

Specification
for
General purpose AC Servo
Power supply cable

Type SC-PWC501C□M-SBXH

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision								Drawn	Check	Design	Approved
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Send to								Date		Dwg	
								7 Sep.,2022		X953503D70003-F03	
								Order			

1. SCOPE

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

• SC-PWC501C□M-SBXH

※ 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

SC - PWC5 01 C □ M - SB XH

	Sign	Wire thickness / Bending life
	XH	Extra thick / Long bending life
	Sign	With or without shield
	SB	With shield
	Sign	Length of cable
□		Refer to clause 4
	Sign	Connector specifications
	01	Screw tightening plug
	Sign	Application
	PWC5	Power supply cable

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 cable length differs depending on the motor.

Refer to the CABLE LENGTH SELECTION TABLE "R9535021-018028-010"
for more information.

Refer to the CABLE SELECTION TABLE "R9535021-018028-015" for applicable motors.

5. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-PWC501C□M-SBXH ×××××××

※ □ is a figure from 1 to 100.

※ ××××××× are the serial number for seven digits.

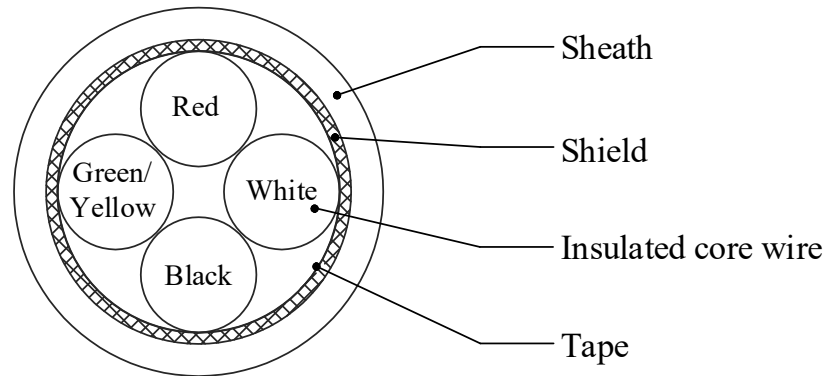
6. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification
Wire			
Structure		—	AWG9×4C
Conductor	Conductor size	—	AWG9
	Outer diameter	mm	Approx.4.8
Insulation	Material	—	PVC
	Outer diameter	mm	Approx.7.6
Twisted	Number of insulated core wire	—	4C
Shield	Material	—	Tin coated copper braid
Sheath	Material	—	Flame resisting PVC
	color	—	Black
Overall diameter		mm	Approx. 23.1
Cable weight		kg/km	800
Electrical characteristics	Insulation resistance	MΩ・km	Over 10
	Withstand voltage	V / for 5 min	AC2000
Minimum bend radius		mm	6 times the overall diameter
Bending life		—	Over 1 million times ^{*1} (by Minimum bend radius)
Flame retardant		—	UL1581 VW-1
Connector			
Amplifier side		—	
Motor side	Type	Japan Aviation Electronics Industry, Ltd. JL04V-6A22-22SE-R (Straight plug) SANKEI MANUFACTURING CO.LTD, C2KD2422 (KEIGLAND Type C2)	
	IP rating	IP67 ^{*2}	
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 It is a test outcome, and not a guaranteed value. (The performance is different according to customer's environment.)

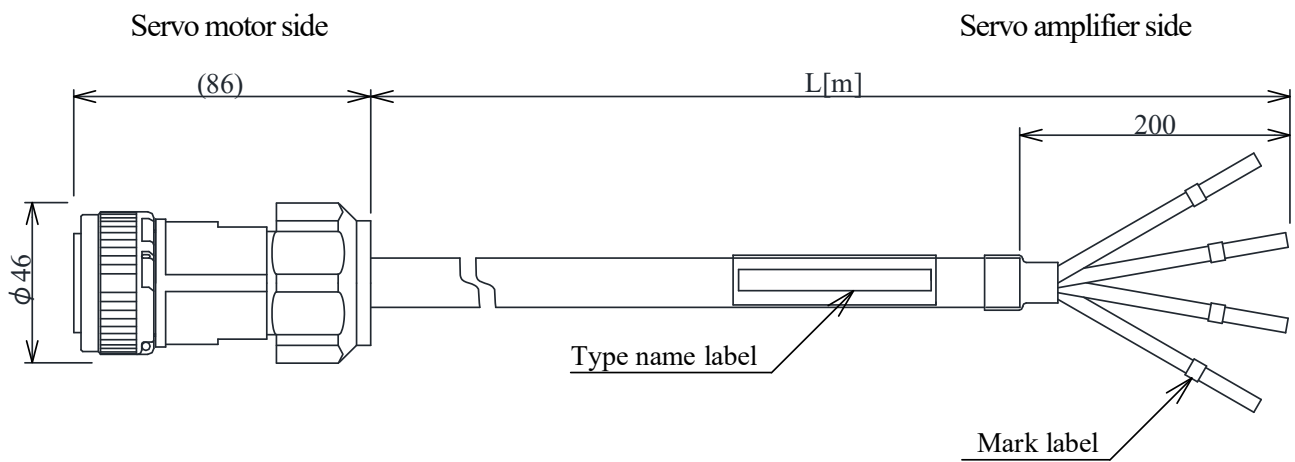
*2 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

7. STRUCTURAL DRAWING



8. OUTLINE DRAWING

[Unit : mm]



Refer to the following table for mark label and insulation color.

Mark label	Insulation color
U	Red
V	White
W	Black
E	Green / Yellow