

Specification
for
General purpose AC Servo
Power supply cable

Type SC-PWC503JDC□M-LL

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision								Drawn	Check	Design	Approved
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Send to								Date		Dwg	
								8 Sep.,2022		X953503D70003-E86	
								Order			

1. SCOPE

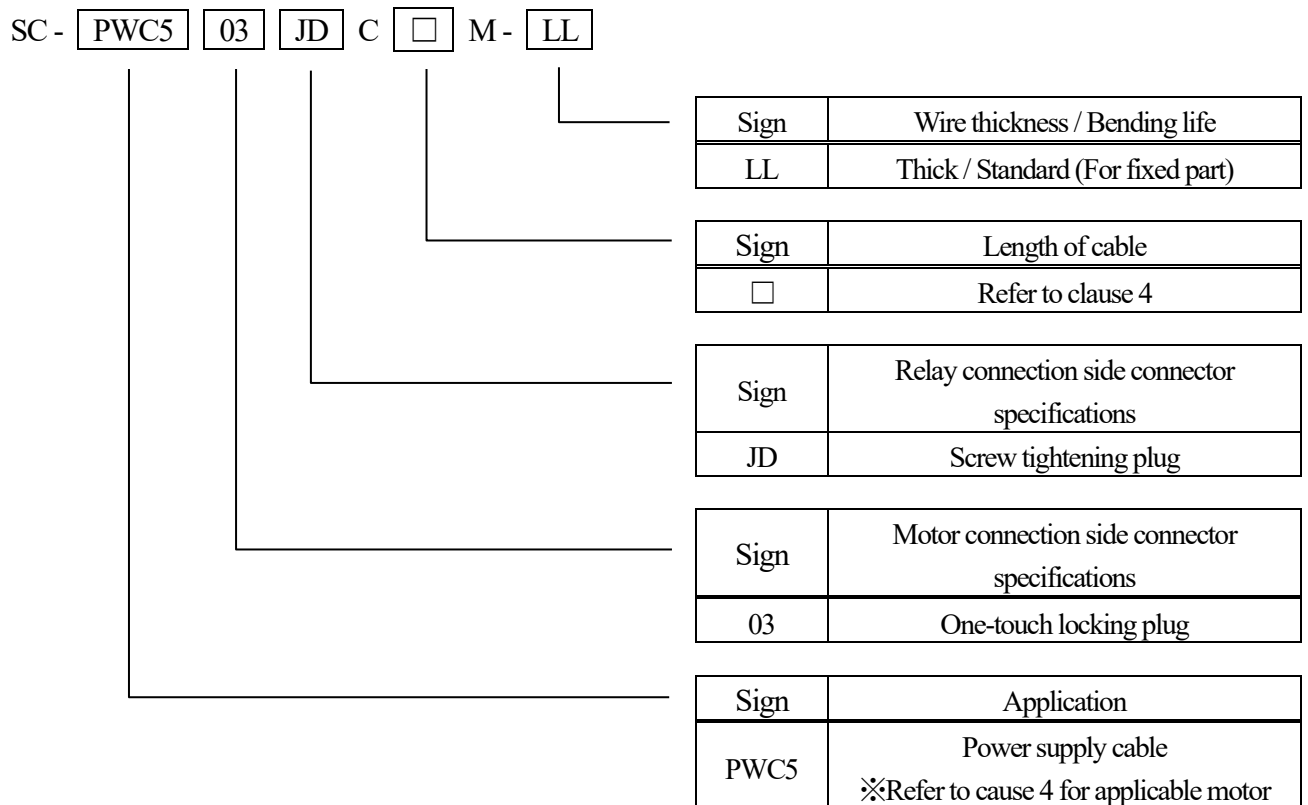
This specification covers the requirements for the General purpose AC Servo Power supply cable.

- SC-PWC503JDC□M-LL

※ The Products covered in this specification don't include the toxic substances in RoHS.

※ UL's Wiring Harnesses Traceability program provides traceability for this cable.

2. CABLE TYPE



3. APPLICABLE STANDARDS

Wire part : UL standard (UL 758 : AWM)

UL Style No.	Rated	
2586	105°C	600V

4. APPLICABLE SERVO MOTOR / LENGTH OF CABLE

1 to 100m

※ The maximum length of this cable varies depending on the motor model and amplifier side cable to be combined. Please contact us for more information.

※ Refer to the CABLE SELECTION TABLE "R9535021-018028-015" for applicable motors and connection cables.

5. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-PWC503JDC□M-LL xxxxxxx

※ □ is a figure from 1 to 100.

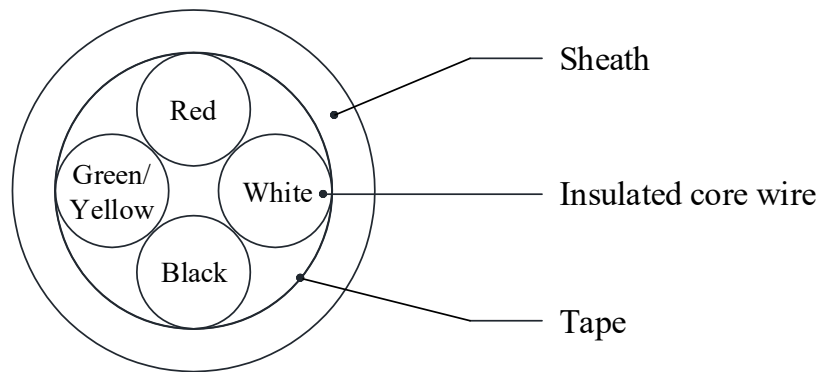
※ xxxxxxx are the serial number for seven digits.

6. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification
Wire			
Structure		—	AWG10×4C
Conductor	Conductor size	—	AWG10
	Outer diameter	mm	Approx.3.1
Insulation	Material	—	PVC
	Outer diameter	mm	Approx.4.8
Twisted	Number of insulated core wire	—	4C
Sheath	Material	—	Flame resisting PVC
	color	—	Black
Overall diameter		mm	Approx. 13.7
Cable weight		kg/km	330
Electrical characteristics	Insulation resistance	MΩ・km	Over 10
	Withstand voltage	V / for 5 min	AC2000
Minimum bend radius		mm	6 times the overall diameter
Flame retardant		—	UL1581 VW-1
Connector			
Amplifier side	Type	DDK Ltd. D/MS3101A22-22P(D263) (Cable receptacle) CE02-22BS-S-D(R1) (Waterproof straight back shell) CE3057-12A-1-D(R1) (Cable clamp)	
	IP rating	IP67 ^{*1}	
Motor side	Type	Japan Aviation Electronics Industry, Ltd. JL10-6A22-22SE-EB (Straight plug) JL04-2022CK(14)-R (Waterproof cable clamp)	
	IP rating	IP67 ^{*1}	
Cable harness			
Environment	Ambient temperature	℃	0 to 60 (Without freezing)
	Ambient humidity	%RH	5 to 95 (Without condensation)
	Ambience	—	Indoors (no direct sunlight), no corrosive gas, inflammable gas, oil mist, or dust
Electrical characteristics	Insulation resistance	MΩ・km	Over 10
	Withstand voltage	V / for 1 min	AC2000

*1 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

7. STRUCTURAL DRAWING



8. OUTLINE DRAWING

[Unit : mm]

