

Specification
for
General purpose AC Servo
Power supply cable

Type SC-PWC1CBL□M-■-○L

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision				Drawn	Check	Design	Approved
A	31 Mar.,2017			<i>N. Ishii</i>	<i>J. Kawai</i>	<i>M. Okamura</i>	<i>D. Tsubouchi</i>
B	1 Jun.,2018						
Send to				Date		Dwg	
				27 Apr.,2016		X903703D50052-F07B	
				Order			

1. SCOPE

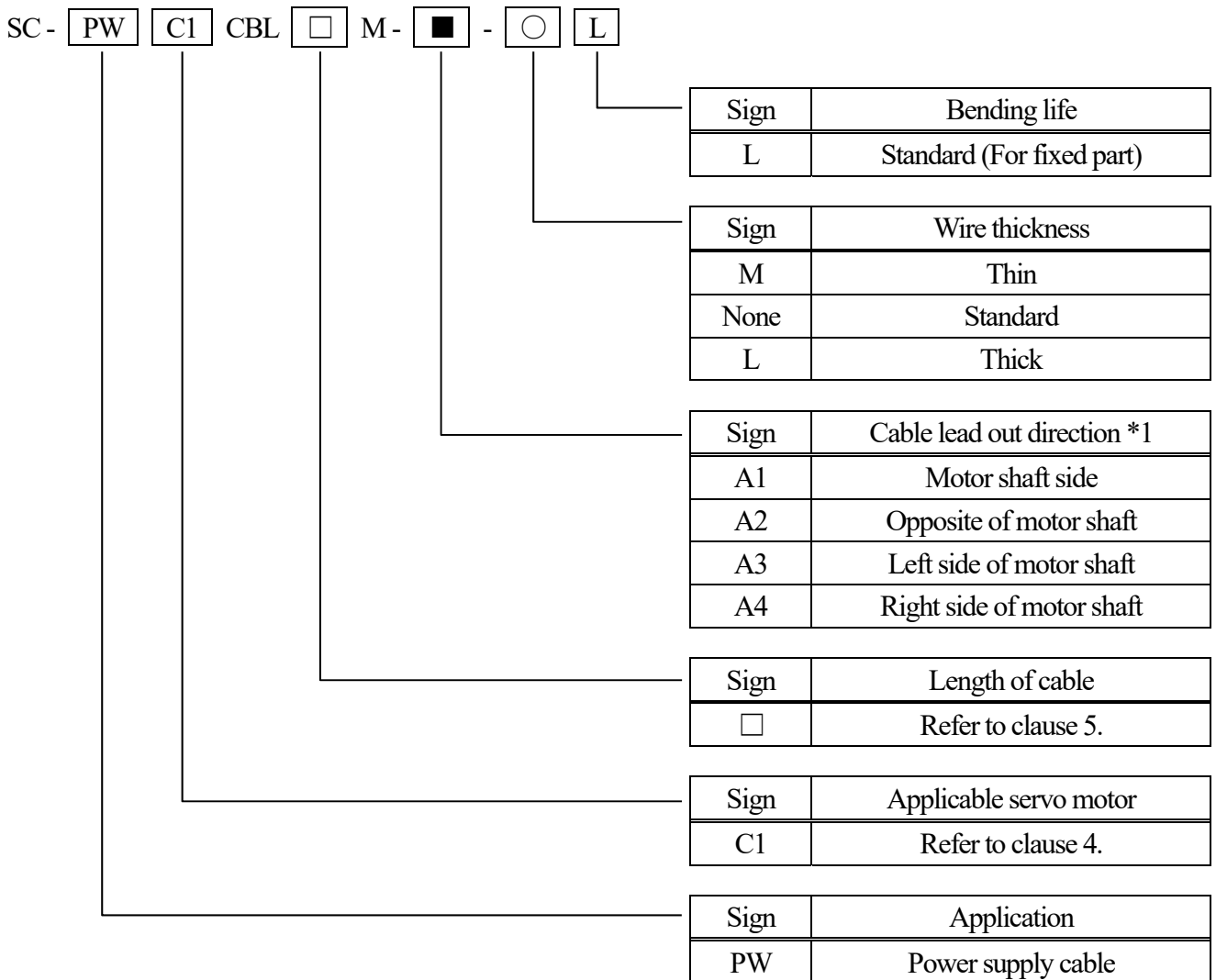
This specification covers the requirements for the General purpose AC Servo Power supply cable.

- SC-PWC1CBL□M-■-ML
- SC-PWC1CBL□M-■-L
- SC-PWC1CBL□M-■-LL

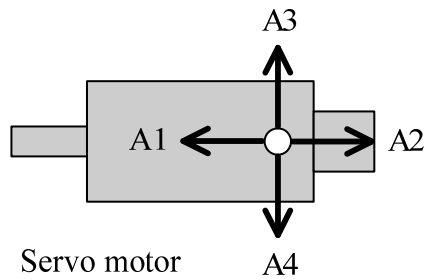
※ The Products covered in this specification don't include the toxic substances in RoHS (Lead, Mercury, Cadmium, Hexavalent Chromium, PBDE, PBB).

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

2. CABLE TYPE



*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

The end of type name

- ① ML : UL758 AWM STYLE 2586 (Wire part)
- ② L : UL758 AWM STYLE 2501 (Wire part)
- ③ LL : UL758 AWM STYLE 2501 (Wire part)

4. APPLICABLE SERVO MOTOR

The end of type name

- ① ML
 - HG-UR72 motor
 - HC-LP52, 102 motor
 - HC-UP72 motor
- ② L
 - HG-RR103, 153 motor
 - HG-UR152 motor
 - HC-LP152 motor
 - HC-RP103, 153 motor
 - HC-UP152 motor
- ③ LL
 - HG-RR203 motor
 - HC-RP203 motor

5. LENGTH OF CABLE

1 to 30m Specified by 1m unit

6. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-PWC1CBL□M-■-○L ×××××××

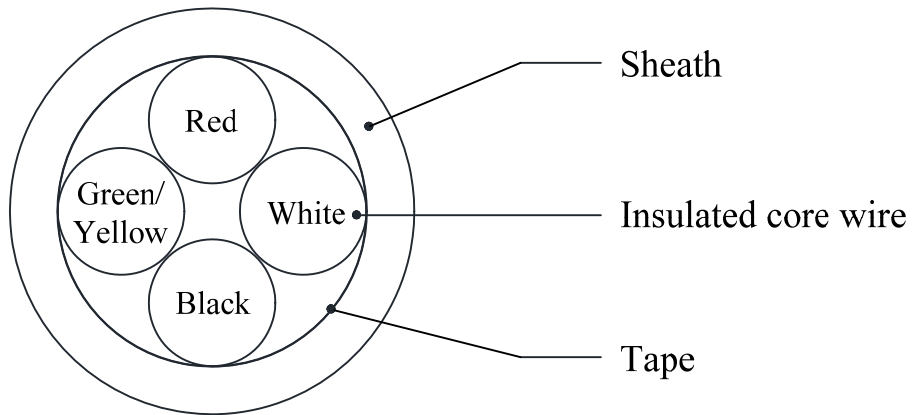
- ※ □ is a figure from 1 to 30.
- ※ ■ is cable lead out direction from A1, A2, A3, A4.
- ※ ○ is wire thickness from M, none, L.
- ※ ××××××× are the serial number for seven digits.

7. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification		
			ML	L	LL
Structure		—	AWG16×4C	AWG14×4C	AWG12×4C
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	—	4C		
Sheath	Material	—	Flame resisting PVC		
	Color	—	Black		
Overall diameter		mm	Approx. 9.9	Approx. 12.2	Approx. 13.6
Electrical characteristics	Insulation resistance	MΩ · km	Over 10		
	Withstand voltage	V for 1minute	AC2000		
Operating temperature range		°C	-10~+60 (without condensation)		
Minimum bend radius		mm	6 times the overall diameter		
Flame retardant		—	UL1581 VW-1		
Connector	Servo amplifier side		—		
	Servo motor side	Type	ML / L: DDK Ltd. CE05-8A22-23SD-D-BAS (Angle plug) CE3057-12A-2-D (Waterproof cable clamp)		
			LL: DDK Ltd. CE05-8A22-23SD-D-BAS (Angle plug) CE3057-12A-1-D (Waterproof cable clamp)		
	IP rating	IP67*1			

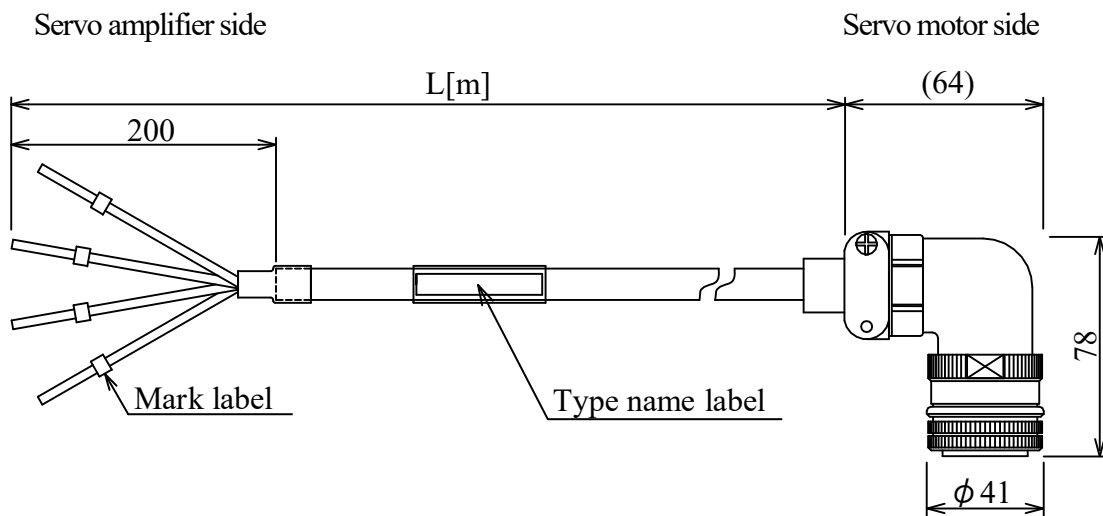
*1 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

8. STRUCTURAL DRAWING



9. OUTLINE DRAWING

[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