



**DS5C1**

**WUXI XINJE ELECTRIC CO., LTD.**

Data No. SC5 07 20220420 1.0

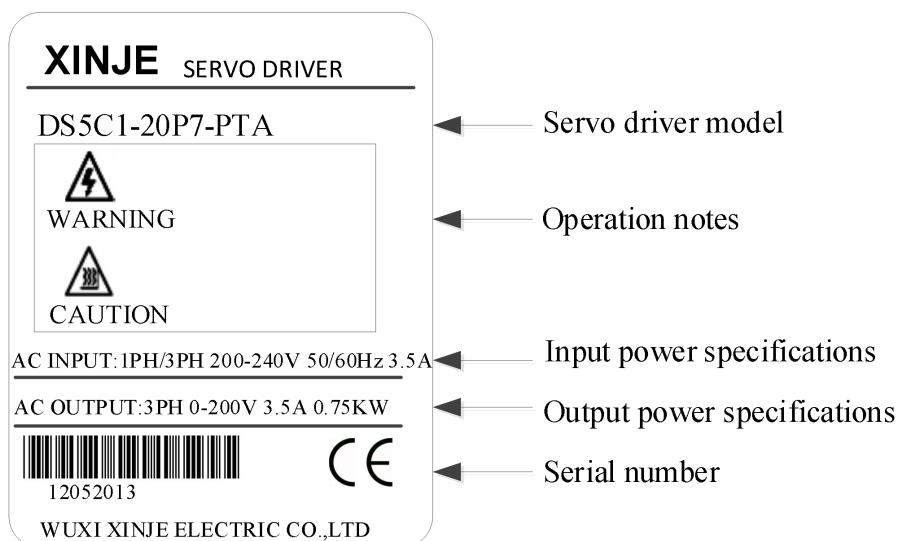
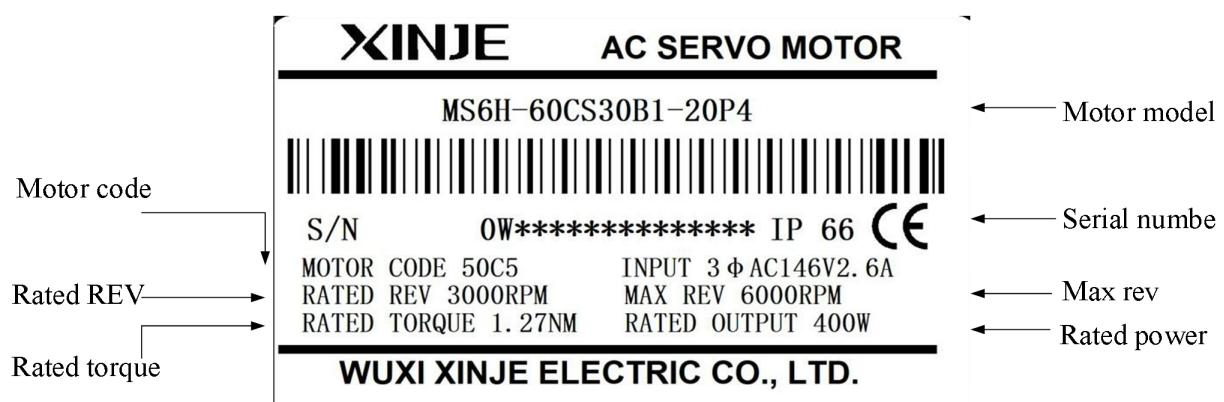
## ►► Confirmation on product arrival

After the product arrives, please confirm the integrity of the product in the following aspects.

Items	Notes
Does the product on arrival match the specified model?	Please confirm according to the nameplate of servo motor and servo unit.
Does the servomotor shaft rotate smoothly?	The servo motor shaft is normal if it can be turned smoothly by hand. Servo motors with brakes, however, cannot be turned manually.
Is there any damage?	Check the overall appearance, and check for damage or scratches that may have occurred during shipping.
Are there any loose screws?	Check screws for looseness using a screwdriver.
Is the motor code the same with the code in drive?	Check the motor code marked on the nameplates of the servomotor and the parameter <b>U3-70</b> on the servo drive.

If any of the above is faulty or incorrect, contact Xinje or an authorized distributor.

A servo driver can be equipped with a variety of motors with similar power levels. Different types of motors are distinguished by the motor code on the motor nameplate.



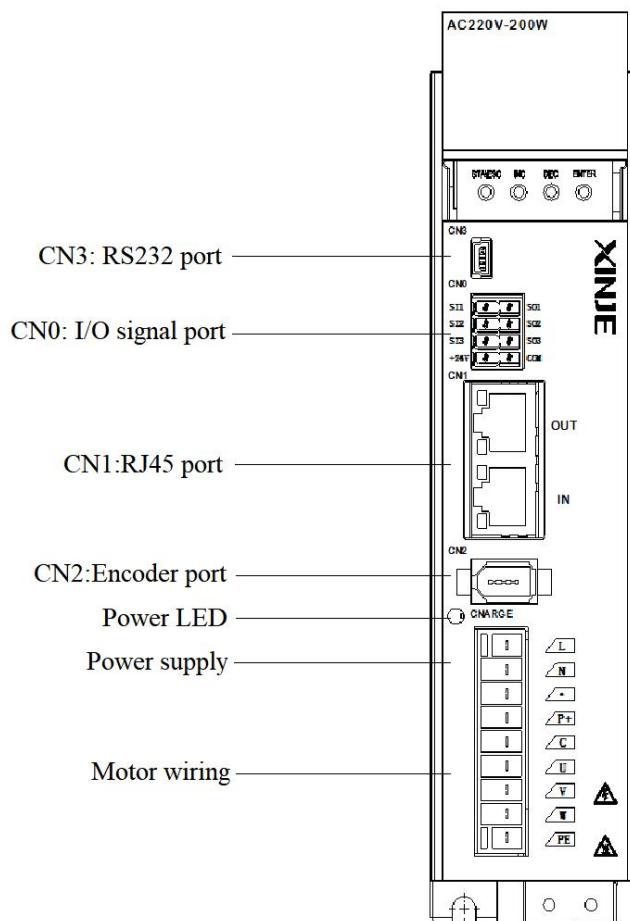
# 1 Selection of servo system

## 1.1 Selection of servo driver

### 1.1.1 Model name

DS 5□-2 □P□ - PTA		Display	Encoder type
Display	Product name	T	Communication encoder
DS		Display	Encoder type
Servo driver		T	Communication encoder
Display		Rated output power	
5C1		0P1	100W
EtherCAT small size bus type		0P2	200W
Display		0P4	400W
Rated input voltage		0P7	750W
2		1P0	1KW
AC220V		1P5	1.5KW
4		2P3	2.3KW
AC380V		3P0	3KW

### 1.1.2 Description of each part



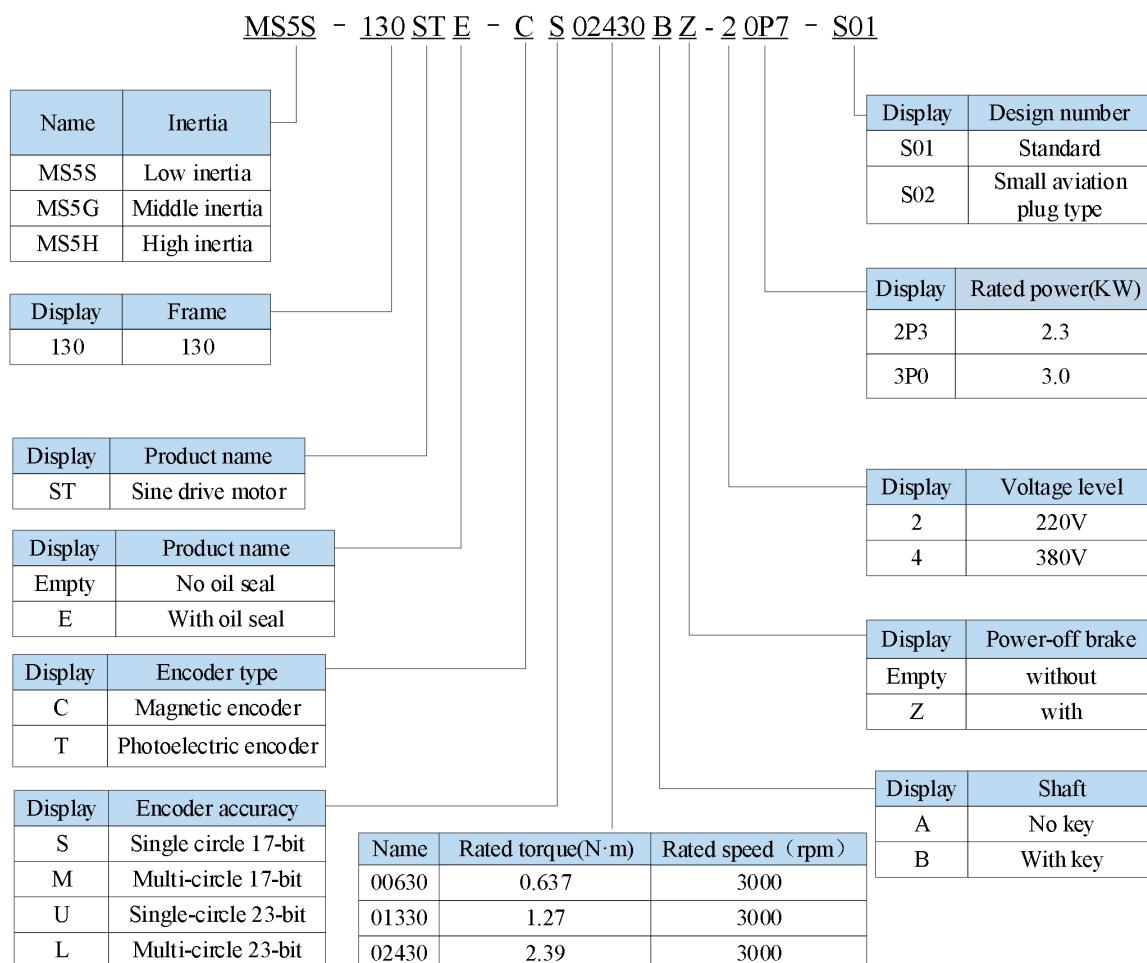
### 1.1.3 Performance specification

Servo unit	DS5C1 series servo driver	
Applicable encoder	Standard: 17bit/23bit communication encoder	
Input power supply	DS5C1-2□P□-PTA: single phase AC200~240V, 50/60Hz DS5C1-4□P□-PTA: Three phase AC380~440V, 50/60Hz	
Control mode	Three-phase full-wave rectifier IPM PWM control sinusoidal current drive mode	
Using condition	Using temperature	0~+50 °C
	Storage temperature	-20~+85 °C
	Environment humidity	Below 90%RH(no condensation)
	Vibration resistance	4.9m/s <sup>2</sup>
Structure	Pedestal installation	

## 1.2 Servo motor selection

### 1.2.1 Model name

#### ■ MS5 series motor

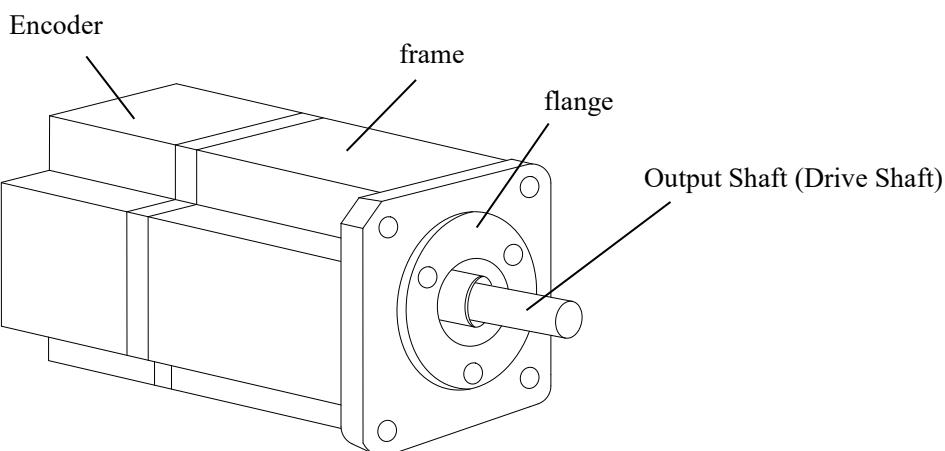


**Note:** At present, only the combination of CS, CM, TL and T is selected for the type of encoder.

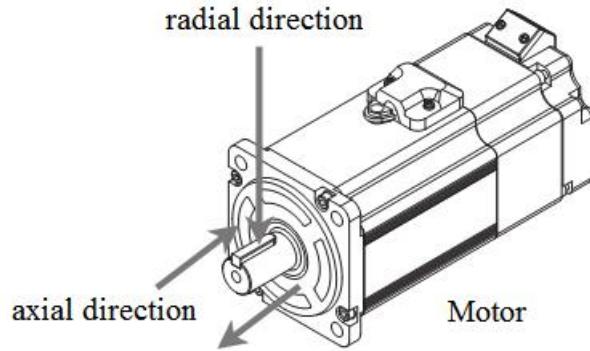
## ■ MS6 series motor

MS6S - 60 C S 30 B Z 1 - 2 0P4		Display	Rated power(KW)	Display	Rated power(KW)
Display	Inertia	OP1	100W	1P8	1.8KW
MS6S	Low inertia	OP2	200W	2P3	2.3KW
MS6H	High inertia	OP4	400W	3P0	3.0KW
		OP7	750W	4P4	4.4KW
		OP8	850W	5P5	5.5KW
		1P5	1.5KW	7P5	7.5KW
Display	Frame	Display	Voltage level		
40	40 seat	2	220V		
60	60 seat	4	380V		
80	80 seat	Display	Connector type		
100	100 seat	1	AMP plug		
130	130 seat	2	Aviation plug		
180	180 seat	3	Connector		
Display	Encoder type	Display	Power-off brake		
C	Magnetic encoder	Vacant	Without brake		
T	Photoelectric encoder	Z	With brake		
Display	Encoder accuracy	Display	Shaft specification		
S	Single circle 17-bit	A	With key, no oil seal ,with threaded hole		
M	Multi-circle 17-bit	B	With key,with oil seal,with threaded hole		
U	Single-circle 23-bit	C	No key, no oil seal, with threaded hole		
L	Multi-circle 23-bit	D	No key, with oil seal, with threaded hole		
		E	Special shaft specification(length,shaft diameter,etc.)		
Display	Rated speed(rpm)				
15	1500				
20	2000				
25	2500				
30	3000				

### 1.2.2 Description of each part



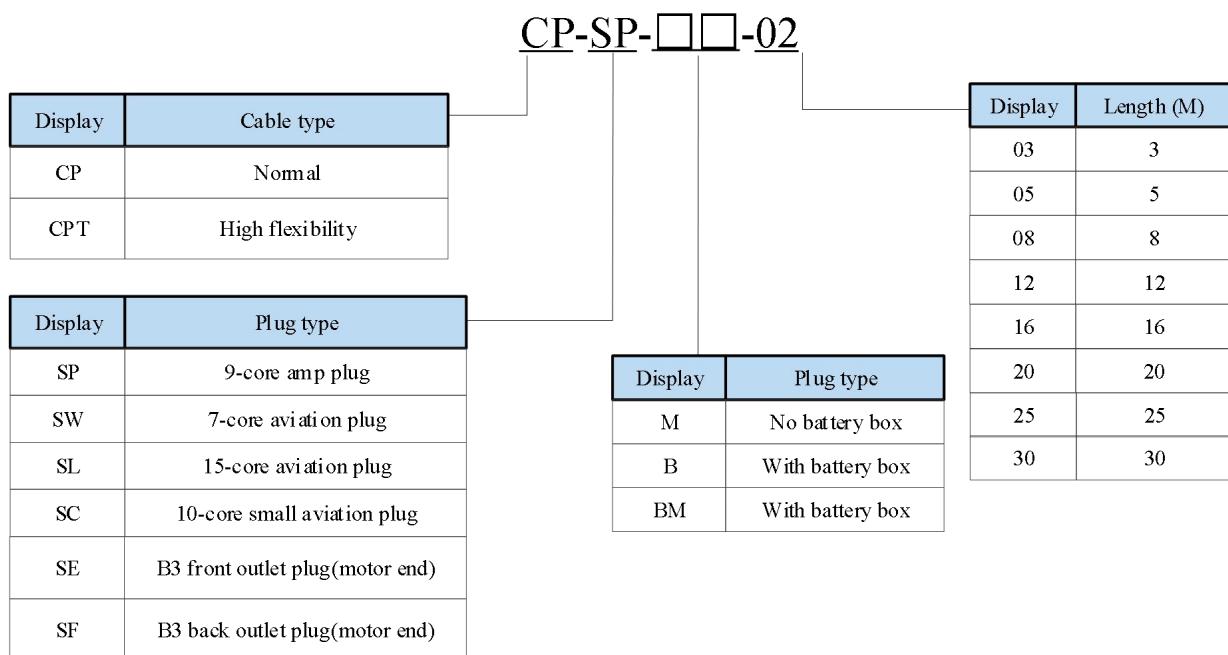
### 1.2.3 Axial force and radial force



Base no.	40ST	60ST	80ST	100ST	110ST	130ST	180ST	220ST/265ST
Axial force	54N	74N	147N	≤200N	250N	300N	400N	≤500N
Radial force	78N	245N	392N	500N	500N	600N	800N	1000N

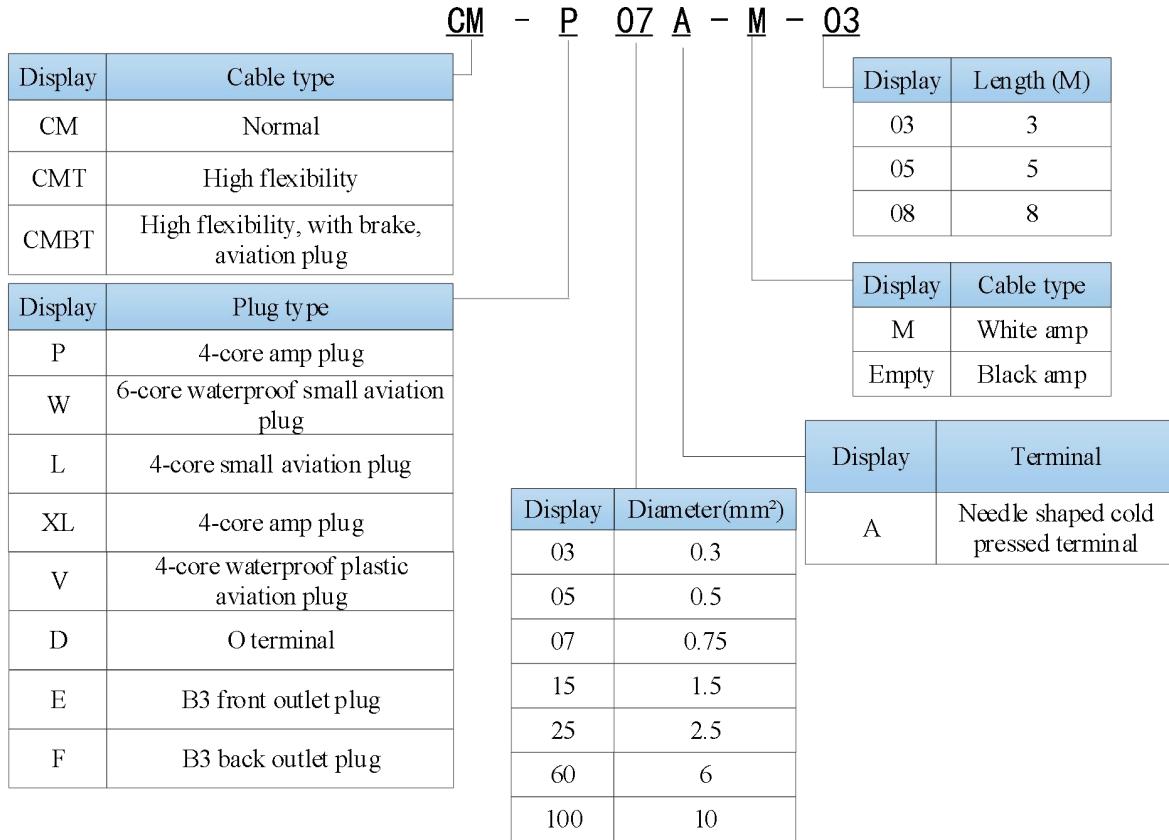
## 1.3 Cable selection

### 1.3.1 Encoder cable



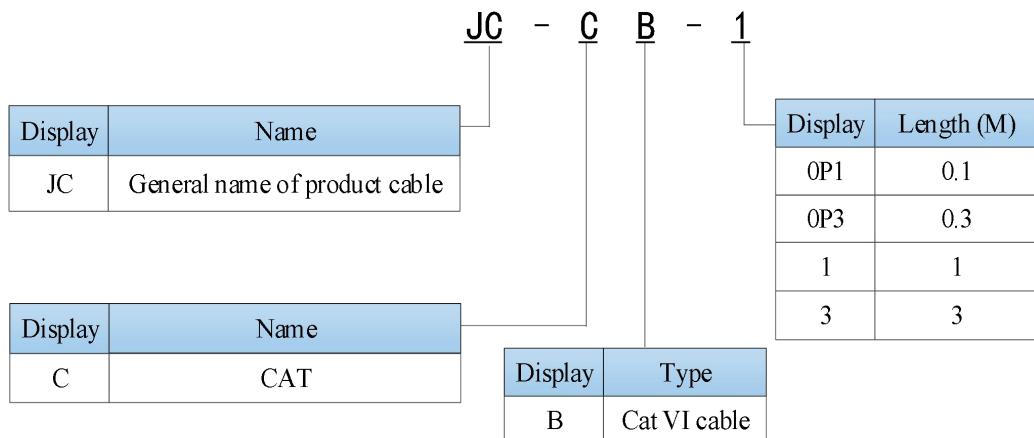
**Note:** The standard wiring length of Xinje is 2m, 3m, 5m, 8m, 10m, 12m, 16m, 20m, 25m, 30m.

### 1.3.2 Power cable



**Note:** The standard wiring length of Xinje is 2m, 3m, 5m, 8m, 10m, 12m, 16m, 20m, 25m, 30m.

### 1.3.3 EtherCAT communication cable



**Note:** At present, the length of communication cables is 0.2 m, 0.3 m, 0.5 m, 1 m, 3 m, 5 m, 10 m, 20 m.