

Specification
for
General purpose AC Servo
Power supply cable

Type SC-PWC403C□M-■-○L

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision								Drawn	Check	Design	Approved
A	6 Sep.,2022							N.Ito	S.Kariya	TKasahara	D.Fukushima
Send to								Date		Dwg	
								24 Apr.,2019		X953503D70003-E18A	
								Order			

1. SCOPE

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

- SC-PWC403C□M-■-L
- SC-PWC403C□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

SC - PWC4 03 C □ M - ■ - ○ L

Sign	Bending life
L	Standard / Standard (For fixed part)
LL	Thick / Standard (For fixed part)

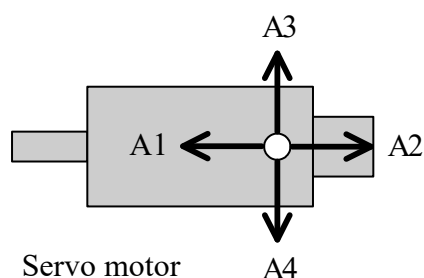
Sign	Cable lead out direction *1
A1	Motor shaft side
A2	Opposite of motor shaft
A3	Left side of motor shaft
A4	Right side of motor shaft

Sign	Length of cable
□	Refer to clause 4

Sign	Connector specifications
03	One-touch locking plug

Sign	Application
PWC4	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°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-PWC403C□M-■-○L ×××××××

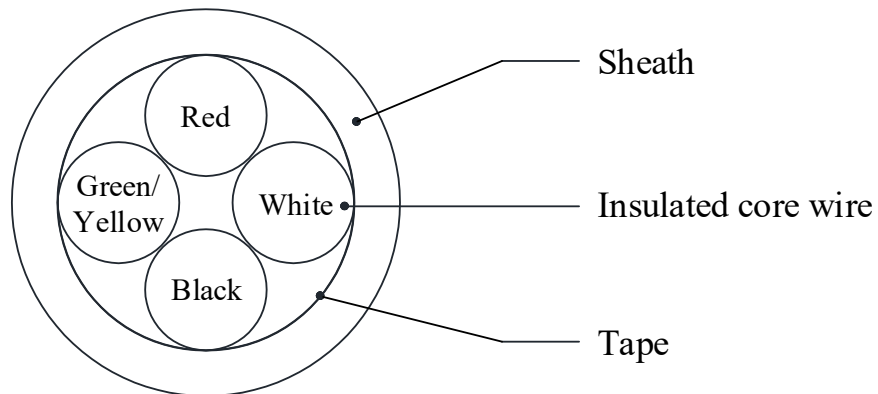
- ※ □ is a figure from 1 to 100.
- ※ ■ is cable lead out direction from A1, A2, A3, A4.
- ※ ○ is wire thickness from none , L.
- ※ ××××××× are the serial number for seven digits.

6. STRUCTURE AND CHARACTERISTICS

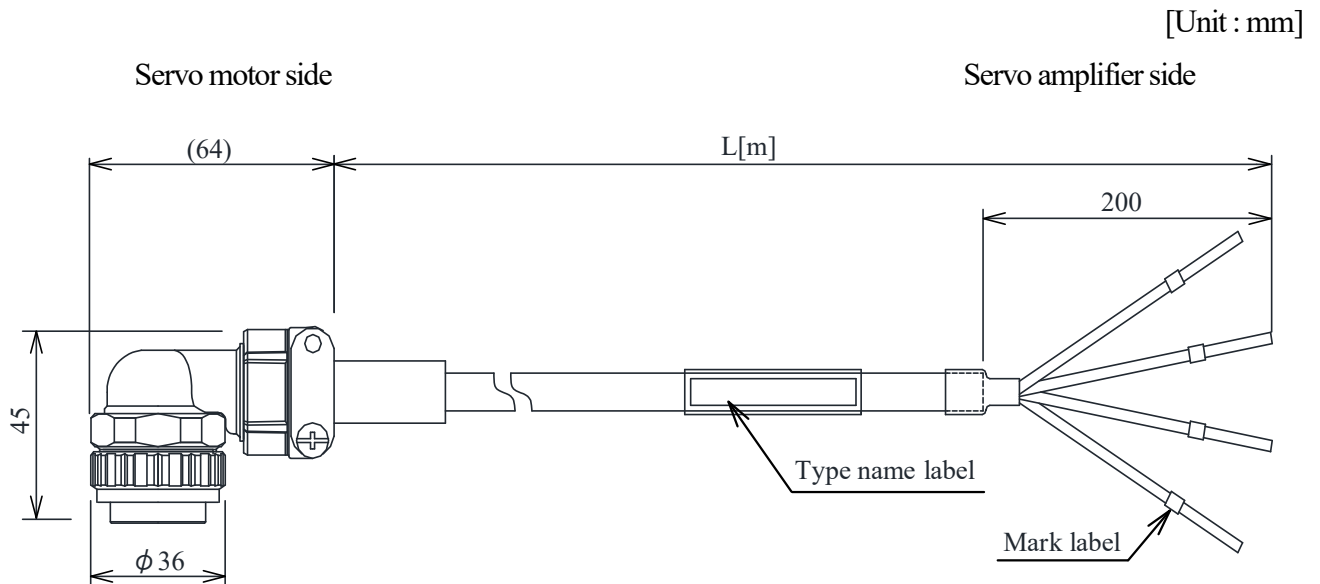
Item		Unit	Specification	
			L	LL
Wire				
Structure		—	AWG14×4C	AWG12×4C
Conductor	Conductor size	—	AWG14	AWG12
	Outer diameter	mm	Approx.2.0	Approx.2.5
Insulation	Material	—	PVC	
	Outer diameter	mm	Approx.3.7	Approx.4.2
Twisted	Number of insulated core wire	—	4C	
Sheath	Material	—	Flame resisting PVC	
	color	—	Black	
Overall diameter	Internal unit	mm	Approx. 11.6	Approx. 12.2
Cable weight		kg/km	200	250
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			—	
Motor side	Type		L , LL : Japan Aviation Electronics Industry, Ltd. JL10-8A18-10SE-EB (Angle plug) JL04-18CK(13)-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



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

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