

Specification
for
General purpose AC Servo
Power supply cable

Type SC-PWC403C□M-○H

mitsubishi electric
system & service co.,ltd

Note

Revision					Drawn	Check	Design	Approved
A	24 Mar.,2020			n. lto	S. Kariga	S. Minenaga	D. Takashima	
Send to					Date		Dwg	
					24 Apr.,2019		X953503D70003-E15A	
					Order			

1. SCOPE

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

- SC-PWC403C□M-H
- SC-PWC403C□M-LH

※ 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 - ○H

SC -	PWC4	03	C	□	M -	○H	Sign	Wire thickness / Bending life
							H	Standard / Long bending life
							LH	Thick / Long bending life
							Sign	Length of cable
							□	Refer to clause 4
							Sign	Connector specifications
							03	One-touch locking plug
							Sign	Application
							PWC4	Power supply cable ※Refer to cause 4 for applicable motor

3. APPLICABLE STANDARDS

Wire part : UL standard (UL 758 : AWM)

UL Style No.	Rated	
2586	105°C	600V

4. APPLICABLE MOTOR / LENGTH OF CABLE

Length of cable	Type name end	Amplifier power supply voltage	Applicable motor
1~30m	H	200V	HK-ST52W, 102W, 524W, 1024W, 1724W, 2024W, 3024W motor
	LH		HK-ST172W, 202AW, 302W, 3024W motor
31~100m	H	200V	<u>The maximum cable length differs depending on the motor.</u> <u>Please refer to the CABLE LENGTH SELECTION TABLE "R9535021-018028-010" for more information.</u>
	LH		

5. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-PWC403C□M-○H xxxxxxx

- ※ □ is a figure from 1 to 100.
- ※ ○ is wire thickness from none , L.
- ※ xxxxxxx are the serial number for seven digits.

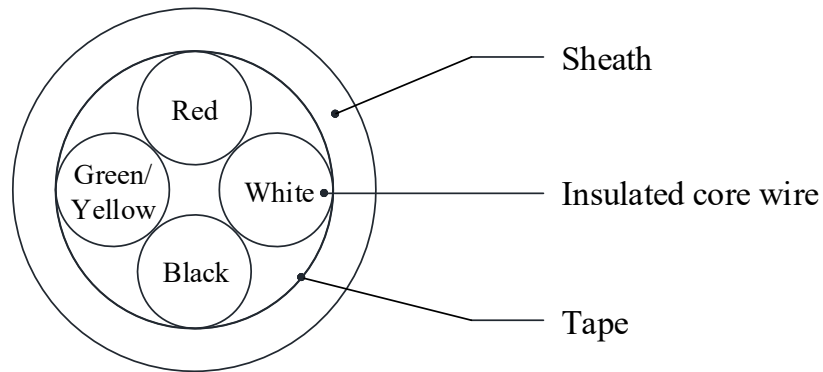
6. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification	
			H	LH
Structure		—	AWG15×4C	AWG12×4C
Conductor	Conductor size	—	AWG15	AWG12
	Outer diameter	mm	Approx.2.0	Approx.2.8
Insulation	Material	—	ETFE	
	Outer diameter	mm	Approx.2.6	Approx.3.6
Twisted	Number of insulated core wire	—	4C	
Sheath	Material	—	Flame resisting PVC	
	color	—	Black	
Overall diameter		mm	Approx. 8.6	Approx. 10.9
Electrical characteristics	Insulation resistance	MΩ・km	Over 100	
	Withstand voltage	V / for 1 min	AC2000	
Operating temperature range		℃	-10～+60 (without condensation)	
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	H : Japan Aviation Electronics Industry, Ltd. JL10-6A18-10SE-EB (Straight plug) JL04-18CK(10)-R (Waterproof cable clamp)		
		LH : Japan Aviation Electronics Industry, Ltd. JL10-6A18-10SE-EB (Straight plug) JL04-18CK(13)-R (Waterproof cable clamp)		
	IP rating	IP67*2		

*1 It is a test outcome, and not a guaranteed value. (The performance is different according to customer's environment.)

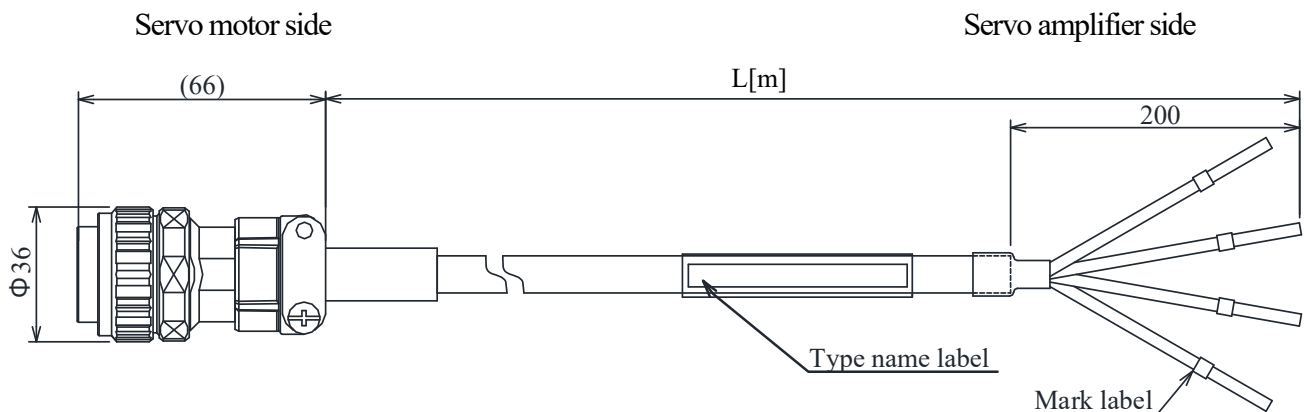
*2 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

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