

Specification
for
General purpose AC Servo
Long Bending Life Power supply cable

Type SC-PWC5CBL□M-○H

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Note

Revision				Drawn	Check	Design	Approved
A	31 Mar.,2017			<i>N. Ishii</i>	<i>A. Kariya</i>	<i>M. Asumura</i>	<i>D. Yoshikawa</i>
B	8 Jun.,2018						
Send to				Date		Dwg	
				27 Apr.,2016		X903703D50052-F34B	
				Order			

1. SCOPE

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

- SC-PWC5CBL□M-MH
- SC-PWC5CBL□M-H
- SC-PWC5CBL□M-LH

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

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

2. CABLE TYPE

SC - PW C5 CBL M - H

Sign	Bending life	
	H	Long Bending Life
Sign	Wire thickness	
	M	Thin
	None	Standard
L	Thick	
Sign	Length of cable	
<input type="checkbox"/>	Refer to clause 5.	
Sign	Applicable servo motor	
C5	Refer to clause 4.	
Sign	Application	
PW	Power supply cable for direct connection ※ Refer to clause 4 for applicable cable	
	Amplifier side power supply cable for relay connection*1	

***1 When used for relay connection at the amplifier side**

When using this cable for relaying at the amplifier side, for the items (1) to (3) below refer to the specification sheet on the motor side relay cable (below table).

(1) Combination

(2) Applicable motor

(3) Cable length

Bending life	Cable type name	The number of specification sheet
Standard (For fixed part)	SC-PWC5JCBL□M-L	X903703D50052-F54
	SC-PWC5JCBL□M-■-L	X903703D50052-F56
Long bending life	SC-PWC5JCBL□M-H	X903703D50052-F55
	SC-PWC5JCBL□M-■-H	X903703D50052-F57

3. APPLICABLE STANDARDS

UL758 AWM STYLE 2586 (wire part)

4. APPLICABLE SERVO MOTOR

The end of type name

① MH

HG-SR121, 201, 202, 2024, 3524 motor

HF-SP121, 201, 202, 2024, 3524 motor

TM-RFM040J10 motor

② H

HG-SR301, 352, 5024, HG-JR353 motor

HF-SP301, 352, 5024, HF-JP353 motor

TM-RFM120J10 motor

③ LH

HG-SR502, HG-JR503 motor

HF-SP502, HF-JP503 motor

5. LENGTH OF CABLE

1 to 30m Specified by 1m unit

6. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-PWC5CBL□M-○H ×××××××

※ □ is a figure from 1 to 30.

※ ○ is wire thickness from M, none, L.

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

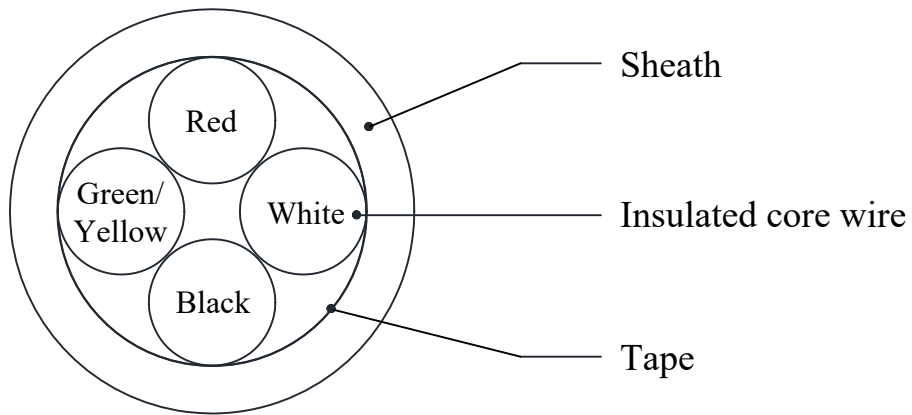
7. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification		
			MH	H	LH
Structure		—	AWG15×4C	AWG12×4C	AWG10×4C
Conductor	Conductor size	—	AWG15	AWG12	AWG10
	Outer diameter	mm	Approx. 2.00	Approx.2.77	Approx.2.99
Insulation	Material	—	ETFE		Heat-resistance PVC
	Outer diameter	mm	Approx. 2.60	Approx. 3.57	Approx. 4.69
Stranding	Number of insulation core wire	—	4C		
Sheath	Material	—	Flame Retardant PVC		
	Color	—	Black		
Overall diameter		mm	Approx. 8.6	Approx. 10.9	Approx. 14
Electrical characteristics	Insulation resistance	MΩ · km	Over 100		
	Withstand voltage	V for 1minute	AC2000		
Operating temperature range		°C	-10~+60 (without condensation)		
Minimum radius bend		mm	6 times the overall diameter		
Bending life		—	Over 1 million times ^{*1} (Bend radius: Minimum bend radius of each cable)		
Connector	Servo amplifier side		—		
	Servo motor side	Type	MH: DDK Ltd. CE05-6A22-22SD-D-BSS (Straight plug) CE3057-12A-3-D (Waterproof cable clamp)		
			H: DDK Ltd. CE05-6A22-22SD-D-BSS (Straight plug) CE3057-12A-2-D (Waterproof cable clamp)		
			LH: DDK Ltd. CE05-6A22-22SD-D-BSS (Straight plug) CE3057-12A-1-D (Waterproof cable clamp)		
IP rating		IP67 ^{*2}			

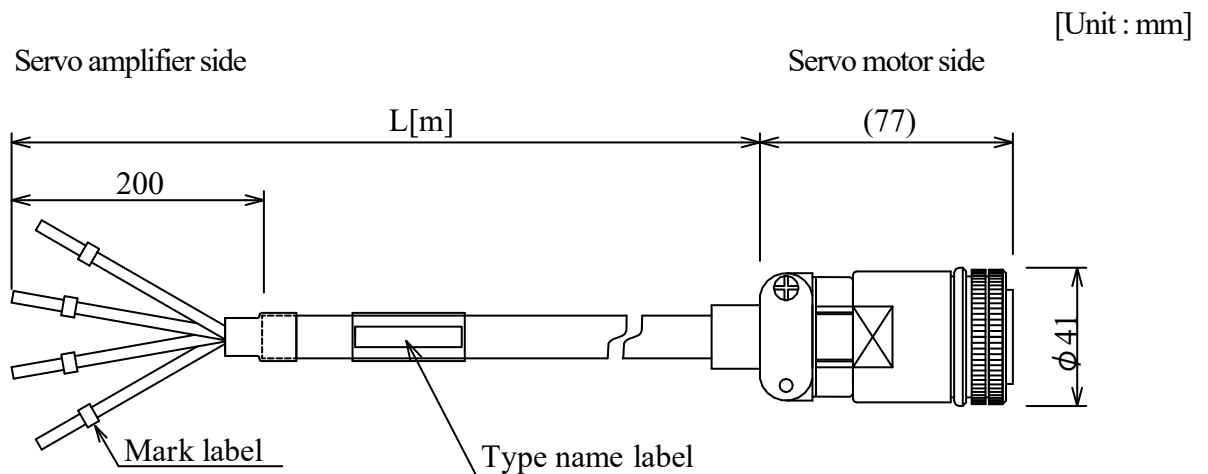
*1 It is a test outcome, and not a guaranteed value. (The performance is different according to customer's environment.)

*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.

8. STRUCTURAL DRAWING



9. 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