

Specification
for
General purpose AC Servo
Long Bending Life
Electromagnetic brake cable

Type SC-BKS4CBL□M-LH

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision				Drawn	Check	Design	Approved
A	11 Jun.,2018			<i>N. Ishii</i>	<i>S. Kariya</i>	<i>M. Awamura</i>	<i>D. Sakashima</i>
Send to				Date		Dwg	
				26 Apr.,2016		X903703D50052-G17A	
				Order			

1. SCOPE

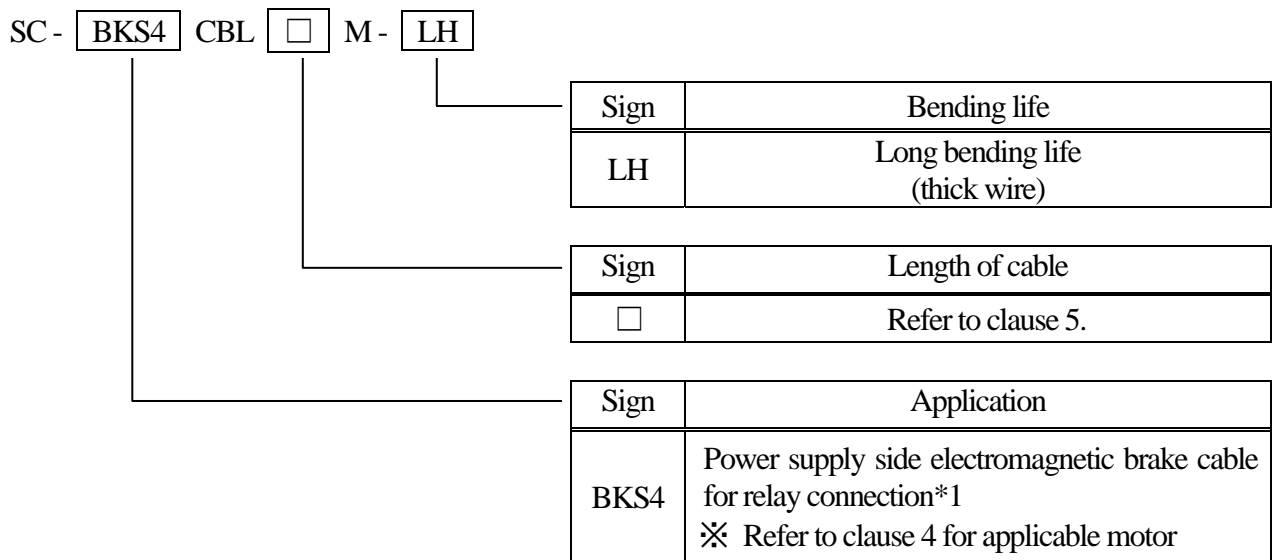
This specification covers the requirements for the General purpose AC Servo Long Bending Life Electromagnetic brake cable.

- SC-BKS4CBL□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



- *1 Please use it with power supply side electromagnetic brake cable.
Refer to clause 6 for confirming the combination and cable length.

(Note) This cable doesn't have clamps for fixture. Please use cable ties or alternatives which can fix cable part; otherwise it might put too much stress on cables and cause disconnection.

3. APPLICABLE STANDARDS

UL758 AWM STYLE 2586 (wire part)

4. APPLICABLE SERVO MOTOR

HG-KR, HG-MR series motor
HF-KN, HF-KP, HF-MP series motor

5. LENGTH OF CABLE

1 to 50m Specified by 1m unit

6. CABLE LENGTH FOR RELAY CONNECTION

Combination		Total cable length
Power supply side	Motor side	
SC-BKS4CBL□M-LH	SC-BKS4JCBL□M-■-L SC-BKS4JCBL□M-■-H SC-BKS4JCBL□M-■-S	10m or less 50m or less

7. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-BKS4CBL□M-LH ×××××××

※ □ is a figure from 1 to 50.

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

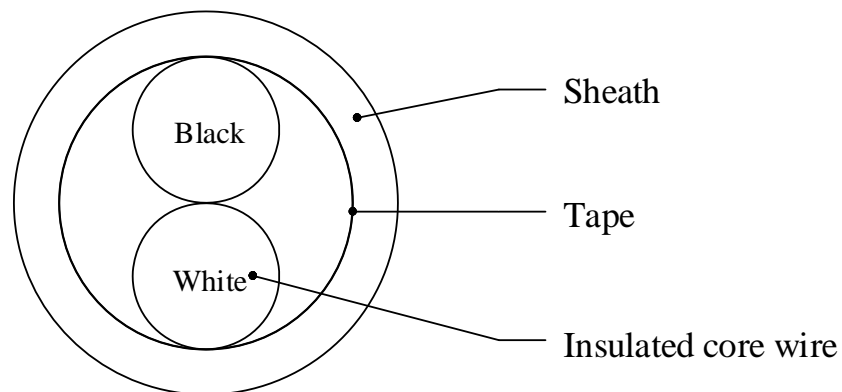
8. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification
Structure		—	AWG16×2C
Conductor	Conductor size	—	AWG16
	Outer diameter	mm	Approx. 1.75
Insulation	Material	—	ETFE
	Outer diameter	mm	Approx. 2.55
Stranding	Number of insulation core wire	—	2C
Sheath	Material	—	Flame resisting PVC
	Color	—	Black
Overall diameter		mm	Approx. 7.2
Electrical characteristics	Insulation resistance	MΩ · km	Over 100
	Withstand voltage	V for 1 minute	AC500
Operating temperature range		°C	-10~+60 (without condensation)
Minimum bend radius		mm	6 times the overall diameter
Bending life		—	Over 1 million times ^{*1} (Bend radius: Minimum bend radius)
Flame retardant		—	UL1581 VW-1
Connector	Power supply side		—
	Motor side	Type	Molex 5559-02P-210 (Plug housing)
		IP rating	IP20 ^{*2}

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

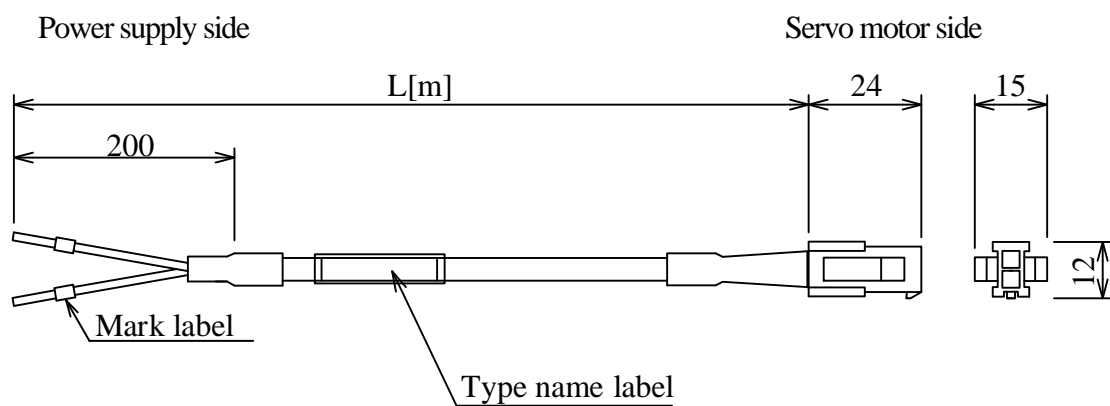
*2 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

9. STRUCTURAL DRAWING



10. OUTLINE DRAWING

[Unit : mm]



Refer to the following table for mark label and insulation color.

Mark label	Insulation color
B1	White
B2	Black

11. SYSTEM CONFIGURATION DIAGRAM

