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

Type SC-BKS1CBL□M-■-S

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision				Drawn	Check	Design	Approved
A	13 Nov.,2017			N. Ishii		M. Awamura	
B	11 Jun.,2018						

Send to	Date	Dwg
	26 Apr.,2016	
	Order	X903703D50052-G21B

1. SCOPE

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

・SC-BKS1CBL□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 - [BK] [S1] CBL [□] M - [■] - [S]

Sign	Bending life
S	Ultra long bending life

Sign	Cable lead out direction
A1	Motor shaft side
A2	Opposite of motor shaft

Sign	Length of cable
□	Refer to clause 5.

Sign	Applicable servo motor
S1	Refer to clause 4.

Sign	Application
BK	Electromagnetic brake cable

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. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-BKS1CBL□M-■-S ××××××

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

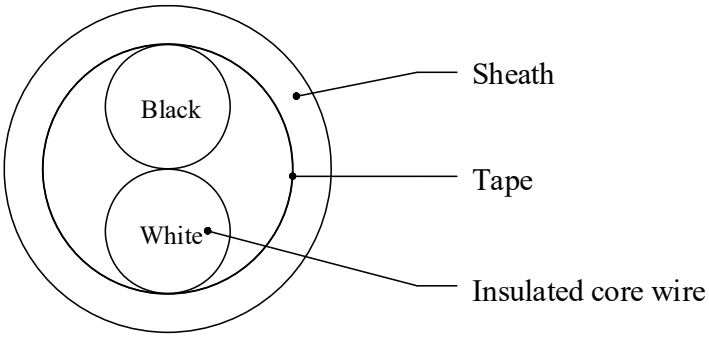
7. STRUCTURE AND CHARACTERISTICS

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		—	Flame resisting PVC
	Color		—	Black
Overall diameter			mm	Approx. 4.6
Electrical characteristics	Insulation resistance		MΩ・km	Over 1000
	Withstand voltage		V for1minute	AC500
Operating temperature range			℃	-10～+60 (without condensation)
Minimum bend radius			mm	6 times the overall diameter
Bending life			—	Over 10 million time[*1] (Bend Radius: Minimum bend radius)
Flame retardant			—	UL1581 VW-1
Connector	Power supply side		—	
	Power motor side	Type	Japan Aviation Electronics Industry, Limited JN4FT02SJ1-R (Angle plug)	
		IP rating	IP65[*2]	

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

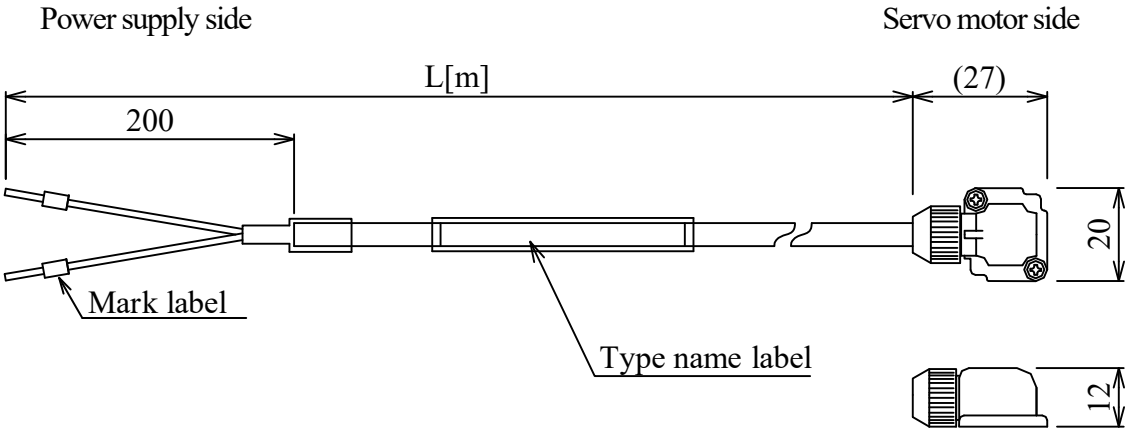
*2 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

8. STRUCTURAL DRAWING



9. OUTLINE DRAWING

[Unit : mm]



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

Mark label	Insulation color
B1	White
B2	Black