

Specification
for
General purpose AC Servo
Long Bending Life Encoder cable

Type SC-J3JSCBL□M-■-H

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision				Drawn	Check	Design	Approved
A	31 Mar.,2017			<i>S. Kasahara</i>	<i>S. Kariya</i>	<i>M. Awamura</i>	<i>D. Takushima</i>
Send to				Date		Dwg	
				22 Mar.,2016		X903703D50052-E10A	
				Order			

1. SCOPE

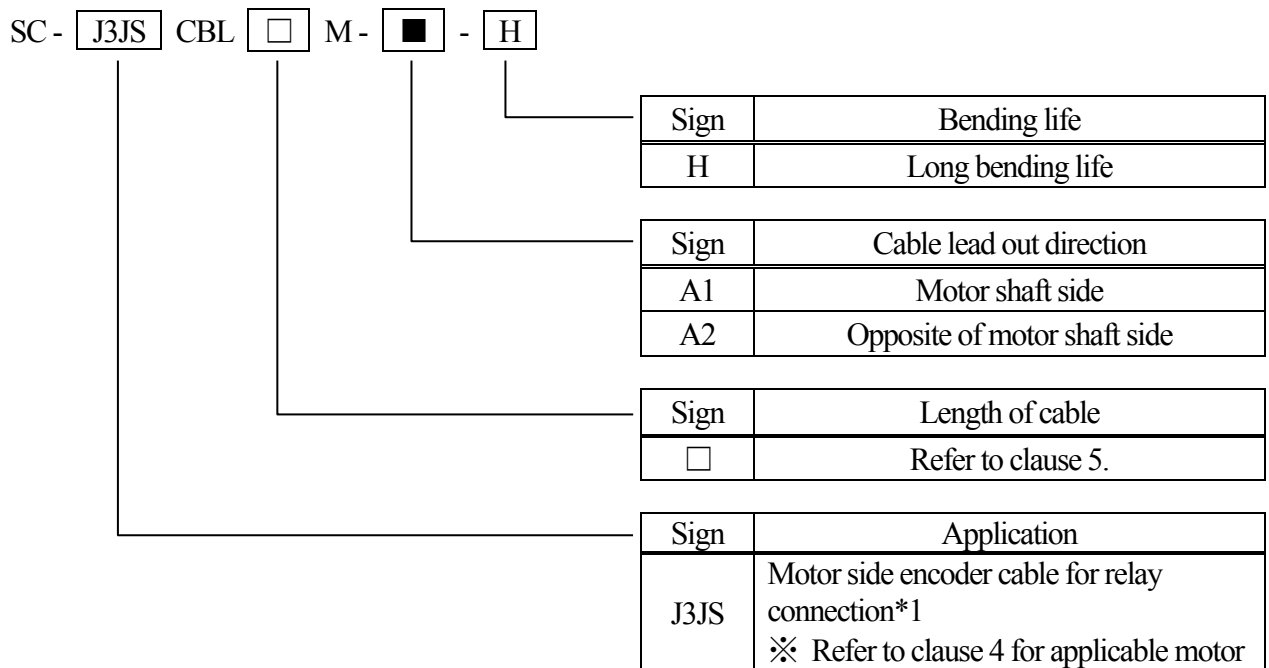
This specification covers the requirements for the General purpose AC Servo Long Bending Life Encoder cable.

• SC-J3JSCBL□M-■-H

※ This cable doesn'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 amplifier side encoder cable.
Refer to clause 6 for confirming the combination and cable length.

3. APPLICABLE STANDARDS

UL758 AWM STYLE 2517 (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 5m Specified by 1m unit

6. CABLE LENGTH FOR RELAY CONNECTION

Combination		Total cable length	
Amplifier side	Motor side		
SC-J3ENSCBL□M-L SC-J3ENSCBL□M-H	SC-J3JSCBL□M-■-H	1m or less	50m or less
		2~5m	40m or less
SC-J3ENSCBL□M-S	SC-J3JSCBL□M-■-H	4m or less	20m or less
SC-J3ENS4CBL□M-H	SC-J3JSCBL□M-■-H	1m or less	100m or less
		2~5m	80m or less

7. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-J3JSCBL□M-■-H ×××××××

- ※ □ is a figure from 1 to 5.
- ※ ■ is cable lead out direction from A1, A2.
- ※ ××××××× are the serial number for seven digits.

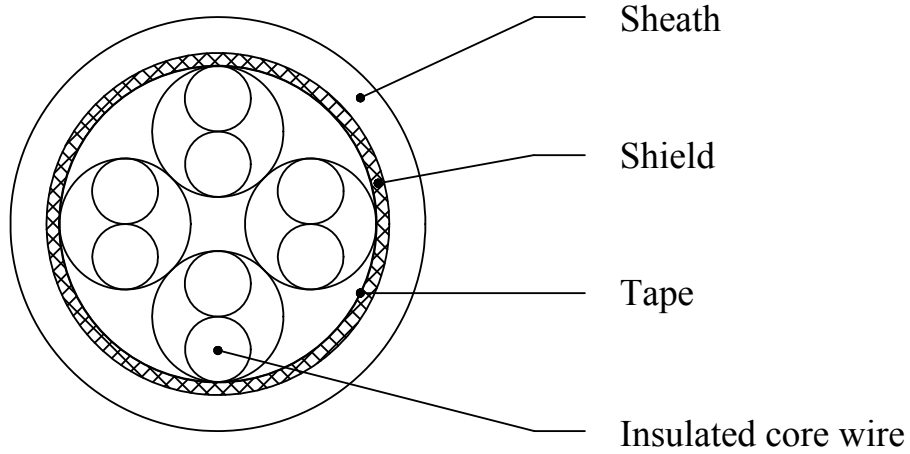
8. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification
Structure		—	AWG25×4P
Conductor	Conductor size	—	AWG25
	Outer diameter	mm	Approx. 0.58
Insulation	Material	—	ETFE
	Outer diameter	mm	Approx. 0.98
Twisted pair	Number of insulated core wire	—	2C
	Outer diameter	mm	2.0
Twisted	Number of pairs	—	4P
Shield	Material	—	Tin coated copper braid
Sheath	Material	—	Flame resisting PVC
	color	—	Black
Overall diameter		mm	Approx. 7.0
Electrical characteristics	Insulation resistance	MΩ · km	Over 100
	Withstand voltage	V/for 1min	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 45mm)
Flame Retardant		—	UL1581 VW-1
Connector	Servo amplifier side	Type	DDK Ltd. CM10-CR10P-M (Cable receptacle) or CMV1-CR10P-M2 (Cable receptacle)
		IP rating	IP67 ^{*2}
	Servo motor side	Type	Tyco Electronics Japan 2174053-1 (Micro motor connector)
		IP rating	IP65 ^{*2}

*1 This is the only test result, not guaranteed value. (The performance would be different depends on environment they are used.)

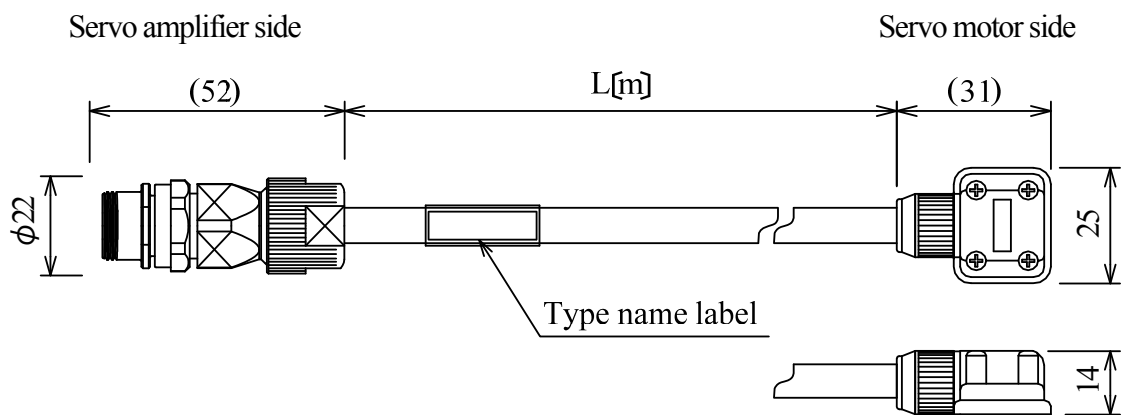
*2 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

9. STRUCTURAL DRAWING



10. OUTLINE DRAWING

[Unit : mm]



11. SYSTEM CONFIGURATION DIAGRAM

