

Specification
for
General purpose AC Servo
Encoder cable

Type SC-J3JSCBL □ M-■ -L

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision				Drawn	Check	Design	Approved
A	31 Mar.,2017			N. Ito	A. Ito	I. Minonaga	D. Subashina
B	21 Aug.,2019						
Send to				Date		Dwg	
				22 Mar.,2016		X903703D50052-E03B	
				Order			

1. SCOPE

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

- SC-J3JSCBL□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

SC - J3JS CBL □ M - ■ - L

L	Sign	Bending life
	L	Standard (For fixed part)
A1	Sign	Cable lead out direction
	A1	Motor shaft side
	A2	Opposite of motor shaft side
□	Sign	Length of cable
	□	Refer to clause 5.
J3JS	Sign	Application
	J3JS	Motor side encoder cable for relay connection*1
	※	Refer to clause 4 for applicable motor

*1 Please use it with amplifier side encoder cable.

Refer to clause 6 for confirming the combination and cable length.

3. APPLICABLE STANDARDS

Wire part : UL standard (UL 758 : AWM)

UL Style No.	Rated	
2464	80°C	300V

4. APPLICABLE SERVO MOTOR

Refer to MR-J4 APPLICABLE SERVO MOTOR TABLE "R9037020-010022-105".

5. LENGTH OF CABLE

0.3 or 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-■-L	1m or less	50m or less
		2~5m	40m or less
SC-J3ENSCBL□M-S	SC-J3JSCBL□M-■-L	4m or less	20m or less
SC-J3ENS4CBL□M-H	SC-J3JSCBL□M-■-L	1m or less	100m or less
		2~5m	80m or less

7. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-J3JSCBL□M-■-L ×××××××

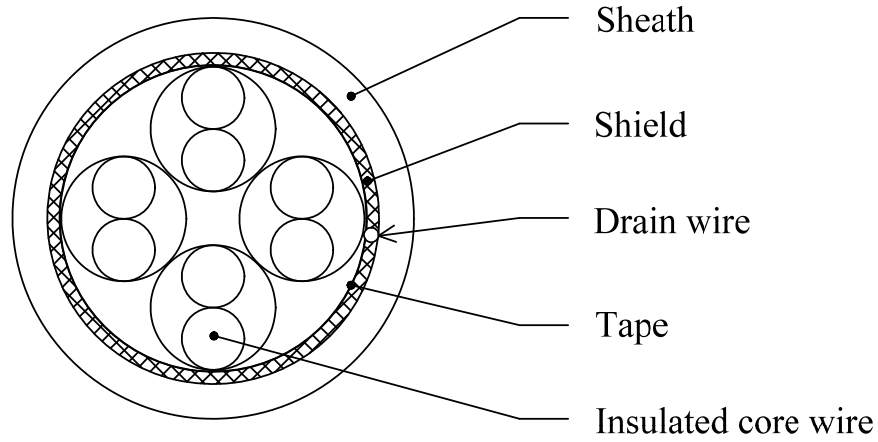
- ※ □ is a figure from 0.3 or 1 to 5.
- ※ ■ is cable lead out direction from A1, A2.
- ※ ××××××× are the serial number for seven digits.

8. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification
Structure		—	AWG24×4P
Conductor	Conductor size	—	AWG24
	Outer diameter	mm	Approx. 0.60
Insulation	Material	—	PVC
	Outer diameter	mm	Approx. 1.10
Twisted pair	Number of insulated core wire	—	2C
	Outer diameter	mm	2.2
Twisted	Number of pairs	—	4P
Drain wire			Tin coated copper
Shield	Material	—	Tin coated copper braid
Sheath	Material	—	Flame resisting PVC
	color	—	Black
Overall diameter		mm	Approx. 7.5
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	Tyco Electronics Japan GK. 2174053-1 (Micro motor connector)
		IP rating	IP65*1

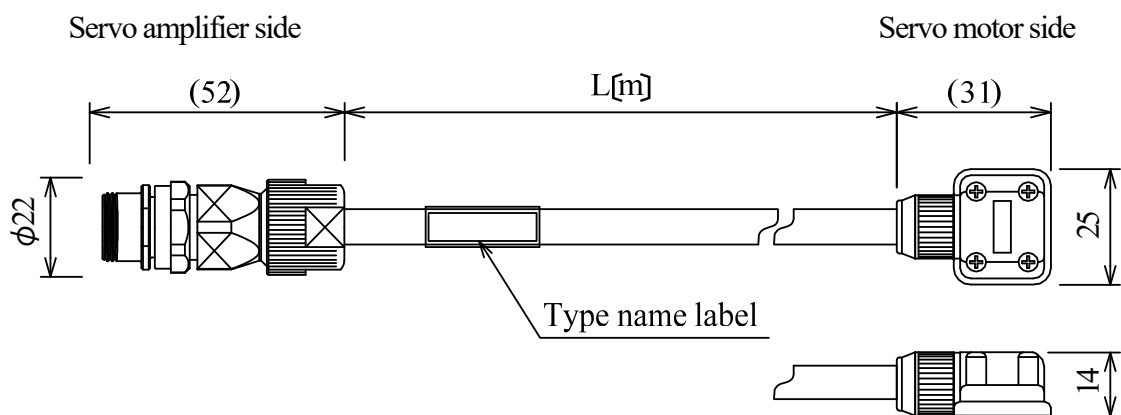
*1 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

9. STRUCTURAL DRAWING



10. OUTLINE DRAWING

[Unit : mm]



11. SYSTEM CONFIGURATION DIAGRAM

