

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

Type SC-BKC1JCBL□M-H

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

| Revision | | | | Drawn | Check | Design | Approved |
|----------|--------------|--|--|--------------------|------------------|--------------------|---------------------|
| A | 31 Mar.,2017 | | | <i>T. Karahara</i> | <i>S. Karuya</i> | <i>Mr. Uemura</i> | <i>D. Tsubokawa</i> |
| | | | | | | | |
| | | | | | | | |
| Send to | | | | Date | | Dwg | |
| | | | | 26 Apr.,2016 | | X903703D50052-G19A | |
| | | | | Order | | | |
| | | | | | | | |

1. SCOPE

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

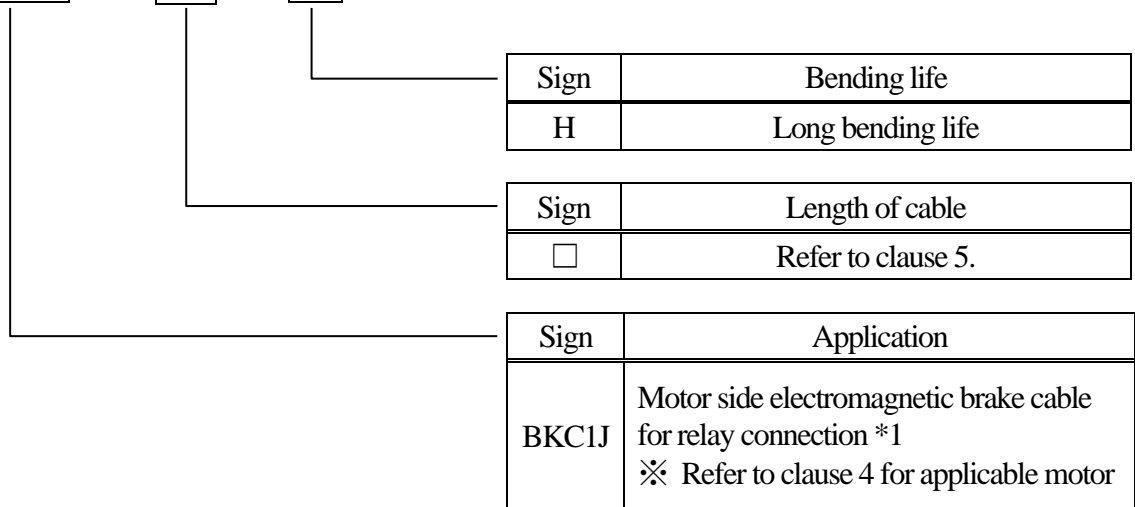
- SC-BKC1JCBL□M-H

※ 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 - BKC1J 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

UL758 AWM STYLE 2586 (wire part)

4. APPLICABLE SERVO MOTOR

HG-SR series motor

HG-JR53B, 73B, 103B, 153B, 203B, 353B, 503B, 703B, 903B,

534B, 734B, 1034B, 1534B, 2034B, 3534B, 5034B, 7034B, 9034B motor

HF-SP series motor

HF-JP53B, 73B, 103B, 153B, 203B, 353B, 503B, 703B, 903B,

534B, 734B, 1034B, 1534B, 2034B, 3534B, 5034B, 7034B, 9034B motor

5. LENGTH OF CABLE

1 to 49m Specified by 1m unit

6. CABLE LENGTH FOR RELAY CONNECTION

| Combination | | | Total cable length |
|-------------------|-------------|-----------------|--------------------|
| Power supply side | | Motor side | |
| SC-BKC1CBL□M-L | 30m or less | SC-BKC1JCBL□M-H | 50m or less |
| SC-BKC1CBL□M-H | | | |

7. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-BKC1JCBL□M-H ×××××××

※ □ is a figure from 1 to 49.

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

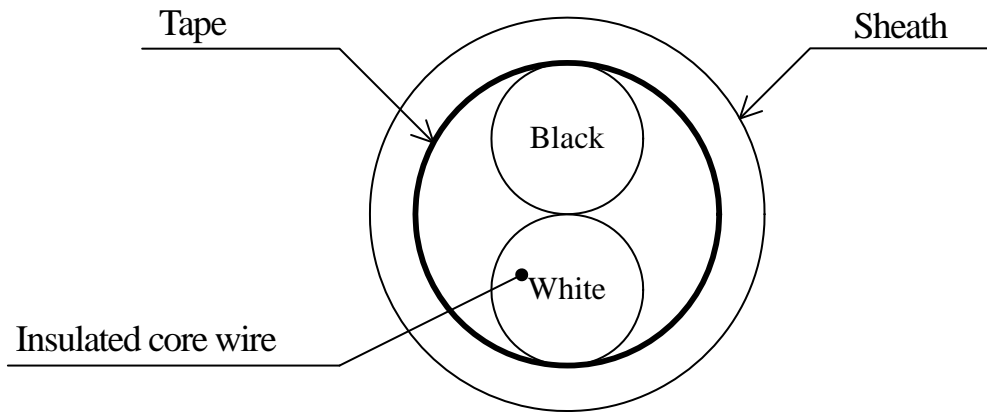
8. STRUCTURE AND CHARACTERISTICS

| 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 performance | | — | Over 1 million times * ¹ (Bend radius 45mm) |
| Flame Retardant | | — | UL1581 VW-1 |
| Connector | Power supply side | Type | DDK Ltd. CM10-CR2P-M (Cable receptacle) or CMV1-CR2P-M2 (Cable receptacle) |
| | | IP rating | IP67* ² |
| | Motor side | Type | DDK Ltd. CM10-SP2S-M (D6) (Straight plug) or CMV1-SP2S-M2 (Straight plug) |
| | | IP rating | IP67* ² |

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

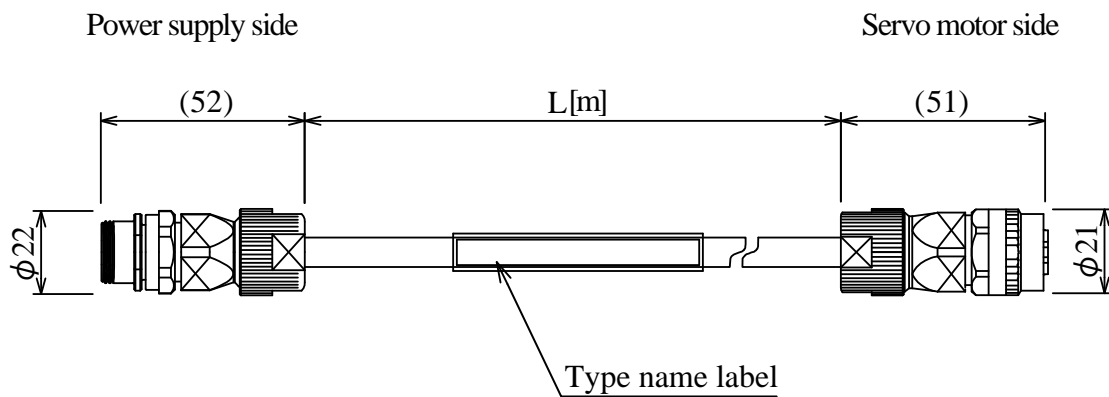
*2 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

9. STRUCTURAL DRAWING



10. OUTLINE DRAWING

[Unit : mm]



11. SYSTEM CONFIGURATION DIAGRAM

