

Specification
for
General purpose AC Servo
Encoder cable

Type SC-J3ENSJCBL□M-■-L

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision				Drawn	Check	Design	Approved
A	31 Mar.,2017			<i>N. Ishii</i>	<i>S. Kariya</i>	<i>M. Okumura</i>	<i>D. Tsubouchi</i>
B	2 Aug.,2018						
Send to				Date		Dwg	
				22 Mar.,2016		X903703D50052-E61B	
				Order			

1. SCOPE

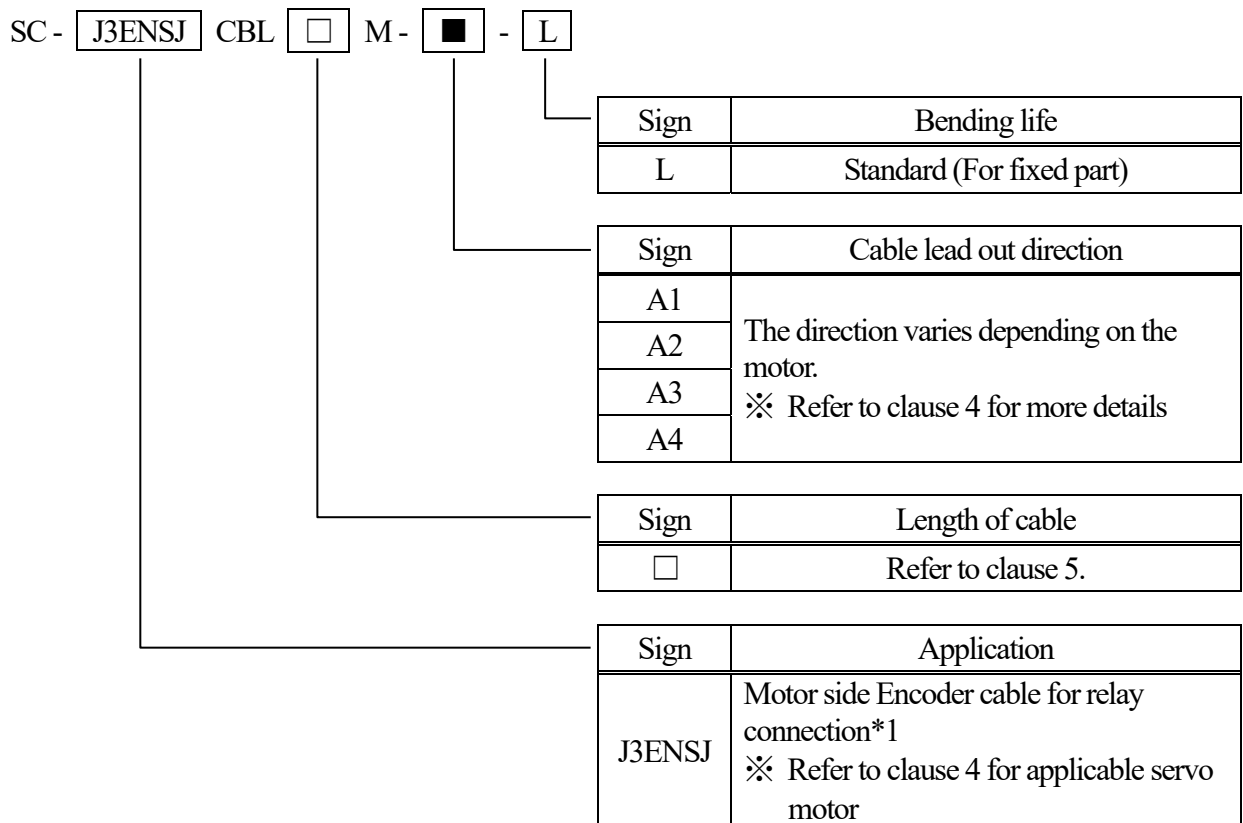
This specification covers the requirements for the General purpose AC Servo Encoder cable.

- SC-J3ENSJCBL□M-■-L

※ 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 20276 (wire part)

4. APPLICABLE SERVO MOTOR

Important matter	
Depending on the situation such as installation environment or combination of power supply cable and electromagnetic brake cable, there is a chance not to complete installation. Please make sure the cable lead out direction before your purchase.	
Applicable motor	Cable lead out direction (View from cable insertion direction)
HG-SR, HG-RR, HG-UR series motor HG-JR53, 73, 103, 153, 203, 353, 503, 703, 903, 534, 734, 1034, 1534, 2034, 3534, 5034, 7034, 9034 motor HF-SP, HC-LP, HC-RP, HC-UP series motor HA-LP502, 702 motor HF-JP53, 73, 103, 153, 203, 353, 503, 703, 903, 534, 734, 1034, 1534, 2034, 3534, 5034, 7034, 9034 motor	<p>Please confirm above mentioned important matter when selecting cable lead out direction.</p>
HA-LP series motor ※ Except for HA-LP502, HA-LP702	<p>Please confirm above mentioned important matter when selecting cable lead out direction.</p>

5. LENGTH OF CABLE

1 to 39m 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-J3ENSJCBL□M-■-L	40m or less
SC-J3ENSCBL□M-S		15m or less

7. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-J3ENSJCBL□M-■-L ×××××××

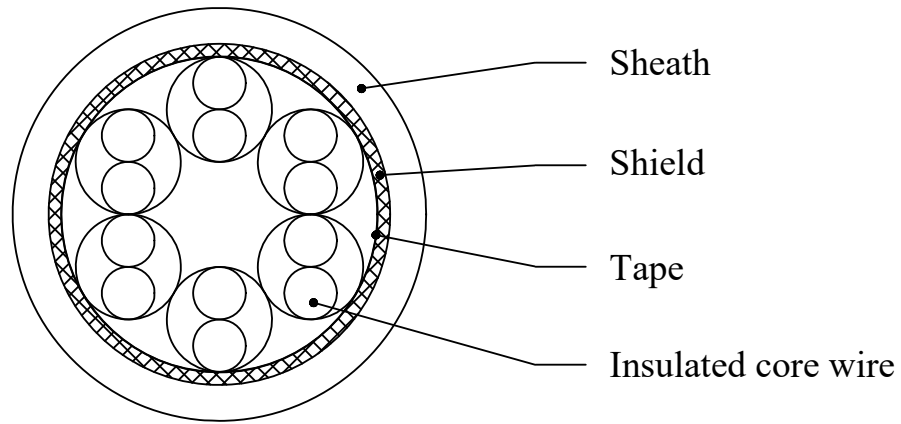
- ※ □ is a figure from 1 to 39.
- ※ ■ is cable lead out direction from A1, A2, A3, A4.
- ※ ××××××× are the serial number for seven digits.

8. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification
Structure		—	AWG23×6P
Conductor	Conductor size	—	AWG23
	Outer diameter	mm	Approx. 0.72
Insulation	Material	—	PVC
	Outer diameter	mm	Approx. 1.22
Twisted pair	Number of insulated core wire	—	2C
	Outer diameter	mm	Approx. 2.4
Twisted	Number of pairs	—	6P
Shield	Material	—	Tin coated copper braid
Sheath	Material	—	Flame resisting PVC
	color	—	Black
Overall diameter		mm	Approx. 8.2
Electrical characteristics	Insulation resistance	MΩ · km	Over 10
	Withstand voltage	V/for 1min	AC500
Operating temperature range		°C	-10~+60 (without condensation)
Minimum Bend Radius		mm	6 times the overall diameter
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*1
	Servo motor side	Type	DDK Ltd. CM10-AP10S-M (D6) (Angle plug) or CMV1-AP10S-M2 (Angle plug)
		IP rating	IP67*1

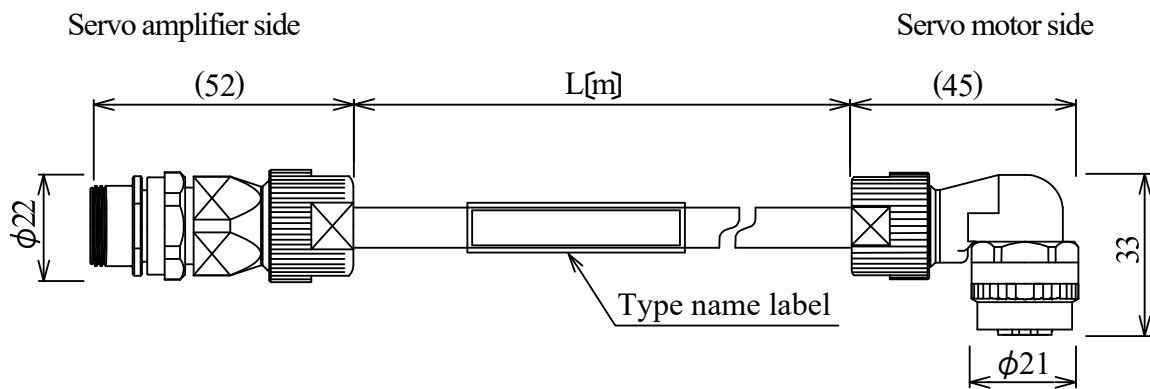
*1 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

9. STRUCTURAL DRAWING



10. OUTLINE DRAWING

[Unit : mm]



11. SYSTEM CONFIGURATION DIAGRAM

