

Specification
for
General purpose AC Servo
Power supply cable

Type SC-PWC403C□M-■-SB○L

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision								Drawn	Check	Design	Approved
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Send to								Date		Dwg	
								24 Apr., 2019		X953503D70003-E20	
								Order			

1. SCOPE

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

- SC-PWC403C□M-■-SBL
- SC-PWC403C□M-■-SBL

※ The Products covered in this specification don't include the toxic substances in RoHS2 (Lead, Mercury, Cadmium, Hexavalent Chromium, PBDE, PBB, HBCDD, DEHP, BPP, DBP).

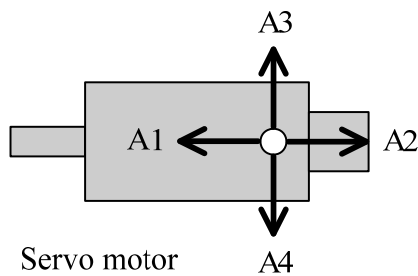
※ UL's Wiring Harnesses Traceability program provides traceability for this cable.

2. CABLE TYPE

SC - PWC4 03 C □ M - ■ - SB ○ L

Sign	Bending life
L	Standard / Standard (For fixed part)
LL	Thick / Standard (For fixed part)
Sign	With or without shield
SB	With shield
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)

Wire thickness	UL Style No.	Rated	
L (Standard)	2586	105°C	600V
LL (Thick)			

4. LENGTH OF CABLE

1 to 100m

※ The maximum cable length differs depending on the motor.

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

5. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-PWC403C□M-■-SB○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.

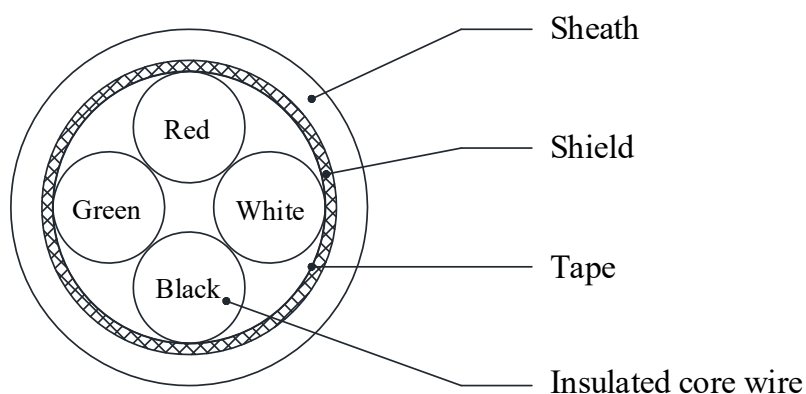
6. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification	
			L	LL
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	
Shield	Material	—	Tin coated copper braid	
Sheath	Material	—	Flame resisting PVC	
	color	—	Black	
Overall diameter	Internal unit	mm	Approx. 11.5	Approx. 12.9
Electrical characteristics	Insulation resistance	MΩ・km	Over 10	
	Withstand voltage	V / for 1 min	AC2000	
Operating temperature range		°C	-10～+60 (without condensation)	
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}		

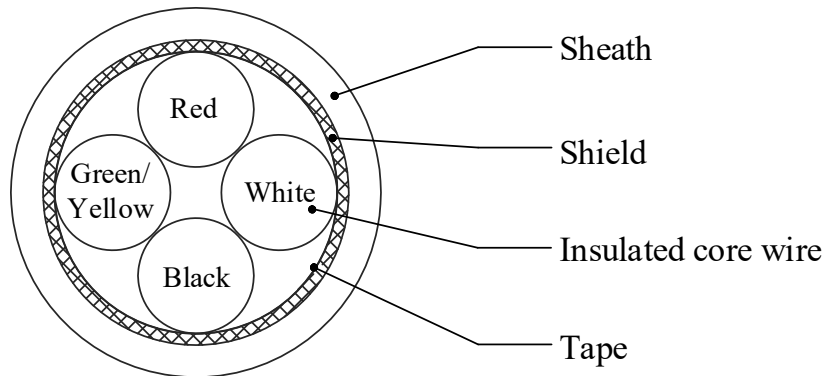
*1 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

7. STRUCTURAL DRAWING

(1)SC-PWC403C□M-■-SBL

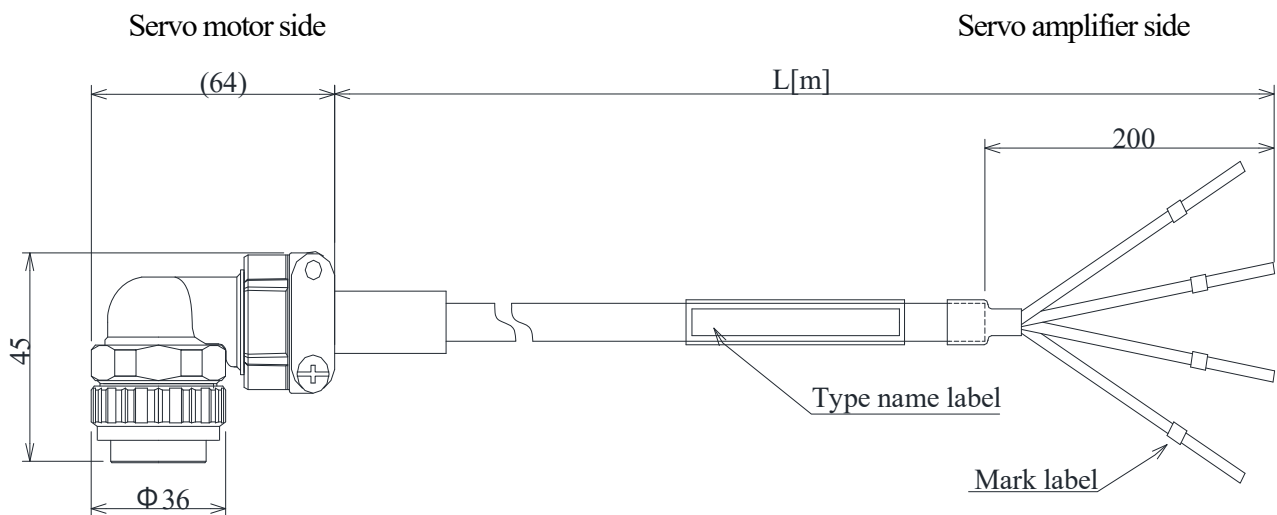


(2)SC-PWC403C□M-■-SBL



8. OUTLINE DRAWING

[Unit : mm]



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

(1)SC-PWC403C□M-■-SBL

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

(2)SC-PWC403C□M-■-SBL

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