

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>N. Ichii</i>	<i>S. Kanaya</i>	<i>M. Okumura</i>	<i>J. Subashiro</i>
Send to				Date		Dwg	
				27 Apr.,2016		X903703D50052-F17A	
				Order			

1. SCOPE

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

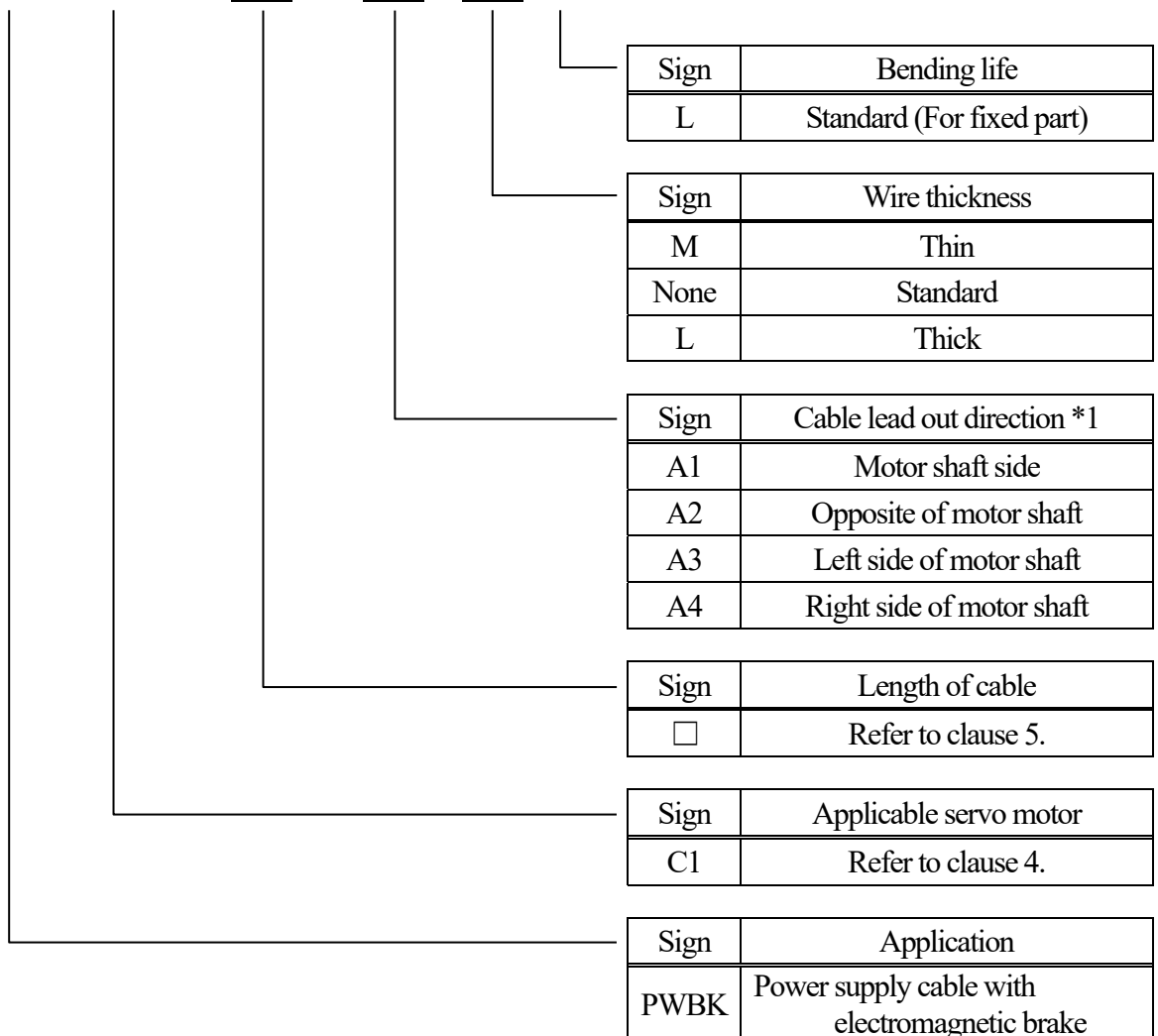
- SC-PWBKC1CBL□M-■-ML
- SC-PWBKC1CBL□M-■-L
- SC-PWBKC1CBL□M-■-LL

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

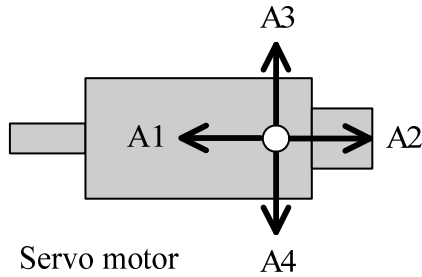
※ UL's Wiring Harnesses Traceability program provides traceability for this cable.

2. CABLE TYPE

SC - PWBK C1 CBL □ M - ■ - ○ L



*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

UL758 AWM STYLE 2586 (wire part)

4. APPLICABLE SERVO MOTOR

The end of type name

- ① ML
 HG-UR72B motor
 HC-LP52B, 102B, HC-UP72B motor
- ② L
 HG-RR103B, 153B, HG-UR152B motor
 HC-LP152B, HC-RP103B, 153B, HC-UP152B motor
- ③ LL
 HG-RR203B motor
 HC-RP203B motor

5. LENGTH OF CABLE

1 to 30m Specified by 1m unit

6. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-PWBKC1CBL□M-■-○L ×××××××

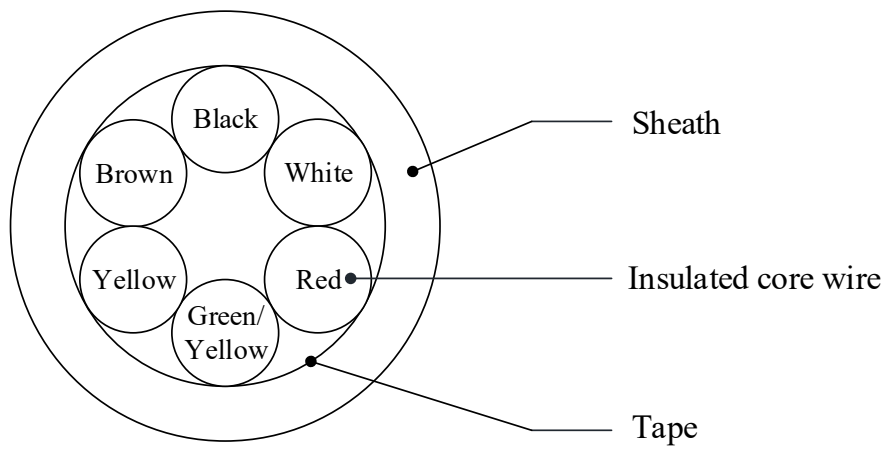
- ※ □ is a figure from 1 to 30.
- ※ ■ is cable lead out direction from A1, A2, A3, A4.
- ※ ○ is wire thickness from M, none, L.
- ※ ××××××× are the serial number for seven digits.

7. STRUCTURE AND CHARACTERISTICS

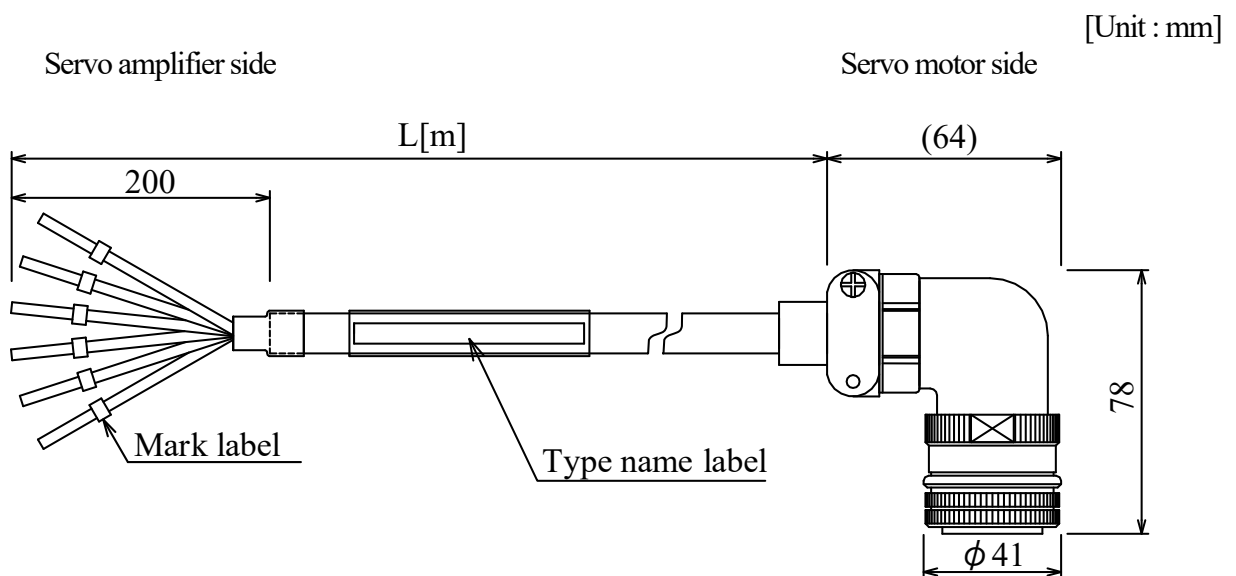
Item		Unit	Specification		
			ML	L	LL
Structure		—	AWG16×6C	AWG14×6C	AWG12×6C
Conductor	Conductor size	—	AWG16	AWG14	AWG12
	Outer diameter	mm	Approx. 1.53	Approx.1.92	Approx.2.48
Insulation	Material	—	PVC		
	Outer diameter	mm	Approx. 3.23	Approx. 3.62	Approx. 4.18
Stranding	Number of insulation core 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. CE05-8A22-23SD-D-BAS (Angle plug) CE3057-12A-2-D (Waterproof cable clamp)		
			L, LL: DDK Ltd. CE05-8A22-23SD-D-BAS (Angle 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