

Specification  
for  
General purpose AC Servo  
Power supply cable  
with electromagnetic brake

Type SC-PWBKC1CBL□M-○L

MITSUBISHI ELECTRIC  
SYSTEM & SERVICE CO., LTD

Note

Revision				Drawn	Check	Design	Approved
A	7 Jun.,2018			<i>m. Ito</i>	<i>S. Kojima</i>	<i>S. Minenaga</i>	<i>D. Subushima</i>
B	5 Jun.,2019						
Send to				Date		Dwg	
				27 Apr.,2016		X903703D50052-F16B	
				Order			

## 1. SCOPE

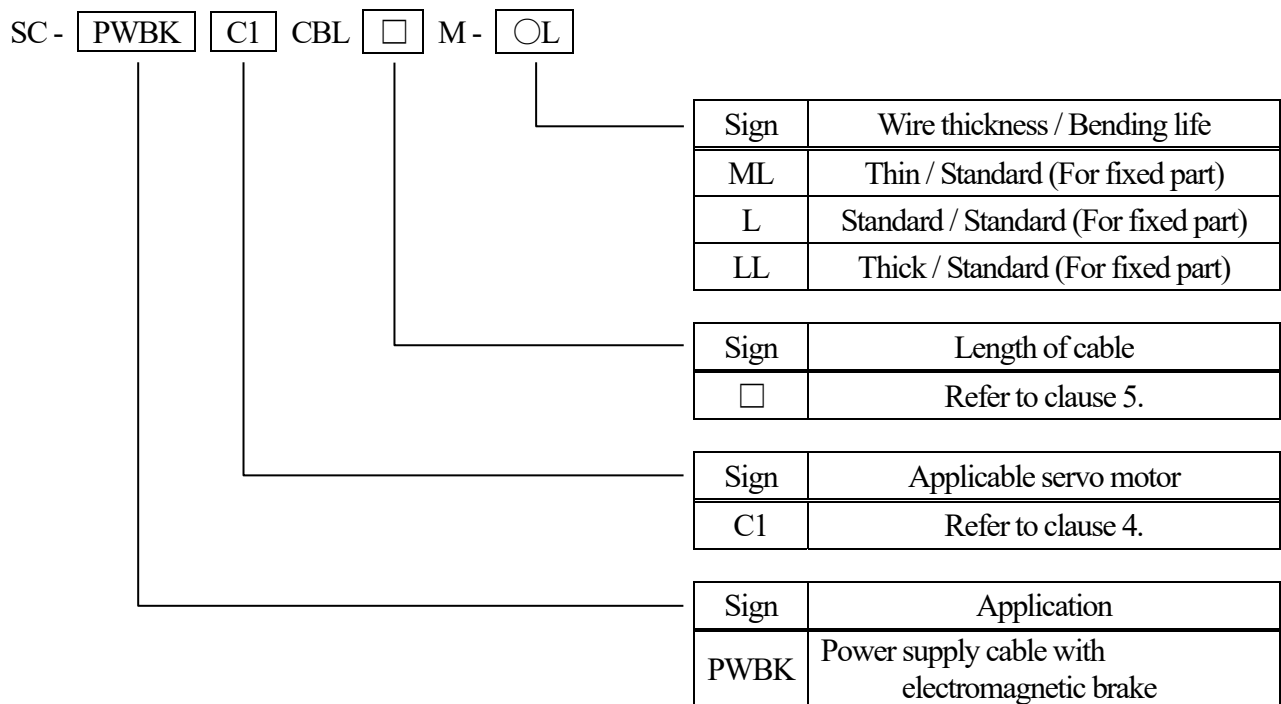
This specification covers the requirements for the General purpose AC Servo Power supply cable with electromagnetic brake.

- SC-PWBKC1CBL□M-ML
- SC-PWBKC1CBL□M-L
- SC-PWBKC1CBL□M-LL

※ 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



## 3. APPLICABLE STANDARDS

Wire part : UL standard (UL 758 : AWM)

UL Style No.	Rated	
2586	105°C	600V

## 4. APPLICABLE SERVO MOTOR

Target series	Applicable servo motor type name
MR-J4 series	Refer to MR-J4 APPLICABLE SERVO MOTOR TABLE "R9037020-010022-105".
MR-J5 series	In the choice page of catalogue or our homepage, please confirm it.

## 5. LENGTH OF CABLE

1 to 30m Specified by 1m unit

※ When used as a relay for the MR-J5 series, please refer to the CABLE LENGTH SELECTION TABLE "R9535021-018028-010".

## 6. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-PWBKC1CBL□M-○L ×××××××

※ □ is a figure from 1 to 30.

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

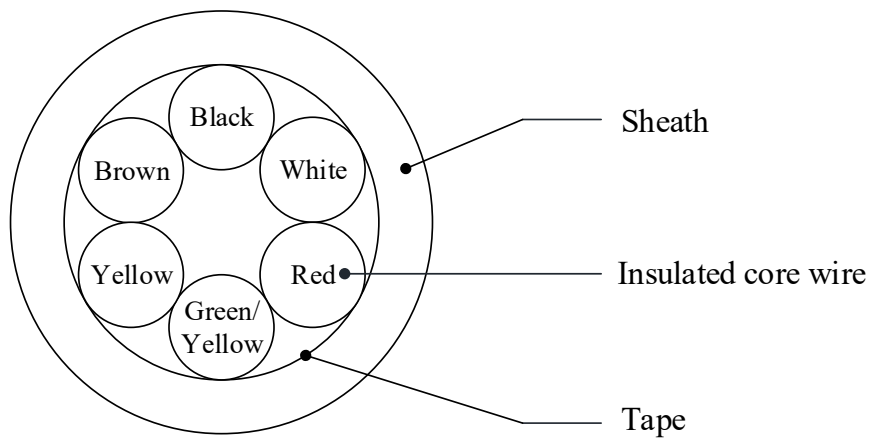
※ ××××××× are the serial number for seven digits.

## 7. STRUCTURE AND CHARACTERISTICS

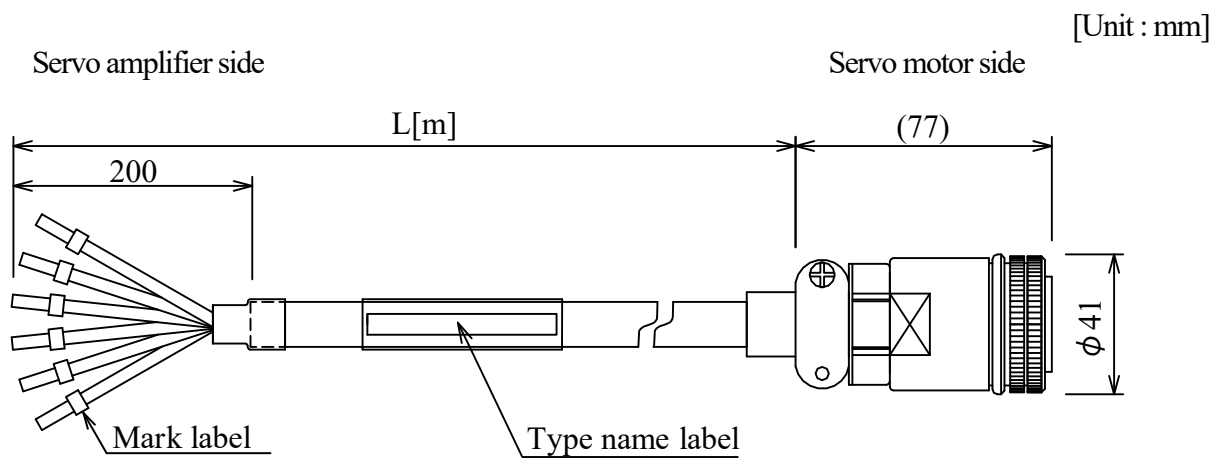
Item		Unit	Specification		
			ML	L	LL
Structure		—	AWG16×6C	AWG14×6C	AWG12×6C
Conductor	Conductor size	—	AWG16	AWG14	AWG12
	Outer diameter	mm	Approx. 1.53	Approx.1.92	Approx.2.48
Insulation	Material	—	PVC		
	Outer diameter	mm	Approx. 3.23	Approx. 3.62	Approx. 4.18
Stranding	Number of insulation core wire	—	6C		
Sheath	Material	—	Flame Retardant PVC		
	Color	—	Black		
Overall diameter		mm	Approx. 11.8	Approx. 13	Approx. 14.6
Electrical characteristics	Insulation resistance	MΩ · km	Over 10		
	Withstand voltage	V for 1minute	AC2000		
Operating temperature range		°C	-10~+60 (without condensation)		
Minimum radius bend		mm	6 times the overall diameter		
Flame retardant		—	UL1581 VW-1		
Connector	Servo amplifier side		—		
	Servo motor side	Type	ML : DDK Ltd. CE05-6A22-23SD-D-BSS (Straight plug) CE3057-12A-2-D (Waterproof cable clamp)		
			L, LL: DDK Ltd. CE05-6A22-23SD-D-BSS (Straight plug) CE3057-12A-1-D (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.

## 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
B1	Yellow
B2	Brown