

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

Type SC-BKS1JCBL□M-■-H

MITSUBISHI ELECTRIC  
 SYSTEM & SERVICE CO.,LTD

Note

Revision				Drawn	Check	Design	Approved
A	14 July ,2017			<i>N. Ishii</i>	<i>S. Kanoya</i>	<i>S. Kurohara</i>	<i>D. Tsubokawa</i>
Send to				Date		Dwg	
				22 Apr.,2016		X903703D50052-G16A	
				Order			

## 1. SCOPE

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

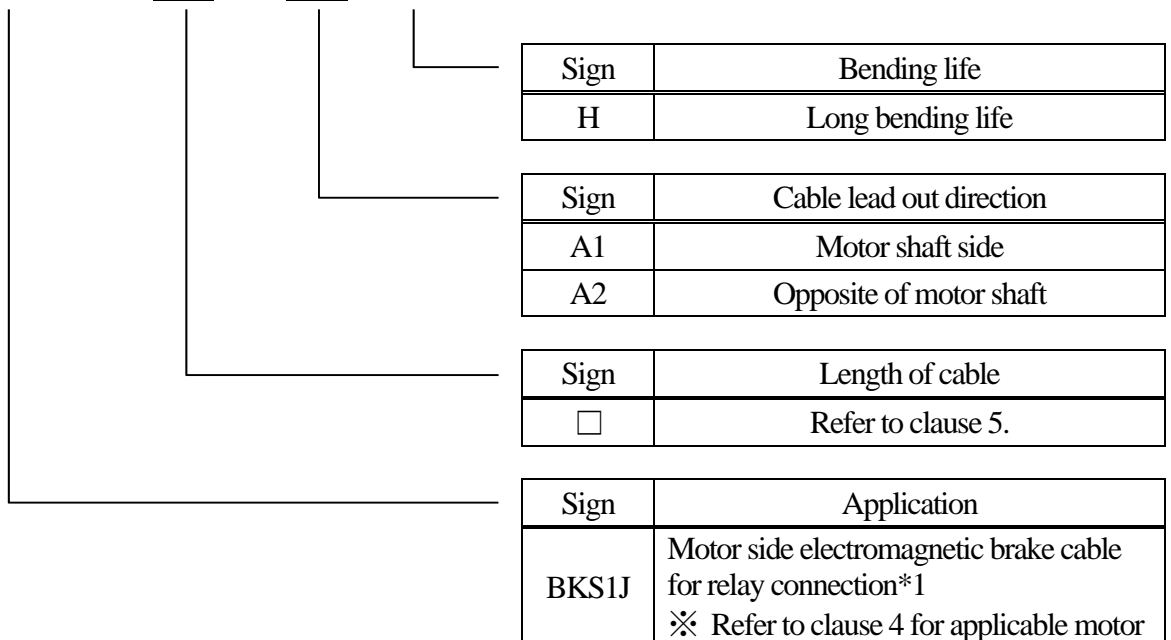
·SC-BKS1JCBL□M-■-H

※ 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 - BKS1J CBL □ M - ■ - H



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

## 3. APPLICABLE STANDARDS

UL13 PLCC CL3X (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 10m Specified by 1m unit

## 6. CABLE LENGTH FOR RELAY CONNECTION

Motor type name	Combination		Total cable length
	Power supply side	Motor side	
HG-KR/MR	SC-BKC1CBL□M-L (*1)	SC-BKS1JCBL□M-■-H (*2)	40m or less
HF-KN/KP/MP	SC-BKC1CBL□M-H (*1)		

\*1 Please use 30m or less cable at power supply side.

\*2 Please use 10m or less cable at motor side.

## 7. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-BKS1JCBL□M-■-H ×××××××

※ □ is a figure from 1 to 10.

※ ■ is cable lead out direction from A1, A2.

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

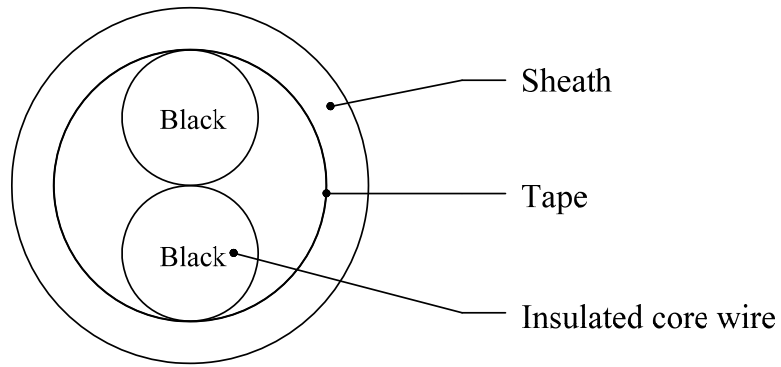
## 8. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification
Structure		—	AWG20×2C
Conductor	Conductor size	—	AWG20
	Outer diameter	mm	Approx. 0.97
Insulation	Material	—	ETFE
	Outer diameter	mm	Approx. 1.37
Stranding	Number of insulation core wire	—	2C
Sheath	Material	—	Flame resisting PVC
	Color	—	Black
Overall diameter		mm	Approx. 4.5
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* <sup>1</sup> (Bend radius : 6 times the overall diameter)
Flame Retardant		—	UL1581 VW-1
Connector	Power supply side	Type	DDK Ltd. CM10-CR2P-S (Cable receptacle) or CMV1-CR2P-S (Cable receptacle)
		IP rating	IP67* <sup>2</sup>
	Motor side	Type	Japan Aviation Electronics Industry, Limited JN4FT02SJ1-R (Angle plug)
		IP rating	IP65* <sup>2</sup>

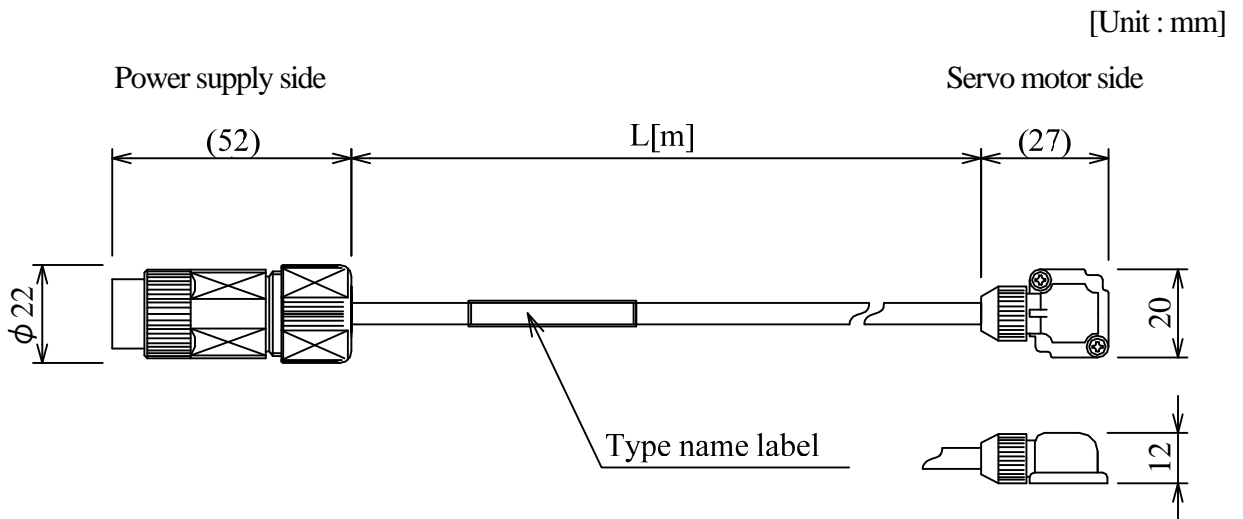
\*1 It is a test outcome, and not a guaranteed value. (The performance is different according to customer's environment.)

\*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



### 11. SYSTEM CONFIGURATION DIAGRAM

