Specification
for
General purpose AC Servo
Power supply cable

Type SC-PWC501C□M-■-XH

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision				Drawn	Check	Design	Approved
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Send to	Date	Dwg
	7 Sep.,2022	X953503D70003-F01
	Order	

1. SCOPE

This specification covers the requirements for the General purpose AC Servo Power supply cable.
・SC-PWC501C□M-■-XH

※ 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 - | ■ | - | XH

Sign	Wire thickness / Bending life
XH	Extra thick / Long bending life

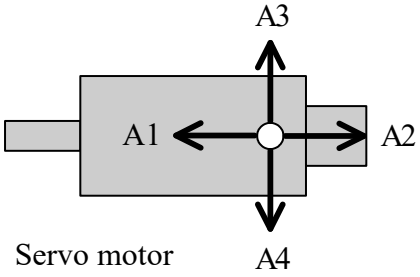
Sign	Cable lead out direction *1
A1	Motor shaft side
A2	Opposite of motor shaft
A3	Left side of motor shaft
A4	Right side of motor shaft

Sign	Length of cable
□	Refer to clause 4

Sign	Connector specifications
01	Screw tightening plug

Sign	Application
PWC5	Power supply cable

*1 : Cable lead out direction (View from cable insertion direction)



A1 : Motor shaft side
A2 : Opposite of motor shaft
A3 : Left side of motor shaft
A4 : Right side of motor shaft

(Note) Depending on the situation such as installation environment or combination of cables and connectors, there is a chance not to complete installation. (Even though it's mentioned above) Please make sure the cable lead out direction before your purchase.

3. APPLICABLE STANDARDS

Wire part : UL standard (UL 758 : AWM)

UL Style No.	Rated	
2586	105℃	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-■-XH ×××××××

※ □ is a figure from 1 to 100.
※ ■ is cable lead out direction from A1, A2, A3, A4.
※ ××××××× are the serial number for seven digits.

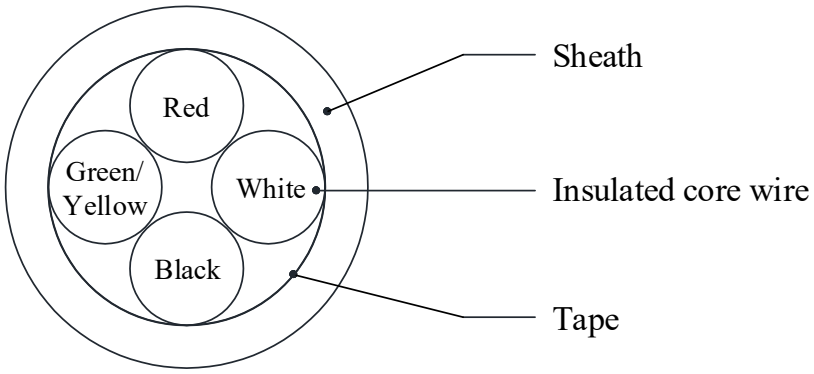
6. STRUCTURE AND CHARACTERISTICS

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
	Sheath	Material	—	Flame resisting PVC
		color	—	Black
	Overall diameter		mm	Approx. 22.1
	Cable weight		kg/km	670
	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 (Plug) SANKEI MANUFACTURING CO.LTD, C29KD2422 (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.)

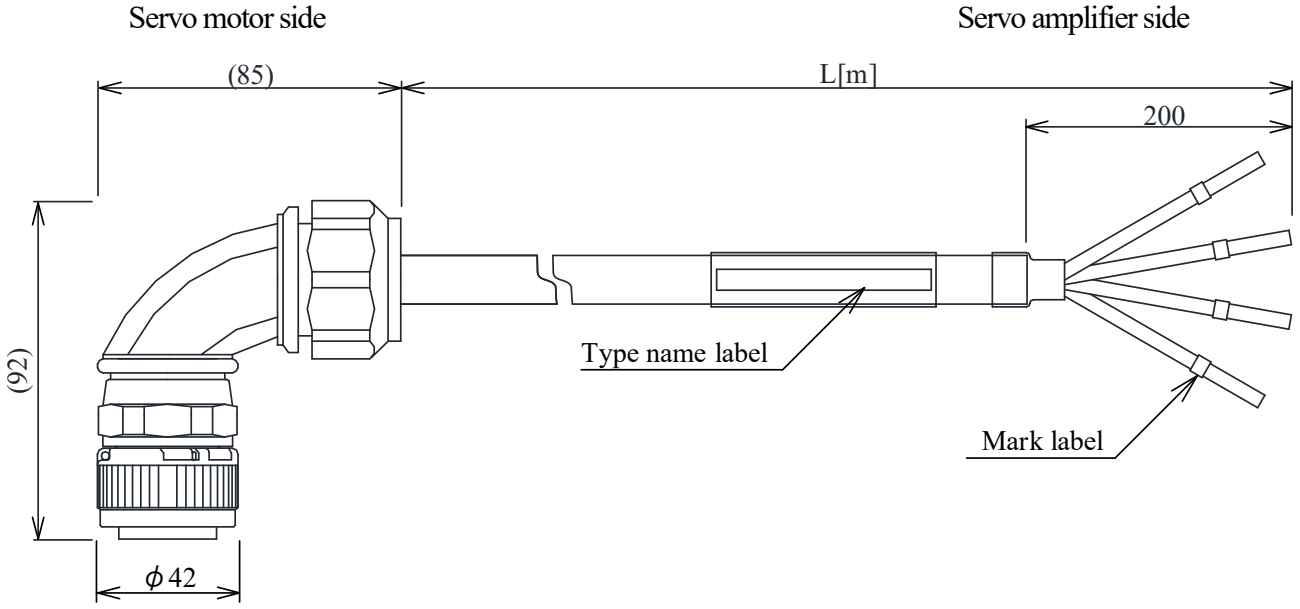
*2 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

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