

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

Type SC-PWC4CBL□M-■-SB○H

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision				Drawn	Check	Design	Approved
A	7 Jun.,2018			<i>N. Sekii</i>	<i>S. Kariya</i>	<i>M. Kuwamura</i>	<i>D. Tsuboshima</i>
Send to				Date		Dwg	
				31 Mar.,2017		X903703D50052-F53A	
				Order			

1. SCOPE

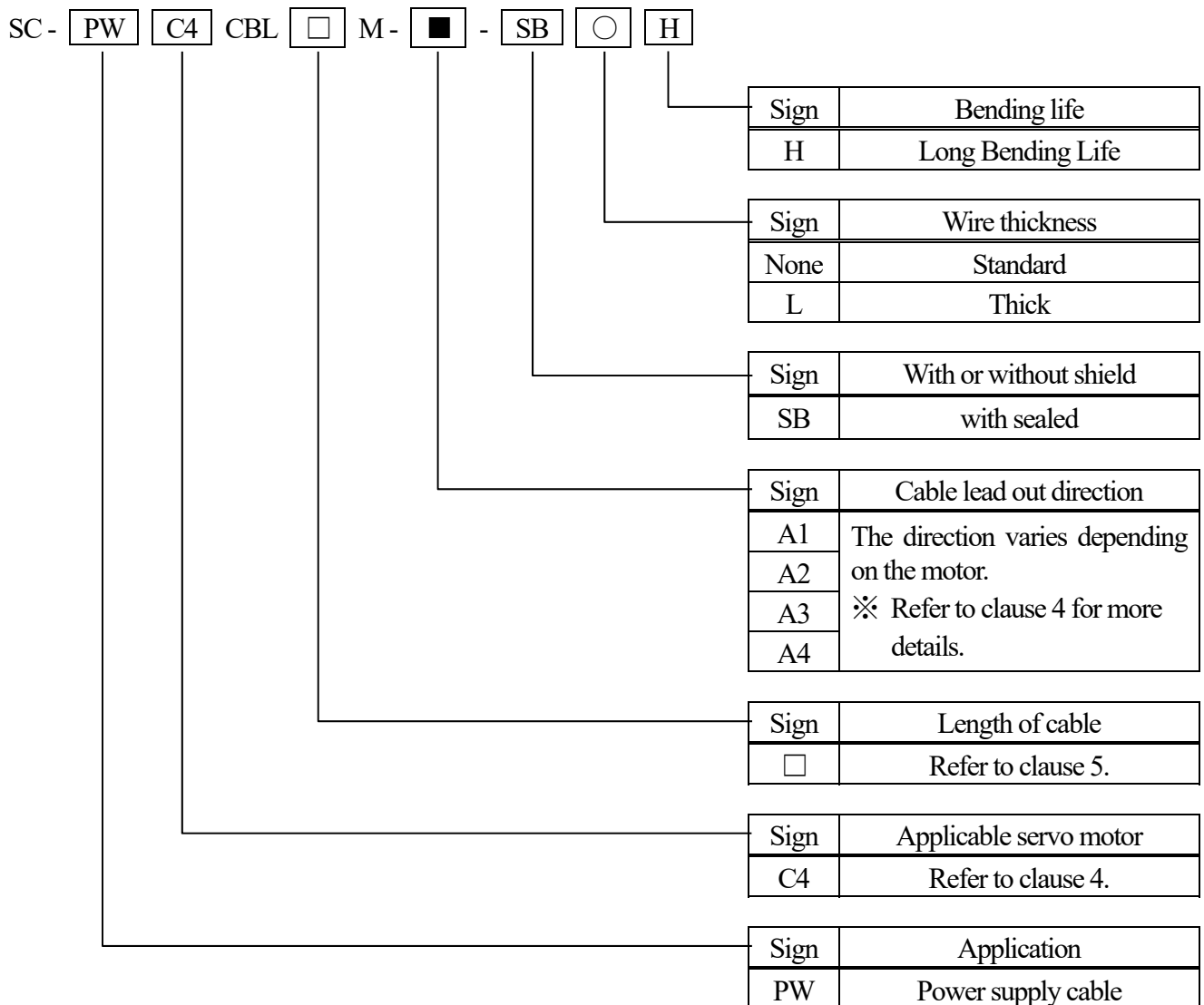
This specification covers the requirements for the General purpose AC Servo Long Bending Life Power supply cable with sealed.

- SC-PWC4CBL□M-■-SBH
- SC-PWC4CBL□M-■-SBLH

※ 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.

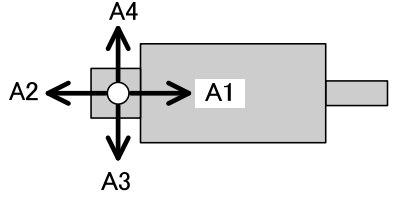
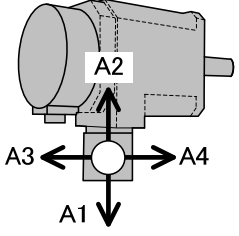
2. CABLE TYPE



3. APPLICABLE STANDARDS

UL758 AWM STYLE 2586 (wire part)

4. APPLICABLE SERVO MOTOR

The end of type name	Applicable servo motor	Cable lead out direction (View from cable insertion direction)
SBH	HG-SR51, 52, 81, 102, 152, 524, 1024, 1524 motor HF-SP51, 52, 81, 102, 152, 524, 1024, 1524 motor	
SBH	HG-JR53, 73, 103, 153, 203, 534, 734, 1034, 1534, 2034, 3534 motor HF-JP53, 73, 103, 153, 203, 534, 734, 1034, 1534, 2034, 3534 motor	
SBLH	HG-JR5034 motor HF-JP5034 motor	

(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.

5. LENGTH OF CABLE

1 to 30m Specified by 1m unit

6. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-PWC4CBL□M-■-SB○H ×××××××

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

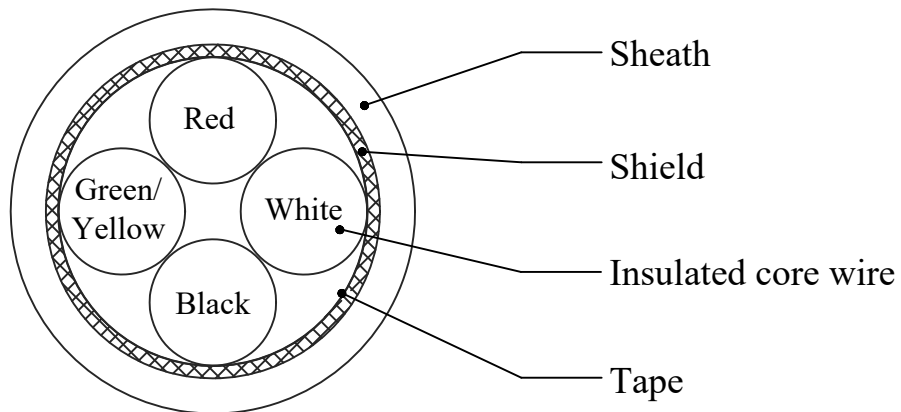
7. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification	
			SBH	SBLH
Structure		—	AWG15×4C	AWG12×4C
Conductor	Conductor size	—	AWG15	AWG12
	Outer diameter	mm	Approx. 2.00	Approx. 2.60
Insulation	Material	—	ETFE	
	Outer diameter	mm	Approx. 2.80	Approx. 3.40
Stranding	Number of insulation core wire	—	4C	
Shield	Material	—	Tin coated copper braid	
Sheath	Material	—	Flame Retardant PVC	
	Color	—	Black	
Overall diameter		mm	Approx. 9.9	Approx. 11.5
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)	
Flame retardant		—	UL1581 VW-1	
Connector	Servo amplifier side		—	
	Servo motor side	Type	SBH: DDK Ltd. CE05-8A18-10SD-D-BAS (Angle plug) CE3057-10A-2-D (Waterproof cable clamp)	
			SBLH: DDK Ltd. CE05-8A18-10SD-D-BAS (Angle plug) CE3057-10A-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.)

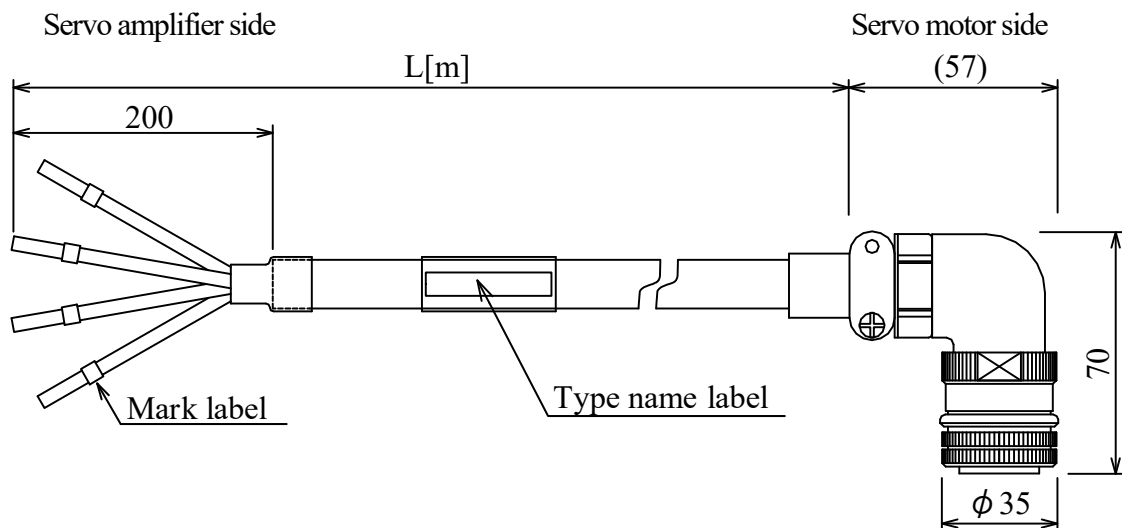
*2 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

8. STRUCTURAL DRAWING



9. OUTLINE DRAWING

[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