

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

Type SC-BKS1JCBL□M-■-S

MITSUBISHI ELECTRIC  
SYSTEM & SERVICE CO.,LTD

Note

Revision				Drawn	Check	Design	Approved
A	14 July ,2017			<i>N. Ishii</i>	<i>S. Kariya</i>	<i>S. Kasahara</i>	<i>D. Kubeshima</i>
B	13 Nov.,2017						
Send to				Date		Dwg	
				26 Apr.,2016		X903703D50052-G22B	
				Order			

## 1. SCOPE

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

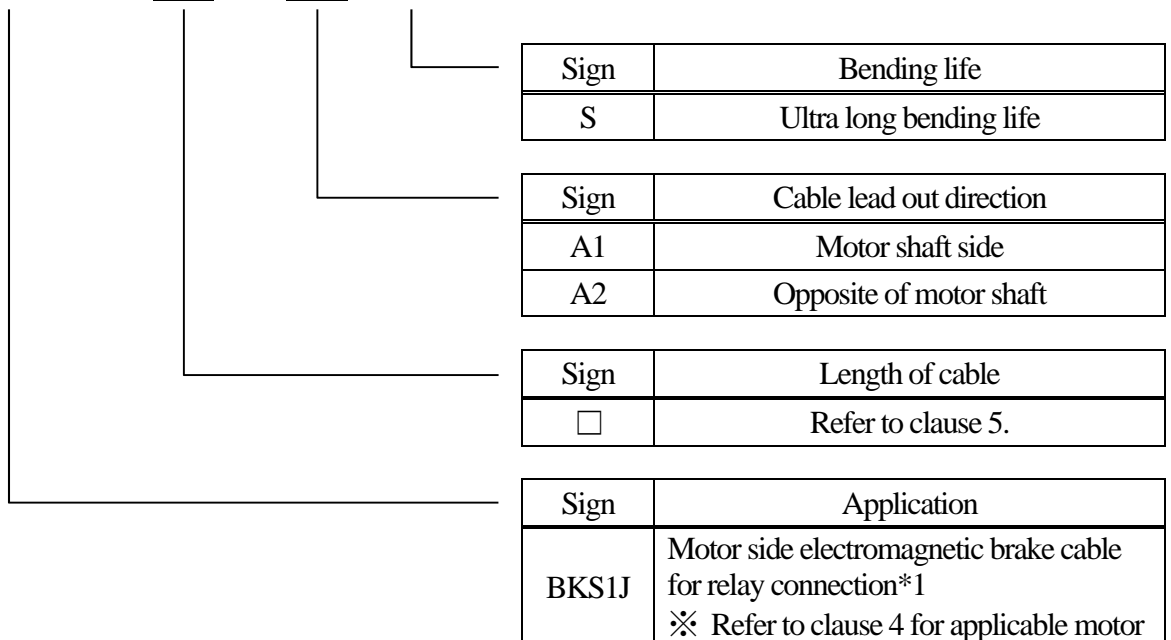
·SC-BKS1JCBL□M-■-S

※ 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 - ■ - S



\*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

UL758 AWM STYLE 20921 (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

Combination				Total cable length
Power supply side		Motor side		
SC-BKC1CBL□M-L SC-BKC1CBL□M-H	30m or less	SC-BKS1JCBL□M-■-S	10m or less	40m or less

## 7. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-BKS1JCBL□M-■-S ×××××××

- ※ □ is a figure from 1 to 10.
- ※ ■ is cable lead out direction from A1, A2.
- ※ ××××××× are the serial number for seven digits.

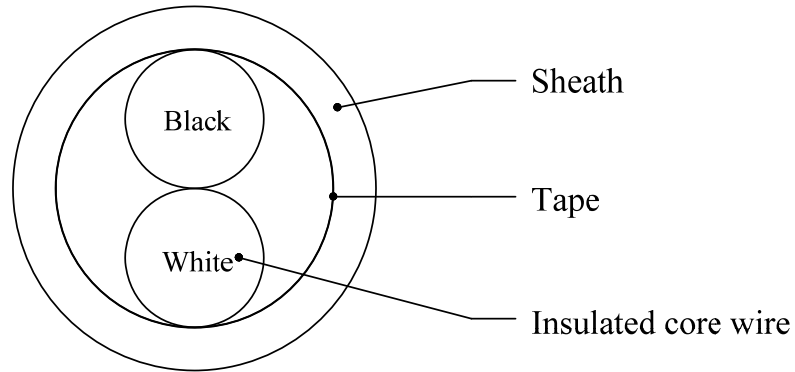
## 8. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification
Structure		—	AWG22×2C
Conductor	Conductor size	—	AWG22
	Outer diameter	mm	Approx. 0.83
Insulation	Material	—	ETFE
	Outer diameter	mm	Approx. 1.23
Stranding	Number of insulation core wire	—	2C
Sheath	Material	—	High Elastic PVC
	Color	—	Black
Overall diameter		mm	Approx. 4.6
Electrical characteristics	Insulation resistance	MΩ・km	Over 1000
	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 10 million times* <sup>1</sup> (Bend radius : Minimum bend radius)
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>

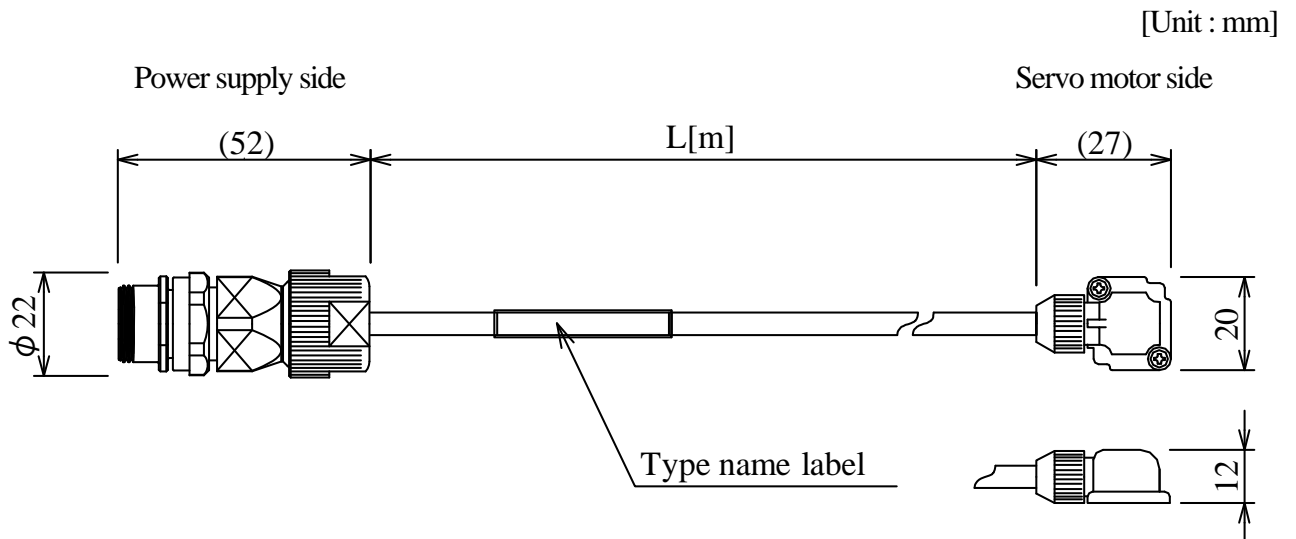
\*1 This is only the test result, not a guaranteed value. ( The performance would change depending on customer's situation)

\*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

