6	53.4	16.4
Mechanical time constant	No brake	ms	1.12	0.775	0.561	1.77	0.463	1.98
	With brake	ms	1.28	0.824	0.581	1.87	0.516	2.07
Electrical time constant		ms	0.97	6.3	6.1	7.8	12.7	6.78
Phase q-axis/d-axis inductance		mH	8.75/8.04	19/5.6	10.7/7.5	6.35/4.49	7.6/4.9	4.2/2.94
Weight: No brake[with brake]		kg	0.44	0.9 [1.3]	1.28 [1.67]	3.1 [4.4]	2.25 [3.01]	3.7 [5]
Permissible load	Radial load	N	68	245	245	392	392	392
	Axial load	N	58	98	98	147	147	147
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%					
	Rated current	A	0.25	0.36	0.36	0.81	0.42	0.81
	Brake power	w	7	7.3	7.3	19.5	9.6	19.5
	Static friction torque	N.m	0.38 or more	1.6 or more	1.6 or more	12 or more	3.8 or more	12 or more
	Suction time	ms	35 or less	50 or less	50 or less	100 or less	70 or less	100 or less
	Release time	ms	20 or less	20 or less	20 or less	60 or less	20 or less	60 or less
	Release voltage	V	DC1V or more	DC1V or more	DC1V or more	DC1.5V or more	DC1V or more	DC1.5V or more

Torque characteristics

Instantaneous operation range — Continuous operation range

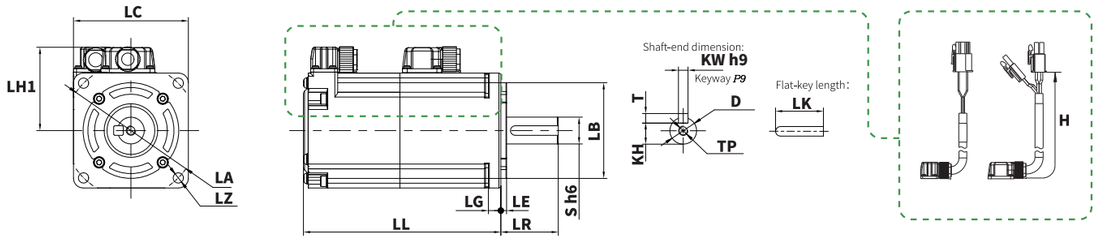


External Dimensions for Servo Motor

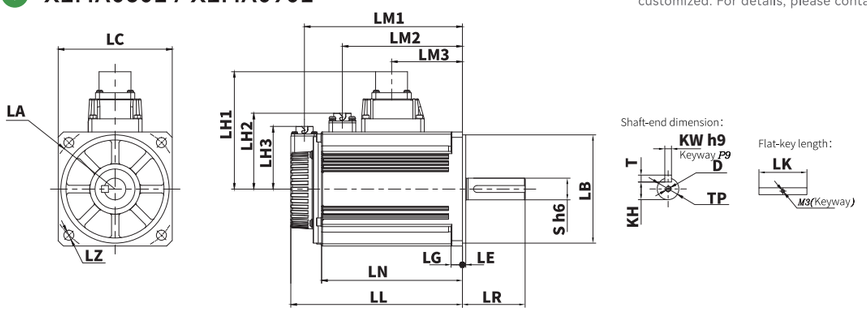
Unit(mm)

Models	X2MA010A	X2MA020A	X2MA040A	X2MA060E	X2MA075A	X2MA090E
LC	40	60	60	110	80	110
LA	ϕ46	ϕ70	ϕ70	ϕ130	ϕ90	ϕ130
LB	ϕ30	ϕ50h7	ϕ50	ϕ95h7	ϕ70	ϕ95h7
LZ	2-ϕ4.3	4-ϕ5.4	4-ϕ5.4	4-ϕ9	4-ϕ6.5	4-ϕ9
LR	25	30	30	55	35	55
S	ϕ8 h6	ϕ14 h6	ϕ14 h6	ϕ19 h6	ϕ19 h6	ϕ19 h6
LL no brake [with brake]	76.7 [107.1]	73.5 [103]	93.2 [122.7]	108 [135]	105 [138.5]	118 [146]
LN no brake [with brake]	—	—	—	81[108]	—	91.5[118.5]
LG	5	6.5	6.5	12	8	12
LE	3	3	3	5	3	5
LM1 no brake [with brake]	—	—	—	96[123.2]	—	106.5 [133.7]
LM2 no brake [with brake]	—	—	—	[90]	—	[100.5]
LM3	—	—	—	47	—	57
LH1	34.5	44.5	44.5	102	54.5	102
LH2	—	—	—	71.4	—	71.4
LH3	—	—	—	55	—	55
LK	14	25	25	42	25	42
T	3	5	5	6	6	6
KW	3 h9	5 h9	5 h9	6 h9	6 h9	6 h9
KH	6.2	11	11	15.5	15.5	15.5
TP	M3 Depth 6	M5 Depth 12	M5 Depth 12	M5 Depth 12	M5 Depth 10	M5 Depth 12
H type cable length for lead-wire type	210	210	210	—	210	—

X2MA010A / X2MA020A / X2MA040A / X2MA060E / X2MA075A / X2MA090E



X2MA060E / X2MA090E



Note 2: For X2 series servo motors, the lead-wire types are needed to be customized. For details, please contact our sales department.

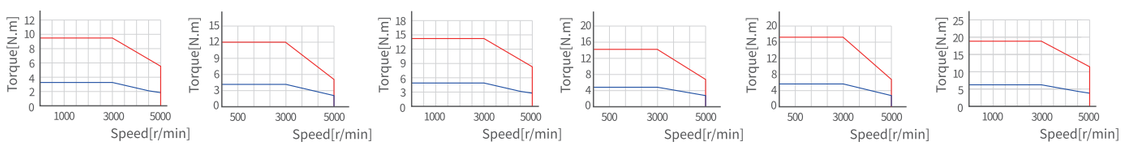
Servo Motor Specifications

1 KW | 1.2 KW | 1.5 KW | 1.8 KW | 2 KW

Items		Unit	X2MA100A	X2MA120E	X2MA150A	X2MA150E	X2MA180E	X2MA200A
Rated power		W	1000	1200	1500	1500	1800	2000
Rated voltage		V	220	220	220	220	220	220
Fitting flange size		mm	100	110	100	110	110	100
Rated torque		N.m	3.18	4	4.77	4.77	5.73	6.37
Instantaneous max. torque		N.m	9.55	12	14.3	14.3	17.2	19.1
Rated speed		r/min	3000	3000	3000	3000	3000	3000
Max. speed		r/min	5000	5000	5000	5000	5000	5000
Rated current		Arms	6.6	6	8.2	7.6	9.5	11.3
Instantaneous max. current		Arms	28	18	35	24	29	48
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	2.03	5.9	2.84	7.3	8.6	3.68
	With brake	$x10^{-4}Kg.m^2$	2.35	7	3.17	8.4	9.7	4.01
Torque constant		N.m/A	0.52	0.63	0.628	0.63	0.63	0.607
Induced voltage constant per phase		mV[r/min]	18.15	23.55	21.92	23.2	24	21.247
Rated power rate	No brake	KW/S	49.82	23.1	80.12	28	34.7	110.26
	With brake	KW/S	43.03	22.1	71.775	27.3	34	101.19
Mechanical time constant	No brake	ms	0.619	1.5	0.507	1.47	1.38	0.425
	With brake	ms	0.717	1.57	0.566	1.51	1.4	0.463
Electrical time constant		ms	7.22	8.86	8.08	9.35	9.54	9.37
Phase q-axis/d-axis inductance		mH	—	3.13 [2.18]	—	2.52/1.75	1.86/1.29	—
Weight: No brake[with brake]		kg	3.5 [4.5]	4.3 [5.6]	4.4 [5.4]	4.95 [6.25]	5.4 [6.7]	5.3 [6.3]
Permissible load	Radial load	N	392	392	392	392	392	392
	Axial load	N	147	147	147	147	147	147
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%					
	Rated current	A	0.81±10%	0.81±10%	0.81±10%	0.81	0.81	0.81±10%
	Brake power	w	19.5	19.5	19.5	19.5	19.5	19.5
	Static friction torque	N.m	7.8 or more	12 or more	7.8 or more	12 or more	12 or more	7.8 or more
	Suction time	ms	50 or less	100 or less	50 or less	100 or less	100 or less	50 or less
	Release time	ms	15 or less	60 or less	15 or less	60 or less	60 or less	15 or less
	Release voltage	V	DC1V or more	DC1.5V or more	DC1V or more	DC1.5V or more	DC1.5V or more	DC1V or more

Torque characteristics

Instantaneous operation range — Continuous operation range



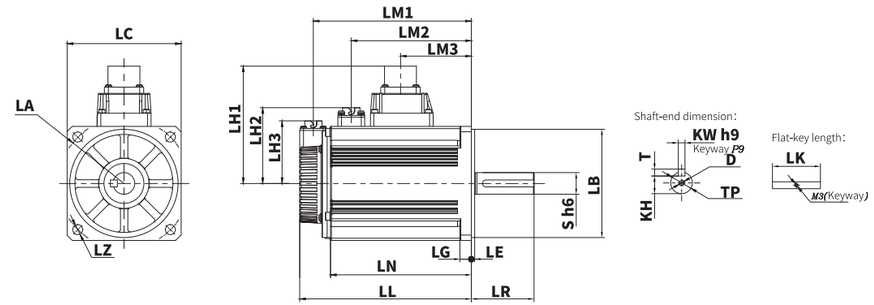
X2MA100A ▲ | X2MA120E ▲ | X2MA150A ▲ | X2MA150E ▲ | X2MA180E ▲ | X2MA200A ▲

External Dimensions for Servo Motor

Unit(mm)

Models	X2MA100A	X2MA120E	X2MA150A	X2MA150E	X2MA180E	X2MA200A
LC	100	110	100	110	110	100
LA	ϕ115	ϕ130	ϕ115	ϕ130	ϕ130	ϕ115
LB	ϕ95h7	ϕ95h7	ϕ95	ϕ95h7	ϕ95h7	ϕ95h7
LZ	4-ϕ9	4-ϕ9	4-ϕ9	4-ϕ9	4-ϕ9	4-ϕ9
LR	55	55	55	55	55	55
S	ϕ19 h6	ϕ19 h6	ϕ19 h6	ϕ19 h6	ϕ19 h6	ϕ19 h6
LL no brake [with brake]	123.5 [150.5]	129.5 [157]	142 [169]	140 [167]	150.5 [178]	161 [188]
LN no brake [with brake]	96.5[123.5]	102.5[129.5]	115[142]	113[140]	123.5[150.5]	134[161]
LG	10	12	10	12	12	10
LE	3	5	3	5	5	3
LM1 no brake [with brake]	111.5[138.5]	117.5 [144.5]	130[157]	128 [155]	138.5 [165.5]	149 [176]
LM2 no brake [with brake]	[105]	[111.5]	[123.5]	[122]	[132.5]	[142.5]
LM3	62	68	80.5	78.5	89	99.5
LH1	103	102	103	102	102	103
LH2	66	71.4	66.5	71.4	71.5	66.5
LH3	55	55	55	55	55	55
LK	42	42	42	42	42	42
T	6	6	6	6	6	6
KW	6 h9	6 h9	5 h9	6 h9	6 h9	6 h9
KH	15.5	15.5	15.5	15.5	15.5	15.5
TP	M5 Depth 12	M5 Depth 12	M5 Depth 12	M5 Depth 12	M5 Depth 12	M5 Depth 12
H type cable length for lead-wire type	—	—	—	—	—	—

X2MA100A / X2MA120E / X2MA150A / X2MA150E / X2MA180E / X2MA200A



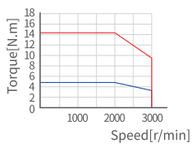
Servo Motor Specifications

1 KW 1.5 KW 2 KW

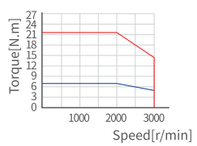
Items		Unit	X2MM100A	X2MM150A	X2MM200A
Rated power		W	1000	1500	2000
Rated voltage		V	220	220	220
Fitting flange size		mm	130	130	130
Rated torque		N.m	4.77	7.16	9.55
Instantaneous max. torque		N.m	14.3	21.5	28.6
Rated speed		r/min	2000	2000	2000
Max. speed		r/min	3000	3000	3000
Rated current		Arms	5.2	8	9.9
Instantaneous max. current		Arms	15.6	24	30
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	6.18	9.16	12.1
	With brake	$x10^{-4}Kg.m^2$	7.4	10.4	13.3
Torque constant		N.m/A	0.918	0.895	0.9645
Induced voltage constant per phase		mV[r/min]	33.65	34.84	37.95
Rated power rate	No brake	KW/S	36.8	56	75.4
	With brake	KW/S	30.7	49.3	68.6
Mechanical time constant	No brake	ms	1.51	1.16	1.05
	With brake	ms	1.81	1.3	1.16
Electrical time constant		ms	11.1	14.6	15.38
Phase q-axis/d-axis inductance		mH	8.4/4.3	5.8/2.9	4.9/2.6
Weight: No brake[with brake]		kg	4.67	5.87[7.47]	6.98[8.58]
Permissible load	Radial load	N	490	490	490
	Axial load	N	196	196	196
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%		
	Rated current	A	0.9	0.9	0.9
	Brake power	w	22	22	22
	Static friction torque	N.m	14 or more	14 or more	14 or more
	Suction time	ms	100 or less	100 or less	100 or less
	Release time	ms	60 or less	60 or less	60 or less
	Release voltage	V	DC1V or more		

Torque characteristics

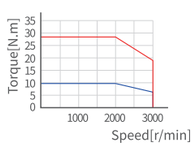
Instantaneous operation range — Continuous operation range



X2MM100A▲



X2MM150A▲



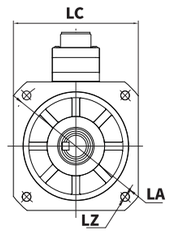
X2MM200A▲

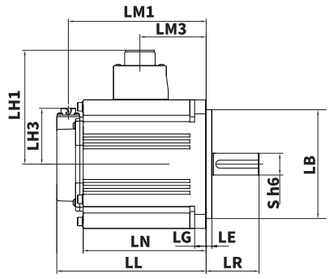
External Dimensions for Servo Motor

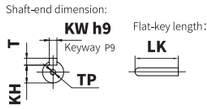
Unit(mm)

Models	X2MM100A-□2L□(Aviation connector)	X2MM150A-□2L□(Aviation connector)	X2MM200A-□2L□(Aviation connector)
LC	130	130	130
LA	ϕ145	ϕ145	ϕ145
LB	ϕ110	ϕ110	ϕ110
LZ	4-ϕ9	4-ϕ9	4-ϕ9
LR	55	55	55
S	ϕ22 h6	ϕ22 h6	ϕ22 h6
LL no brake [with brake]	107.5 [127.5]	121.5[141.5]	135.5 [155.5]
LN no brake [with brake]	80[100]	94[114]	108[128]
LG	12	12	12
LE	6	6	66
LH1	115	115	115
LH3	56.5	56.5	56.5
LM1 no brake [with brake]	95.5[115.5]	109.5[129.5]	123.5[143.5]
LM3	41	55	69
LK	45	45	45
T	7	7	7
KW	8 h9	8 h9	8 h9
KH	18	18	18
TP	M6 Depth 20	M6 Depth 20	M6 Depth 20

X2MM100A / X2MM150A / X2MM200A[Aviation connector]







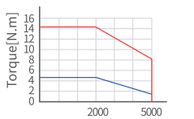
Servo Motor Specifications

1 KW 1.5 KW 2 KW

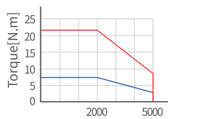
Items		Unit	X2MM100S	X2MM150S	X2MM200S
Rated power		W	1000	1500	2000
Rated voltage		V	220	220	220
Fitting flange size		mm	130	130	130
Rated torque		N.m	4.77	7.16	9.55
Instantaneous max. torque		N.m	14.31	21.5	28.6
Rated speed		r/min	2000	2000	2000
Max. speed		r/min	5000	5000	5000
Rated current		Arms	8.25	9.5	15
Instantaneous max. current		Arms	25	29	50
Moment of inertia	No brake	x10^{-4}Kg.m^2	9.16	12.1	16.85
	With brake	x10^{-4}Kg.m^2	10.4	13.3	18.05
Torque constant		N.m/A	0.573	0.672	0.627
Induced voltage constant per phase		mV[r/min]	21.2	25.9	23
Rated power rate	No brake	KW/S	24.84	42.37	54.13
	With brake	KW/S	21.88	38.55	50.53
Mechanical time constant	No brake	ms	1.24	1.08	0.93
	With brake	ms	1.41	1.18	1
Electrical time constant		ms	13.3	16.13	13.75
Phase q-axis/d-axis inductance		mH	2.2/1.1	2.5/1.3	1.1/0.6
Weight: No brake[with brake]		kg	5.87 [7.47]	6.98[8.58]	6.91[10.1]
Permissible load	Radial load	N	490	490	490
	Axial load	N	196	196	196
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%		
	Rated current	A	0.9	0.9	0.9
	Brake power	w	22	22	22
	Static friction torque	N.m	14 or more	14 or more	14 or more
	Suction time	ms	100 or less	100 or less	100 or less
	Release time	ms	60 or less	60 or less	60 or less
	Release voltage	V	DC1V or more		

Torque characteristics

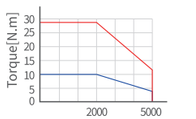
Instantaneous operation range — Continuous operation range



X2MM100S ▲



X2MM150S ▲



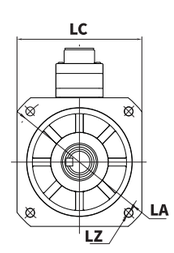
X2MM200S ▲

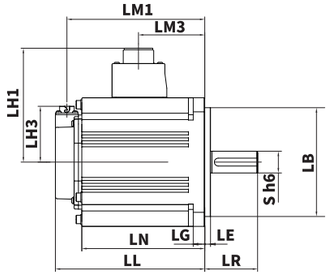
External Dimensions for Servo Motor

Unit(mm)

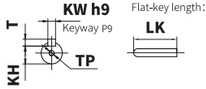
Models	X2MM100S	X2MM150S	X2MM200S
LC	130	130	130
LA	ϕ145	ϕ145	ϕ145
LB	ϕ110	ϕ110	ϕ110
LZ	4-ϕ9	4-ϕ9	4-ϕ9
LR	55	55	55
S	ϕ22 h6	ϕ22 h6	ϕ22 h6
LL no brake [with brake]	121.5 [141.5]	135.5 [155.5]	163.5 [183.5]
LN no brake [with brake]	94 [114]	108 [128]	136 [156]
LG	12	12	12
LE	6	6	6
LM1 no brake [with brake]	109.5 [129.5]	123.5 [143.5]	151.5 [171.5]
LM3	55	69	97
LH1	115	115	115
LH3	56.5	56.5	56.5
LK	45	45	45
T	7	7	7
KW	8 h9	8 h9	8 h9
KH	18	18	18
TP	M6 Depth 20	M6 Depth 20	M6 Depth 20
H type cable length for lead-wire type	—	—	—

X2MM100S / X2MM150S / X2MM200S





Shaft-end dimension:



Flat-key length:

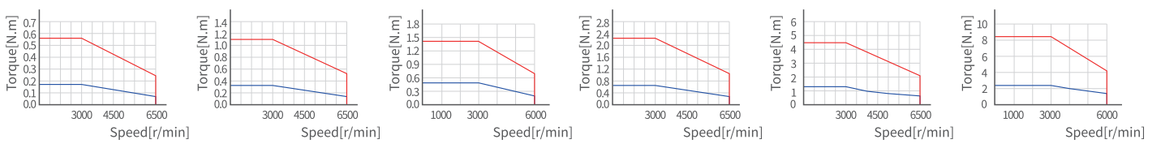
Servo Motor Specifications

50 W | 100 W | 150 W | 200 W | 400 W | 750 W

Items		Unit	X2MH005A	X2MH010A	X2MH015A	X2MH020A	X2MH040A	X2MH075A
Rated power		W	50	100	150	200	400	750
Rated voltage		V	220	220	220	220	220	220
Fitting flange size		mm	40	40	40	60	60	80
Rated torque		N.m	0.16	0.32	0.477	0.64	1.27	2.39
Instantaneous max. torque		N.m	0.56	1.11	1.43	2.23	4.46	8.36
Rated speed		r/min	3000	3000	3000	3000	3000	3000
Max. speed		r/min	6500	6500	6000	6500	6500	6000
		Note				*1	*1	*1
		*1: The above data is only the theoretical performance of the motor design, so the motor performance may vary according to the different series of servo drives						
Rated current		Arms	1.1	1.1	1.5	1.4	2.1	3.8
Instantaneous max. current		Arms	3.89	3.89	4.5	4.87	7.36	13.3
Moment of inertia	No brake	x10^{-4}Kg.m^2	0.038	0.071	0.13	0.29	0.56	1.56
	With brake	x10^{-4}Kg.m^2	0.042	0.074	0.133	0.31	0.58	1.66
Torque constant		N.m/A	0.168	0.327	0.33	0.5	0.67	0.648
Induced voltage constant per phase		mV[r/min]	5	11.1	13.66	14.61	20.85	22.65
Rated power rate	No brake	KW/S	6.7	14.4	17.5	14.1	28.8	36.6
	With brake	KW/S	6.1	13.8	17.1	13.2	27.8	34.4
Mechanical time constant	No brake	ms	2.6	1.67	1.9	1.57	1.24	0.97
	With brake	ms	2.85	1.74	1.94	1.68	1.29	1.03
Electrical time constant		ms	0.89	1.1	1.22	2.58	2.97	6.59
Phase q-axis/d-axis inductance		mH	5.1/3.4	9.4/6.3	7.2/4.8	10.2/5.8	9.2/6.5	6/3.3
Weight: No brake[with brake]		kg	0.33[0.55]	0.45 [0.66]	0.6 [0.81]	0.87 [1.27]	1.22[1.61]	2.25 [3.01]
Permissible load	Radial load	N	68	68	68	245	245	392
	Axial load	N	58	58	58	98	98	147
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%					
	Rated current	A	0.25	0.25	0.375	0.36	0.36	0.42
	Brake power	w	6	6	9	9	9	10
	Static friction torque	N.m	0.38 or more	0.38 or more	0.58 or more	1.6 or more	1.6 or more	3.8 or more
	Suction time	ms	35 or less	35 or less	50 or less	50 or less	50 or less	70 or less
	Release time	ms	20 or less	20 or less	20 or less	20 or less	20 or less	20 or less
	Release voltage	V	DC1V or more					

Torque characteristics

Instantaneous operation range — Continuous operation range



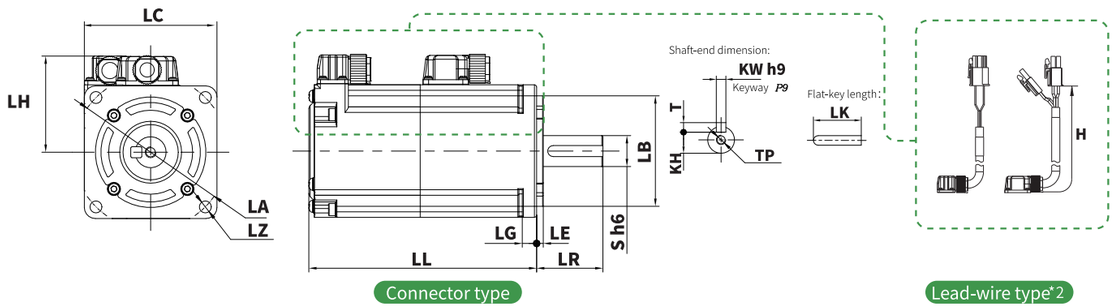
X2MH005A▲ X2MH010A▲ X2MH015A▲ X2MH020A▲ X2MH040A▲ X2MH075A▲

External Dimensions for Servo Motor

Unit(mm)

Models	X2MH005A	X2MH010A	X2MH015A	X2MH020A	X2MH040A	X2MH075A
LC	40	40	40	60	60	80
LA	ϕ46	ϕ46	ϕ46	ϕ70	ϕ70	ϕ90
LB	ϕ30	ϕ30	ϕ30	ϕ50	ϕ50	ϕ70
LZ	2-ϕ4.3	2-ϕ4.3	2-ϕ4.3	4-ϕ5.4	4-ϕ5.4	4-ϕ6.5
LR	25	25	25	30	30	35
S	ϕ8 h6	ϕ8 h6	ϕ8 h6	ϕ14 h6	ϕ14 h6	ϕ19 h6
LL no brake [with brake]	57 [91]	71 [105]	93.8[127.8]	70.5[100]	87.5 [117]	94.5[128.5]
LG	5	5	5	6.5	6.5	8
LE	3	3	3	3	3	3
LH	35	35	35	44.5	44.5	54.5
LK	14	14	14	25	25	25
T	3	3	3	5	5	6
KW	3 h9	3 h9	3 h9	5 h9	5 h9	6 h9
KH	6.2	6.2	6.2	11	11	15.5
TP	M3 Depth 6	M3 Depth 6	M3 Depth 6	M5 Depth 12	M5 Depth 12	M5 Depth 12
H type cable length for lead-wire type	210	210	210	210	210	210

X2MH005A / X2MH010A / X2MH015A/X2MH20A/X2MH040A/X2MH075A



Note 2: For X2 series servo motors, the lead-wire types are needed to be customized. For details, please contact our sales department.

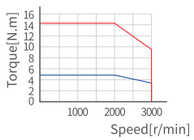
Servo Motor Specifications

1 KW 1.5 KW

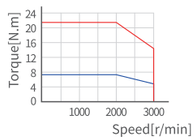
Items		Unit	X2MH100A	X2MH150A
Rated power		W	1000	1500
Rated voltage		V	220	220
Fitting flange size		mm	130	130
Rated torque		N.m	4.77	7.16
Instantaneous max. torque		N.m	14.3	21.5
Rated speed		r/min	2000	2000
Max. speed		r/min	3000	3000
Rated current		Arms	5.2	8
Instantaneous max. current		Arms	15.6	24
Moment of inertia	No brake	x10^{-4}Kg.m^2	30.8	38.5
	With brake	x10^{-4}Kg.m^2	32	39.7
Torque constant		N.m/A	0.918	0.895
Induced voltage constant per phase		mV[r/min]	33.65	34.84
Rated power rate	No brake	KW/S	7.39	13.3
	With brake	KW/S	7.11	12.9
Mechanical time constant	No brake	ms	7.54	4.9
	With brake	ms	7.84	5.05
Electrical time constant		ms	11.1	14.63
Phase q-axis/d-axis inductance		mH	8.4/4.3	5.8/2.9
Weight: No brake[with brake]		kg	6.4 [8]	7.8[9.4]
Permissible load	Radial load	N	490	490
	Axial load	N	196	196
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%	
	Rated current	A	0.9	0.9
	Brake power	w	22	22
	Static friction torque	N.m	14 or more	14 or more
	Suction time	ms	100 or less	100 or less
	Release time	ms	60 or less	60 or less
	Release voltage	V	DC1V or more	

Torque characteristics

Instantaneous operation range
Continuous operation range



X2MH100A▲



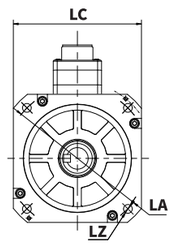
X2MH150A▲

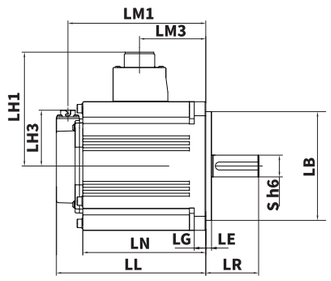
External Dimensions for Servo Motor

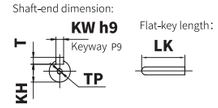
Unit(mm)

Models	X2MH100A-□2L□(Aviation connector)	X2MH150A-□2L□(Aviation connector)
LC	130	130
LA	ϕ145	ϕ145
LB	ϕ110	ϕ110
LZ	4-ϕ9	4-ϕ9
LR	55	55
S	ϕ22 h6	ϕ22 h6
LL no brake [with brake]	135.5[155.5]	149.5 [169.5]
LN no brake [with brake]	108[128]	122[142]
LG	12	12
LE	6	6
LH1	115	115
LH3	56.5	56.5
LM1 no brake [with brake]	123.5 [143.5]	137.5 [157.5]
LM3	69	83
LK	45	45
T	7	7
KW	8 h9	8 h9
KH	18	18
TP	M6 Depth 20	M6 Depth 20

X2MH100A/X2MH150A[Aviation connector]







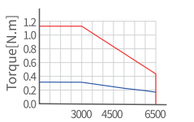
Servo Motor Specifications

100 W 200 W 400 W 750 W

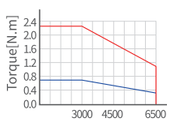
Items		Unit	X2MH010H	X2MH020H	X2MH040H	X2MH075H
Rated power		W	100	200	400	750
Rated voltage		V	220	220	220	220
Fitting flange size		mm	40	60	60	80
Rated torque		N.m	0.32	0.64	1.27	2.39
Instantaneous max. torque		N.m	1.11	2.23	4.45	8.36
Rated speed		r/min	3000	3000	3000	3000
Max. speed		r/min	6500	6500	6500	6000
		Note		*1	*1	*1
		*1: The above data is only the theoretical performance of the motor design, so the motor performance may vary according to the different series of servo drives				
Rated current		Arms	0.92	1.4	2.4	3.8
Instantaneous max. current		Arms	3.6	4.87	8.2	18.8
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	0.092	0.47	0.73	3.15
	With brake	$x10^{-4}Kg.m^2$	0.095	0.49	0.75	3.2
Torque constant		N.m/A	0.347	0.5	0.531	0.648
Induced voltage constant per phase		mV[r/min]	13.3	14.61	20.4	22.65
Rated power rate	No brake	KW/S	11.13	8.71	22.09	18.1
	With brake	KW/S	10.78	8.36	21.5	17.85
Mechanical time constant	No brake	ms	2.23	2.54	1.15	1.95
	With brake	ms	2.3	2.65	1.18	1.98
Electrical time constant		ms	0.986	2.58	4.1	6.59
Phase q-axis/d-axis inductance		mH	11.9/8	10.2/5.8	6.9/4.3	6/3.3
Weight: No brake[with brake]		kg	0.44[0.65]	0.95 [1.29]	1.45 [1.85]	2.65 [3.13]
Permissible load	Radial load	N	68	245	245	392
	Axial load	N	58	98	98	147
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%			
	Rated current	A	0.25	0.36	0.36	0.42
	Brake power	w	6	9	9	10
	Static friction torque	N.m	0.38 or more	1.6 or more	1.6 or more	3.8 or more
	Suction time	ms	35 or less	50 or less	50 or less	70 or less
	Release time	ms	20 or less	20 or less	20 or less	20 or less
	Release voltage	V	DC1V or more			

Torque characteristics

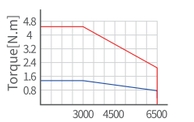
Instantaneous operation range — Continuous operation range



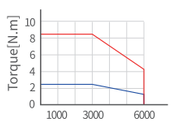
X2MH010H ▲



X2MH020H ▲



X2MH040H ▲



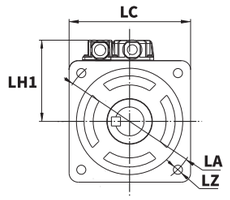
X2MH075H ▲

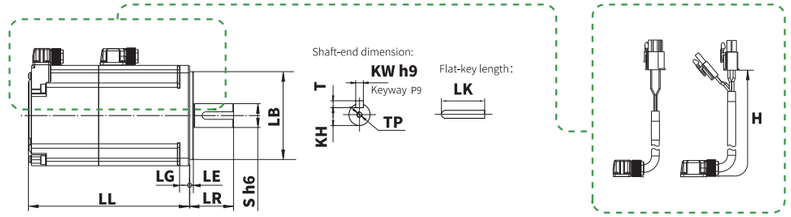
External Dimensions for Servo Motor

Unit(mm)

Models	X2MH010H	X2MH020H(lead-wire types)	X2MH040H	X2MH075H(lead-wire types)
LC	40	60	60	80
LA	ϕ46	ϕ70	ϕ70	ϕ90
LB	ϕ30	ϕ50	ϕ50	ϕ70
LZ	2-ϕ4.3	4-ϕ5.5	4-ϕ5.5	4-ϕ6.6
LR	25	30	30	35
S	ϕ8 h6	ϕ14 h6	ϕ14 h6	ϕ19 h6
LL no brake [with brake]	76.7 [110.7]	82.4 [111.9]	98.5 [128]	122 [167.1]
LG	5	6.5	6.5	8
LE	3	3	3	3
LH1	35	43.5	44.5	53.5
LK	14	25	25	25
T	3	5	5	6
KW	3 h9	5 h9	5 h9	6 h9
KH	6.2	11	11	15.5
TP	M3 Depth 6	M5 Depth 12	M5 Depth 12	M5 Depth 12
H type cable length for lead-wire type	210	210	210	210

X2MH010H / X2MH020H / X2MH040H / X2MH075H





Connector type — Lead-wire type*2

Note 2: For X2 series servo motors, the lead-wire types are needed to be customized. For details, please contact our sales department.

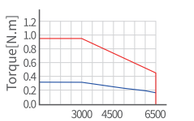
Servo Motor Specifications

100 W | 200 W | 400 W | 1 KW

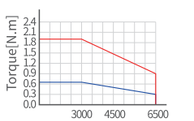
Items		Unit	X2MQ010A	MQ010A-□2K□	X2MQ020A	X2MQ040A	X2MQ100E
Rated power		W	100	100	200	400	1000
Rated voltage		V	220	220	220	220	220
Fitting flange size		mm	60	60	80	80	80
Rated torque		N.m	0.32	0.32	0.637	1.27	3.185
Instantaneous max. torque		N.m	0.96	0.96	1.91	3.82	11.13
Rated speed		r/min	3000	3000	3000	3000	3000
Max. speed		r/min	6500	6500	6500	6500	6000
		Note				*1	*1
		*1: The above data is only the theoretical performance of the motor design, so the motor performance may vary according to the different series of servo drives					
Rated current		Arms	1.15	1.15	2	2.6	5.7
Instantaneous max. current		Arms	3.45	3.45	6.4	8.4	21.2
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	0.14	0.14	0.47	0.87	2
	With brake	$x10^{-4}Kg.m^2$	0.16	0.16	0.5	0.9	2.1
Torque constant		N.m/A	0.28	0.28	0.318	0.488	0.552
Induced voltage constant per phase		mV[r/min]	10.78	10.78	12.2	19.6	21.2
Rated power rate	No brake	KW/S	6.99	6.99	8.63	18.5	50.7
	With brake	KW/S	6.64	6.64	8.12	17.92	48.31
Mechanical time constant	No brake	ms	2.3	2.3	2.51	1.51	0.85
	With brake	ms	2.46	2.46	2.67	1.57	0.897
Electrical time constant		ms	1.66	1.66	3.52	5.41	7.6
Phase q-axis/d-axis inductance		mH	13.63/11.09	13.63/11.09	7.3/3.9	9/4.9	3.8/2.6
Weight: No brake[with brake]		kg	0.57 [0.81]	0.57 [0.81]	1.24 [1.74]	1.6 [2.1]	2.68 [3.45]
Permissible load	Radial load	N	68	68	245	245	392
	Axial load	N	58	58	98	98	147
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%				
	Rated current	A	0.9	0.9	0.9	0.9	0.42
	Brake power	w	22	22	22	22	10
	Static friction torque	N.m	0.38-1.1	0.38-1.1	1.6 or more	1.6 or more	3.8 or more
	Suction time	ms	60 or less	60 or less	60 or less	60 or less	70 or less
	Release time	ms	40 or less	40 or less	40 or less	40 or less	20 or less
	Release voltage	V	DC1.5V or more				DC1V or more

Torque characteristics

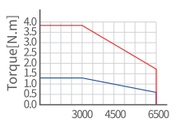
Instantaneous operation range — Continuous operation range



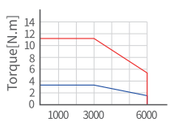
X2MQ010A▲



X2MQ020A▲



X2MQ040A▲



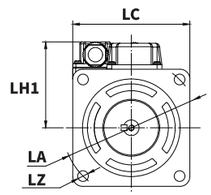
X2MQ100E▲

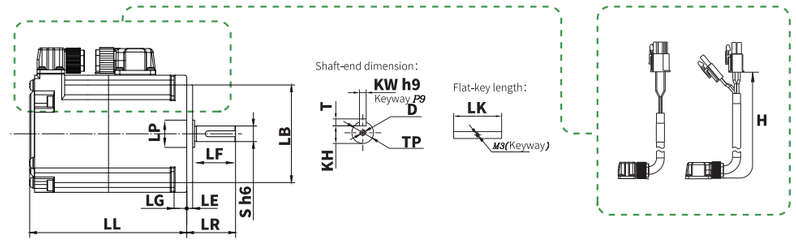
External Dimensions for Servo Motor

Unit(mm)

Models	X2MQ010A(Lead-wire type)	MQ010A-□2K□*3	X2MQ020A(Lead-wire type)	X2MQ040A(Lead-wire type)	X2MQ100E
LC	60	60	80	80	80
LA	ϕ70	ϕ70	ϕ90	ϕ90	ϕ90
LB	ϕ50	ϕ50	ϕ70	ϕ70	ϕ70
LZ	4-ϕ5.4	4-ϕ5.4	4-ϕ6.5	4-ϕ6.5	4-ϕ6.5
LR	25	25	30	30	35
S	ϕ8 h6	ϕ8 h6	ϕ11 h6	ϕ14 h6	ϕ19 h6
LL	58.6[78.1]	107.1[76.7]±1	66 [90]	76.8 [100.8]	108 [141.5]
LG	6.5	6.5	8	8	8
LE	3	3	3	3	3
LF	21	21	26	26	—
LP	ϕ14	ϕ14	ϕ19.7	ϕ19.7	—
LH1	43.5	43.5	53.5	53.5	54.5
LK	14	14	20	22	25
T	3	3	4	5	6
KW	3 h9	3 h9	4 h9	5 h9	6 h9
KH	6.2	6.2	8.5	11	15.5
TP	M3 Depth 6	M3 Depth 6	M4 Depth 8	M5 Depth 12	M5 Depth 12
H type cable length for lead-wire type	210	210	210	210	210

X2MQ010A / X2MQ020A / X2MQ040A / X2MQ100E





Connector type — Lead-wire type*2

Note 2: For X2 series servo motors, the lead-wire types are needed to be customized. For details, please contact our sales department.

*3: MQ010A-□2K□, "K" indicates "Keyway shaft/no oil seal"

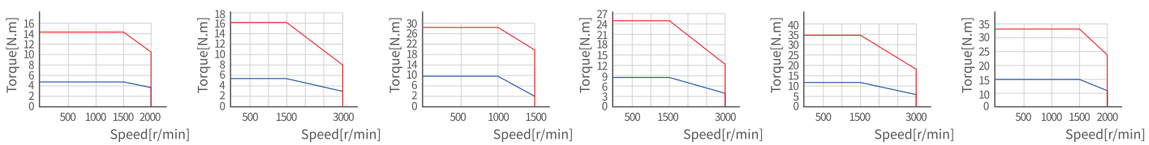
Servo Motor Specifications

750 W | 850 W | 1 KW | 1.3 KW | 1.8 KW | 2.3 KW

Items		Unit	X2MG075A	X2MG085A	X2MG100A	X2MG130A	X2MG180A	X2MG230A
Rated power		W	750	850	1000	1300	1800	2300
Rated voltage		V	220	220	220	220	220	220
Fitting flange size		mm	80	130	130	130	130	130
Rated torque		N.m	4.77	5.41	9.55	8.28	11.5	15
Instantaneous max. torque		N.m	14.3	16.2	28.6	24.84	34.5	33
Rated speed		r/min	1500	1500	1000	1500	1500	1500
Max. speed		r/min	2000	3000	1500	3000	3000	2000
Rated current		Arms	4.2	5.9	5.2	9.3	11.8	12
Instantaneous max. current		Arms	15	18	16	28	35.5	26.4
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	2.88	14	12.1	20.2	26	12.7
	With brake	$x10^{-4}Kg.m^2$	3	15.2	13.3	21.4	27.2	14.2
Torque constant		N.m/A	1.135	0.918	1.83	0.895	0.964	1.27
Induced voltage constant per phase		mV[r/min]	43.3	33.65	67.3	34.84	40.18	83.08
Rated power rate	No brake	KW/S	79	63.29	75.4	33.9	50.87	177
	With brake	KW/S	75.84	58.26	68.6	32	48.6	158
Mechanical time constant	No brake	ms	1.01	3.43	1.12	2.57	2.06	0.583
	With brake	ms	1.05	3.72	1.23	2.72	2.15	0.651
Electrical time constant		ms	5.1	11.1	9.65	14.63	15.99	9.58
Phase q-axis/d-axis inductance		mH	8.4/5.7	8.4/4.3	11/8.7	5.8/2.9	4.9/2.6	-
Weight: No brake[with brake]		kg	3.46[4.14]	5.53 [7.13]	6.91 [8.51]	6.89 [8.49]	8.14 [9.74]	11.4[13]
Permissible load	Radial load	N	392	490	490	490	490	490
	Axial load	N	147	160	160	160	160	196
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%					
	Rated current	A	0.42	0.9	0.9	0.9	0.9	0.96
	Brake power	w	10	22	22	22	22	23
	Static friction torque	N.m	3.8 or more	14 or more	14 or more	14 or more	14 or more	20 or more
	Suction time	ms	70 or less	100 or less	100 or less	100 or less	100 or less	80 or less
	Release time	ms	20 or less	60 or less	60 or less	60 or less	60 or less	40 or less
	Release voltage	V	DC1V or more					DC0.5V or more

Torque characteristics

Instantaneous operation range — Continuous operation range



X2MG075A▲ X2MG085A▲ X2MG100A▲ X2MG130A▲ X2MG180A▲ X2MG230A▲

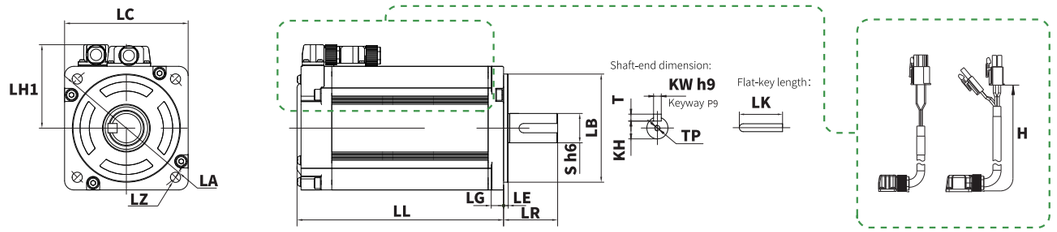
External Dimensions for Servo Motor

Unit(mm)

Models	X2MG075A(Lead-wire type)	X2MG085A	X2MG100A	X2MG130A	X2MG180A	X2MG230A
LC	80	130	130	130	130	130
LA	ϕ90	ϕ145	ϕ145	ϕ145	ϕ145	ϕ145
LB	ϕ70	ϕ110	ϕ110	ϕ110	ϕ110	ϕ110
LZ	4-ϕ6.6	4-ϕ9	4-ϕ9	4-ϕ9	4-ϕ9	4-ϕ9
LR	35	55	55	55	55	55
S	ϕ19 h6	ϕ22 h6	ϕ22 h6	ϕ22 h6	ϕ22 h6	ϕ22 h6
LL no brake [with brake]	134 [177]	135.5 [155.5]	135.5 [155.5]	149.5 [169.5]	163.5 [183.5]	198 [223]
LN no brake [with brake]	—	108 [128]	108 [128]	122 [142]	136 [156]	167 [192]
LG	8	12	12	12	12	12
LE	3	6	6	6	6	6
LM1 no brake [with brake]	—	123.5 [143.5]	123.5 [143.5]	137.5[157.5]	151.5 [171.5]	186 [211]
LM2 no brake [with brake]	—	—	—	—	—	—[173]
LM3	—	69	69	83	97	127.6
LH1	54	115	115	115	115	118
LH2	—	—	—	—	—	81.5
LH3	—	56.5	56.5	56.5	56.5	58.5
LK	25	45	45	45	45	45
T	6	7	7	7	7	7
KW	6 h9	8 h9	8 h9	8 h9	8 h9	8 h9
KH	15.5	18	18	18	18	18
TP	M5 Depth 12	M6 Depth 20	M6 Depth 20	M6 Depth 20	M6 Depth 20	M6 Depth 20
H type cable length for lead-wire type	210	—	—	—	—	—

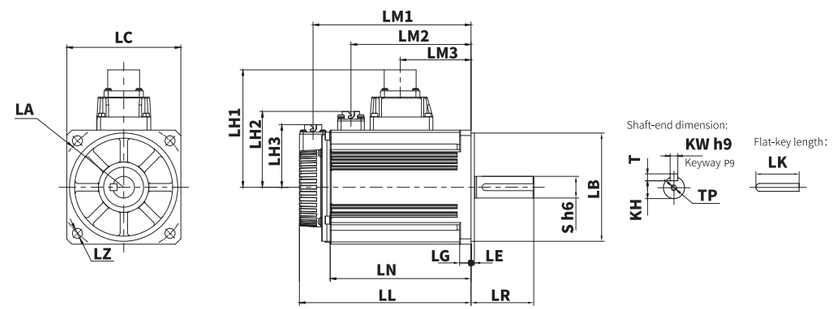
X2MG075A

Note 1: For X2 series servo motors, the lead-wire types are needed to be customized. For details, please contact our sales department.



Connector type — Lead-wire type*1

X2MG085A / X2MG100A / X2MG130A / X2MG180A / X2MG230A



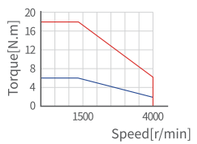
Servo Motor Specifications

850 W | 1.3 KW | 1.8 KW

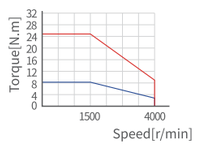
Items		Unit	X2MG085S	X2MG130S	X2MG180S
Rated power		W	850	1300	1800
Rated voltage		V	220	220	220
Fitting flange size		mm	130	130	130
Rated torque		N.m	5.39	8.28	11.5
Instantaneous max. torque		N.m	16.2	24.84	34.5
Rated speed		r/min	1500	1500	1500
Max. speed		r/min	4000	4000	4000
Rated current		Arms	6.7	9.6	15.6
Instantaneous max. current		Arms	20.1	28.8	46.8
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	13.9	19.9	26
	With brake	$x10^{-4}Kg.m^2$	16	22	28.1
Torque constant		N.m/A	0.859	0.891	0.748
Induced voltage constant per phase		mV[r/min]	31.04	32.08	27
Rated power rate	No brake	KW/S	20.9	35	50.9
	With brake	KW/S	18.2	31.6	47.1
Mechanical time constant	No brake	ms	2.74	2.23	1.95
	With brake	ms	3.16	2.46	2.29
Electrical time constant		ms	10.2	10.7	11.14
Phase q-axis/d-axis inductance		mH	—	—	—
Weight: No brake[with brake]		kg	5.5[7.5]	7.1[9]	8.6[11]
Permissible load	Radial load	N	490	490	490
	Axial load	N	196	196	196
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%		
	Rated current	A	0.41	0.41	0.41
	Brake power	w	12	12	12
	Static friction torque	N.m	14 or more	14 or more	14 or more
	Suction time	ms	100 or less	100 or less	100 or less
	Release time	ms	80 or less	80 or less	80 or less
	Release voltage	V	DC1V or more		

Torque characteristics

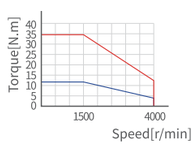
Instantaneous operation range — Continuous operation range



X2MG085S▲



X2MG130S▲



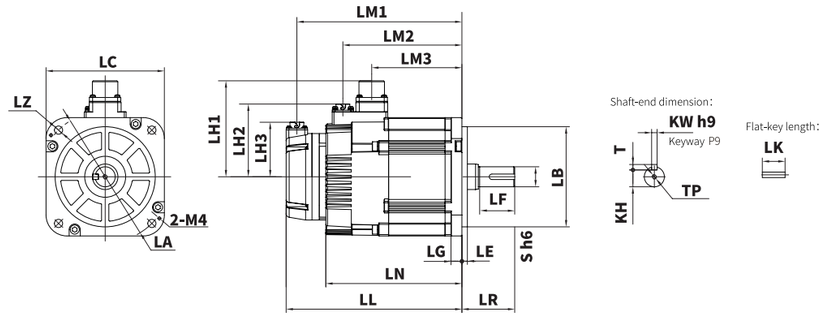
X2MG180S▲

External Dimensions for Servo Motor

Unit(mm)

Models	X2MG085S	X2MG130S	X2MG180S
LC	130	130	130
LA	ϕ145	ϕ145	ϕ145
LB	ϕ110h7	ϕ110h7	ϕ110h7
LZ	4-ϕ9	4-ϕ9	4-ϕ9
LR	58	58	58
S	ϕ19 h6	ϕ22 h6	ϕ24 h6
LL no brake [with brake]	128.5 [146.5]	144.5[180.5]	162.5 [198.5]
LN no brake [with brake]	97.5[133.5]	113.5[149.5]	131.5[167.5]
LG	12	12	12
LE	6	6	6
LF	40	40	40
LM1 no brake [with brake]	116.5[152.5]	132.5[168.5]	150.5 [186.5]
LM2 no brake [with brake]	[114.5]	[130.5]	[148.5]
LM3	83	99	117
LH1	105	105	105
LH2	79.5	79.5	79.5
LH3	54.5	54.5	54.5
LK	25	25	25
T	5	6	7
KW	5 h9	6 h9	8 h9
KH	16	18.5	20
TP	M5 Depth 16	M5 Depth 16	M5 Depth 16

X2MG085S/X2MG130S/X2MG180S



X6 Series Servo Motor with high precision optical encoder

220V/380V

23Bit/25Bit[*1] Absolute

50W-22KW

0.16N.m-140N.m

New manufacturing process

The newly-designed iron-core process makes the sero motor much smaller and lighter, 20% shorer than the previous generation.

New structure design

The integrated structure of the front fange and housing to be stronger, matching with connector-type motor. IP67 protection level.

New rotor design

The new design with 10-pole rotor + magnetic feld analysis technology to reduce the width of pulsation and makes it smoother at low speed.

76 models, and the capacity has been extended to 22KW, which can provide a wider range of power options!

MA

Low-inertia servo motor

Suitable for some occasions with light load and high-speed positioning. Quick response to start, accelerate and stop

MM/MH

Medium/high ineria sero motor

Suitable for occasions with heavy load and high stability requirements.

MHH

Ultra-high ineria sero motor

Suitable for the same installation fange. With higher motor ineria, suitable for rollers and low-speed and stable occasions.

MQ

Flat and special fange sero motor

Under the same power, with diferent sizes of fange design. The sero motor becomes shorer, but with larger ineria. Also suitable for rollers and low-speed stable occasions.

MG

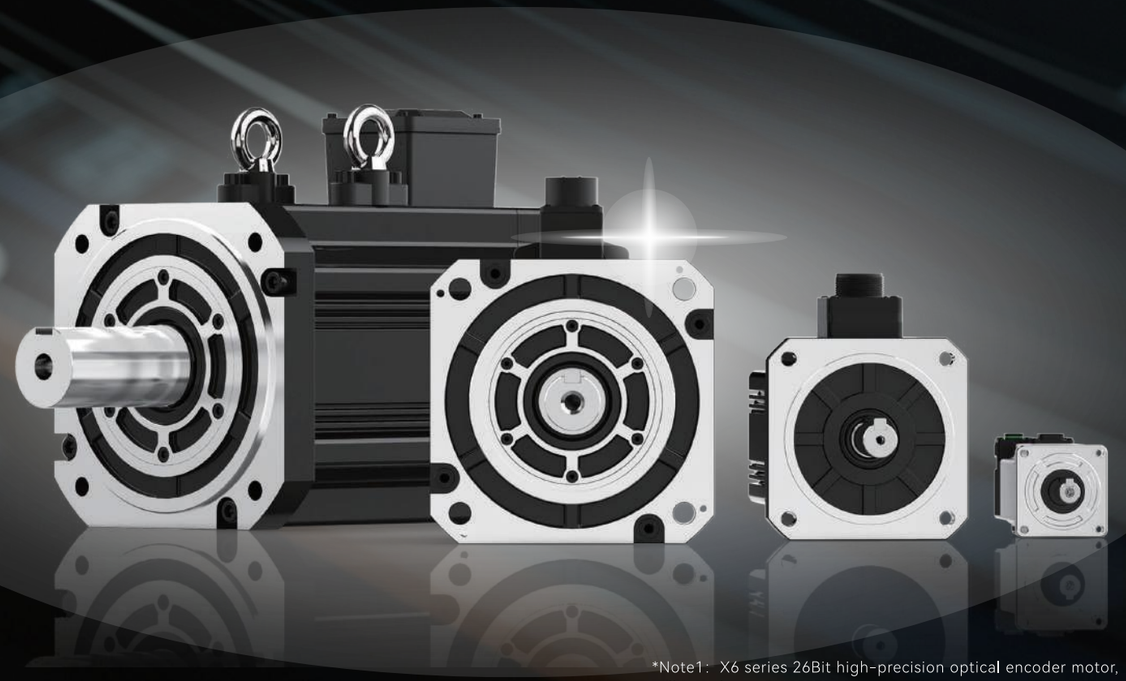
Low-speed and large-torque sero motor

With the characteristics of low rated speed and large output torque, suitable for heavy load occasions.

MGS

Low cogging cutting sero motor

Groove inclination design,which has lower cogging torque and good low-speed characteristics. At the same time, it can reach the maximum speed of 4000RPM with the Y7 series sero drive, which greatly shorens the idle travel time and improves the processing efciency.



*Note1: X6 series 26Bit high-precision optical encoder motor, will be released in 2023.

SV-X6 MA 040 A - N 2 C D - ****

1 2 3 4 5 6 7 8 Special specifications

1	Series name
SV-X6series	20BIT(PNXXXM Version)/23BIT

2	Inertia Specifications
MA	Low inertia
MM	Middle inertia
MMS	Middle inertia & high speed
MH	High inertia
MHH	Ultra high inertia
MQ	Special flange/Flat-type/small flange
MG	Low-speed & high-torque
MGS	Low-cogging cutting

3	Power specification		
005	50W	240	2.4KW
010	100W	290	2.9KW
015	150W	300	3KW
020	200W	400	4KW
040	400W	440	4.4KW
075	750W	500	5KW
085	850W	550	5.5KW
100	1KW	750	7.5KW
130	1.3KW	11K	11KW
150	1.5KW	15K	15KW
180	1.8KW	22K	22KW
200	2KW	37K	37KW*3

4	Design number
A/B/C/S	A: Standard speed B/C/S... Indicates a design sequence different from the standard speed
E/F	Indicates the design sequence of special flange specifications under the same index
H/K	Indicates the design sequence of special inertia

5	Brake specifications
N	No brake
B	With brake

6	Voltage specifications
2	AC220V
4	AC380V

7	Specifications
K	Lead wire type/Keyway shaft/no oil seal
L	Lead wire type/Keyway shaft/with oil seal
C	Connector type/keyway shaft/with oil seal*1
D	Connector type/keyway shaft/ no oil seal*1
J	Compact type(customized)

8	Encoder specifications
D	Multi-turn 23bit absolute
A	Multi-turn 20bit absolute (PNXXXM version) *2
C	Multi-turn 20bit absolute

9	Customization
**	N/A

E.g.

23bitabsolute 220v 850W MG High torque at low speed Naming rule SV-X6 MG 085A-N2LD

23bitabsolute 380v 850W MG High torque at low speed Naming rule SV-X6 MG 085A-N4LD

20bitabsolute 380v 850W MG High torque at low speed Naming rule SV-X6 MG085A-N4LA

*1: *1: Note 1: From the 2nd quarter of 2021, our company started rele servo motor with 40~80 flanges as the regular model.
Lead-wire servo motors will be discontinued from December 2021, if still the customized application process is required.
For details, refer to page 123 or consult our sales staff.

*2: The PNXXXM version of the X2 series motor has 20-bit resolution for Y7 drives and 17-bit resolution for other series drives.

*3: To be available in 2024

X6 Series Servo Motor

Series Name	Specifications	50W	100W	200W	400W	600W	750W	900W	1.0KW	1.2KW	1.5KW		1.8KW	2.0KW	3.0KW	4.0kW	5.0KW
Model name			X6MA010A	X6MA020A	X6MA040A	X6MA060E	X6MA075A	X6MA090E	X6MA100A	X6MA120E	X6MA150A	X6MA150E	X6MA180E	X6MA200A	X6MA300K	X6MA400K	X6MA500K
X6-MA Low inertia	Flange		□40	□60	□60	□110	□80	□110	□100	□110	□100	□110	□110	□100	□130	□130	□130
	Rated [Peak torque]		0.32[1.12]	0.64[1.91]	1.27[3.82]	1.91[5.73]	2.39[7.16]	2.86[8.6]	3.185[9.55]	4[12]	4.77[14.3]	4.77[14.3]	5.73[17.2]	6.37[19.1]	9.55[28.65]	12.7[38.1]	15.9[47.7]
	Inertia: No brake [with brake]		0.041[0.042]	0.16[0.17]	0.28[0.29]	3.1[4.2]	0.96[1.07]	4.5[5.6]	2.03[2.35]	5.9[7]	2.84[3.17]	7.3[8.4]	8.6[9.7]	3.68[4.01]	10.75[11.95]	14.7[15.9]	20.3[21.5]
	Rotation speed: Rated [Max. speed]		3000[6500]	3000[6000]	3000[6000]	3000[5000]	3000[6000]	3000[5000]	3000[5000]	3000[5000]	3000[5000]	3000[5000]	3000[5000]	3000[5000]	3000[5000]	3000[5000]	3000[5000]
	220V		23	23	23	23	23	23	23	23	23	23	23	23			
	380V								20 23		20 23			20 23	20 23	20 23	20 23

Series Name	Specifications	50W	100W	150W	200W	400W	750W	1.0KW	1.5KW	2.0KW	3KW	4KW	5.0KW	7.5KW	11KW	15KW	22KW
Model name								X6MM100A	X6MM150A	X6MM200A	X6MM300A	X6MM400A	X6MM500A	X6MM750A	X6MM11KA	X6MM15KA	X6MM22KA
X6-MM Middle inertia	Flange							□130	□130	□130	□180	□180	□180	□180	□220	□220	□220
	Rated [Peak torque]							4.77[14.3]	7.16[21.5]	9.55[28.6]	14.3[42.9]	19.1[57.3]	23.9[71.6]	47.8[119.4]	70[175]	96[239]	140[350]
	Inertia: No brake [with brake]							6.18[7.4]	9.16[10.4]	12.1[13.3]	43.5[63.2]	54.7[68]	66.7[80.8]	99.3[114.2]	251.8[314]	327.6[390.7]	481.2[543.8]
	Rotation speed: Rated [Max. speed]							2000[3000]	2000[3000]	2000[3000]	2000[3000]	2000[3000]	2000[3000]	1500[2500]	1500[2000]	1500[2000]	1500[2000]
	220V							23	23	23							
	380V							20 23	20 23	20 23	20 23	20 23	20 23	20 23	23	23	23
Model name								X6MM100S	X6MM150S	X6MM200S							
X6-MMS Middle inertia high speed series	Flange							□130	□130	□130							
	Rated [Peak torque]							4.77[14.31]	7.16[21.5]	9.55[28.6]							
	Inertia: No brake [with brake]							9.16[10.4]	12.1[13.3]	16.85[18.05]							
	Rotation speed: Rated [Max. speed]							2000[5000]	2000[5000]	2000[5000]							
	220V							23	23	23							
	380V							20 23	20 23	20 23							
Model name		X6MH005A	X6MH010A	X6MH015A	X6MH020A	X6MH040A	X6MH075A	X6MH100A	X6MH150A	X6MH200A		X6MH400A					
X6-MH High inertia	Flange	□40	□40	□40	□60	□60	□80	□130	□130	□180		□180					
	Rated [Peak torque]	0.16[0.56]	0.32[1.11]	0.477[1.43]	0.64[2.23]	1.27[4.46]	2.39[8.36]	4.77[14.3]	7.16[21.5]	9.55[28.6]		19.1[57.3]					
	Inertia: No brake [with brake]	0.038[0.042]	0.071[0.074]	0.13[0.133]	0.29[0.31]	0.56[0.58]	1.56[1.66]	30.8[32]	38.5[39.7]	31.4[44.6]		101.7[115]					
	Rotation speed: Rated [Max. speed]	3000[6500]	3000[6500]	3000[6000]	3000[6500]	3000[6500]	3000[6000]	2000[3000]	2000[3000]	2000[3000]		2000[3000]					
	220V	23	23	23	23	23	23	23	23								
	380V									20 23		20 23					
Model name			X6MH010H		X6MH020H	X6MH040H	X6MH075H										
X6-MHH Ultra high inertia	Flange		□40		□60	□60	□80										
	Rated [Peak torque]		0.32[1.11]		0.64[2.23]	1.27[4.46]	2.39[8.36]										
	Inertia: No brake [with brake]		0.092[0.095]		0.47[0.49]	0.73[0.75]	3.15[/]										
	Rotation speed: Rated [Max. speed]		3000[6500]		3000[6500]	3000[6500]	3000[6000]										
	220V		23		23	23	23										
	380V																
Model name			X6MQ010A		X6MQ020A	X6MQ040A		X6MQ100E									
X6-MQ Special flange Flat-type/ small flange	Flange		□60		□80	□80		□80									
	Rated [Peak torque]		0.32[0.96]		0.637[1.91]	1.27[3.82]		3.185[11.13]									
	Inertia: No brake [with brake]		0.14[0.16]		0.47[0.5]	0.87[0.9]		2[2.1]									
	Rotation speed: Rated [Max. speed]		3000[6500]		3000[6500]	3000[6500]		3000[6000]									
	220V		23		23	23		23									
	380V																

Series Name	Specifications	750W	1KW	850W	1.3KW	1.5KW	1.8KW	2.4KW	2.9KW	4.4KW	5.5KW
Model name		X6MG075A	X6MG100A	X6MG085A	X6MG130A	X6MG150C	X6MG180A	X6MG240A	X6MG290A	X6MG440A	X6MG550A
X6-MG Low-speed & high-torque	Flange	□80	□130	□130	□130	□130	□130	□130	□180	□180	□180
	Rated [Peak torque]	4.77[14.3]	9.55[28.6]	5.41[16.2]	8.28[24.84]	14.3[42]	11.5[34.5]	15.2[45.8]	18.6[46.5]	28[71.1]	35[87.5]
	Inertia: No brake [with brake]	2.88[3]	12.1[13.3]	14[15.2]	20.2[21.4]	20.8[22]	26[27.2]	31.3[32.5]	47.2[62.3]	68.6[83.7]	91.4[106.5]
	Rotation speed: Rated [Max. speed]	1500[2000]	1000[1500]	1500[3000]	1500[3000]	1000[1500]	1500[3000]	1500[3000]	1500[3000]	1500[3000]	1500[3000]
	220V	23	23	23	23		23				
	380V			20 23		20 23		20 23	20 23	20 23	20 23
Model name				X6MG085S	X6MG130S		X6MG180S		X6MG290S	X6MG440S	
X6-MGS Low-cogging cutting series	Flange			□130	□130		□130		□180	□180	
	Rated [Peak torque]			5.39[16.2]	8.28[24.842]		11.5[34.5]		18.6[55.8]	28.4[71.1]	
	Inertia: No brake [with brake]			13.9[16]	19.9[22]		26[28.1]		47.2[62.3]	68.6[83.7]	
	Rotation speed: Rated [Max. speed]			1500[4000]	1500[4000]		1500[4000]		1500[4000]	1500[4000]	
	220V			23	23		23				
	380V			20 23	20 23		20 23		20 23	20 23	

Note 23 20 23 Indicates the encoder bits; The color indicates the voltage specification, orange: 220V, blue: 380V.

X6 series servo motor (Version:PNXXXM) is 20bit resolution when matching with Y7 series servo drive, and it is 17bit resolution when matching with other servo drives.

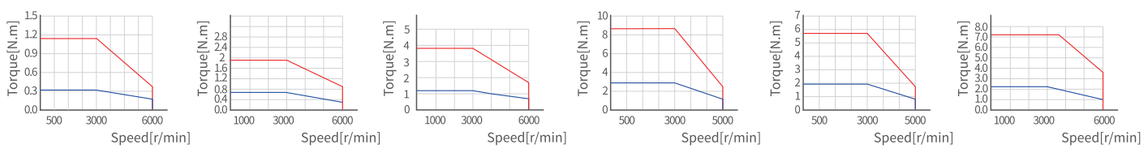
Servo Motor Specifications

100 W | 200 W | 400 W | 600 W | 750 W | 900 W

Items		Unit	X6MA010A	X6MA020A	X6MA040A	X6MA060E	X6MA075A	X6MA090E
Rated power		W	100	200	400	600	750	900
Rated voltage		V	220	220	220	220	220	220
Fitting flange size		mm	40	60	60	110	80	110
Rated torque		N.m	0.32	0.64	1.27	1.91	2.39	2.86
Instantaneous max. torque		N.m	1.12	1.91	3.82	5.73	7.16	8.6
Rated speed		r/min	3000	3000	3000	3000	3000	3000
Max. speed		r/min	6500	6000	6000	5000	6000	5000
Rated current		Arms	1.2	1.7	2.7	3	4.2	4.5
Instantaneous max. current		Arms	4.6	6.5	10.2	9	17.4	13.5
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	0.041	0.16	0.28	3.1	0.96	4.5
	With brake	$x10^{-4}Kg.m^2$	0.042	0.17	0.29	4.2	1.07	5.6
Torque constant		N.m/A	0.265	0.427	0.488	0.63	0.583	0.63
Induced voltage constant per phase		mV[r/min]	10.05	14.5	17.9	24.48	21.33	24.52
Rated power rate	No brake	KW/S	29.1	25.6	57.6	11.3	59.5	17.1
	With brake	KW/S	27.5	24.1	55.6	10.6	53.4	16.4
Mechanical time constant	No brake	ms	1.12	0.775	0.561	1.77	0.463	1.98
	With brake	ms	1.28	0.824	0.581	1.87	0.516	2.07
Electrical time constant		ms	0.97	6.3	6.1	7.8	12.7	6.78
Phase q-axis/d-axis inductance		mH	8.75/8.04	19/5.6	10.7/7.5	6.35/4.49	7.6/4.9	4.2/2.94
Weight: No brake[with brake]		kg	0.44 [0.65]	0.9 [1.3]	1.28 [1.67]	3.1 [4.4]	2.25 [3.01]	3.7 [5]
Permissible load	Radial load	N	68	245	245	392	392	392
	Axial load	N	58	98	98	147	147	147
	Rated voltage	V	DC24V±10%					
	Rated current	A	0.25	0.36	0.36	0.81	0.42	0.81
Brake specifications Note: Holding brake	Brake power	w	7	7.3	7.3	19.5	9.6	19.5
	Static friction torque	N.m	0.38 or more	1.6 or more	1.6 or more	12 or more	3.8 or more	12 or more
	Suction time	ms	35 or less	50 or less	50 or less	100 or less	70 or less	100 or less
	Release time	ms	20 or less	20 or less	20 or less	60 or less	20 or less	60 or less
	Release voltage	V	DC1V or more	DC1V or more	DC1V or more	DC1.5V or more	DC1V or more	DC1.5V or more

Torque characteristics

Instantaneous operation range — Continuous operation range

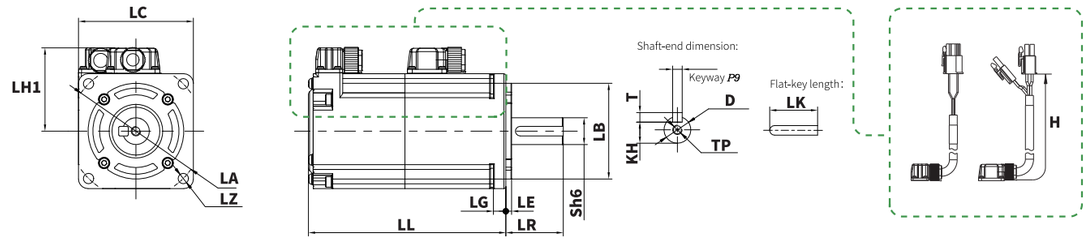


External Dimensions for Servo Motor

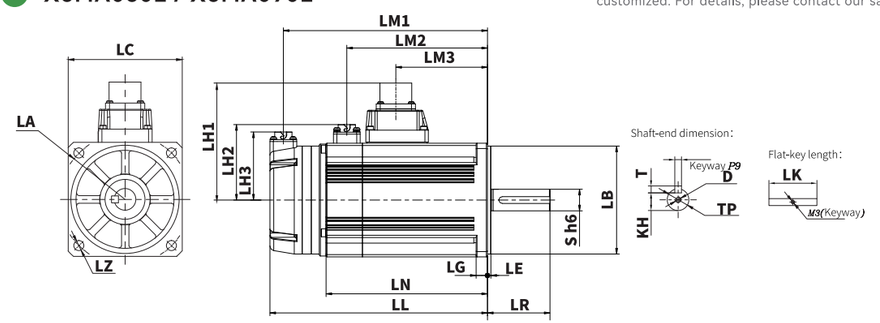
Unit(mm)

Models	X6MA010A	X6MA020A	X6MA040A	X6MA060E	X6MA075A	X6MA090E
LC	40	60	60	130	80	110
LA	ϕ46	ϕ70	ϕ70	ϕ95	ϕ60	ϕ130
LB	ϕ30	ϕ50	ϕ50	ϕ70	ϕ70	ϕ95h7
LZ	2-ϕ4.3	4-ϕ5.4	4-ϕ5.4	4-ϕ9	4-ϕ6	4-ϕ9
LR	25	30	30	55	35	55
S	ϕ8 h6	ϕ14 h6	ϕ14 h6	ϕ19 h6	ϕ19 h6	ϕ19 h6
LL no brake [with brake]	76.7 [107.1]	73.5[103]	93.2[122.7]	130.5 [157.5]	105[138.5]	141[168]
LN no brake [with brake]	—	—	—	81[108]	—	91.5[118.5]
LG	5	6.5	6.5	12	8	12
LE	3	3	3	5	3	5
LM1 no brake [with brake]	—	—	—	118.5 [145.5]	—	129[156]
LM2 no brake [with brake]	—	—	—	[90]	—	[100.5]
LM3	—	—	—	47	—	57
LH1	34.5	44.5	44.5	102	54.5	102
LH2	—	—	—	71.5	—	71.4
LH3	—	—	—	60	—	60
LK	14	25	25	42	25	42
T	3	5	5	6	6	6
KW	3 h9	5 h9	5 h9	6 h9	6 h9	6 h9
KH	6.2	11	11	15.5	15.5	15.5
TP	M3 Depth 6	M5 Depth 12	M5 Depth 12	M5 Depth 12	M5 Depth 12	M5 Depth 12
H type cable length for lead-wire type	210	210	210	—	210	—

X6MA010A / X6MA020A / X6MA040A / X6MA060E / X6MA075A/ X6MA090E



X6MA060E / X6MA090E



*1: For X6 series servo motors, the lead-wire types are needed to be customized. For details, please contact our sales department.

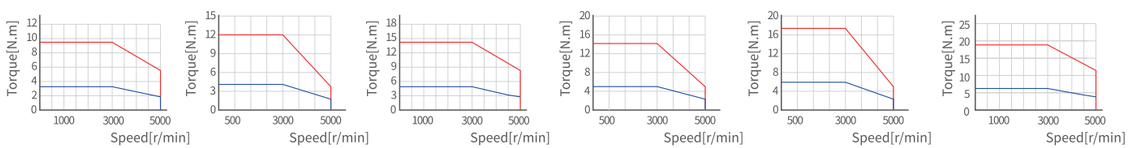
Servo Motor Specifications

1 KW | 1.2 KW | 1.5 KW | 1.8 KW | 2 KW

Items		Unit	X6MA100A	X6MA120E	X6MA150A	X6MA150E	X6MA180E	X6MA200A
Rated power		W	1000	1200	1500	1500	1800	2000
Rated voltage		V	220	220	220	220	220	220
Fitting flange size		mm	100	110	100	110	110	100
Rated torque		N.m	3.18	4	4.77	4.77	5.73	6.37
Instantaneous max. torque		N.m	9.55	12	14.3	14.3	17.2	19.1
Rated speed		r/min	3000	3000	3000	3000	3000	3000
Max. speed		r/min	5000	5000	5000	5000	5000	5000
Rated current		Arms	6.6	6	8.2	7.6	9.5	11.3
Instantaneous max. current		Arms	28	18	35	24	29	48
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	2.03	5.9	2.84	7.3	8.6	3.68
	With brake	$x10^{-4}Kg.m^2$	2.35	7	3.17	8.4	9.7	4.01
Torque constant		N.m/A	0.52	0.63	0.628	0.63	0.63	0.607
Induced voltage constant per phase		mV[r/min]	18.15	23.55	21.92	23.2	24	21.247
Rated power rate	No brake	KW/S	49.82	23.1	80.12	28	34.7	110.26
	With brake	KW/S	43.03	22.1	71.775	27.3	34	101.19
Mechanical time constant	No brake	ms	0.619	1.5	0.507	1.47	1.38	0.425
	With brake	ms	0.717	1.57	0.566	1.51	1.4	0.463
Electrical time constant		ms	7.22	8.86	8.08	9.35	9.54	9.37
Phase q-axis/d-axis inductance		mH	—	3.13/2.18	—	2.52/1.75	1.86/1.29	—
Weight: No brake[with brake]		kg	3.5 [4.5]	4.3 [5.6]	4.4 [5.4]	4.95 [6.25]	5.4 [6.7]	5.3 [6.3]
Permissible load	Radial load	N	392	392	392	392	392	392
	Axial load	N	147	147	147	147	147	147
	Rated voltage	V	DC24V±10%					
	Rated current	A	0.81±10%	0.81	0.81±10%	0.81	0.81	0.81±10%
Brake specifications Note: Holding brake	Brake power	w	20	19.5	20	19.5	19.5	20
	Static friction torque	N.m	7.8 or more	12 or more	7.8 or more	12 or more	12 or more	7.8 or more
	Suction time	ms	50 or less	100 or less	50 or less	100 or less	100 or less	50 or less
	Release time	ms	15 or less	60 or less	15 or less	60 or less	60 or less	15 or less
	Release voltage	V	DC1V or more	DC1.5V or more	DC1V or more	DC1.5V or more	DC1.5V or more	DC1V or more

Torque characteristics

Instantaneous operation range — Continuous operation range



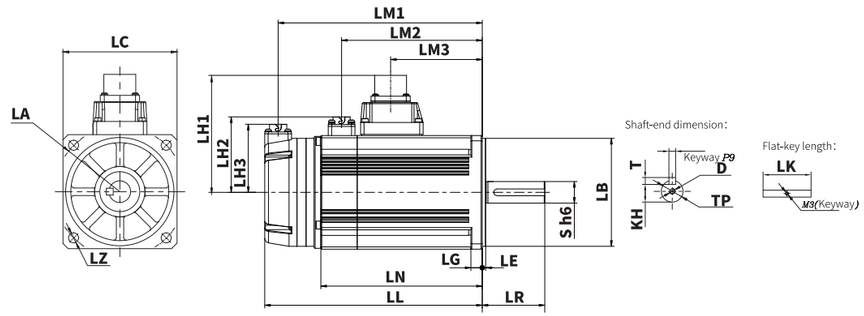
X6MA100A▲ X6MA120E▲ X6MA150A▲ X6MA150E▲ X6MA180E▲ X6MA200A▲

External Dimensions for Servo Motor

Unit(mm)

Models	X6MA100A	X6MA120E	X6MA150A	X6MA150E	X6MA180E	X6MA200A
LC	100	110	100	110	110	100
LA	ϕ115	ϕ130	ϕ115	ϕ130	ϕ130	ϕ115
LB	ϕ95	ϕ95	ϕ95	ϕ95	ϕ95	ϕ95
LZ	4-ϕ9	4-ϕ9	4-ϕ9	4-ϕ9	4-ϕ9	4-ϕ9
LR	55	55	55	55	55	55
S	ϕ19 h6	ϕ19 h6	ϕ19 h6	ϕ19 h6	ϕ19 h6	ϕ19 h6
LL no brake [with brake]	123.5 [150.5]	152[179]	142 [169]	163[190]	173[200]	183.5[210.5]
LN no brake [with brake]	96.5 [123.5]	102.5[129.5]	115 [142]	113[140]	123.5[150.5]	134 [161]
LG	10	12	10	12	12	10
LE	3	5	3	5	5	3
LM1 no brake [with brake]	111.5 [138.5]	152[167]	130 [157]	151[178]	161[188]	171.5[198.5]
LM2 no brake [with brake]	—[105]	—[111.5]	—[123.5]	— [122]	— [132.5]	— [142.5]
LM3	62	68	80.5	78.5	89	99.5
LH1	103	102	103	102	102	103
LH2	66	71.4	66.5	71.4	71.5	66.5
LH3	55	60	55	60	60	60
LK	42	42	42	42	42	42
T	6	6	6	6	6	6
KW	6 h9	6 h9	6 h9	6 h9	6 h9	6 h9
KH	15.5	15.5	15.5	15.5	15.5	15.5
TP	M5 Depth 12	M5 Depth 12	M5 Depth 12	M5 Depth 12	M5 Depth 12	M5 Depth 12
H type cable length for lead-wire type	—	—	—	—	—	—

X6MA100A / X6MA120E / X6MA150A / X6MA150E / X6MA180E / X6MA200A



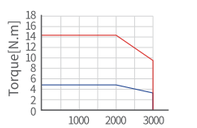
Servo Motor Specifications

1 KW 1.5 KW 2 KW

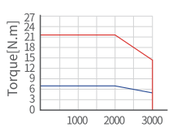
Items		Unit	X6MM100A	X6MM150A	X6MM200A
Rated power		W	1000	1500	2000
Rated voltage		V	220	220	220
Fitting flange size		mm	130	130	130
Rated torque		N.m	4.77	7.16	9.55
Instantaneous max. torque		N.m	14.3	21.5	28.6
Rated speed		r/min	2000	2000	2000
Max. speed		r/min	3000	3000	3000
Rated current		Arms	5.2	8	9.9
Instantaneous max. current		Arms	15.6	24	30
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	6.18	9.16	12.1
	With brake	$x10^{-4}Kg.m^2$	7.4	10.4	13.3
Torque constant		N.m/A	0.918	0.895	0.9645
Induced voltage constant per phase		mV[r/min]	33.65	34.84	37.95
Rated power rate	No brake	KW/S	36.8	56	75.4
	With brake	KW/S	30.7	49.3	68.6
Mechanical time constant	No brake	ms	1.51	1.16	1.05
	With brake	ms	1.81	1.3	1.16
Electrical time constant		ms	11.1	14.6	15.38
Phase q-axis/d-axis inductance		mH	8.4/4.3	5.8/2.9	4.9/2.6
Weight: No brake[with brake]		kg	4.9[6.5]	6.1[7.7]	7.21[8.81]
Permissible load	Radial load	N	490	490	490
	Axial load	N	196	196	196
	Rated voltage	V	DC24V±10%		
	Rated current	A	0.9	0.9	0.9
Brake specifications Note: Holding brake	Brake power	w	22	22	22
	Static friction torque	N.m	14 or more	14 or more	14 or more
	Suction time	ms	100 or less	100 or less	100 or less
	Release time	ms	60 or less	60 or less	60 or less
	Release voltage	V		DC1V or more	

Torque characteristics

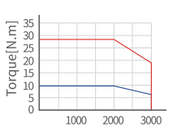
Instantaneous operation range — Continuous operation range



X6MM100A▲



X6MM150A▲



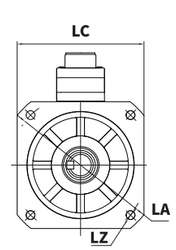
X6MM200A▲

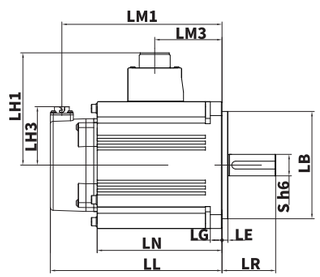
External Dimensions for Servo Motor

Unit(mm)

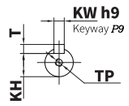
Models	X6MM100A	X6MM150A	X6MM200A
LC	130	130	130
LA	ϕ145	ϕ145	ϕ145
LB	ϕ110	ϕ110	ϕ110
LZ	4-ϕ9	4-ϕ9	4-ϕ9
LR	55	55	55
S	ϕ22 h6	ϕ22 h6	ϕ22 h6
LL no brake [with brake]	128 [148]	142 [162]	156 [176]
LN no brake [with brake]	80 [100]	94 [114]	108 [128]
LG	12	12	12
LE	6	6	6
LM1 no brake [with brake]	116.2 [136.2]	130.2 [150.2]	144.2 [164.2]
LM3	41	55	69
LH1	115	115	115
LH3	60	60	60
LK	45	45	45
T	7	7	7
KW	8 h9	8 h9	8 h9
KH	18	18	18
TP	M6 Depth 20	M6 Depth 20	M6 Depth 20

X6MM100A / X6MM150A / X6MM200A





Shaft-end dimension:



Flat-key length:

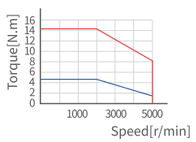
Servo Motor Specifications

1 KW 1.5 KW 2 KW

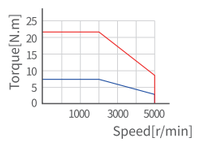
Items		Unit	X6MM100S	X6MM150S	X6MM200S
Rated power		W	1000	1500	2000
Rated voltage		V	220	220	220
Fitting flange size		mm	130	130	130
Rated torque		N.m	4.77	7.16	9.55
Instantaneous max. torque		N.m	14.31	21.5	28.6
Rated speed		r/min	2000	2000	2000
Max. speed		r/min	5000	5000	5000
Rated current		Arms	8.25	9.5	15
Instantaneous max. current		Arms	25	29	50
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	9.16	12.1	16.85
	With brake	$x10^{-4}Kg.m^2$	10.4	13.3	18.05
Torque constant		N.m/A	0.573	0.672	0.627
Induced voltage constant per phase		mV[r/min]	21.2	25.9	23
Rated power rate	No brake	KW/S	24.84	42.37	54.13
	With brake	KW/S	21.88	38.55	50.53
Mechanical time constant	No brake	ms	1.24	1.08	0.93
	With brake	ms	1.41	1.18	1
Electrical time constant		ms	13.3	16.13	13.75
Phase q-axis/d-axis inductance		mH	2.2/1.1	2.5/1.3	1.1/0.6
Weight: No brake[with brake]		kg	6.1[7.7]	7.21[8.81]	7.14[10.33]
Permissible load	Radial load	N	490	490	490
	Axial load	N	196	196	196
	Rated voltage	V	DC24V±10%		
	Rated current	A	0.9	0.9	0.9
Brake specifications Note: Holding brake	Brake power	w	21.5	21.5	21.5
	Static friction torque	N.m	14 or more	14 or more	14 or more
	Suction time	ms	100 or less	100 or less	100 or less
	Release time	ms	60 or less	60 or less	60 or less
	Release voltage	V		DC1V or more	

Torque characteristics

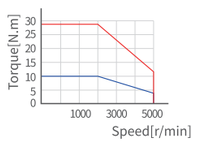
Instantaneous operation range — Continuous operation range



X6MM100S▲



X6MM150S▲



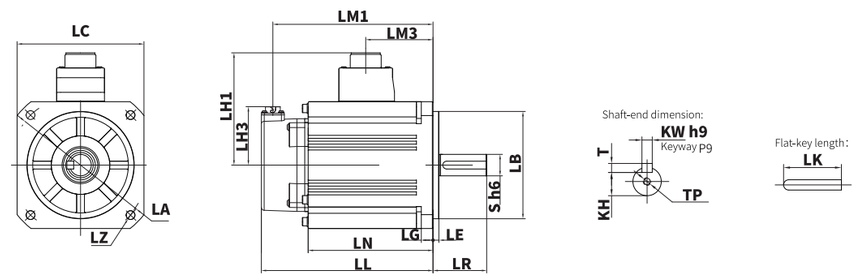
X6MM200S▲

External Dimensions for Servo Motor

Unit(mm)

Models	X6MM100S	X6MM150S	X6MM200S
LC	130	130	130
LA	ϕ145	ϕ145	ϕ145
LB	ϕ110	ϕ110	ϕ110
LZ	4-ϕ9	4-ϕ9	4-ϕ9
LR	55	55	55
S	ϕ22 h6	ϕ22 h6	ϕ22 h6
LL no brake [with brake]	142 [162]	156 [176]	184 [204]
LN no brake [with brake]	94 [114]	108 [128]	136 [156]
LG	12	12	12
LE	6	6	6
LM1 no brake [with brake]	130.2 [150.2]	144.2 [164.2]	172.2 [192.2]
LM3	55	69	97
LH1	115	115	115
LH3	60	60	60
LK	45	45	45
T	7	7	7
KW	8 h9	8 h9	8 h9
KH	18	18	18
TP	M6 Depth 20	M6 Depth 20	M6 Depth 20

X6MM100S/X6MM150S/X6MM200S



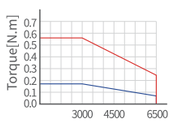
Servo Motor Specifications

50 W 100 W 150 W 200 W

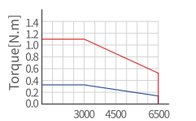
Items		Unit	X6MH005A	X6MH010A	X6MH015A	X6MH020A*2
Rated power		W	50	100	150	200
Rated voltage		V	220	220	220	220
Fitting flange size		mm	40	40	40	60
Rated torque		N.m	0.16	0.32	0.477	0.64
Instantaneous max. torque		N.m	0.56	1.11	1.43	2.23
Rated speed		r/min	3000	3000	3000	3000
Max. speed		r/min	6500	6500	6000	6500
Rated current		Arms	1.1	1.1	1.5	1.4
Instantaneous max. current		Arms	3.89	3.89	4.5	4.87
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	0.038	0.071	0.13	0.29
	With brake	$x10^{-4}Kg.m^2$	0.042	0.074	0.133	0.31
Torque constant		N.m/A	0.168	0.327	0.33	0.5
Induced voltage constant per phase		mV[r/min]	5	11.1	13.66	14.61
Rated power rate	No brake	KW/S	6.7	14.4	17.5	14.1
	With brake	KW/S	6.1	13.8	17.1	13.2
Mechanical time constant	No brake	ms	2.6	1.67	1.9	1.57
	With brake	ms	2.85	1.74	1.94	1.68
Electrical time constant		ms	0.89	1.1	1.22	2.58
Phase q-axis/d-axis inductance		mH	5.1/3.4	9.4/6.3	7.2/4.8	10.2/5.8
Weight: No brake[with brake]		kg	0.33 [0.55]	0.45 [0.66]	0.6[0.81]	0.87 [1.27]
Permissible load	Radial load	N	68	68	68	245
	Axial load	N	58	58	58	98
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%			
	Rated current	A	0.25	0.25	0.375	0.36
	Brake power	w	6	6	9	9
	Static friction torque	N.m	0.38 or more	0.38 or more	0.58 or more	1.6 or more
	Suction time	ms	35 or less	35 or less	50 or less	50 or less
	Release time	ms	20 or less	20 or less	20 or less	20 or less
	Release voltage	V	DC1V or more			

Torque characteristics

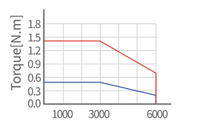
Instantaneous operation range — Continuous operation range



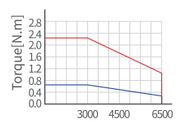
X6MH005A▲



X6MH010A▲



X6MH015A▲



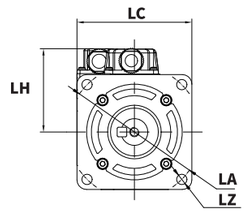
X6MH020A▲

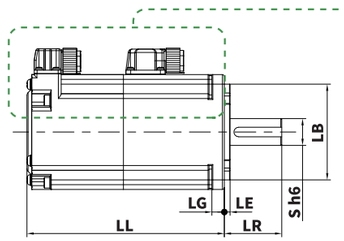
External Dimensions for Servo Motor

Unit(mm)

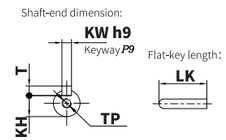
Models	X6MH005A	X6MH010A	X6MH015A	X6MH020A*2
LC	40	40	40	60
LA	ϕ46	ϕ46	ϕ46	ϕ70
LB	ϕ30	ϕ30	ϕ30	ϕ50
LZ	2-ϕ4.3	2-ϕ4.3	2-ϕ4.3	4-ϕ5.4
LR	25	25	25	30
S	ϕ8 h6	ϕ8 h6	ϕ8 h6	ϕ14 h6
LL no brake [with brake]	57 [91]	71 [105]	93.8 [127.8]	70.5 [100]
LG	5	5	5	6.5
LE	3	3	3	3
LH	35	35	35	44.5
LK	14	14	14	25
T	3	3	3	5
KW no brake [with brake]	3 h9	3 h9	3 h9	5 h9
KH	6.2	6.2	6.2	11
TP	M3 Depth 6	M3 Depth 6	M3 Depth 6	M5 Depth 12
H type cable length for lead-wire type	210	210	210	210

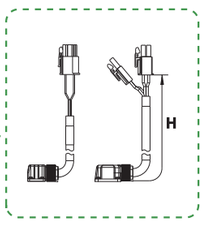
X6MH005A / X6MH010A / X6MH015A / X6MH020A





Connector type





Lead-wire type*1

*1: For X6 series servo motors, the lead-wire types are needed to be customized. For details, please contact our sales department.
*2: There is the shaft diameter ϕ11 for X6 series servo motor, the model is X6MH020A-N2JD.

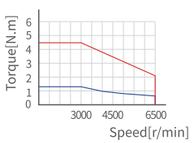
Servo Motor Specifications

400 W | 750 W | 1 KW | 1.5 KW

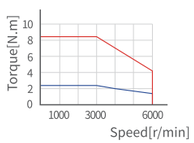
Items		Unit	X6MH040A	X6MH075A	X6MH100A	X6MH150A
Rated power		W	400	750	1000	1500
Rated voltage		V	220	220	220	220
Fitting flange size		mm	60	80	130	130
Rated torque		N.m	1.27	2.39	4.77	7.16
Instantaneous max. torque		N.m	4.46	8.36	14.3	21.5
Rated speed		r/min	3000	3000	2000	2000
Max. speed		r/min	6500	6000	3000	3000
Rated current		Arms	2.1	3.8	5.2	8
Instantaneous max. current		Arms	7.36	13.3	15.6	24
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	0.56	1.56	30.8	38.5
	With brake	$x10^{-4}Kg.m^2$	0.58	1.66	32	39.7
Torque constant		N.m/A	0.67	0.648	0.918	0.895
Induced voltage constant per phase		mV[r/min]	20.85	22.65	33.65	34.84
Rated power rate	No brake	KW/S	28.8	36.6	7.39	13.3
	With brake	KW/S	27.8	34.4	7.11	12.9
Mechanical time constant	No brake	ms	1.24	0.97	7.54	4.9
	With brake	ms	1.29	1.03	7.84	5.05
Electrical time constant		ms	2.97	6.59	11.1	14.63
Phase q-axis/d-axis inductance		mH	9.2/6.5	6/3.3	8.4/4.3	5.8/2.9
Weight: No brake[with brake]		kg	1.22 [1.61]	2.25 [3.01]	6.63[8.23]	8.03[9.63]
Permissible load	Radial load	N	245	392	490	490
	Axial load	N	98	147	196	196
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%			
	Rated current	A	0.36	0.42	0.9	0.9
	Brake power	w	9	9	9	9
	Static friction torque	N.m	1.6 or more	3.8 or more	14 or more	14 or more
	Suction time	ms	50 or less	70 or less	100 or less	100 or less
	Release time	ms	20 or less	20 or less	60 or less	60 or less
	Release voltage	V	DC1V or more			

Torque characteristics

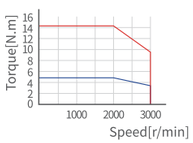
Instantaneous operation range — Continuous operation range



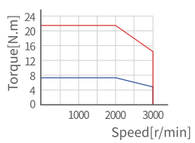
X6MH040A▲



X6MH075A▲



X6MH100A▲



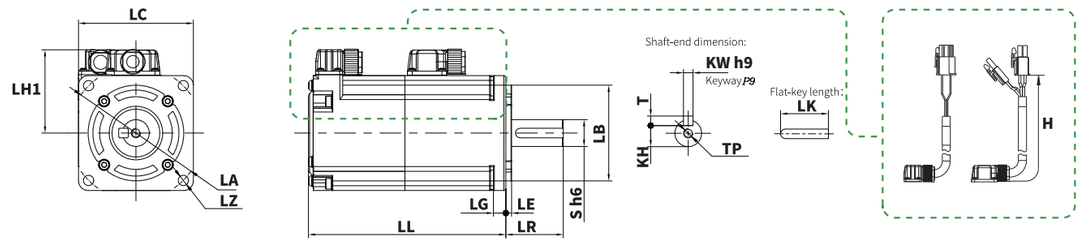
X6MH150A▲

External Dimensions for Servo Motor

Unit(mm)

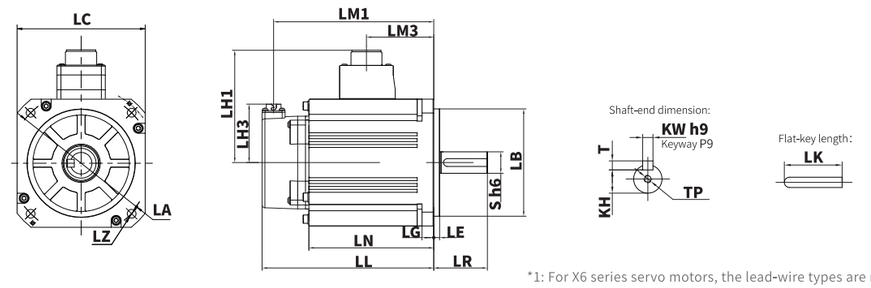
Models	X6MH040A	X6MH075A	X6MH100A	X6MH150A
LC	60	80	130	130
LA	ϕ70	ϕ90	ϕ145	ϕ145
LB	ϕ50	ϕ70	ϕ110	ϕ110
LZ	4-ϕ5.4	4-ϕ6.5	4-ϕ9	4-ϕ9
LR	30	35	55	55
S	ϕ14 h6	ϕ19 h6	ϕ22 h6	ϕ22 h6
LL no brake [with brake]	87.5 [117]	94.5 [128.5]	156 [176]	170 [190]
LN no brake [with brake]	—	—	108 [128]	122 [142]
LG	6.5	8	12	12
LE	3	3	6	6
LM1 no brake [with brake]	—	—	144.2[164.2]	158.2 [178.2]
LM3	—	—	69	83
LH1	44.5	54.5	115	115
LH3	—	—	60	60
LK	25	25	45	45
T	5	6	7	7
KW	5 h9	6 h9	8 h9	8 h9
KH	11	15.5	18	18
TP	M5 Depth 12	M5 Depth 12	M6 Depth 20	M6 Depth 20
H type cable length for lead-wire type	210	210	—	—

X6MH040A / X6MH075A



Connector type | Lead-wire type*1

X6MH100A / X6MH150A



*1: For X6 series servo motors, the lead-wire types are needed to be customized. For details, please contact our sales department.

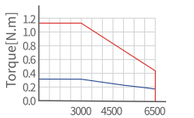
Servo Motor Specifications

100 W 200 W 400 W 750 W

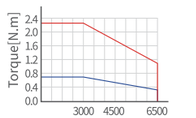
Items		Unit	X6MH010H	X6MH020H	X6MH040H	X6MH075H
Rated power		W	100	200	400	750
Rated voltage		V	220	220	220	220
Fitting flange size		mm	40	60	60	80
Rated torque		N.m	0.32	0.64	1.27	2.39
Instantaneous max. torque		N.m	1.11	2.23	4.45	8.36
Rated speed		r/min	3000	3000	3000	3000
Max. speed		r/min	6500	6500	6500	6000
Rated current		Arms	0.92	1.4	2.4	3.8
Instantaneous max. current		Arms	3.6	4.87	8.2	18.8
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	0.092	0.47	0.73	3.15
	With brake	$x10^{-4}Kg.m^2$	0.095	0.49	0.75	—*2
Torque constant		N.m/A	0.347	0.5	0.531	0.648
Induced voltage constant per phase		mV[r/min]	13.3	14.61	20.4	22.65
Rated power rate	No brake	KW/S	11.13	8.71	22.09	18.1
	With brake	KW/S	10.78	8.36	21.5	17.85
Mechanical time constant	No brake	ms	2.23	2.54	1.15	1.95
	With brake	ms	2.3	2.65	1.18	1.98
Electrical time constant		ms	0.986	2.58	4.1	6.59
Phase q-axis/d-axis inductance		mH	11.9/8	10.2/5.8	6.9/4.3	6/3.3
Weight: No brake[with brake]		kg	0.44[0.65]	0.95 [1.29]	1.45 [1.85]	2.65 [—*2]
Permissible load	Radial load	N	68	245	245	392
	Axial load	N	58	98	98	147
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%			
	Rated current	A	0.25	0.36	0.36	0.42
	Brake power	w	6	9	9	10
	Static friction torque	N.m	0.38 or more	1.6 or more	1.6 or more	3.8 or more
	Suction time	ms	35 or less	50 or less	50 or less	70 or less
	Release time	ms	20 or less	20 or less	20 or less	20 or less
	Release voltage	V	DC1V or more			

Torque characteristics

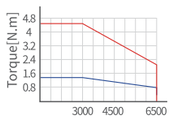
Instantaneous operation range — Continuous operation range



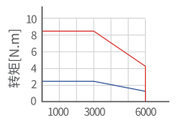
X6MH010H ▲



X6MH020H ▲



X6MH040H ▲



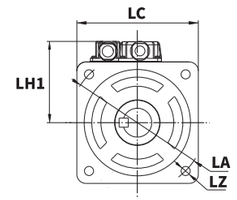
X6MH075H ▲

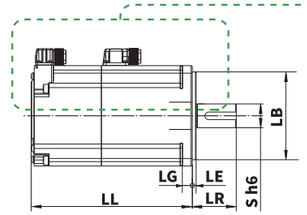
External Dimensions for Servo Motor

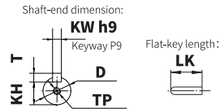
Unit(mm)

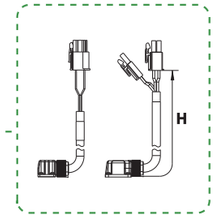
Models	X6MH010H	X6MH020H(Lead-wire type)	X6MH040H	X6MH075H(Lead-wire type)
LC	40	60	60	80
LA	ϕ46	ϕ70	ϕ70	ϕ90
LB	ϕ30	ϕ50	ϕ50	ϕ70
LZ	2-ϕ4.3	4-ϕ5.5	4-ϕ5.5	4-ϕ6.6
LR	25	30	30	35
S	ϕ8 h6	ϕ14 h6	ϕ14 h6	ϕ19 h6
LL no brake [with brake]	76.7 [110.7]	82.4 [111.9]	98.5 [128]	122 [—*2]
LG	5	6.5	6.5	8
LE	3	3	3	3
LH1	35	43.5	44.5	53.5
LK	14	25	25	25
T	3	5	5	6
KW	3 h9	5 h9	5 h9	6 h9
KH	6.2	11	11	15.5
TP	M3 Depth 6	M5 Depth 12	M5 Depth 12	M5 Depth 12
H type cable length for lead-wire type	210	210	210	210

X6MH010H / X6MH020H / X6MH040H / X6MH075H









Connector type

Lead-wire type*1

*1: For X6 series servo motors, the lead-wire types are needed to be customized. For details, please contact our sales department.

*2: Indicates there is no model with the brake.

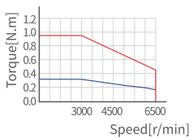
Servo Motor Specifications

100 W | 200 W | 400 W | 1 KW

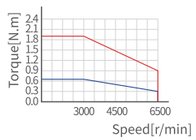
Items		Unit	X6MQ010A	MQ010A-□2K□	X6MQ020A	X6MQ040A	X6MQ100E
Rated power		W	100	100	200	400	1000
Rated voltage		V	220	220	220	220	220
Fitting flange size		mm	60	60	80	80	80
Rated torque		N.m	0.32	0.32	0.637	1.27	3.185
Instantaneous max. torque		N.m	0.96	0.96	1.91	3.82	11.13
Rated speed		r/min	3000	3000	3000	3000	3000
Max. speed		r/min	6500	6500	6500	6500	6000
Rated current		Arms	1.15	1.15	2	2.6	5.7
Instantaneous max. current		Arms	3.45	3.45	6.4	8.4	21.2
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	0.14	0.14	0.47	0.87	2
	With brake	$x10^{-4}Kg.m^2$	0.16	0.16	0.5	0.9	2.1
Torque constant		N.m/A	0.28	0.28	0.318	0.488	0.552
Induced voltage constant per phase		mV[r/min]	10.78	10.78	12.2	19.6	21.2
Rated power rate	No brake	KW/S	6.99	6.99	8.63	18.5	50.7
	With brake	KW/S	6.64	6.64	8.12	17.92	48.31
Mechanical time constant	No brake	ms	2.3	2.3	2.51	1.51	0.85
	With brake	ms	2.46	2.46	2.67	1.57	0.897
Electrical time constant		ms	1.66	1.66	3.52	5.41	7.6
Phase q-axis/d-axis inductance		mH	13.63/11.09	13.63/11.09	7.3/3.9	9/4.9	3.8/2.6
Weight: No brake[with brake]		kg	0.68 [0.92]	0.68 [0.92]	1.24 [1.74]	1.6 [2.1]	2.68 [3.45]
Permissible load	Radial load	N	68	68	245	245	392
	Axial load	N	58	58	98	98	147
	Rated voltage	V	DC24V±10%				
	Rated current	A	0.9	0.9	0.9	0.9	0.42
Brake specifications Note: Holding brake	Brake power	w	22	22	22	22	22
	Static friction torque	N.m	0.38-1.1	0.38-1.1	1.6 or more	1.6 or more	3.8 or more
	Suction time	ms	60 or less	60 or less	60 or less	60 or less	70 or less
	Release time	ms	40 or less	40 or less	40 or less	40 or less	20 or less
	Release voltage	V	DC1.5V or more				DC1V or more

Torque characteristics

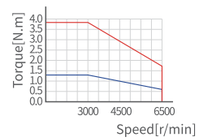
Instantaneous operation range — Continuous operation range



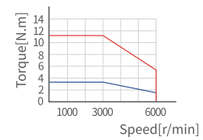
X6MQ010A▲



X6MQ020A▲



X6MQ040A▲



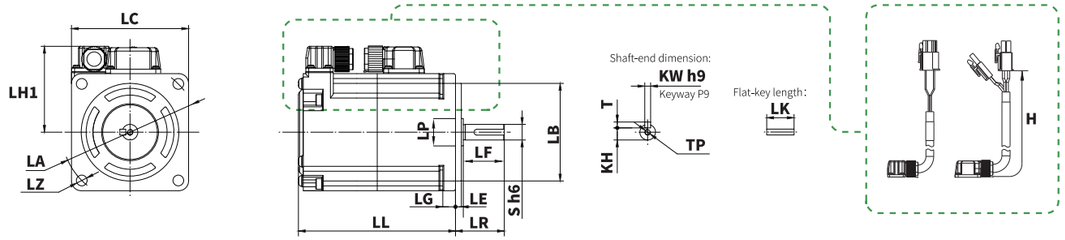
X6MQ100E▲

External Dimensions for Servo Motor

Unit(mm)

Models	X6MQ010A(Lead-wire type)	X6MQ020A(Lead-wire type)	X6MQ040A(Lead-wire type)	X6MQ100E
LC	60	80	80	80
LA	ϕ70	ϕ90	ϕ90	ϕ90
LB	ϕ50h7	ϕ70	ϕ70	ϕ70
LZ	4-ϕ5.4	4-ϕ6.5	4-ϕ6.5	4-ϕ6.5
LR	25±0.5	30	30	35
S	ϕ8 h6	ϕ11 h6	ϕ14 h6	ϕ19 h6
LL no brake [with brake]	78.1 [58.6]±1	66 [90]	76.8 [100.8]	108 [141.5]
LG	6.5	8	8	8
LE	3	3	3	3
LF	21	26	26	—
LP	ϕ14	ϕ19.7	ϕ19.7	—
LH1	43.5±0.5	53.5	53.5	54.5
LK	14	20	22	25
T	3	4	5	6
KW	3 h9	4 h9	5 h9	6 h9
KH	6.2	8.5	11	15.5
TP	M3 Depth 6	M4 Depth 8	M5 Depth 12	M5 Depth 12
H type cable length for lead-wire type	210±20	210	210	210

X6MQ010A / X6MQ020A / X6MQ040A / X6MQ100E



Connector type — Lead-wire type*1

*1: For X6 series servo motors, the lead-wire types are needed to be customized. For details, please contact our sales department.

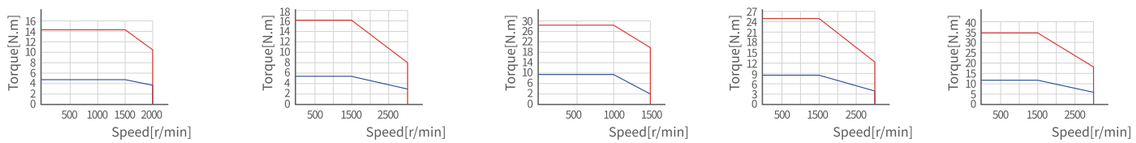
Servo Motor Specifications

750 W | 850 W | 1 KW | 1.3 KW | 1.8 KW

Items		Unit	X6MG075A	X6MG085A	X6MG100A	X6MG130A	X6MG180A
Rated power		W	750	850	1000	1300	1800
Rated voltage		V	220	220	220	220	220
Fitting flange size		mm	80	130	130	130	130
Rated torque		N.m	4.77	5.41	9.55	8.28	11.5
Instantaneous max. torque		N.m	14.3	16.2	28.6	24.84	34.5
Rated speed		r/min	1500	1500	1000	1500	1500
Max. speed		r/min	2000	3000	1500	3000	3000
Rated current		Arms	4.2	5.9	5.2	9.3	11.8
Instantaneous max. current		Arms	15	18	16	28	35.5
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	2.88	14	12.1	20.2	26
	With brake	$x10^{-4}Kg.m^2$	3	15.2	13.3	21.4	27.2
Torque constant		N.m/A	1.135	0.918	1.83	0.895	0.964
Induced voltage constant per phase		mV[r/min]	43.3	33.65	67.3	34.84	40.18
Rated power rate	No brake	KW/S	79	63.29	75.4	33.9	50.87
	With brake	KW/S	75.84	58.26	68.6	32	48.6
Mechanical time constant	No brake	ms	1.01	3.43	1.12	2.57	2.06
	With brake	ms	1.05	3.72	1.23	2.72	2.15
Electrical time constant		ms	5.1	11.1	9.65	14.63	15.99
Phase q-axis/d-axis inductance		mH	8.4/5.7	8.4/4.3	11/8.7	5.8/2.9	4.9/2.6
Weight: No brake[with brake]		kg	3.46 [4.14]	5.76[7.36]	7.14[8.74]	7.12[8.72]	8.37[9.97]
Permissible load	Radial load	N	392	490	490	490	490
	Axial load	N	147	160	160	160	160
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%				
	Rated current	A	0.42	0.9	0.9	0.9	0.9
	Brake power	w	10	10	10	10	10
	Static friction torque	N.m	3.8 or more	14 or more	14 or more	14 or more	14 or more
	Suction time	ms	70 or less	100 or less	100 or less	100 or less	100 or less
	Release time	ms	20 or less	60 or less	60 or less	60 or less	60 or less
	Release voltage	V	DC1V or more				

Torque characteristics

Instantaneous operation range — Continuous operation range

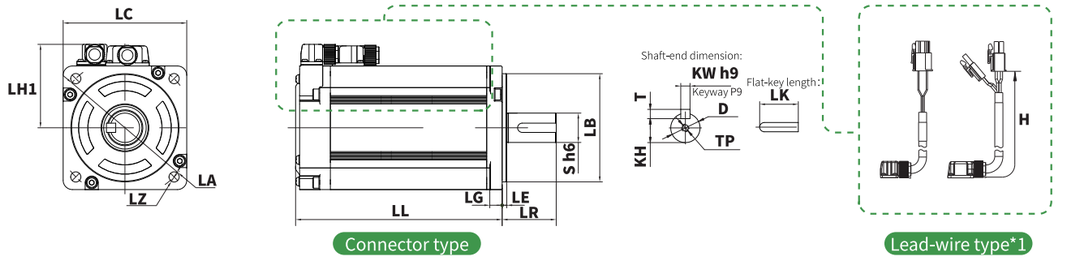


External Dimensions for Servo Motor

Unit(mm)

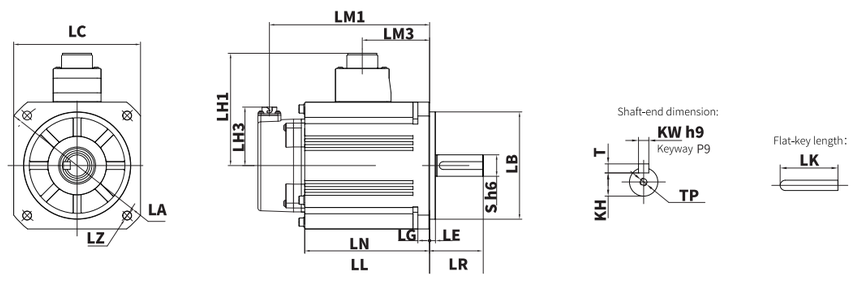
Models	X6MG075A(Lead-wire type)	X6MG085A	X6MG100A	X6MG130A	X6MG180A
LC	80	130	130	130	130
LA	ϕ90	ϕ145	ϕ145	ϕ145	ϕ145
LB	ϕ70	ϕ110	ϕ110	ϕ110	ϕ110
LZ	4-ϕ6.6	4-ϕ9	4-ϕ9	4-ϕ9	4-ϕ9
LR	35	55	55	55	55
S	ϕ19 h6	ϕ22 h6	ϕ22 h6	ϕ22 h6	ϕ22 h6
LL no brake [with brake]	134 [177]	156 [176]	156 [176]	170 [190]	184 [204]
LN no brake [with brake]	—	108 [128]	108 [128]	122 [142]	136 [156]
LG	8	12	12	12	12
LE	3	6	6	6	6
LM1 no brake [with brake]	—	144.2[164.2]	144.2 [164.2]	158.2 [178.2]	172.2[192.2]
LM3	—	69	69	83	97
LH1	54	115	115	115	115
LH3	—	60	60	60	60
LK	25	45	45	45	45
T	6	7	7	7	7
KW	6 h9	8 h9	8 h9	8 h9	8 h9
KH	15.5	18	18	18	18
TP	M5 Depth 12	M6 Depth 20	M6 Depth 20	M6 Depth 20	M6 Depth 20
H type cable length for lead-wire type	210	—	—	—	—

X6MG075A



*1: For X6 series servo motors, the lead-wire types are needed to be customized. For details, please contact our sales department.

X6MG085A / X6MG100A / X6MG130A / X6MG180A



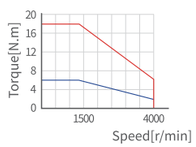
Servo Motor Specifications

850 W | 1.3 KW | 1.8 KW

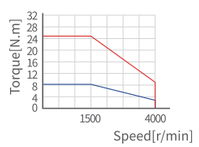
Items		Unit	X6MG085S	X6MG130S	X6MG180S
Rated power		W	850	1300	1800
Rated voltage		V	220	220	220
Fitting flange size		mm	130	130	130
Rated torque		N.m	5.39	8.28	11.5
Instantaneous max. torque		N.m	16.2	24.84	34.5
Rated speed		r/min	1500	1500	1500
Max. speed		r/min	4000	4000	4000
Rated current		Arms	6.7	9.6	15.6
Instantaneous max. current		Arms	20.1	28.8	46.8
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	13.9	19.9	26
	With brake	$x10^{-4}Kg.m^2$	16	22	28.1
Torque constant		N.m/A	0.859	0.891	0.748
Induced voltage constant per phase		mV[r/min]	31.04	32.08	27
Rated power rate	No brake	KW/S	20.9	35	50.9
	With brake	KW/S	18.2	31.6	47.1
Mechanical time constant	No brake	ms	2.74	2.23	1.95
	With brake	ms	3.16	2.46	2.29
Electrical time constant		ms	10.2	10.7	11.14
Phase q-axis/d-axis inductance		mH	—	—	—
Weight: No brake[with brake]		kg	5.7 [7.7]	7.3[9.2]	8.8[11.2]
Permissible load	Radial load	N	490	490	490
	Axial load	N	196	196	196
	Rated voltage	V	DC24V±10%		
	Rated current	A	0.41	0.41	0.41
Brake specifications Note: Holding brake	Brake power	w	10	10	10
	Static friction torque	N.m	14 or more	14 or more	14 or more
	Suction time	ms	100 or less	100 or less	100 or less
	Release time	ms	80 or less	80 or less	80 or less
	Release voltage	V	DC1V or more		

Torque characteristics

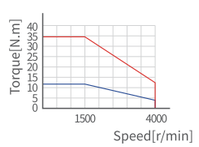
Instantaneous operation range — Continuous operation range



X6MG085S▲



X6MG130S▲



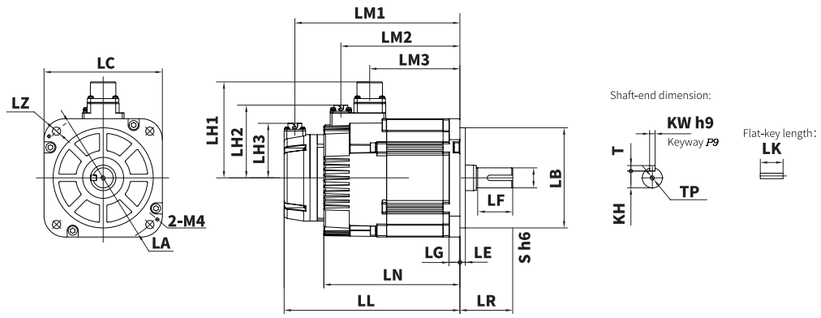
X6MG180S▲

External Dimensions for Servo Motor

Unit(mm)

Models	X6MG085S	X6MG130S	X6MG180S
LC	130	130	130
LA	ϕ145	ϕ145	ϕ145
LB	ϕ110	ϕ110	ϕ110
LZ	4-ϕ9	4-ϕ9	4-ϕ9
LR	58	58	58
S	ϕ19 h6	ϕ22 h6	ϕ24 h6
LL no brake [with brake]	141.1 [177.1]	157.1[193.1]	175.1 [211.1]
LN no brake [with brake]	97.5[133.5]	113.5[149.5]	131.5[167.5]
LG	12	12	12
LE	6	6	6
LF	40	40	40
LM1 no brake [with brake]	129.4[165.4]	145.3[181.3]	163.3 [199.3]
LM2 no brake [with brake]	—[114.5]	—[130.5]	—[148.5]
LM3	83	99	117
LH1	105	105	105
LH2	79.5	79.5	79.5
LH3	60	60	60
LK	25	25	25
T	5	6	7
KW	5 h9	6 h9	8 h9
KH	16	18.5	20
TP	M5 Depth 16	M5 Depth 16	M5 Depth 16

X6MG085S/X6MG130S/X6MG180S



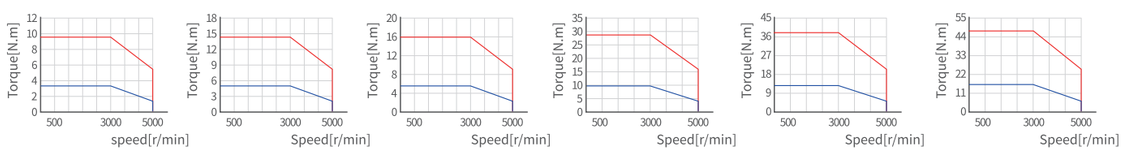
Servo Motor Specifications

1 KW 1.5 KW 2 KW 3 KW 4 KW 5 KW

Items		Unit	X6MA100A	X6MA150A	X6MA200A	X6MA300K	X6MA400K	X6MA500K
Rated power		W	1000	1500	2000	3000	4000	5000
Rated voltage		V	380	380	380	380	380	380
Fitting flange size		mm	100	100	100	130	130	130
Rated torque		N.m	3.18	4.77	6.37	9.55	12.7	15.9
Instantaneous max. torque		N.m	9.55	14.3	15.93	28.65	38.1	47.7
Rated speed		r/min	3000	3000	3000	3000	3000	3000
Max. speed		r/min	5000	5000	5000	5000	5000	5000
Rated current		Arms	4	5.4	6.3	9	13	16
Instantaneous max. current		Arms	12	16.5	19	28	40	50
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	2.03	2.84	3.68	10.75	14.67	20.3
	With brake	$x10^{-4}Kg.m^2$	2.35	3.17	4.01	11.95	15.9	21.5
Torque constant		N.m/A	0.8185	0.879	1	1.053	0.9767	1
Induced voltage constant per phase		mV[r/min]	29.56	31.75	43.88	41.1	38.4	41.4
Rated power rate	No brake	KW/S	53.3	80.3	132	88.8	111	125
	With brake	KW/S	48.2	70.9	94	74.6	97.2	114
Mechanical time constant	No brake	ms	0.589	0.51	0.47	8.78	0.764	0.75
	With brake	ms	0.651	0.57	0.67	0.96	0.868	0.83
Electrical time constant		ms	6.16	7.09	7.98	11.44	12.17	12.7
Phase q-axis/d-axis inductance		mH	4.7/4.7	3.73/3.73	4.5/4.5	2.95/2.95	1.66/1.66	1.39/1.39
Weight: No brake[with brake]		kg	3.65 [4.65]	4.6 [5.6]	5.6 [6.6]	10.4 [12]	13.75 [15.35]	18[19.6]
Permissible load	Radial load	N	392	392	392	490	490	490
	Axial load	N	147	147	147	196	196	196
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%					
	Rated current	A	0.81	0.81	0.81	0.9	0.9	0.9
	Brake power	w	19.5	19.5	19.5	21.5	21.5	21.5
	Static friction torque	N.m	8 or more	8 or more	8 or more	20 or more	20 or more	20 or more
	Suction time	ms	50 or less	50 or less	50 or less	100 or less	100 or less	100 or less
	Release time	ms	15 or less	15 or less	15 or less	60 or less	60 or less	60 or less
	Release voltage	V	DC1V or more	DC1V or more	DC1V or more	DC1V or more	DC1V or more	DC1V or more

Torque characteristics

Instantaneous operation range — Continuous operation range

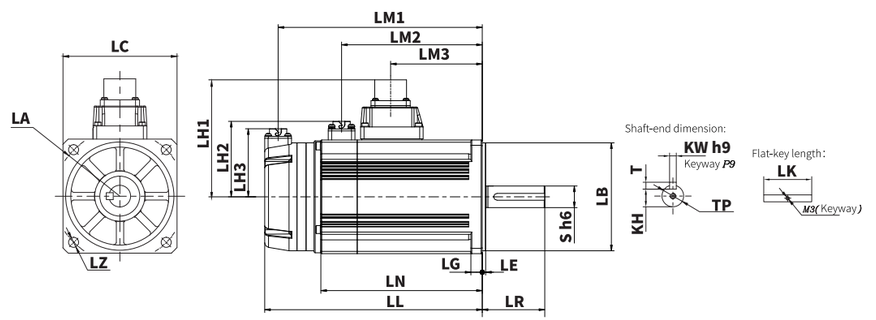


External Dimensions for Servo Motor

Unit(mm)

Models	X6MA100A	X6MA150A	X6MA200A	X6MA300K	X6MA400K	X6MA500K
LC	100	100	100	130	130	130
LA	ϕ115	ϕ115	ϕ115	ϕ145	ϕ145	ϕ145
LB	ϕ95	ϕ95	ϕ95	ϕ110	ϕ110	ϕ110
LZ	4-ϕ9	4-ϕ9	4-ϕ9	4-ϕ9	4-ϕ9	4-ϕ9
LR	55	55	55	65	65	65
S	ϕ19 h6	ϕ19 h6	ϕ19 h6	ϕ24 h6	ϕ24 h6	ϕ24 h6
LL (20bit)no brake [with brake]	123.5 [150.5]	142[169]	161[188]	182 [202]	224 [244]	274 [294]
LL (23bit)no brake [with brake]	146[173]	164.5[191.5]	183.5[210.5]	202.5[222.5]	244.5[264.5]	294.5[314.5]
LN no brake [with brake]	96.5[123.5]	115[142]	134[161]	154.5[174.5]	196.5[216.5]	246.5[266.5]
LG	10	10	10	12	12	12
LE	3	3	3	6	6	6
LM1 (20bit)no brake [with brake]	111.5[138.5]	130[157]	149[176]	170[190]	212[232]	262[282]
LM1 (23bit)no brake [with brake]	134[161]	153[180]	171.5[198.5]	190[210]	232.7[252.7]	282.7[302.7]
LM2 (20bit)no brake [with brake]	105	123.5	[142.5]	—	—	—
LM2 (23bit)no brake [with brake]	105	123.5	[142.5]	—	—	—
LM3(20bit)	62	80.5	99.5	115.5	157.5	207.5
LM3(23bit)	62	80.5	99.5	115.5	157.5	207.5
LH1	103	103	103	115	115	115
LH2	66.5	66.5	66.5	—	—	—
LH3(20bit)	55	55	55	56.5	56.5	56.5
LH3(23bit)	60	60	60	60	60	60
LK	42	42	42	51	51	51
T	6	6	6	7	7	7
KW	6h9	6h9	6h9	8h9	8h9	8h9
KH	15.5	15.5	15.5	20	20	20
TP	M5 Depth 12	M5 Depth 12	M5 Depth 12	M6 Depth 20	M6 Depth 20	M6 Depth 20

X6MA100A / X6MA150A / X6MA200A / X6MA300K / X6MA400K/X6MA500K



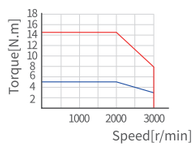
Servo Motor Specifications

1 KW 1.5 KW 2 KW

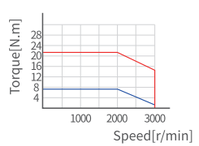
Items		Unit	X6MM100A	X6MM150A	X6MM200A
Rated power		W	1000	1500	2000
Rated voltage		V	380	380	380
Fitting flange size		mm	130	130	130
Rated torque		N.m	4.77	7.16	9.55
Instantaneous max. torque		N.m	12	17.9	23.87
Rated speed		r/min	2000	2000	2000
Max. speed		r/min	3000	3000	3000
Rated current		Arms	3	4.3	5.3
Instantaneous max. current		Arms	9	13	16
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	6.18	9.16	12.1
	With brake	$x10^{-4}Kg.m^2$	7.4	10.4	13.3
Torque constant		N.m/A	1.56	1.67	1.8
Induced voltage constant per phase		mV[r/min]	57.2	61.5	72.17
Rated power rate	No brake	KW/S	36.9	56	75.4
	With brake	KW/S	30.8	49.3	68.6
Mechanical time constant	No brake	ms	1.72	1.34	1.33
	With brake	ms	2.06	1.52	1.47
Electrical time constant		ms	1.72	12.27	13.9
Phase q-axis/d-axis inductance		mH	24.1/12.2	18.5/9.45	18/9.3
Weight: No brake[with brake]		kg	4.69[6.29]	5.8 [7.4]	6.88[8.48]
Permissible load	Radial load	N	490	490	490
	Axial load	N	196	196	196
	Rated voltage	V	DC24V±10%		
	Rated current	A	0.9	0.9	0.9
Brake specifications Note: Holding brake	Brake power	w	22	22	22
	Static friction torque	N.m	14 or more	14 or more	14 or more
	Suction time	ms	100 or less	100 or less	100 or less
	Release time	ms	60 or less	60 or less	60 or less
	Release voltage	V	DC1V or more	DC1V or more	DC1V or more

Torque characteristics

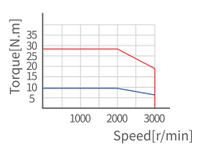
Instantaneous operation range — Continuous operation range



X6MM100A



X6MM150A



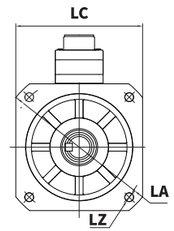
X6MM200A

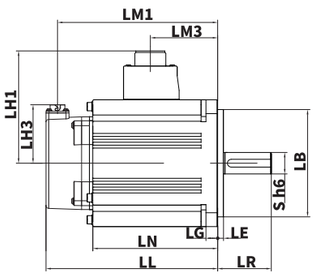
External Dimensions for Servo Motor

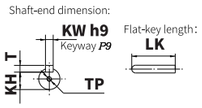
Unit(mm)

Models	X6MM100A	X6MM150A	X6MM200A
LC	130	130	130
LA	ϕ145	ϕ145	ϕ145
LB	ϕ110	ϕ110	ϕ110
LZ	4-ϕ9	4-ϕ9	4-ϕ9
LR	55	55	55
S	ϕ22 h6	ϕ22 h6	ϕ22 h6
LL (20bit)no brake [with brake]	107.5 [127.5]	121.5 [141.5]	135.5[155.5]
LL (23bit)no brake [with brake]	128[148]	142[162]	156 [176]
LN no brake [with brake]	80[100]	94[114]	108[128]
LG	12	12	12
LE	6	6	6
LM1(20bit)no brake [with brake]	95.5[115.5]	109.5[129.5]	123.5[143.5]
LM1(23bit)no brake [with brake]	116.2[136.2]	130.2[150.2]	144.2[164.2]
LM3	41	55	69
LH1	115	115	115
LH3(20bit)	56.5	56.5	56.5
LH3(23bit)	60	60	60
LK	45	45	45
T	7	7	7
KW	8h9	8h9	8h9
KH	18	18	18
TP	M6 Depth 20	M6 Depth 20	M6 Depth 20

X6MM100A / X6MM150A / X6MM200A







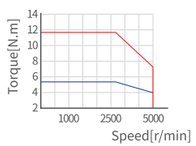
Servo Motor Specifications

1 KW 1.5 KW 2 KW

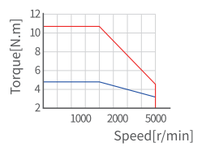
Items		Unit	X6MM100S	X6MM150S	X6MM200S
Rated power		W	1000	1500	2000
Rated voltage		V	380	380	380
Fitting flange size		mm	130	130	130
Rated torque		N.m	4.77	7.16	9.55
Instantaneous max. torque		N.m	14.31	21.5	28.6
Rated speed		r/min	2000	2000	2000
Max. speed		r/min	5000	5000	5000
Rated current		Arms	4.6	6.7	9
Instantaneous max. current		Arms	16.2	23.5	31.5
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	9.16	12.1	16.85
	With brake	$x10^{-4}Kg.m^2$	10.4	13.3	18.05
Torque constant		N.m/A	1.03	1.07	1.06
Induced voltage constant per phase		mV[r/min]	38.2	40.4	38.1
Rated power rate	No brake	KW/S	24.9	42.4	54.1
	With brake	KW/S	21.9	38.6	50.7
Mechanical time constant	No brake	ms	1.29	1.15	0.97
	With brake	ms	1.47	1.26	1.04
Electrical time constant		ms	11.8	13.9	19.4
Phase q-axis/d-axis inductance		mH	6.62/3.93	5.6/2.8	4.67/2.37
Weight: No brake[with brake]		kg	5.87 [7.47]	6.98 [8.58]	6.91[10.1]
Permissible load	Radial load	N	490	490	490
	Axial load	N	196	196	196
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%		
	Rated current	A	0.9	0.9	0.9
	Brake power	w	21.5	21.5	21.5
	Static friction torque	N.m	14 or more	14 or more	14 or more
	Suction time	ms	100 or less	100 or less	100 or less
	Release time	ms	60 or less	60 or less	60 or less
	Release voltage	V	DC1V or more	DC1V or more	DC1V or more

Torque characteristics

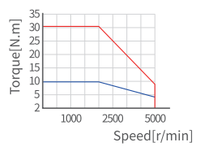
Instantaneous operation range — Continuous operation range



X6MM100S



X6MM150S



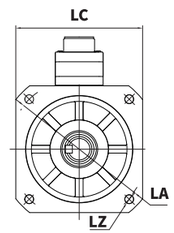
X6MM200S

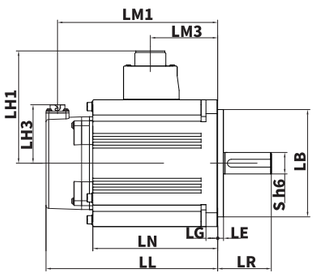
External Dimensions for Servo Motor

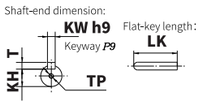
Unit(mm)

Models	X6MM100S	X6MM150S	X6MM200S
LC	130	130	130
LA	ϕ145	ϕ145	ϕ145
LB	ϕ110	ϕ110	ϕ110
LZ	4-ϕ9	4-ϕ9	4-ϕ9
LR	55	55	55
S	ϕ22 h6	ϕ22 h6	ϕ22 h6
LL (20bit)no brake [with brake]	121.5[141.5]	135.5[155.5]	163.5[183.5]
LL (23bit)no brake [with brake]	142[162]	156 [176]	184 [204]
LN no brake [with brake]	94[114]	108[128]	136[156]
LG	12	12	12
LE	6	6	6
LM1(20bit)no brake [with brake]	109.5[129.5]	123.5 [143.5]	151.5[171.5]
LM1(23bit)no brake [with brake]	130.2[150.2]	144.2[164.2]	172.2[192.2]
LM3	55	69	97
LH1	115	115	115
LH3(20bit)no brake [with brake]	56.5	56.5	56.5
LH3(23bit)no brake [with brake]	60	60	60
LK	45	45	45
T	7	7	7
KW	8h9	8h9	8h9
KH	18	18	18
TP	M6 Depth 20	M6 Depth 20	M6 Depth 20

X6MM100S / X6MM150S / X6MM200S







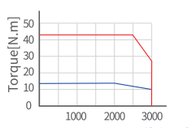
Servo Motor Specifications

3 KW 4 KW 5 KW 7.5 KW

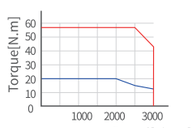
Items		Unit	X6MM300A	X6MM400A	X6MM500A	X6MM750A	X6MM750H
Rated power		W	3000	4000	5000	7500	7500
Rated voltage		V	380	380	380	380	380
Fitting flange size		mm	180	180	180	180	180
Rated torque		N.m	14.3	19.1	23.9	47.8	47.8
Instantaneous max. torque		N.m	42.9	57.3	71.6	119.4	119.4
Rated speed		r/min	2000	2000	2000	1500	1500
Max. speed		r/min	3000	3000	3000	2500	3000
Rated current		Arms	8.7	11.5	13.5	21.8	25.3
Instantaneous max. current		Arms	30	38	45	75	65.8
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	43.5	54.7	66.7	99.3	136.4
	With brake	$x10^{-4}Kg.m^2$	63.2	68	80.8	114.2	150.8
Torque constant		N.m/A	1.8	1.82	2.04	2.5	2.1
Induced voltage constant per phase		mV[r/min]	62.9	63.5	71.3	87.2	74.3
Rated power rate	No brake	KW/S	47.2	66.7	85.5	230.1	167.5
	With brake	KW/S	32.5	53.6	70.5	200.1	151.5
Mechanical time constant	No brake	ms	1.4	1.29	1.10	0.82	0.96
	With brake	ms	2.03	1.61	1.33	0.94	1.06
Electrical time constant		ms	18.7	19	21.7	20	26.9
Phase q-axis/d-axis inductance		mH	5.8	4.4	4.5	3.1	2.5
Weight: No brake[with brake]		kg	14.3 [19]	16.5 [21.2]	19.4 [24.1]	25[29.7]	28.2[32.9]
Permissible load	Radial load	N	784	784	784	2058	2058
	Axial load	N	343	343	343	980	980
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%				
	Rated current	A	1.04	1.04	1.04	1.04	1.04
	Brake power	w	25	25	25	25	25
	Static friction torque	N.m	74 or more	74 or more	74 or more	74 or more	74 or more
	Suction time	ms	120 or less	120 or less	120 or less	120 or less	120 or less
	Release time	ms	30 or less	30 or less	30 or less	30 or less	30 or less
	Release voltage	V	DC0.5 or more				

Torque characteristics

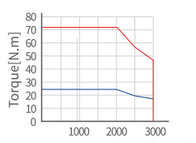
Instantaneous operation range — Continuous operation range



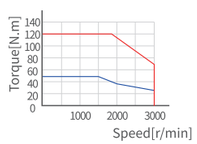
X6MM300A▲



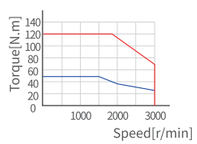
X6MM400A▲



X6MM500A▲



X6MM750A▲



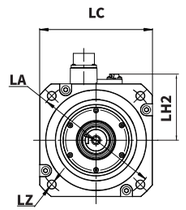
X6MM750H▲

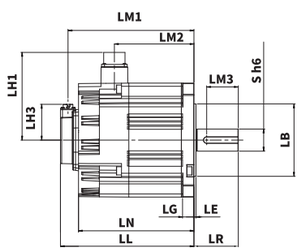
External Dimensions for Servo Motor

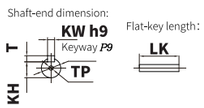
Unit(mm)

Models	X6MM300A	X6MM400A	X6MM500A	X6MM750A	X6MM750H
LC	180	180	180	180	180
LA	200	200	200	200	200
LB	ϕ114.3 h7	ϕ114.3 h7	ϕ114.3 h7	ϕ114.3 h7	ϕ114.3 h7
LZ	4-ϕ13.5	4-ϕ13.5	4-ϕ13.5	4-ϕ13.5	4-ϕ13.5
LR	70±0.5	70±0.5	70±0.5	113±0.5	113±0.5
S	ϕ35 h6	ϕ35 h6	ϕ35 h6	ϕ42 h6	ϕ42 h6
LL (20bit) no brake [with brake]	159±1[211±1]	173±1[225±1]	188±1[240±1]	230±1[282±1]	253±1[305±1]
LL (23bit) no brake [with brake]	172±1[231.5±1]	186±1[245.5±1]	201±1[260.5±1]	243±1[302.5±1]	266±1[325.5±1]
LN no brake [with brake]	128[182.5]	142[196.5]	157[211.5]	199[253.5]	222[276.5]
LG	18	18	18	18	18
LE	3.2	3.2	3.2	3.2	3.2
LM1 (20bit) no brake [with brake]	147[199]	161[213]	176[228]	218[270]	241[293]
LM1 (23bit) no brake [with brake]	160[220]	174[234]	189[248.7]	231[291]	254[314]
LM2 no brake [with brake]	107[125.8]	121[139.8]	136[154.8]	178[196.8]	201[219.8]
LM3	50	50	50	90	90
LH1 no brake [with brake]	144[138.6]	144[138.6]	144[138.6]	144[138.6]	144[138.6]
LH2	105.3	105.3	105.3	105.3	105.3
LH3 (20bit) no brake [with brake]	55[56.4]	55[56.4]	55[56.4]	55[56.4]	55[56.4]
LH3 (23bit) no brake [with brake]	60[59.8]	60[59.8]	60[59.8]	60[59.8]	60[59.8]
LK	50	50	50	90	90
T	8	8	8	8	8
KW	10 h9	10 h9	10 h9	12 h9	12 h9
KH	30	30	30	37	37
TP	M12 Depth 25	M12 Depth 25	M12 Depth 25	M16 Depth 32	M16 Depth 32

X6MM300A/X6MM400A/X6MM500A/X6MM750A/X6MM750H







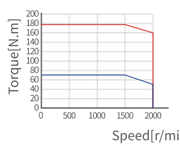
Servo Motor Specifications

11 KW 15 KW 22 KW

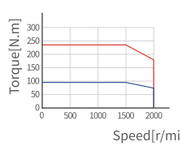
Items		Unit	X6MM11KA	X6MM15KA	X6MM22KA
Rated power		kW	11	15	22
Rated voltage		V	380	380	380
Fitting flange size		mm	220	220	220
Rated torque		N.m	70	96	140
Instantaneous max. torque		N.m	175	239	350
Rated speed		r/min	1500	1500	1500
Max. speed		r/min	2000	2000	2000
Rated current		Arms	32.3	38.2	54.5
Instantaneous max. current		Arms	80.8	99.3	141.7
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	251.8	327.6	481.2
	With brake	$x10^{-4}Kg.m^2$	314	390.7	543.8
Torque constant		N.m/A	2.5	2.6	2.79
Induced voltage constant per phase		mV[r/min]	87.6	90.4	97.4
Rated power rate	No brake	KW/S	194.6	281.3	407.3
	With brake	KW/S	156.1	235.9	360.4
Mechanical time constant	No brake	ms	0.75	0.66	0.65
	With brake	ms	0.9	0.78	0.74
Electrical time constant		ms	22.4	22.5	21.6
Phase q-axis/d-axis inductance		mH	1.27	0.91	0.69
Weight: No brake[with brake]		kg	65.6 [76.7]	79.4 [92.5]	107.3 [122]
Permissible load	Radial load	N	2254	2254	2254
	Axial load	N	686	686	686
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%		
	Rated current	A	3.6	3.6	4.4
	Brake power	W	88(20℃)	88(20℃)	106(20℃)
	Static friction torque	N.m	150 or more	150 or more	150 or more
	Suction time	ms	300 or less	300 or less	300 or less
	Release time	ms	150 or less	150 or less	150 or less
	Release voltage	V	DC1V or more(20℃)		
Fan Specifications	Rated voltage	V	AC220~240		
	Max. current	A	0.320	0.320	0.320
	Max. power	W	43	43	43
	speed	r/min	4300	4300	4300

Torque characteristics

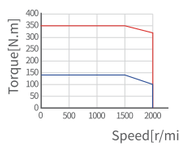
Instantaneous operation range — Continuous operation range



X6MM11KA▲



X6MM15KA▲



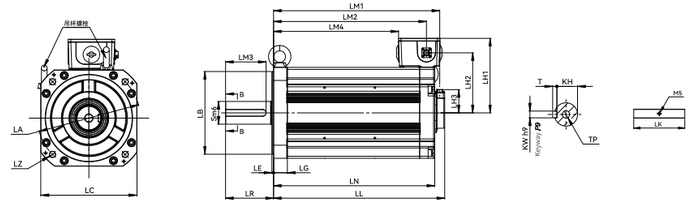
X6MM22KA▲

External Dimensions for Servo Motor

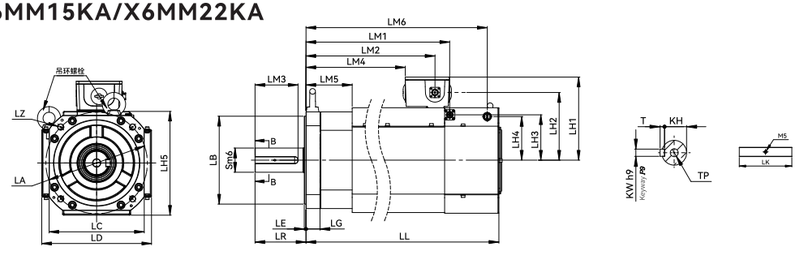
Unit(mm)

Models	X6MM11KA	X6MM15KA	X6MM22KA
LC	220	220	220
LA	235	235	235
LB	ϕ200 h7	ϕ200 h7	ϕ200 h7
LZ	4-ϕ13.5	4-ϕ13.5	4-ϕ13.5
LR	116±1	116±1	116±1
S	ϕ55 m6	ϕ55 m6	ϕ55 m6
LL (20bit) no brake [with brake]	351[424]	510[583]	628[707]
LL (23bit) no brake [with brake]	371.5[444.5]	510[583]	628[707]
LN no brake [with brake]	327[400]	-	-
LG	32	32	32
LE	4	4	4
LM1 (20bit) no brake [with brake]	339[412]	398[471]	516[595]
LM1 (23bit) no brake [with brake]	360[433]	398[471]	516[595]
LM2 with brake	380	437	561
LM3	98	98	98
LM4no brake [with brake]	239[312]	297[370]	415[494]
LM5	-	105	105
LM6no brake [with brake]	-	483[556]	601[680]
LH1	180	189	189
LH2 with brake	145	154	154
LH3(20bit)no brake [with brake]	56	103	103
LH3(23bit)no brake [with brake]	60	103	103
LH4	-	99	99
LH5	-	240	240
LD	-	254	254
LK	90	90	90
T	10	10	10
KW	16P9	16P9	16P9
KH	49	49	49
TP	M20 Depth 40	M20 Depth 40	M20 Depth 40

X6MM11KA



X6MM15KA/X6MM22KA



Servo Motor Specifications 2KW 4KW

Items		Unit	X6MH200A	X6MH400A
Rated power		W	2000	4000
Rated voltage		V	380	380
Fitting flange size		mm	180	180
Rated torque		N.m	9.55	19.1
Instantaneous max. torque		N.m	28.6	57.3
Rated speed		r/min	2000	2000
Max. speed		r/min	3000	3000
Rated current		Arms	5.8	11.5
Instantaneous max. current		Arms	19	38
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	31.4	101.7
	With brake	$x10^{-4}Kg.m^2$	44.6	115
Torque constant		N.m/A	1.83	1.82
Induced voltage constant per phase		mV[r/min]	63.9	63.5
Rated power rate	No brake	KW/S	29	35.9
	With brake	KW/S	20.4	31.7
Mechanical time constant	No brake	ms	1.86	2.40
	With brake	ms	2.64	2.71
Electrical time constant		ms	15.2	19
Phase q-axis/d-axis inductance		mH	9.5	4.5
Weight: No brake[with brake]		kg	12.7 [17.4]	17.8 [24]
Permissible load	Radial load	N	784	784
	Axial load	N	343	343
	Rated voltage	V	DC24V±10%	
	Rated current	A	1.04	1.04
Brake specifications Note: Holding brake	Brake power	w	25	25
	Static friction torque	N.m	74 or more	74 or more
	Suction time	ms	120 or less	120 or less
	Release time	ms	30 or less	30 or less
	Release voltage	V	DC0.5V or more	

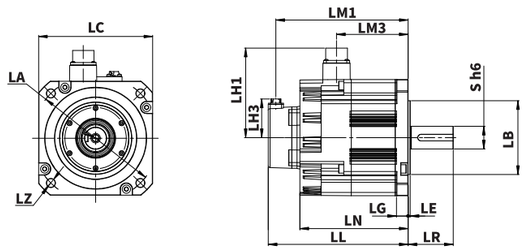
Torque characteristics

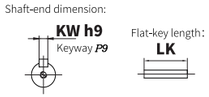
External Dimensions for Servo Motor

Unit(mm)

Models	X6MH200A	X6MH400A
LC	180	180
LA	200	200
LB	ϕ114.3 h7	ϕ114.3 h7
LZ	4-ϕ13.5	4-ϕ13.5
LR	70±0.5	70±0.5
S	ϕ35 h6	ϕ35 h6
LL (20bit) no brake [with brake]	144±1[196±1]	191±1[243±1]
LL (23bit) no brake [with brake]	157±1[216.5±1]	204±1[263.5±1]
LN no brake [with brake]	113[167.5]	160[214.5]
LG	18	18
LE	3.2	3.2
LM1 (20bit) no brake [with brake]	132[184]	179[231]
LM1 (23bit) no brake [with brake]	145[205]	192[252]
LM2 no brake [with brake]	92[110.8]	139[157.8]
LM3	50	50
LH1 no brake [with brake]	144[138.6]	144[138.6]
LH2	105.3	105.3
LH3 (20bit) no brake [with brake]	55[56.4]	55[56.4]
LH3 (23bit) no brake [with brake]	60[59.8]	60[59.8]
LK	50	50
T	8	8
KW	10 h9	10 h9
KH	30	30
TP	M12 Depth 25	M12 Depth 25

X6MH200A / X6MH400A





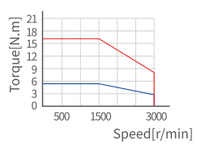
Servo Motor Specifications

850 W | 1.3 KW | 1.5 KW | 1.8 KW

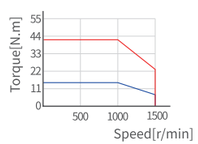
Items		Unit	X6MG085A	X6MG150C
Rated power		W	850	1500
Rated voltage		V	380	380
Fitting flange size		mm	130	130
Rated torque		N.m	5.41	14.3
Instantaneous max. torque		N.m	16.2	42
Rated speed		r/min	1500	1000
Max. speed		r/min	3000	1500
Rated current		Arms	4	5
Instantaneous max. current		Arms	14	15
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	14	20.8
	With brake	$x10^{-4}Kg.m^2$	15.2	22
Torque constant		N.m/A	1.316	2.89
Induced voltage constant per phase		mV[r/min]	48.78	106
Rated power rate	No brake	KW/S	21.1	77.4
	With brake	KW/S	18.3	71.9
Mechanical time constant	No brake	ms	3.37	1.34
	With brake	ms	4.29	1.44
Electrical time constant		ms	11.7	15.3
Phase q-axis/d-axis inductance		mH	20.14/10.27	23/12
Weight: No brake[with brake]		kg	5.68 [7.28]	10.45[12.05]
Permissible load	Radial load	N	490	490
	Axial load	N	196	196
Brake specifications Note: Holding brake	Rated voltage	V	DC24V±10%	DC24V±10%
	Rated current	A	0.9	0.9
	Brake power	w	21.6	21.5
	Static friction torque	N.m	14 or more	20 or more
	Suction time	ms	100 or less	100 or less
	Release time	ms	60 or less	60 or less
	Release voltage	V	DC1V or more	DC1V or more

Torque characteristics

Instantaneous operation range — Continuous operation range



X6MG085A ▲



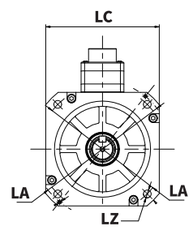
X6MG150C ▲

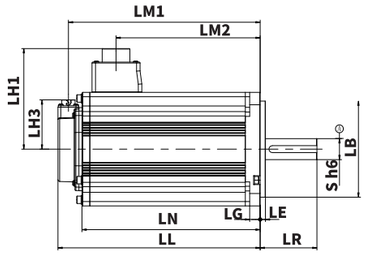
External Dimensions for Servo Motor

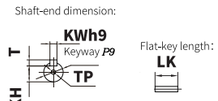
Unit(mm)

Models	X6MG085A	X6MG150C
LC	130	130
LA	ϕ145	ϕ145
LB	ϕ110	ϕ110
LZ	4-ϕ9	4-ϕ9
LR	55	55
S	ϕ22 h6	ϕ22h6
LL (20bit) no brake [with brake]	135.5[155.5]	182[202]
LL (23bit) no brake [with brake]	156[176]	202.5[222.5]
LN no brake [with brake]	108[128]	155.5[174.5]
LG	12	12
LE	6	6
LM1 (20bit) no brake [with brake]	123.5[143.5]	170[190]
LM1 (23bit) no brake [with brake]	144.2[164.2]	190.5[210.7]
LM2 no brake [with brake]	69	—
LM3	—	115.5
LH1 no brake [with brake]	115	115.5
LH2	—	—
LH3 (20bit) no brake [with brake]	56.5	56.5
LH3 (23bit) no brake [with brake]	60	60
LK	45	45
T	7	7
KW	8 h9	8 h9
KH	18	18
TP	M6 Depth 20	M6 Depth 20

X6MG085A/X6MG150C







Note *1：Under development.

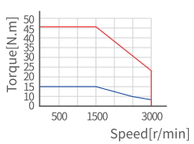
Servo Motor Specifications

2.4 KW | 2.9 KW | 4.4 KW | 5.5 KW

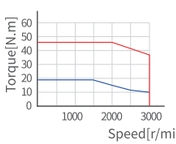
Items		Unit	X6MG240A*1	X6MG290A	X6MG440A	X6MG550A
Rated power		W	2400	2900	4400	5500
Rated voltage		V	380	380	380	380
Fitting flange size		mm	130	180	180	180
Rated torque		N.m	15.2	18.6	28.4	35
Instantaneous max. torque		N.m	45.8	46.5	71.1	87.5
Rated speed		r/min	1500	1500	1500	1500
Max. speed		r/min	3000	3000	3000	3000
Rated current		Arms	10	10	15.7	19.5
Instantaneous max. current		Arms	30	26	41	51
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	31.3	47.2	68.6	91.4
	With brake	$x10^{-4}Kg.m^2$	32.5	62.3	83.7	106.5
Torque constant		N.m/A	1.52	2.01	2.13	1.98
Induced voltage constant per phase		mV[r/min]	59.9	70.2	74.2	69.6
Rated power rate	No brake	KW/S	123	73.3	117.6	134.2
	With brake	KW/S	116	55.5	96.4	115.1
Mechanical time constant	No brake	ms	0.669	1.37	1.18	1.07
	With brake	ms	0.712	1.81	1.44	1.25
Electrical time constant		ms	20	19.2	19.9	22.9
Phase q-axis/d-axis inductance		mH	6.2/3.1	6.7	4.7	3.2
Weight: No brake[with brake]		kg	14.1[15.7]	16[20.7]	19.4 [24.1]	23.9[28.5]
Permissible load	Radial load	N	490	1470	1470	1764
	Axial load	N	196	490	490	588
	Rated voltage	V	DC24V±10%			
	Rated current	A	0.9	1.04	1.04	1.04
Brake specifications Note: Holding brake	Brake power	w	22	25	25	25
	Static friction torque	N.m	15.2 or more	74 or more	74 or more	74 or more
	Suction time	ms	100 or less	120 or less	120 or less	120 or less
	Release time	ms	60 or less	30 or less	30 or less	30 or less
	Release voltage	V	DC0.5 or more			

Torque characteristics

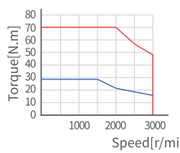
Instantaneous operation range — Continuous operation range



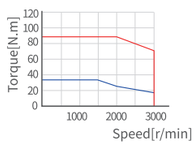
X6MG240A▲



X6MG290A▲



X6MG440A▲



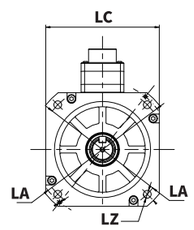
X6MG550A▲

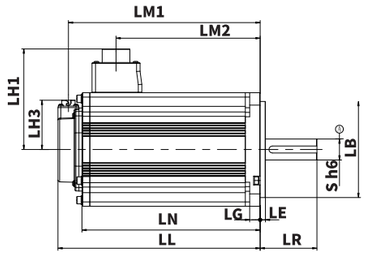
External Dimensions for Servo Motor

Unit(mm)

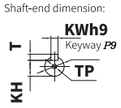
Models	X6MG240A*1	X6MG290A	X6MG440A	X6MG550A
LC	130	180	180	180
LA	ϕ145	200	200	200
LB	ϕ110	ϕ114.3 h7	ϕ114.3 h7	ϕ114.3 h7
LZ	4-ϕ9	4-ϕ13.5	4-ϕ13.5	4-ϕ13.5
LR	65	79±0.5	79±0.5	113±0.5
S	ϕ24 h6	ϕ35 $^{+0.01}_{0}$	ϕ35 $^{+0.01}_{0}$	ϕ42 h6
LL (20bit) no brake [with brake]	231.5[251.5]	165±1[217±1]	191±1[243±1]	220±1[272±1]
LL (23bit) no brake [with brake]	252[272]	178±1[237.5±1]	204±1[263.5±1]	233±1 [292.5±1]
LN no brake [with brake]	204[224]	134[188.5]	160[214.5]	189[243.5]
LG	12	18	18	18
LE	6	3.2	3.2	3.2
LM1 (20bit) no brake [with brake]	219.5[239.5]	153[205]	179[231]	208[260]
LM1 (23bit) no brake [with brake]	240.2[260.2]	166[226]	192[252]	221[281]
LM2 no brake [with brake]	165[165]	113[131.8]	139[157.8]	168[186.8]
LM3	—	60	60	90
LH1 no brake [with brake]	115	144[139]	144[139]	144[139]
LH2	—	105.3	105.3	105.3
LH3 (20bit) no brake [with brake]	56.5	55[56]	55[56]	55[56]
LH3 (23bit) no brake [with brake]	60	60	60	60
LK	51	60	60	90
T	7	8	8	8
KW	8 h9	10 p9	10 p9	12 p9
KH	20	30	30	37
TP	M6 Depth 20	M12 Depth 25	M12 Depth 25	M16 Depth 32

X6MG240A



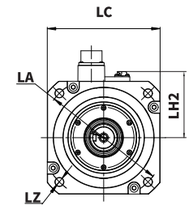


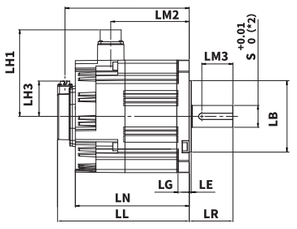
Shaft-end dimension:



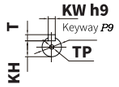
Flat-key length:

X6MG290A / X6MG440A/ X6MG550A





Shaft-end dimension:



Flat-key length:

Note *1: Under development.
*2: Shaft difference for X6MG550A is h6

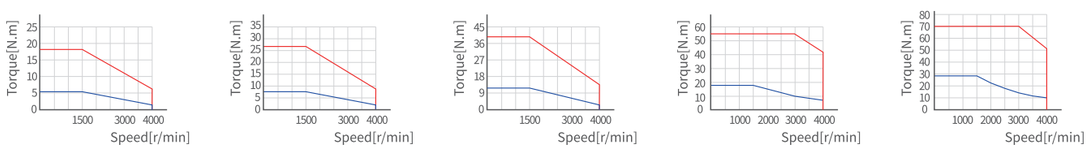
Servo Motor Specifications

850W 1.3KW 1.8KW 2.9KW 4.4KW

Items		Unit	X6MG085S	X6MG130S	X6MG180S	X6MG290S	X6MG440S
Rated power		W	850	1300	1800	2900	4400
Rated voltage		V	380	380	380	380	380
Fitting flange size		mm	130	130	130	180	180
Rated torque		N.m	5.4	8.28	11.46	18.6	28.4
Instantaneous max. torque		N.m	18.9	29	40	55.8	71.1
Rated speed		r/min	1500	1500	1500	1500	1500
Max. speed		r/min	4000	4000	4000	4000	4000
Rated current		Arms	4.2	5.93	8.3	13.5	20.3
Instantaneous max. current		Arms	14.7	20.7	29	44.5	53
Moment of inertia	No brake	$x10^{-4}Kg.m^2$	13.76	20.21	26.37	47.2	68.6
	With brake	$x10^{-4}Kg.m^2$	14.96	21.41	27.57	62.3	83.7
Torque constant		N.m/A	1.3	1.39	1.38	1.51	1.6
Induced voltage constant per phase		mV[r/min]	46.5	48.88	46.38	52.5	56
Rated power rate	No brake	KW/S	24	37.6	53.8	73.3	117.6
	With brake	KW/S	18.3	31.1	46.7	55.5	96.4
Mechanical time constant	No brake	ms	2.72	2.2	2	1.38	1.15
	With brake	ms	3.57	2.66	2.41	1.82	1.4
Electrical time constant		ms	3.52	4.46	4.64	18.5	18.3
Phase q-axis/d-axis inductance		mH	5.55/5.55	3.88/3.88	2.83/2.83	3.7	2.4
Weight: No brake[with brake]		kg	5.8 [7.4]	7.25 [8.9]	8.95 [10.6]	16 [20.7]	19.4 [24.1]
Permissible load	Radial load	N	490	490	490	1470	1470
	Axial load	N	196	196	196	490	490
	Rated voltage	V		DC24V±10%			
	Rated current	A	0.9	0.9	0.9	1.04	1.04
Brake specifications Note: Holding brake	Brake power	w	19.59	19.59	19.59	25	25
	Static friction torque	N.m	14 or more	14 or more	14 or more	74 or more	74 or more
	Suction time	ms	100 or less	100 or less	100 or less	120 or less	120 or less
	Release time	ms	60 or less	60 or less	60 or less	30 or less	30 or less
	Release voltage	V	DC1V or more	DC1V or more	DC1V or more	DC0.5V or more	DC0.5V or more

Torque characteristics

Instantaneous operation range — Continuous operation range

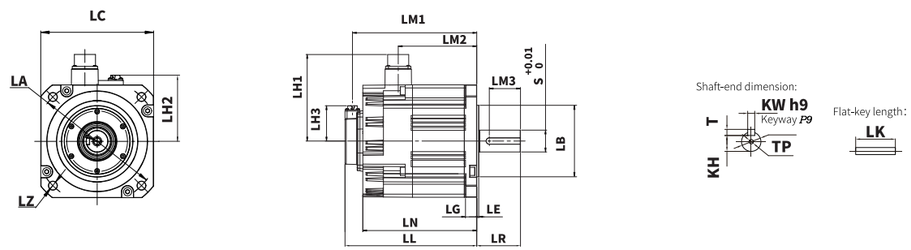


External Dimensions for Servo Motor

Unit(mm)

Models	X6MG085S	X6MG130S	X6MG180S	X6MG290S	X6MG440S
LC	130	130	130	180	180
LA	ϕ145	ϕ145	ϕ145	200	200
LB	ϕ110h7	ϕ110h7	ϕ110h7	ϕ114.3 h7	ϕ114.3 h7
LZ	4-ϕ9	4-ϕ9	4-ϕ9	4-ϕ13.5	4-ϕ13.5
LR	55	55	55	79±0.5	79±0.5
S	ϕ22 h6	ϕ22 h6	ϕ22 h6	$\phi35\ ^{+0.01}_{0}$	$\phi35\ ^{+0.01}_{0}$
LL (20bit) no brake [with brake]	121.5 [141.5]	135.5 [155.5]	159.4 [179.4]	165±1[217±1]	191±1[243±1]
LL (23bit) no brake [with brake]	142 [162]	156 [176]	179.9 [199.9]	178±1[237.5±1]	204±1[263.5±1]
LN no brake [with brake]	94[114]	108[128]	131.9[151.9]	134[188.5]	160[214.5]
LG	12	12	12	18	18
LE	6	6	6	3.2	3.2
LM1 (20bit) no brake [with brake]	109.5[129.5]	123.5[143.5]	147.4[167.4]	153[205]	179[231]
LM1 (23bit) no brake [with brake]	130.2[150.2]	144.2[164.2]	168.1[188.1]	166[226]	192[252]
LM2	[97.9]	[111.9]	[135.8]	113[131.8]	139[157.8]
LM3	64.1	80	103	60	60
LH1	103.8	103.8	103.8	144[139]	144[139]
LH2	[81.4]	[81.4]	[81.4]	105.3	105.3
LH3 (20bit) no brake [with brake]	56.4	56.4	56.4	55[56]	55[56]
LH3 (23bit) no brake [with brake]	60	60	60	60	60
LK	45	45	45	60	60
T	7	7	7	8	8
KW	8 h9	8 h9	8 h9	10 p9	10 p9
KH	18	18	18	30	30
TP	M6 Depth 20	M6 Depth 20	M6 Depth 20	M12 Depth 25	M12 Depth 25

X6MG085S/X6MG130S/X6MG180S/X6MG290S/X6MG440S



MEMO

Series name	Power	Model name	20bit Absolute	20bit Incremental	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X2-MA Low Inertia Series	100W	SV-X2MA010A-N2LA	●			●	●	40	ϕ8	Lead-wire type	21 22 31
		SV-X2MA010A-B2LA			●						21 22 23 31
	200W	SV-X2MA020A-N2CA	●			●	●	60	ϕ14	Connector -type	1 5 31
		SV-X2MA020A-B2CA			●						1 6 31
		SV-X2MA020A-N2CN		●		●					2 5
		SV-X2MA020A-B2CN			●						2 6
	400W	SV-X2MA040A-N2CA	●			●	●	60	ϕ14	Connector -type	1 5 31
		SV-X2MA040A-B2CA			●						1 6 31
		SV-X2MA040A-N2CN		●		●					2 5
		SV-X2MA040A-B2CN			●						2 6
	600W	SV-X2MA060E-N2LA	●			●	●	110	ϕ19	Aviation connector	11 12 31
		SV-X2MA060E-B2LA			●						11 12 14 31
		SV-X2MA060E-N2LN		●		●	●	110	ϕ19		11 12
		SV-X2MA060E-B2LN			●						11 12 14
	750W	SV-X2MA075A-N2CA	●			●	●	80	ϕ19	Connector -type	1 5 31
		SV-X2MA075A-B2CA			●						1 6 31
		SV-X2MA075A-N2CN		●		●					2 5
		SV-X2MA075A-B2CN			●						2 6
	900W	SV-X2MA090E-N2LN		●		●	●	110	ϕ19	Aviation connector	11 12 31
		SV-X2MA090E-B2LN			●						11 12 14 31
		SV-X2MA090E-N2LA	●			●	●	110	ϕ19	Aviation connector	11 12
		SV-X2MA090E-B2LA			●						11 12 14
	1kW	SV-X2MA100A-N2LA	●			●	●	100	ϕ19	Aviation connector	11 12 31
		SV-X2MA100A-B2LA			●						11 12 14 31
		SV-X2MA100A-N2LN		●		●					11 12
		SV-X2MA100A-B2LN			●						11 12 14
	1.2kW	SV-X2MA120E-N2LA	●			●	●	110	ϕ19	Aviation connector	11 12 31
		SV-X2MA120E-B2LA			●						11 12 14 31
		SV-X2MA120E-N2LN		●		●	●	110	ϕ19	Aviation connector	11 12
		SV-X2MA120E-B2LN			●						11 12 14
	1.5kW	SV-X2MA150E-N2LA	●			●	●	110	ϕ19	Aviation connector	11 12 31
		SV-X2MA150E-B2LA			●						11 12 14 31
		SV-X2MA150E-N2LN		●		●	●	110	ϕ19	Aviation connector	11 12
		SV-X2MA150E-B2LN			●						11 12 14
		SV-X2MA150A-N2LA	●			●	●	100	ϕ19	Aviation connector	11 12 31
		SV-X2MA150A-B2LA			●						11 12 14 31
		SV-X2MA150A-N2LN		●		●					11 12
		SV-X2MA150A-B2LN			●						11 12 14

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet General-purpose:Y7N[ ]---	Standard:Y7E[ ]---	Full-functional:Y7F[ ]---	Power specifications
X2-MA Low Inertia Series	100W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V
	200W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V
	400W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V
	600W	HN-Y7N[ ]075A-S	HN-Y7E[ ]075A-S	HN-Y7F[ ]075A-S	Single-phase AC220V
	750W	HN-Y7N[ ]075A-S	HN-Y7E[ ]075A-S	HN-Y7F[ ]075A-S	Single-phase AC220V
	900W	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V
	1kW	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V
	1.2kW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V
	1.5kW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V
		HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V

Accessories specifications for connector-type servo motors of flange 40 to 80

1	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
2	SVCAB-ENC075CA-***L-05	Incremental encoder cable
3	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
4	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
5	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
6	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

11	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
12	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
13	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
14	PWB-CON- 1KW	2-core brake power connector
15	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

Accessories specifications for lead-wire type servo motor of flange 40 to 80

21	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
22	PWR-CON 750W	4-hole power plastic connector
23	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

31 SV-BAT Absolute battery box

Series name	Power	Model name	20bit Absolute	20bit Incremental	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X2-MA Low Inertia Series	1.8kW	SV-X2MA180E-N2LA	●			●	●	110	φ19	Aviation connector	⑪ ⑫ ㉛
		SV-X2MA180E-B2LA			●						⑪ ⑫ ⑭ ㉛
		SV-X2MA180E-N2LN		●		●		110	φ19	Aviation connector	⑪ ⑫
		SV-X2MA180E-B2LN			●						⑪ ⑫ ⑭
	2kW	SV-X2MA200A-N2LA	●			●	●	100	φ19	Aviation connector	⑪ ⑫ ㉛
		SV-X2MA200A-B2LA			●						⑪ ⑫ ⑭ ㉛
		SV-X2MA200A-N2LN		●		●					⑪ ⑫
		SV-X2MA200A-B2LN			●						⑪ ⑫ ⑭
X2-MM Middle Inertia series	1kW	SV-X2MM100A-N2LA	●			●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X2MM100A-B2LA			●						⑪ ⑬ ㉛
		SV-X2MM100A-N2LN		●		●	●				⑪ ⑫
		SV-X2MM100A-B2LN			●						⑪ ⑬
	1.5kW	SV-X2MM150A-N2LA	●			●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X2MM150A-B2LA			●						⑪ ⑬ ㉛
		SV-X2MM150A-N2LN		●		●					⑪ ⑫
		SV-X2MM150A-B2LN			●						⑪ ⑬
	2kW	SV-X2MM200A-N2LA	●			●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X2MM200A-B2LA			●						⑪ ⑬ ㉛
		SV-X2MM200A-N2LN		●		●	●				⑪ ⑫
		SV-X2MM200A-B2LN			●						⑪ ⑬
X2-MM Middle Inertia & High Speed series	1kW	SV-X2MM100S-N2LA	●			●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X2MM100S-B2LA			●						⑪ ⑬ ㉛
		SV-X2MM100S-N2LN		●		●					⑪ ⑫
		SV-X2MM100S-B2LN			●						⑪ ⑬
	1.5kW	SV-X2MM150S-N2LA	●			●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X2MM150S-B2LA			●						⑪ ⑬ ㉛
		SV-X2MM150S-N2LN		●		●					⑪ ⑫
		SV-X2MM150S-B2LN			●						⑪ ⑬
	2kW	SV-X2MM200S-N2LA	●			●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X2MM200S-B2LA			●						⑪ ⑬ ㉛
		SV-X2MM200S-N2LN		●		●					⑪ ⑫
		SV-X2MM200S-B2LN			●						⑪ ⑬

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet General-purpose:Y7N[ ]---	 Standard:Y7E[ ]---	 Full-functional:Y7F[ ]---	Power specifications	Notes
X2-MA Low Inertia Series	1.8kW	HN-Y7N[ ]200A-S	HN-Y7E[ ]200A-S	HN-Y7F[ ]200A-S	Three-phase AC220V	
	2kW	HN-Y7N[ ]200A-S	HN-Y7E[ ]200A-S	HN-Y7F[ ]200A-S	Three-phase AC220V	
X2-MM Middle Inertia series	1kW	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	
	1.5kW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	
	2kW	HN-Y7N[ ]200A-S	HN-Y7E[ ]200A-S	HN-Y7F[ ]200A-S	Three-phase AC220V	
X2-MM Middle Inertia & High Speed series	1kW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	
	1.5W	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	
	2KW	HN-Y7N[ ]200A-S	HN-Y7E[ ]200A-S	HN-Y7F[ ]200A-S	Three-phase AC220V	

Accessories specifications for connector-type servo motors of flange 40 to 80

①	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
②	SVCAB-ENC075CA-***L-05	Incremental encoder cable
③	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
④	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
⑤	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
⑥	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

⑪	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
⑫	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
⑬	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
⑭	PWB-CON- 1KW	2-core brake power connector
⑮	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

Accessories specifications for lead-wire type servo motor of flange 40 to 80

㉑	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
㉒	PWR-CON 750W	4-hole power plastic connector
㉓	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

㉛ SV-BAT Absolute battery box

Series name	Power	Model name	20bit Absolute	20bit Incremental	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X2-MH High Inertia series	50W	SV-X2MH005A-N2CA	●			●	●	40	φ8	Connector-type	1 3 31
		SV-X2MH005A-B2CA			●						1 4 31
		SV-X2MH005A-N2CN		●		●					2 3
		SV-X2MH005A-B2CN			●						2 4
	100W	SV-X2MH010A-N2CA	●			●	●	40	φ8	Connector-type	1 3 31
		SV-X2MH010A-B2CA			●						1 4 31
		SV-X2MH010A-N2CN		●		●					2 3
		SV-X2MH010A-B2CN			●						2 4
	150W	SV-X2MH015A-N2CA	●			●	●	40	φ8	Connector-type	1 3 31
		SV-X2MH015A-B2CA			●						1 4 31
		SV-X2MH015A-N2CN		●		●	●				2 3
		SV-X2MH015A-B2CN			●						2 4
	200W	SV-X2MH020A-N2CA	●			●	●	60	φ14	Connector-type	1 5 31
		SV-X2MH020A-B2CA			●						1 6 31
		SV-X2MH020A-N2CN		●		●					2 5
		SV-X2MH020A-B2CN			●						2 6
	400W	SV-X2MH040A-N2CA	●			●	●	60	φ14	Connector-type	1 5 31
		SV-X2MH040A-B2CA			●						1 6 31
		SV-X2MH040A-N2CN		●		●	●				2 5
		SV-X2MH040A-B2CN			●						2 6
	750W	SV-X2MH075A-N2CA	●			●	●	80	φ19	Connector-type	1 5 31
		SV-X2MH075A-B2CA			●						1 6 31
		SV-X2MH075A-N2CN		●		●					2 5
		SV-X2MH075A-B2CN			●						2 6
	1kW	SV-X2MH100A-N2LA	●			●	●	130	φ22	Connector-type	11 12 31
		SV-X2MH100A-B2LA			●						11 13 31
		SV-X2MH100A-N2LN		●		●					11 12
		SV-X2MH100A-B2LN			●						11 13
	1.5kW	SV-X2MH150A-N2LA	●			●	●	130	φ22	Connector-type	11 12 31
		SV-X2MH150A-B2LA			●						11 13 31
		SV-X2MH150A-N2LN		●		●					11 12
		SV-X2MH150A-B2LN			●						11 13

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet: General-purpose:Y7N[ ]---	Standard:Y7E[ ]---	Full-functional:Y7F[ ]---	Power specifications	Notes
X2-MH High Inertia series	50W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	100W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	150W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	200W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	400W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	750W	HN-Y7N[ ]075A-S	HN-Y7E[ ]075A-S	HN-Y7F[ ]075A-S	Single-phase AC220V	
	1KW	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	
	1.5KW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	

Accessories specifications for connector-type servo motors of flange 40 to 80

1	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
2	SVCAB-ENC075CA-***L-05	Incremental encoder cable
3	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
4	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
5	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
6	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

11	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
12	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
13	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
14	PWB-CON- 1KW	2-core brake power connector
15	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

Accessories specifications for lead-wire type servo motor of flange 40 to 80

21	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
22	PWR-CON 750W	4-hole power plastic connector
23	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

31 SV-BAT Absolute battery box

Series name	Power	Model name	20bit Absolute	20bit Incremental	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X2-MHH Ultra-high Inertia series	100W	SV-X2MH010H-N2CA	●			●	●	40	φ8	Connector-type	① ③ ㉛
		SV-X2MH010H-B2CA			●						① ④ ㉛
		SV-X2MH010H-N2CN		●		●					② ③
		SV-X2MH010H-B2CN			●						② ④
	200W	SV-X2MH020H-N2LA	●			●	●	60	φ14	Lead-wire type	㉑ ㉒ ㉛
		SV-X2MH020H-B2LA			●						㉑ ㉒ ㉓ ㉛
		SV-X2MH020H-N2LN		●		●					㉑ ㉒
		SV-X2MH020H-B2LN			●						㉑ ㉓
	400W	SV-X2MH040H-N2CA	●			●	●	60	φ14	Connector-type	① ⑤ ㉛
		SV-X2MH040H-B2CA			●						① ⑥ ㉛
		SV-X2MH040H-N2CN		●		●					② ⑤
		SV-X2MH040H-B2CN			●						② ⑥
	750W	SV-X2MH075H-N2LA	●			●	●	80	φ19	Lead-wire type	㉑ ㉒ ㉛
		SV-X2MH075H-B2LA			●						㉑ ㉒ ㉓ ㉛
		SV-X2MH075H-N2LN		●		●					㉑ ㉒
		SV-X2MH075H-B2LN			●						㉑ ㉓
X2-MQ Special Flange/ Flat-type/ Small flange	100W	SV-X2MQ010A-N2KA	●			●		60	φ8	Lead-wire type	㉑ ㉒ ㉛
		SV-X2MQ010A-B2KA			●						㉑ ㉒ ㉓ ㉛
		SV-X2MQ010A-N2LA	●			●	●	60	φ8	Lead-wire type	㉑ ㉒ ㉛
		SV-X2MQ010A-B2LA			●						㉑ ㉒ ㉓ ㉛
	200W	SV-X2MQ020A-N2LA	●			●	●	80	φ11	Lead-wire type	㉑ ㉒ ㉛
		SV-X2MQ020A-B2LA			●						㉑ ㉒ ㉓ ㉛
	400W	SV-X2MQ040A-N2LA	●			●	●	80	φ14	Lead-wire type	㉑ ㉒ ㉛
		SV-X2MQ040A-B2LA			●						㉑ ㉒ ㉓ ㉛
	1kW	SV-X2MQ100E-N2CA	●			●	●	80	φ19	Connector-type	① ⑤ ㉛
		SV-X2MQ100E-B2CA			●						① ⑥ ㉛
		SV-X2MQ100E-N2CN		●		●					② ⑤
		SV-X2MQ100E-B2CN			●						② ⑥

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet General-purpose:Y7N[ ]---	 Standard:Y7E[ ]---	 Full-functional:Y7F[ ]---	Power specifications	Notes
X2-MHH Ultra-high Inertia series	100W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	200W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	400W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	750W	HN-Y7N[ ]075A-S	HN-Y7E[ ]075A-S	HN-Y7F[ ]075A-S	Single-phase AC220V	
X2-MQ Special Flange/ Flat-type/ Small flange	100W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	200W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	400W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	1kW	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	

Accessories specifications for connector-type servo motors of flange 40 to 80

①	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
②	SVCAB-ENC075CA-***L-05	Incremental encoder cable
③	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
④	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
⑤	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
⑥	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

⑪	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
⑫	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
⑬	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
⑭	PWB-CON- 1KW	2-core brake power connector
⑮	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

Accessories specifications for lead-wire type servo motor of flange 40 to 80

㉑	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
㉒	PWR-CON 750W	4-hole power plastic connector
㉓	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

㉛ SV-BAT Absolute battery box

Series name	Power	Model name	20bit Absolute	20bit Incremental	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X2-MG Low-speed & High-torque	750W	SV-X2MG075A-N2LA	●			●	●	80	Φ19	Lead-wire type	21 22 31
		SV-X2MG075A-B2LA			●						21 22 23 31
		SV-X2MG075A-N2LN		●		●					21 22
		SV-X2MG075A-B2LN			●						21 22 23
	1kW	SV-X2MG100A-N2LA	●			●	●	130	Φ22	Aviation connector	11 12 31
		SV-X2MG100A-B2LA			●						11 13 31
		SV-X2MG100A-N2LN		●		●					11 12
		SV-X2MG100A-B2LN			●						11 13
	850W	SV-X2MG085A-N2LA	●			●	●	130	Φ22	Aviation connector	11 12 31
		SV-X2MG085A-B2LA			●						11 13 31
		SV-X2MG085A-N2LN		●		●					11 12
		SV-X2MG085A-B2LN			●						11 13
	1.3kW	SV-X2MG130A-N2LA	●			●	●	130	Φ22	Aviation connector	11 12 31
		SV-X2MG130A-B2LA			●						11 13 31
		SV-X2MG130A-N2LN		●		●					11 12
		SV-X2MG130A-B2LN			●						11 13
	1.8kW	SV-X2MG180A-N2LA	●			●	●	130	Φ22	Aviation connector	11 12 31
		SV-X2MG180A-B2LA			●						11 13 31
		SV-X2MG180A-N2LN		●		●					11 12
		SV-X2MG180A-B2LN			●						11 13
	2.3kW	SV-X2MG230A-N2LA	●			●	●	130	Φ22	Aviation connector	11 12 31
		SV-X2MG230A-B2LA			●						11 12 14 31
		SV-X2MG230A-N2LN		●		●					11 12
		SV-X2MG230A-B2LN			●						11 12 14

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet General-purpose:Y7N[ ]---	Standard:Y7E[ ]---	Full-functional:Y7F[ ]---	Power specifications	Notes
X2-MG Low-speed & High-torque	750W	HN-Y7N[ ]075A-S	HN-Y7E[ ]075A-S	HN-Y7F[ ]075A-S	Single-phase AC220V	
	1kW	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	
	850W	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	
	1.3kW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	
	1.8kW	HN-Y7N[ ]200A-S	HN-Y7E[ ]200A-S	HN-Y7F[ ]200A-S	Three-phase AC220V	
	2.3kW	HN-Y7N[ ]200A-S	HN-Y7E[ ]200A-S	HN-Y7F[ ]200A-S	Three-phase AC220V	

Accessories specifications for connector-type servo motors of flange 40 to 80

1	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
2	SVCAB-ENC075CA-***L-05	Incremental encoder cable
3	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
4	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
5	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
6	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

11	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
12	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
13	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
14	PWB-CON- 1KW	2-core brake power connector
15	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

Accessories specifications for lead-wire type servo motor of flange 40 to 80

21	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
22	PWR-CON 750W	4-hole power plastic connector
23	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

31 SV-BAT Absolute battery box

Series name	Power	Model name	23bit Absolute	20bit Absolute	20bit Incremental	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X6-MA Low Inertia Series	100W	SV-X6MA010A-N2LD	●				●	●	40	Φ8	Lead-wire type	21 22 31
		SV-X6MA010A-B2LD				●						21 22 23 31
	200W	SV-X6MA020A-N2LD	●				●	●	60	Φ14	Lead-wire type	21 22 31
		SV-X6MA020A-B2LD				●						21 22 23 31
		SV-X6MA020A-N2CD	●				●	●	60	Φ14	Connector -type	1 5 31
		SV-X6MA020A-B2CD				●						1 6 31
	400W	SV-X6MA040A-N2LD	●				●	●	60	Φ14	Lead-wire type	21 22 31
		SV-X6MA040A-B2LD				●						21 22 23 31
		SV-X6MA040A-N2CD	●				●	●	60	Φ14	Connector -type	1 5 31
		SV-X6MA040A-B2CD				●						1 6 31
	600W	SV-X6MA060E-N2LD	●				●	●	110	Φ19	Aviation connector	11 12 31
		SV-X6MA060E-B2LD				●						11 12 14 31
	750W	SV-X6MA075A-N2LD	●				●	●	80	Φ19	Lead-wire type	21 22 31
		SV-X6MA075A-B2LD				●						21 22 23 31
		SV-X6MA075A-N2CD	●				●	●	80	Φ19	Connector -type	1 5 31
		SV-X6MA075A-B2CD				●						1 6 31
	900W	SV-X6MA090E-N2LD	●				●	●	110	Φ19	Aviation connector	11 12 31
		SV-X6MA090E-B2LD				●						11 12 14 31
	1kW	SV-X6MA100A-N2LD	●				●	●	100	Φ19	Aviation connector	11 12 31
		SV-X6MA100A-B2LD				●						11 12 14 31
	1.2kW	SV-X6MA120E-N2LD	●				●	●	110	Φ19	Aviation connector	11 12 31
		SV-X6MA120E-B2LD				●						11 12 14 31
	1.5kW	SV-X6MA150A-N2LD	●				●	●	110	Φ19	Aviation connector	11 12 31
		SV-X6MA150A-B2LD				●						11 12 14 31
		SV-X6MA150E-N2LD	●				●	●	100	Φ19	Aviation connector	11 12 31
		SV-X6MA150E-B2LD				●						11 12 14 31
	1.8kW	SV-X6MA180E-N2LD	●				●	●	110	Φ19	Aviation connector	11 12 31
		SV-X6MA180E-B2LD				●						11 12 14 31
	2kW	SV-X6MA200A-N2LD	●				●	●	110	Φ19	Aviation connector	11 12 31
		SV-X6MA200A-B2LD				●						11 12 14 31

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet General-purpose:Y7N[ ]---	Standard:Y7E[ ]---	Full-functional:Y7F[ ]---	Power specifications	Notes
X6-MA Low Inertia Series	100W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	200W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
					Single-phase AC220V	
	400W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
					Single-phase AC220V	
	600W	HN-Y7N[ ]075A-S	HN-Y7E[ ]075A-S	HN-Y7F[ ]075A-S	Single-phase AC220V	
	750W	HN-Y7N[ ]075A-S	HN-Y7E[ ]075A-S	HN-Y7F[ ]075A-S	Single-phase AC220V	
					Single-phase AC220V	
	900W	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	
	1kW	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	
	1.2kW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	
	1.5kW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	
		HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	
	1.8kW	HN-Y7N[ ]200A-S	HN-Y7E[ ]200A-S	HN-Y7F[ ]200A-S	Three-phase AC220V	
	2kW	HN-Y7N[ ]200A-S	HN-Y7E[ ]200A-S	HN-Y7F[ ]200A-S	Three-phase AC220V	

Accessories specifications for connector-type servo motors of flange 40 to 80

1	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
2	SVCAB-ENC075CA-***L-05	Incremental encoder cable
3	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
4	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
5	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
6	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

11	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
12	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
13	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
14	PWB-CON- 1KW	2-core brake power connector
15	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

Accessories specifications for lead-wire type servo motor of flange 40 to 80

21	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
22	PWR-CON 750W	4-hole power plastic connector
23	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

31 SV-BAT Absolute battery box

Series name	Power	Model name	23bit Absolute	20bit Absolute	20bit Incremental	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X2-MM Middle Inertia series	1kW	SV-X6MM100A-N2LD	●				●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM100A-B2LD				●						⑪ ⑬ ㉛
	1.5kW	SV-X6MM150A-N2LD	●				●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM150A-B2LD				●						⑪ ⑬ ㉛
	2kW	SV-X6MM200A-N2LD	●				●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM200A-B2LD				●						⑪ ⑬ ㉛
X6-MMS Middle Inertia series	1kW	SV-X6MM100S-N2LD	●				●	●	100	Φ19	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM100S-B2LD				●						⑪ ⑬ ㉛
	1.5kW	SV-X6MM150S-N2LD	●				●	●	100	Φ19	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM150S-B2LD				●						⑪ ⑬ ㉛
	2kW	SV-X6MM200S-N2LD	●				●	●	100	Φ19	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM200S-B2LD				●						⑪ ⑬ ㉛

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet General-purpose:Y7N[ ]---	 Standard:Y7E[ ]---	 Full-functional:Y7F[ ]---	Power specifications	Notes
X2-MM Middle Inertia series	1kW	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	
	1.5kW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	
	2kW	HN-Y7N[ ]200A-S	HN-Y7E[ ]200A-S	HN-Y7F[ ]200A-S	Three-phase AC220V	
X6-MMS Middle Inertia series	1kW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	
	1.5kW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	
	2kW	HN-Y7N[ ]200A-S	HN-Y7E[ ]200A-S	HN-Y7F[ ]200A-S	Three-phase AC220V	

Accessories specifications for connector-type servo motors of flange 40 to 80

①	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
②	SVCAB-ENC075CA-***L-05	Incremental encoder cable
③	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
④	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
⑤	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
⑥	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

⑪	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
⑫	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
⑬	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
⑭	PWB-CON- 1KW	2-core brake power connector
⑮	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

Accessories specifications for lead-wire type servo motor of flange 40 to 80

㉑	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
㉒	PWR-CON 750W	4-hole power plastic connector
㉓	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

㉛ SV-BAT Absolute battery box

Series name	Power	Model name	23bit Absolute	20bit Absolute	20bit Increme-ntal	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X6-MH High Inertia series	50W	SV-X6MH005A-N2LD	●				●	●	40	ϕ8	Lead-wire type	21 22 31
		SV-X6MH005A-B2LD				●						21 22 23 31
		SV-X6MH005A-N2CD	●				●	●	40	ϕ8	Connector -type	1 3 31
		SV-X6MH005A-B2CD				●						1 4 31
	100W	SV-X6MH010A-N2LD	●				●	●	40	ϕ8	Lead-wire type	21 22 31
		SV-X6MH010A-B2LD				●						21 22 23 31
		SV-X6MH010A-N2CD	●				●	●	40	ϕ8	Connector -type	1 3 31
		SV-X6MH010A-B2CD				●						1 4 31
	150W	SV-X6MH015A-N2LD	●				●	●	40	ϕ8	Lead-wire type	21 22 31
		SV-X6MH015A-B2LD				●						21 22 23 31
		SV-X6MH015A-N2CD	●				●	●	40	ϕ8	Connector -type	1 3 31
		SV-X6MH015A-B2CD				●						1 4 31
	200W	SV-X6MH020A-N2LD	●				●	●	40	ϕ14	Lead-wire type	21 22 31
		SV-X6MH020A-B2LD				●						21 22 23 31
		SV-X6MH020A-N2CD	●				●	●	60	ϕ14	Connector -type	1 5 31
		SV-X6MH020A-B2CD				●						1 6 31
		SV-X6MH020A-N2JD	●				●			ϕ11		1 5 31
	400W	SV-X6MH040A-N2LD	●				●	●	60	ϕ14	Lead-wire type	21 22 31
		SV-X6MH040A-B2LD				●						21 22 23 31
		SV-X6MH040A-N2CD	●				●	●	60	ϕ14	Connector -type	1 5 31
		SV-X6MH040A-B2CD				●						1 6 31
	750W	SV-X6MH075A-N2LD	●				●	●	80	ϕ19	Lead-wire type	21 22 31
		SV-X6MH075A-B2LD				●						21 22 23 31
		SV-X6MH075A-N2CD	●				●	●	80	ϕ19	Connector -type	1 5 31
		SV-X6MH075A-B2CD				●						1 6 31
	1kW	SV-X6MH100A-N2LD	●				●	●	130	ϕ22	Aviation connector	11 12 31
		SV-X6MH100A-B2LD				●						11 13 31
	1.5kW	SV-X6MH150A-N2LD	●				●	●	130	ϕ22	Aviation connector	11 12 31
		SV-X6MH150A-B2LD				●						11 13 31
X6-MHH Ultra-high Inertia series	100W	SV-X6MH010H-N2LD	●				●	●	40	ϕ8	Lead-wire type	21 22 31
		SV-X6MH010H-B2LD				●						21 22 23 31
		SV-X6MH010H-N2CD	●				●	●	40	ϕ8	Connector -type	1 3 31
		SV-X6MH010H-B2CD				●						1 4 31
	200W	SV-X6MH020H-N2LD	●				●	●	60	ϕ14	Lead-wire type	21 22 31
		SV-X6MH020H-B2LD				●						21 22 23 31
	400W	SV-X6MH040H-N2LD	●				●	●	60	ϕ14	Lead-wire type	21 22 31
		SV-X6MH040H-B2LD				●						21 22 23 31
		SV-X6MH040H-N2CD	●				●	●	60	ϕ14	Connector -type	1 5 31
		SV-X6MH040H-B2CD				●						1 6 31
	750W	SV-X6MH075H-N2LD	●				●	●	80	ϕ19	Lead-wire type	21 22 31

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet			Power specifications	Notes
		General-purpose:Y7N[ ]---	Standard:Y7E[ ]---	Full-functional:Y7F[ ]---		
X6-MH High Inertia series	50W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
		HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	100W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
		HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	150W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
		HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	200W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
		HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	400W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
		HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	750W	HN-Y7N[ ]075A-S	HN-Y7E[ ]075A-S	HN-Y7F[ ]075A-S	Three-phase AC220V	
		HN-Y7N[ ]075A-S	HN-Y7E[ ]075A-S	HN-Y7F[ ]075A-S	Three-phase AC220V	
	1kW	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	
	1.5kW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	
X6-MHH Ultra-high Inertia series	100W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Three-phase AC220V	
		HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Three-phase AC220V	
	200W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	400W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
		HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	750W	HN-Y7N[ ]075A-S	HN-Y7E[ ]075A-S	HN-Y7F[ ]075A-S	Single-phase AC220V	

Accessories specifications for connector-type servo motors of flange 40 to 80

1	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
2	SVCAB-ENC075CA-***L-05	Incremental encoder cable
3	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
4	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
5	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
6	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

11	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
12	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
13	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
14	PWB-CON- 1KW	2-core brake power connector
15	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

Accessories specifications for lead-wire type servo motor of flange 40 to 80

21	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
22	PWR-CON 750W	4-hole power plastic connector
23	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

31 SV-BAT Absolute battery box

Series name	Power	Model name	23bit Absolute	20bit Absolute	20bit Increme-ntal	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X6-MQ Special Flange/ Flat-type/ Small flange	100W	SV-X6MQ010A-N2KD	●				●		60	φ8	Lead-wire type	21 22 31
		SV-X6MQ010A-B2KD				●						21 22 23 31
		SV-X6MQ010A-N2LD	●				●	●	60	φ8	Lead-wire type	21 22 31
		SV-X6MQ010A-B2LD				●						21 22 23 31
	200W	SV-X6MQ020A-N2LD	●				●	●	60	φ11	Lead-wire type	21 22 31
		SV-X6MQ020A-B2LD				●						21 22 23 31
	400W	SV-X6MQ040A-N2LD	●				●	●	80	φ14	Lead-wire type	21 22 31
		SV-X6MQ040A-B2LD				●						21 22 23 31
	1kW	SV-X6MQ100E-N2LD	●				●	●	80	φ19	Lead-wire type	21 22 31
		SV-X6MQ100E-B2LD				●						21 22 23 31
		SV-X6MQ100E-N2CD	●				●	●	80	φ19	Connector -type	1 5 31
		SV-X6MQ100E-B2CD				●						1 6 31
X6-MG Low-speed & High-torque	750W	SV-X6MG075A-N2LD	●				●	●	80	φ19	Lead-wire type	21 22 31
		SV-X6MG075A-B2LD				●						21 22 23 31
	1kW	SV-X6MG100A-N2LD	●				●	●	130	φ22	Aviation connector	11 12 31
		SV-X6MG100A-B2LD				●						11 13 31
	850W	SV-X6MG085A-N2LD	●				●	●	130	φ22	Aviation connector	11 12 31
		SV-X6MG085A-B2LD				●						11 13 31
	1.3kW	SV-X6MG130A-N2LD	●				●	●	130	φ22	Aviation connector	11 12 31
		SV-X6MG130A-B2LD				●						11 13 31
	1.8kW	SV-X6MG180A-N2LD	●				●	●	130	φ22	Aviation connector	11 12 31
		SV-X6MG180A-B2LD				●						11 13 31
X6-MGS Low-cogging Cutting series	850W	SV-X6MG085S-N2LD	●				●	●	130	φ19	Aviation connector	11 12 31
		SV-X6MG085S-B2LD				●						11 12 14 31
	1.3kW	SV-X6MG130S-N2LD	●				●	●	130	φ22	Aviation connector	11 12 31
		SV-X6MG130S-B2LD				●						11 12 14 31
	1.8kW	SV-X6MG180S-N2LD	●				●	●	130	φ24	Aviation connector	11 12 31
		SV-X6MG180S-B2LD				●						11 12 14 31

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet — General-purpose:Y7N[ ]---	Standard:Y7E[ ]---	Full-functional:Y7F[ ]---	Power specifications	Notes
X6-MQ Special Flange/ Flat-type/ Small flange	100W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
		HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	200W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	400W	HN-Y7N[ ]040A-S	HN-Y7E[ ]040A-S	HN-Y7F[ ]040A-S	Single-phase AC220V	
	1kW	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	
		HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	
X6-MG Low-speed & High-torque	750W	HN-Y7N[ ]075A-S	HN-Y7E[ ]075A-S	HN-Y7F[ ]075A-S	Single-phase AC220V	
	1kW	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	
	850W	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	
	1.3kW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	
	1.8kW	HN-Y7N[ ]200A-S	HN-Y7E[ ]200A-S	HN-Y7F[ ]200A-S	Three-phase AC220V	
X6-MGS Low-cogging Cutting series	850W	HN-Y7N[ ]100A-S	HN-Y7E[ ]100A-S	HN-Y7F[ ]100A-S	Three-phase AC220V	
	1.3kW	HN-Y7N[ ]150A-S	HN-Y7E[ ]150A-S	HN-Y7F[ ]150A-S	Three-phase AC220V	
	1.8kW	HN-Y7N[ ]200A-S	HN-Y7E[ ]200A-S	HN-Y7F[ ]200A-S	Three-phase AC220V	

Accessories specifications for connector-type servo motors of flange 40 to 80

1	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
2	SVCAB-ENC075CA-***L-05	Incremental encoder cable
3	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
4	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
5	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
6	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

11	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
12	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
13	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
14	PWB-CON- 1KW	2-core brake power connector
15	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

Accessories specifications for lead-wire type servo motor of flange 40 to 80

21	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
22	PWR-CON 750W	4-hole power plastic connector
23	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

31 SV-BAT Absolute battery box

Series name	Power	Model name	23bit Absolute	20bit Absolute	20bit Increme-ntal	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X6-MA Low Inertia Series	1kW	SV-X6MA100A-N4LA		●			●	●	100	φ19	Aviation connector	⑪ ⑫ ㉛
		SV-X6MA100A-B4LA				●						⑪ ⑫ ⑭ ㉛
		SV-X6MA100A-N4LD	●				●	●	100	φ19	Aviation connector	⑪ ⑫ ㉛
		SV-X6MA100A-B4LD				●						⑪ ⑫ ⑭ ㉛
	1.5kW	SV-X6MA150A-N4LA		●			●	●	100	φ19	Aviation connector	⑪ ⑫ ㉛
		SV-X6MA150A-B4LA				●						⑪ ⑫ ⑭ ㉛
		SV-X6MA150A-N4LD	●				●	●	100	φ19	Aviation connector	⑪ ⑫ ㉛
		SV-X6MA150A-B4LD				●						⑪ ⑫ ⑭ ㉛
	2kW	SV-X6MA200A-N4LA		●			●	●	100	φ19	Aviation connector	⑪ ⑫ ㉛
		SV-X6MA200A-B4LA				●						⑪ ⑫ ⑭ ㉛
		SV-X6MA200A-N4LD	●				●	●	100	φ19	Aviation connector	⑪ ⑫ ㉛
		SV-X6MA200A-B4LD				●						⑪ ⑫ ⑭ ㉛
	3kW	SV-X6MA300K-N4LA		●			●	●	130	φ24	Aviation connector	⑪ ⑫ ㉛
		SV-X6MA300K-B4LA				●						⑪ ⑫ ⑭ ㉛
		SV-X6MA300K-N4LD	●				●	●	130	φ24	Aviation connector	⑪ ⑫ ㉛
		SV-X6MA300K-B4LD				●						⑪ ⑫ ⑭ ㉛
	4kW	SV-X6MA400K-N4LA		●			●	●	130	φ24	Aviation connector	⑪ ⑫ ㉛
		SV-X6MA400K-B4LA				●						⑪ ⑫ ⑭ ㉛
		SV-X6MA400K-N4LD	●				●	●	130	φ24	Aviation connector	⑪ ⑫ ㉛
		SV-X6MA400K-B4LD				●						⑪ ⑫ ⑭ ㉛
	5kW	SV-X6MA500K-N4LA		●			●	●	130	φ24	Aviation connector	⑪ ⑫ ㉛
		SV-X6MA500K-B4LA				●						⑪ ⑫ ⑭ ㉛
		SV-X6MA500K-N4LD	●				●	●	130	φ24	Aviation connector	⑪ ⑫ ㉛
		SV-X6MA500K-B4LD				●						⑪ ⑫ ⑭ ㉛

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet			Power specifications	Notes
		General-purpose:Y7N[ ]---	Standard:Y7E[ ]---	Full-functional:Y7F[ ]---		
X6-MA Low Inertia Series	1kW	HN-Y7N[ ]100T-S	HN-Y7E[ ]100T-S	HN-Y7F[ ]100T-S	Three-phase AC380V	
	1.5kW	HN-Y7N[ ]150T-S	HN-Y7E[ ]150T-S	HN-Y7F[ ]150T-S	Three-phase AC380V	
	2kW	HN-Y7N[ ]200T-S	HN-Y7E[ ]200T-S	HN-Y7F[ ]200T-S	Three-phase AC380V	
	3kW	HN-Y7N[ ]300T-S	HN-Y7E[ ]300T-S	HN-Y7F[ ]300T-S	Three-phase AC380V	
	4kW	HN-Y7N[ ]500T-S	HN-Y7E[ ]500T-S	HN-Y7F[ ]500T-S	Three-phase AC380V	
	5kW	HN-Y7N[ ]500T-S	HN-Y7E[ ]500T-S	HN-Y7F[ ]500T-S	Three-phase AC380V	

Accessories specifications for connector-type servo motors of flange 40 to 80

①	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
②	SVCAB-ENC075CA-***L-05	Incremental encoder cable
③	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
④	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
⑤	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
⑥	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

⑪	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
⑫	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
⑬	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
⑭	PWB-CON- 1KW	2-core brake power connector
⑮	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

Accessories specifications for lead-wire type servo motor of flange 40 to 80

㉑	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
㉒	PWR-CON 750W	4-hole power plastic connector
㉓	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

㉛ SV-BAT Absolute battery box

Series name	Power	Model name	23bit Absolute	20bit Absolute	20bit Increme-ntal	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X6-MM Middle Inertia series	1kW	SV-X6MM100A-N4LD	●				●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM100A-B4LD				●						⑪ ⑬ ㉛
		SV-X6MM100A-N4LA		●			●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM100A-B4LA				●						⑪ ⑬ ㉛
		SV-X6MM100S-N4LD	●				●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM100S-B4LD				●						⑪ ⑬ ㉛
		SV-X6MM100S-N4LA		●			●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM100S-B4LA				●						⑪ ⑬ ㉛
	1.5kW	SV-X6MM150A-N4LD	●				●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM150A-B4LD				●						⑪ ⑬ ㉛
		SV-X6MM150A-N4LA		●			●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM150A-B4LA				●						⑪ ⑬ ㉛
		SV-X6MM150S-N4LD	●				●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM150S-B4LD				●						⑪ ⑬ ㉛
		SV-X6MM150S-N4LA		●			●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM150S-B4LA				●						⑪ ⑬ ㉛
	2kW	SV-X6MM200A-N4LD	●				●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM200A-B4LD				●						⑪ ⑬ ㉛
		SV-X6MM200A-N4LA		●			●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM200A-B4LA				●						⑪ ⑬ ㉛
		SV-X6MM200S-N4LD	●				●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM200S-B4LD				●						⑪ ⑬ ㉛
		SV-X6MM200S-N4LA		●			●	●	130	Φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MM200S-B4LA				●						⑪ ⑬ ㉛

Note

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet General-purpose:Y7N[ ]---	Standard:Y7E[ ]---	Full-functional:Y7F[ ]---	Power specifications	Notes
X6-MM Middle Inertia series	1kW	HN-Y7N[ ]100T-S	HN-Y7E[ ]100T-S	HN-Y7F[ ]100T-S	Three-phase AC380V	
		HN-Y7N[ ]100T-S	HN-Y7E[ ]100T-S	HN-Y7F[ ]100T-S	Three-phase AC380V	
	1.5kW	HN-Y7N[ ]150T-S	HN-Y7E[ ]150T-S	HN-Y7F[ ]150T-S	Three-phase AC380V	
		HN-Y7N[ ]200T-S	HN-Y7E[ ]200T-S	HN-Y7F[ ]200T-S	Three-phase AC380V	
	2kW	HN-Y7N[ ]200T-S	HN-Y7E[ ]200T-S	HN-Y7F[ ]200T-S	Three-phase AC380V	
		HN-Y7N[ ]300T-S	HN-Y7E[ ]300T-S	HN-Y7F[ ]300T-S	Three-phase AC380V	

Accessories specifications for connector-type servo motors of flange 40 to 80

①	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
②	SVCAB-ENC075CA-***L-05	Incremental encoder cable
③	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
④	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
⑤	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
⑥	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

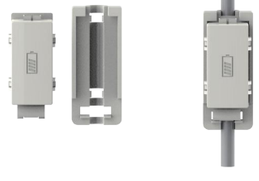
⑪	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
⑫	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
⑬	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
⑭	PWB-CON- 1KW	2-core brake power connector
⑮	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

Accessories specifications for lead-wire type servo motor of flange 40 to 80

㉑	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
㉒	PWR-CON 750W	4-hole power plastic connector
㉓	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

㉛ SV-BAT Absolute battery box



Series name	Power	Model name	23bit Absolute	20bit Absolute	20bit Increme-ntal	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X6-MM Middle Inertia series	3kW	SV-X6MM300A-N4LD	●				●	●	180	φ35	Aviation connector	11 15 31
		SV-X6MM300A-B4LD				●						11 14 15 31
		SV-X6MM300A-N4LA		●			●	●				11 15 31
		SV-X6MM300A-B4LA				●						11 14 15 31
	4kW	SV-X6MM400A-N4LD	●				●	●	180	φ35	Aviation connector	11 15 31
		SV-X6MM400A-B4LD				●						11 14 15 31
		SV-X6MM400A-N4LA		●			●	●				11 15 31
		SV-X6MM400A-B4LA				●						11 14 15 31
	5kW	SV-X6MM500A-N4LD	●				●	●	180	φ35	Aviation connector	11 15 31
		SV-X6MM500A-B4LD				●						11 14 15 31
		SV-X6MM500A-N4LA		●			●	●				11 15 31
		SV-X6MM500A-B4LA				●						11 14 15 31
	7.5kW	SV-X6MM750A(H)-N4LD	●				●	●	180	φ42	Aviation connector	11 15 31
		SV-X6MM750A(H)-B4LD				●						11 14 15 31
		SV-X6MM750A(H)-N4LA		●			●	●				11 15 31
		SV-X6MM750A(H)-B4LA				●						11 14 15 31
	11kW	SV-X6MM11KA-N4LD	●				●	●	220	φ55	Aviation connector	11 31
		SV-X6MM11KA-B4LD				●						11 14 31
		SV-X6MM11KA-N4LA		●			●	●				11 31
		SV-X6MM11KA-B4LA				●						11 14 31
	15kW	SV-X6MM15KA-N4LD-F	●				●	●	220	φ55	Aviation connector	11 16 31
		SV-X6MM15KA-B4LD-F				●						11 14 16 31
		SV-X6MM15KA-N4LA-F		●			●	●				11 16 31
		SV-X6MM15KA-B4LA-F				●						11 14 16 31
	22kW	SV-X6MM22KA-N4LD-F	●				●	●	220	φ55	Aviation connector	11 16 31
		SV-X6MM22KA-B4LD-F				●						11 14 16 31
		SV-X6MM22KA-N4LA-F		●			●	●				11 16 31
		SV-X6MM22KA-B4LA-F				●						11 14 16 31
X6-MH High Inertia series	2kW	SV-X6MH200A-N4LD	●				●	●	180	φ35	Aviation connector	11 15 31
		SV-X6MH200A-B4LD				●						11 14 15 31
		SV-X6MH200A-N4LA		●			●	●				11 15 31
		SV-X6MH200A-B4LA				●						11 14 15 31
	4kW	SV-X6MH400A-N4LD	●				●	●	180	φ35	Aviation connector	11 15 31
		SV-X6MH400A-B4LD				●						11 14 15 31
		SV-X6MH400A-N4LA		●			●	●				11 15 31
		SV-X6MH400A-B4LA				●						11 14 15 31

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet			Power specifications	Notes
		General-purpose:Y7N[ ]---	Standard:Y7E[ ]---	Full-functional:Y7F[ ]---		
X6-MM Middle Inertia series	3kW	HN-Y7N[ ]300T-S	HN-Y7E[ ]300T-S	HN-Y7F[ ]300T-S	Three-phase AC380V	
	4kW	HN-Y7N[ ]500T-S	HN-Y7E[ ]500T-S	HN-Y7F[ ]500T-S	Three-phase AC380V	
	5kW	HN-Y7N[ ]500T-S	HN-Y7E[ ]500T-S	HN-Y7F[ ]500T-S	Three-phase AC380V	
	7.5kW	HN-Y7N[ ]750T-S	HN-Y7E[ ]750T-S	HN-Y7F[ ]750T-S	Three-phase AC380V	
	11kW	HN-Y7N[ ]111T-S	HN-Y7E[ ]111T-S	HN-Y7F[ ]111T-S	Three-phase AC380V	
	15kW	HN-Y7N[ ]151T-S	HN-Y7E[ ]151T-S	HN-Y7F[ ]151T-S	Three-phase AC380V	
	22kW	HN-Y7N[ ]221T-S	HN-Y7E[ ]221T-S	HN-Y7F[ ]221T-S	Three-phase AC380V	
X6-MH High Inertia series	2kW	HN-Y7N[ ]200T-S	HN-Y7E[ ]200T-S	HN-Y7F[ ]200T-S	Three-phase AC380V	
	4kW	HN-Y7N[ ]500T-S	HN-Y7E[ ]500T-S	HN-Y7F[ ]500T-S	Three-phase AC380V	

Accessories specifications for connector-type servo motors of flange 40 to 80

1	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
2	SVCAB-ENC075CA-***L-05	Incremental encoder cable
3	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
4	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
5	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
6	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

11	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
12	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
13	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
14	PWB-CON- 1KW	2-core brake power connector
15	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

Accessories specifications for lead-wire type servo motor of flange 40 to 80

21	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
22	PWR-CON 750W	4-hole power plastic connector
23	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

31 SV-BAT Absolute battery box

Series name	Power	Model name	23bit Absolute	20bit Absolute	20bit Increme-ntal	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X6-MG Low-speed & High-torque	850W	SV-X6MG085A-N4LD	●				●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MG085A-B4LD				●						⑪ ⑬ ㉛
		SV-X6MG085A-N4LA		●			●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MG085A-B4LA				●						⑪ ⑬ ㉛
	1.5kW	SV-X6MG150C-N4LD	●				●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MG150C-B4LD				●						⑪ ⑬ ㉛
		SV-X6MG150C-N4LA		●			●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MG150C-B4LA				●						⑪ ⑬ ㉛
	2.4kW	SV-X6MG240A-N4LD	●				●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MG240A-B4LD				●						⑪ ⑬ ㉛
		SV-X6MG240A-N4LA		●			●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MG240A-B4LA				●						⑪ ⑬ ㉛
	2.9kW	SV-X6MG290A-N4LD	●				●	●	180	φ35	Aviation connector	⑪ ⑮ ㉛
		SV-X6MG290A-B4LD				●						⑪ ⑭ ⑮ ㉛
		SV-X6MG290A-N4LA		●			●	●				⑪ ⑮ ㉛
		SV-X6MG290A-B4LA				●						⑪ ⑭ ⑮ ㉛
	4.4kW	SV-X6MG440A-N4LD	●				●	●	180	φ35	Aviation connector	⑪ ⑮ ㉛
		SV-X6MG440A-B4LD				●						⑪ ⑭ ⑮ ㉛
		SV-X6MG440A-N4LA		●			●	●				⑪ ⑮ ㉛
		SV-X6MG440A-B4LA				●						⑪ ⑭ ⑮ ㉛
	5.5 kW	SV-X6MG550A-N4LD	●				●	●	180	φ42	Aviation connector	⑪ ⑮ ㉛
		SV-X6MG550A-B4LD				●						⑪ ⑭ ⑮ ㉛
		SV-X6MG550A-N4LA		●			●	●				⑪ ⑮ ㉛
		SV-X6MG550A-B4LA				●						⑪ ⑭ ⑮ ㉛

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet			Power specifications	Notes
		General-purpose:Y7N[ ]---	Standard:Y7E[ ]---	Full-functional:Y7F[ ]---		
X6-MG Low-speed & High-torque	850W	HN-Y7N[ ]100T-S	HN-Y7E[ ]100T-S	HN-Y7F[ ]100T-S	Three-phase AC380V	
	1.5kW	HN-Y7N[ ]150T-S	HN-Y7E[ ]150T-S	HN-Y7F[ ]150T-S	Three-phase AC380V	
	2.4kW	HN-Y7N[ ]300T-S	HN-Y7E[ ]300T-S	HN-Y7F[ ]300T-S	Three-phase AC380V	
	2.9kW	HN-Y7N[ ]300T-S	HN-Y7E[ ]300T-S	HN-Y7F[ ]300T-S	Three-phase AC380V	
	4.4kW	HN-Y7N[ ]500T-S	HN-Y7E[ ]500T-S	HN-Y7F[ ]500T-S	Three-phase AC380V	
	5.5 kW	HN-Y7N[ ]600T-S	HN-Y7E[ ]600T-S	HN-Y7F[ ]600T-S	Three-phase AC380V	

Accessories specifications for connector-type servo motors of flange 40 to 80

①	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
②	SVCAB-ENC075CA-***L-05	Incremental encoder cable
③	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
④	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
⑤	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
⑥	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

⑪	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
⑫	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
⑬	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
⑭	PWB-CON- 1KW	2-core brake power connector
⑮	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

Note Note *1 Under development, and will be released in 2023.

Accessories specifications for lead-wire type servo motor of flange 40 to 80

㉑	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
㉒	PWR-CON 750W	4-hole power plastic connector
㉓	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

㉛ SV-BAT Absolute battery box

Series name	Power	Model name	23bit Absolute	20bit Absolute	20bit Incremental	Brake Yes	Brake No	Oil seal	Flange	Shaft diameter	Regular models	Applicable accessories
X6-MGS Low-cogging Cutting series	850W	SV-X6MG085S-N4LD	●				●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MG085S-B4LD				●						⑪ ⑫ ⑭ ㉛
		SV-X6MG085S-N4LA		●			●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MG085S-B4LA				●						⑪ ⑫ ⑭ ㉛
	1.3kW	SV-X6MG130S-N4LD	●				●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MG130S-B4LD				●						⑪ ⑫ ⑭ ㉛
		SV-X6MG130S-N4LA		●			●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MG130S-B4LA				●						⑪ ⑫ ⑭ ㉛
	1.8kW	SV-X6MG180S-N4LD	●				●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MG180S-B4LD				●						⑪ ⑫ ⑭ ㉛
		SV-X6MG180S-N4LA		●			●	●	130	φ22	Aviation connector	⑪ ⑫ ㉛
		SV-X6MG180S-B4LA				●						⑪ ⑫ ⑭ ㉛
	2.9kW	SV-X6MG290S-N4LD	●				●	●	180	φ35	Aviation connector	⑪ ⑮ ㉛
		SV-X6MG290S-B4LD				●						⑪ ⑭ ⑮ ㉛
		SV-X6MG290S-N4LA		●			●	●	180	φ35	Aviation connector	⑪ ⑮ ㉛
		SV-X6MG290S-B4LA				●						⑪ ⑭ ⑮ ㉛
	4.4kW	SV-X6MG440S-N4LD	●				●	●	180	φ35	Aviation connector	⑪ ⑮ ㉛
		SV-X6MG440S-B4LD				●						⑪ ⑭ ⑮ ㉛
		SV-X6MG440S-N4LA		●			●	●	180	φ35	Aviation connector	⑪ ⑮ ㉛
		SV-X6MG440S-B4LA				●						⑪ ⑭ ⑮ ㉛

Series name	Power	[ ]Control mode [A] Pulse control / [B] EtherCAT / [K]MECHATROLINK-III / [R] Profinet			Power specifications	Notes
		General-purpose:Y7N[ ]---	Standard:Y7E[ ]---	Full-functional:Y7F[ ]---		
X6-MGS Low-cogging Cutting series	850W	HN-Y7N[ ]100T-S	HN-Y7E[ ]100T-S	HN-Y7F[ ]100T-S	Three-phase AC380V	
	1.3kW	HN-Y7N[ ]200T-S	HN-Y7E[ ]200T-S	HN-Y7F[ ]200T-S	Three-phase AC380V	
	1.8kW	HN-Y7N[ ]300T-S	HN-Y7E[ ]300T-S	HN-Y7F[ ]300T-S	Three-phase AC380V	
	2.9kW	HN-Y7N[ ]500T-S	HN-Y7E[ ]500T-S	HN-Y7F[ ]500T-S	Three-phase AC380V	
	4.4kW	HN-Y7N[ ]600T-S	HN-Y7E[ ]600T-S	HN-Y7F[ ]600T-S	Three-phase AC380V	

Accessories specifications for connector-type servo motors of flange 40 to 80

①	SVCAB-ENC075CA-ABS-***L-05	Absolute encoder cable
②	SVCAB-ENC075CA-***L-05	Incremental encoder cable
③	SVCAB-PWR010CA-***L-05	UVW power cable(no brake) 50W to 100W
④	SVCAB-PWB010CA-***L-05	UVW power cable(with brake) 50W to 100W
⑤	SVCAB-PWR075CA-***L-05	UVW power cable(no brake) 200W to 1KW
⑥	SVCAB-PWB075CA-***L-05	UVW power cable(with brake) 200W to 1KW

Aviation connector specifications for servo motor of flange 100&130&180

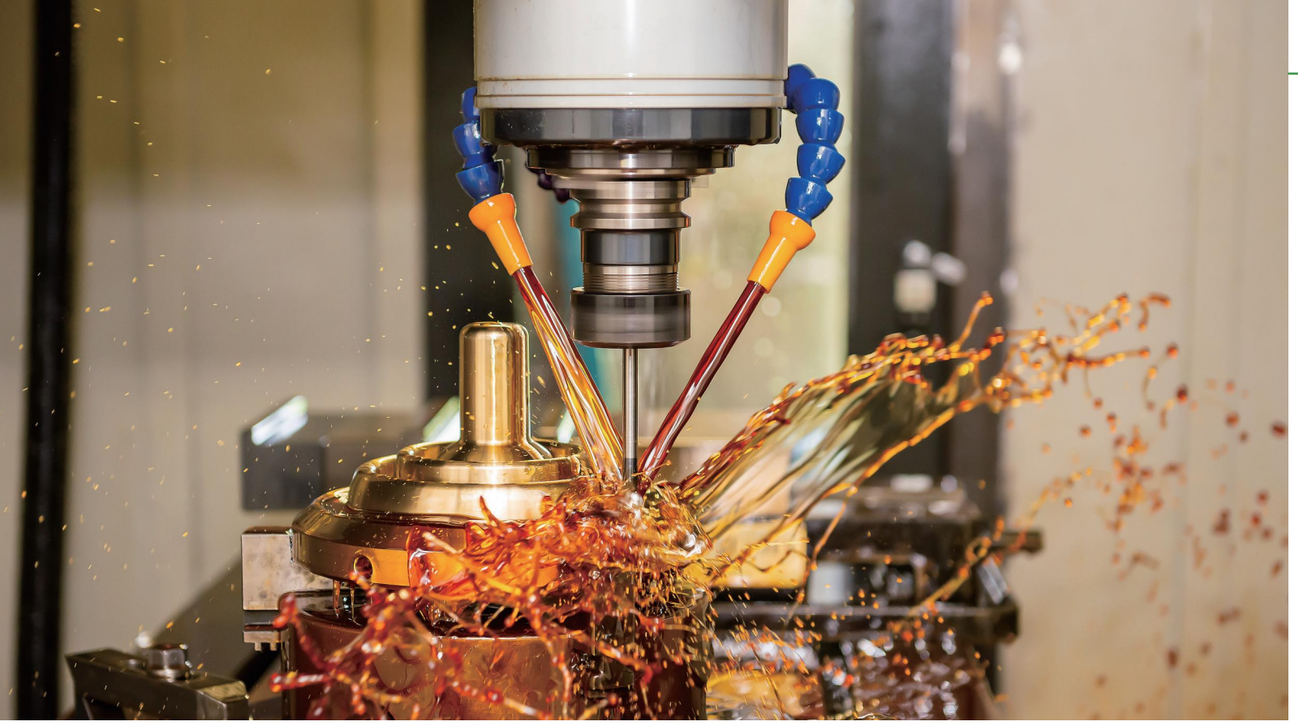
⑪	ENC-TE-LW 1KW	Encoder accessories (10-pin aviation connector + 1394 connector)
⑫	PWR-CON 1KW	4-core power aviation connector, for flange 100&130
⑬	PWR-CON 1KW-9P	9-pin brake power aviation connector, for flange 100&130
⑭	PWB-CON- 1KW	2-core brake power connector
⑮	PWR-CON 7.5KW	4-core power aviation connector, for flange 180

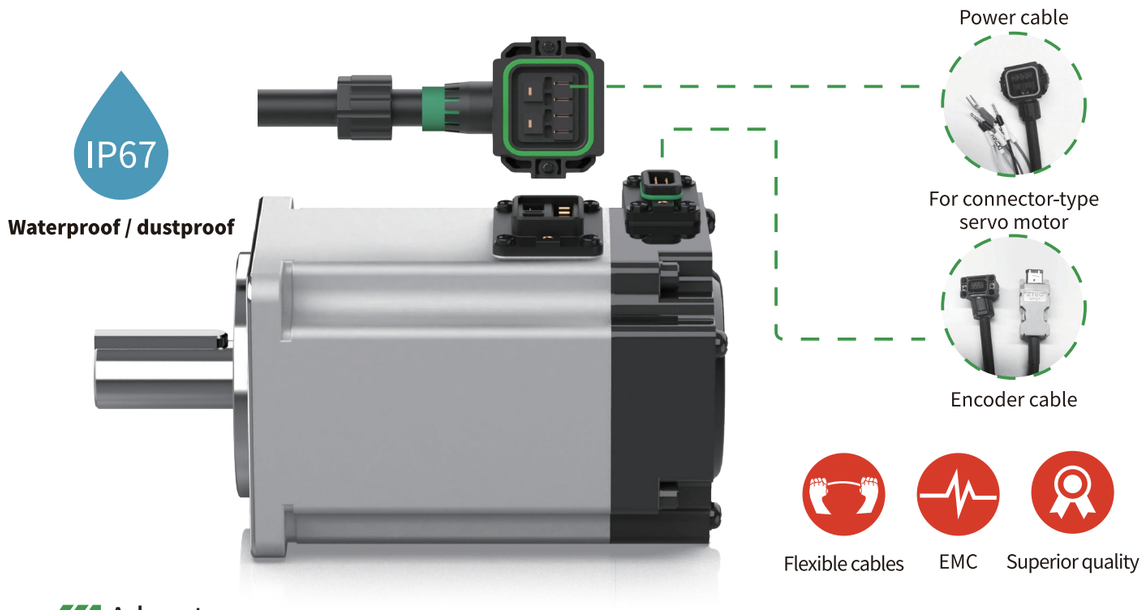
Accessories specifications for lead-wire type servo motor of flange 40 to 80

㉑	ENC-TE 750W	2 packs of encoder accessories (6-hole plastic connector + 1394 connector)
㉒	PWR-CON 750W	4-hole power plastic connector
㉓	PWB-CON 750W	2-hole power brake plastic connector

Other accessories specifications

㉛ SV-BAT Absolute battery box





Advantages

- The motor cables connected directly to the servo drive, reducing the connection and greatly improving the reliability.
- The protection level of the motor connector upgraded to IP67, vibration-resistance, dustproof and waterproof.
- Encoder cables are treated with metal shielding layer, which has strong anti-interference ability!
- Various specifications of cables can be customized based on the different application occasions. HCFA designated high-quality raw material suppliers for centralized procurement. (See Naming Rule 7 for cables)

From the 2nd quarter of 2021, our company started releasing connector-type servo motors as the regular model. The lead-wire servo motors will be discontinued from December 2021, if you still need the lead-wire servo motor, the customized application process is required.

SVCAB-ENC 075 C A – ABS-010L-05

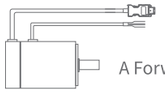
1 2 3 4 5 6 7

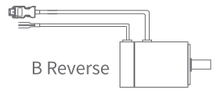
1	Product type
ENC	Encoder cable
PWR	4-core power cable
PWB	6-core power cable with brake

2	Motor power
010	50W~150W
075	200W~1KW

3	Connector-type
C	Flange 40 to 80

4	Outlet direction
A	Forward-The leading direction at the front end
B	Reverse-The leading direction at the back end


A Forward


B Reverse

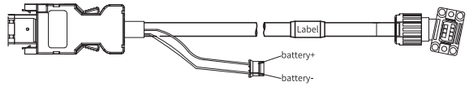
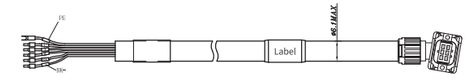
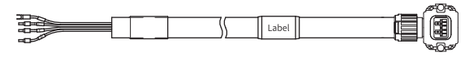
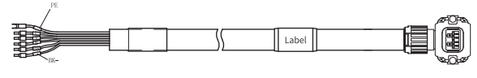
5	Encoder type
ABS	Absolute
N/A	Incremental

6	Length specifications (unit 0.1m)
L	Length identification

7	Cable flexibility
01	Fixed
05(regular)	500 million times
10	10 million times
20	2 million times
A0	For swinging

Note *1:The regular length specifications in our stock is 0.5M/1M/2M/3M/5M/8M/10M. For other length specifications (minimum unit 0.5 meters), please consult our sales department in advance.

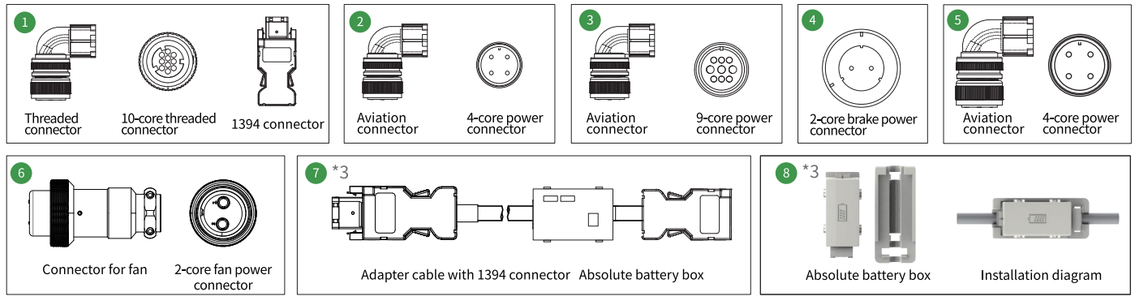
Accessories Specifications for Connector-type Servo Motor

Cables	Model name	Diagram
Absolute encoder cable	SVCAB-ENC075CA-ABS-***L-05	
Incremental encoder cable	SVCAB-ENC075CA-***L-05	
50W~150W UVW power cable	SVCAB-PWR010CA-***L-05	
50W~150W UVW power cable with brake	SVCAB-PWB010CA-***L-05	
200W~1000W UVW power cable	SVCAB-PWR075CA-***L-05	
200W~1000W UVW power cable with brake	SVCAB-PWB075CA-***L-05	

Aviation connectors for servo motor of flange 100&130, 180&220

Accessories	Model name	Diagram
Encoder thread accessories (10-pin thread connector *1 + 1394 connector)	ENC-TE-LW 1KW	1
4-core power aviation connector, for flange 100&130	PWR-CON 1KW	2
9-pin brake power aviation connector, for flange 100&130	PWR-CON 1KW-9P	3
2-core brake power connector *2	PWB-CON- 1KW	4
4-core power aviation connector, for flange 180	PWR-CON 7.5KW	5
Absolute battery box with 1394 connector	SVBOX-ENCABS	6
2-core fan power connector	PWR-CON-F	7

Note *1: When used in vibration occasions, please use the encoder thread accessories.
*2: Only the models of flange of 130 &180&220 are required.
*3: When matching with an absolute servo motor, choose one from accessories 7 and 9 according to your needs.



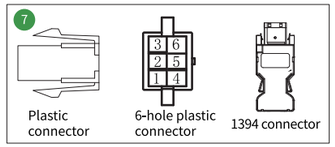
Other Accessories Specifications

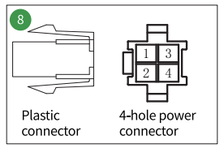
Accessories	Model name	Applicable servo drive/Spec.	Description
Absolute battery box 8	SV-BAT	For all the absolute servo motors	Can be installed on the front of models of Y7 series 6kw and 7.5kw housing or SVCAB-ENC075CA-ABS-***L-05 encoder cable
EtherCAT bus cable	SV-ECAT-0.35M	HN-Y7 □B □□□□ A	For EtherCAT bus models For CN6A, CN6B Length: 0.35m
External brake resistance	SV-BRAKE-1KW	1kw 50Ω 350mm Aluminum shell	Selected when the power of the built-in resistor isinsufficient, and connected to the main circuit B1 and B2 ports
External brake resistance	SV-BRAKE-75A	60w 50Ω 350mm Aluminum shell	Selected when the power of the built-in resistor isinsufficient, and connected to the main circuit B1 and B2 ports
Anti-interference magnetic ring	Magnetic ring	Installed on the servo drive, signal line, power cable and encoder cable to anti-interference	

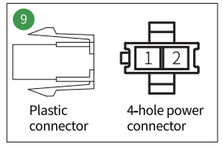
Waterproof Connectors/ Compact Accessories	Specifications
ENC-TE 750W-F	6-core waterproof encoder connector + 1394 connector encoder accessory pack
PWR-CON 750W-F	4-core waterproof power connector, for flange 40 to 80
PWB-CON 750W-F	6-core waterproof power connector with brake, for flange 40 to 80
PWR-CON 1KW-F	6-core waterproof power connector, for flange 130

Accessories for servo motor of flange 40 to 80

Accessories	Model name	Diagram
2 packs of encoder accessories ((6-hole plastic connector + 1394 connector)	ENC-TE 750W	7
4-hole power connector accessories	PWR-CON 750W	8
6-hole power brake connector accessories	PWB-CON 750W	9







Cables for Lead-wire Type Servo Motor(customized products)

Encoder cables	Specifications
CAB-ENC75A-3M	Incremental encoder cable, for lead-wire type servo motor of flange 40 to 80, 3 meters
SVCAB-ENC75A-3M	Absolute encoder cable, for lead-wire type servo motor of flange 40 to 80, 3 meters
CAB-ENC100A-LW-3M	Incremental encoder cable, for lead-wire type servo motor of flange 100&130&180, 3 meters
CAB-ENC100A-ABS-LW-3M	Absolute encoder cable with battery box, for lead-wire type servo motor of flange 100&130&180, 3 meters
Power cables	**Specifications**
CAB-PWR75A-3M	4-core power cable, for lead-wire type servo motor flange 40 to 80, 3 meters
CAB-PWR100A-3M	4-core power cable, for lead-wire type servo motor flange 100&130, 3 meters
CAB-PWR400C-3M	4-core power cable, for lead-wire type servo motor of 2KW to 5KW, flange 180, 3 meters
CAB-PWR750C-5M	4-core power cable, for aviation connector type servo motor of 5.5KW to 7.5KW, flange 180, 5 meters
Power brake cable	**Specifications**
CAB-PWB75A-3M	6-core power brake cable, for lead-wire type servo motor of flange 40 to 80, 3 meters
CAB-PWB100A-3M	9-core power cable, for aviation-connector type servo motor of flange130, 3 meters
CAB-PWD100A-3M	2-core power cable, for aviation-connector type servo motor of flange 100&130&180, 3 meters
Waterproof-connector cable	**Specifications**
SVCAB-ENC75A-3M-F	6-core waterproof absolute encoder cable, for servo motor of flange 40 to 130, 3 meters
CAB-PWR75A-3M-F	4-core waterproof power cable, for lead-wire type servo motor flange 40 to 80, 3 meters
CAB-PWB75A-3M-F	6-core waterproof power brake cable, for lead-wire type servo motor flange 40 to 80, 3 meters
CAB-PWB100A-3M-F	6-core waterproof power brake cable, for aviation-connector type servo motor of flange 130, 3 meters

SV Series Gear Motor

HCFA gear motor adopts the integrated design of motor and reducer, with the features of high integration, high reliability, high precision and high efficiency, which can meet the needs of customers for mechatronics integration and suitable for transmission applications in various industries.

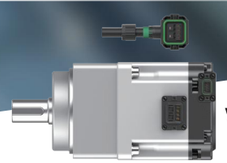
More powerful
More efficient

High integration, significantly improve the motor performance

- The whole machine shortened by 25%, the installation space greatly saved
- The shaft of the motor connection shortened and the rigidity improved
- The load inertia reduced, lower the vibration and noise

High reliability, long service-life, and maintenance-free

- Elimination of couplings, reduces the risk of slippage and improves mechanical reliability
- Sealed protection, long-term lubrication and maintenance-free
- Protection level IP65



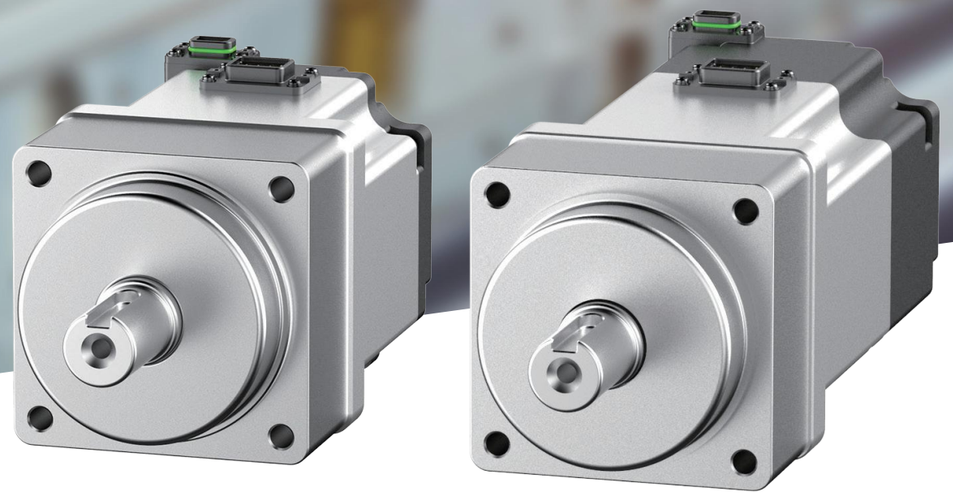
IP65
Waterproof / dustproof

High accuracy for precise control

- High-precision helical gear reduction design, end runout reduced and precision improved
- The highest backlash accuracy≤3arcmin
- High-precision 20bit magnetic encoder/23bit optical encoder

High efficiency, convenient model selection and efficient transmission

- Standardized products, convenient model selection
- Installation time saved and TCO costs reduced
- Max3.5 times overload motor, transmission efficiency 95%, more efficient



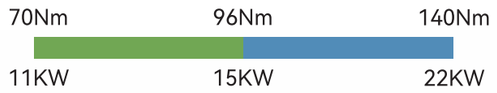
SV-X6MM Series of High Power

Powerful High-precision Strong Reliable

Y7S Series High-power Servo Drive

- Rich buses, controlled by the "Chip"
- Can match with high-precision 20bit magnetic encoder/23bit optical encoder
- Independent air duct, no fear of harsh environment
- Provide a variety of installation methods, can be wall-mounted or installed through the wall
- Built-in temperature detection unit, can connect external temperature detection element

- AC380V



SV-X6MM Series Servo Motor of Middle Inertia and Flange 220*1

- Power expanded to 22KW, to provide servo motor of 70Nm~140Nm
- Standard flange 220 design, the main specifications are consistent with other famous brands
- Maximum 2.5 times of overload design, more powerful
- Rated 1500rpm, maximum 2000rpm
- For models above 15KW, air forced cooling, with low temperature rise and long service life
- Protection level IP65, more stable and reliable

Note 1: For detailed specifications, please refer to page 65 , 66, 83 and 84.

New Generation of Feiling Sensor

Excellent performance and stability

Slot Sensor | Photoelectric Sensor | Proximity Sensor

HCFA Q-Series Standard PACs

Focus on 9 major industries of industrial automation and create overall solutions!

CODESYS platform

Standard IEC61131-3 specification 6 programming languages

Based on standard PLC OPEN standard motion control

Linear/circular/spiral interpolation / electronic cam / flying shear / rotary shear

EtherCAT Technology Group EtherNet/IP CODESYS Modbus CANopen

HCFA TP3000 Series Touch Screen

New upgrade for TP2000 series, Performance greatly improved for TP3000 series

More beautiful product appearance, more stable performance, more functions to meet customers' requirements in different applications.

Performance

ARM platform, Higher performance, 50% improved compared to last generation products

Interfaces

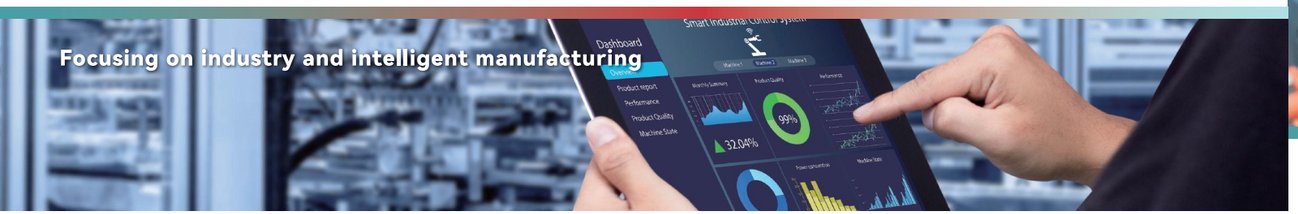
Ethernet, communication port, USB and SD card supported

Size

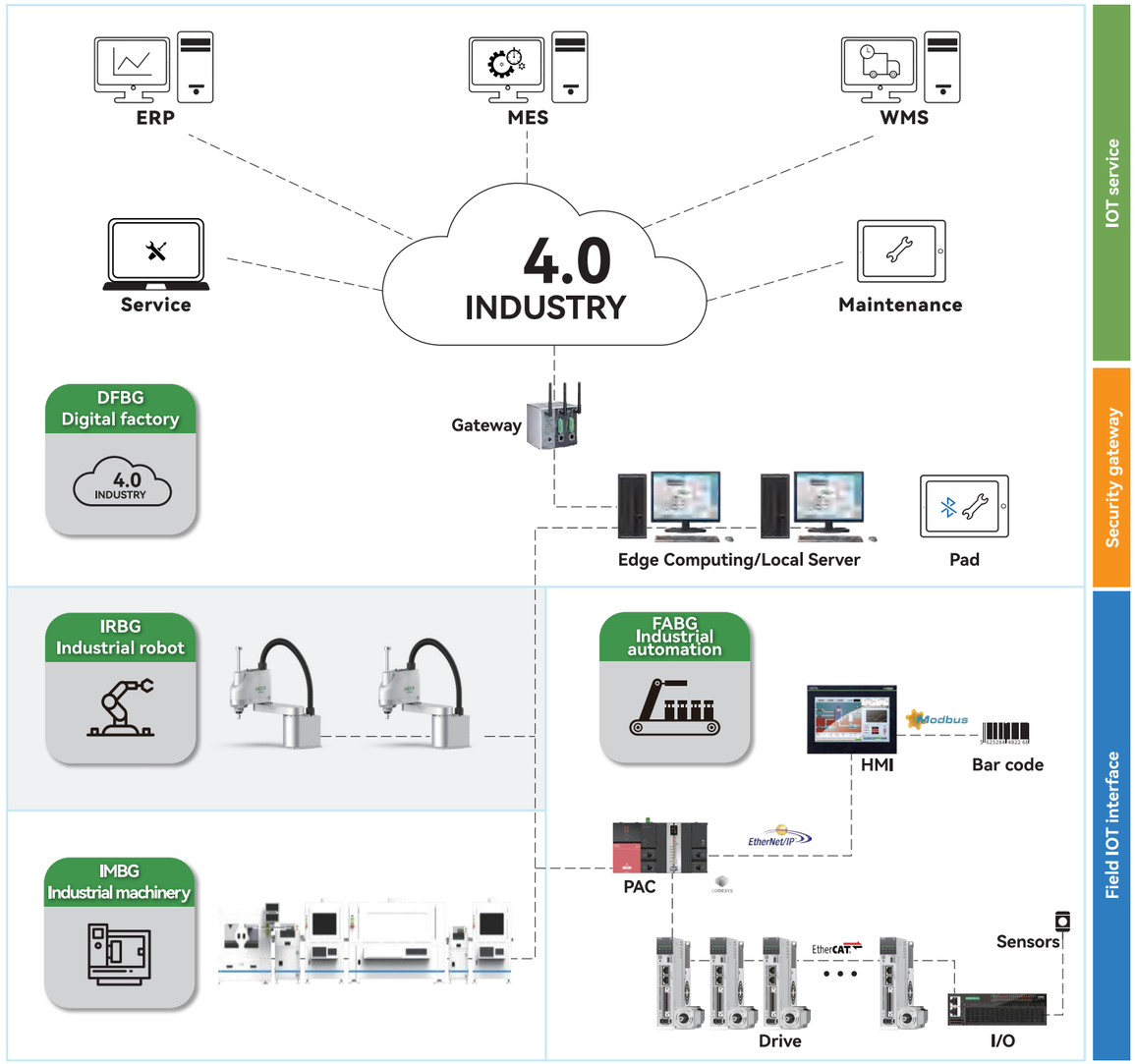
Full range of sizes, exquisite appearance and easy to install

Easy-to-use

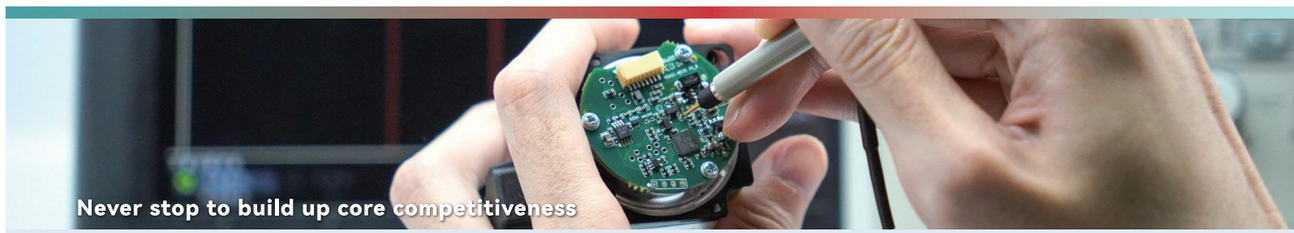
New configuration software-HiStudio, make the operation much easier



We not only provide the core components of industrial automation, but also engage in the industrial process, industrial robots, industrial machines, and digital factories, and can provide enterprises with comprehensive solutions of automation + intelligent equipment + digitalization



Founded in 2011, Zhejiang Hechuan Technology Co., Ltd. is an enterprise focusing on the R&D, manufacturing, sales and application integration of industrial automation products, and is committed to providing core components and system integration solutions for smart factories. The main products include PLCs, servo systems, vision systems, encoders, inverters, touch screens, electric drums, etc.,covering the entire field of industrial automation



R&D Centers
5
Set up nationally

R&D investment
10%+
Proportion of revenue

R&D personnel
300+
Elite gathering

- Established five R&D centers in Longyou, Hangzhou, Shenzhen, Dalian and Suzhou
- Self-designed ASIC and SOC chips, realize localization replacement
- First-class AMR magnetic technology/high-precision encoder in the industry