

Specification
for
General purpose AC Servo
Long Bending Life Encoder cable

Type SC-J3ENCBL□M-■-H

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision				Drawn	Check	Design	Approved
A	22 Mar.,2016	D	2 Jun.,2021	<i>n. Ito</i>	<i>A. Kojima</i>	<i>T. Kawahara</i>	<i>D. Tsubushiro</i>
B	26 Mar.,2018						
C	21 Aug.,2019						
Send to				Date		Dwg	
				17 June,2013		X903703D50052-E07D	
				Order			

1. SCOPE

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

- SC-J3ENCBL□M-■-H

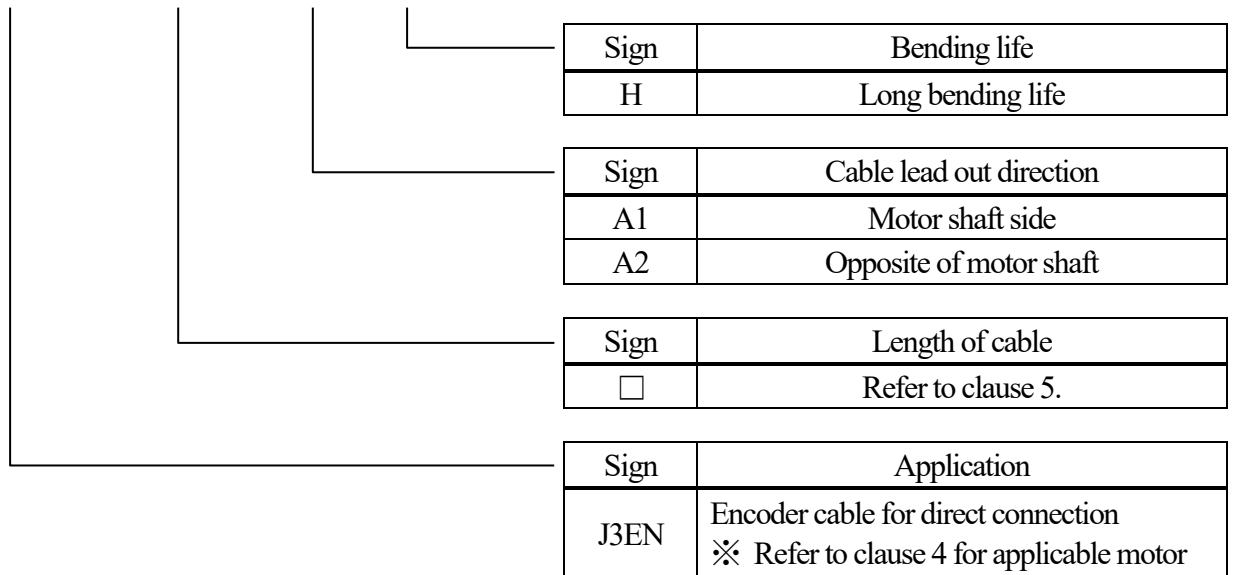
※ Please note that the product specifications described in this specification are subject to change without notice for improvement.

※ If you need copy exactly, please contact our Sales Department.

Copy exactly ... Products made in the same process, same parts

2. CABLE TYPE

SC - [J3EN] CBL [□] M - [■] - [H]



3. APPLICABLE STANDARDS

Wire part : UL standard (UL 758 : AWM)

UL Style No.	Rated	
20276	80°C	30V

(UL's Wiring Harnesses Traceability program provides traceability for this cable.)

- This cable doesn't include the toxic substances in RoHS.

4. APPLICABLE SERVO MOTOR

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

5. LENGTH OF CABLE

1 to 10m Specified by 1m unit

6. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-J3ENCBL□M-■-H ×××××××

※ □ 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

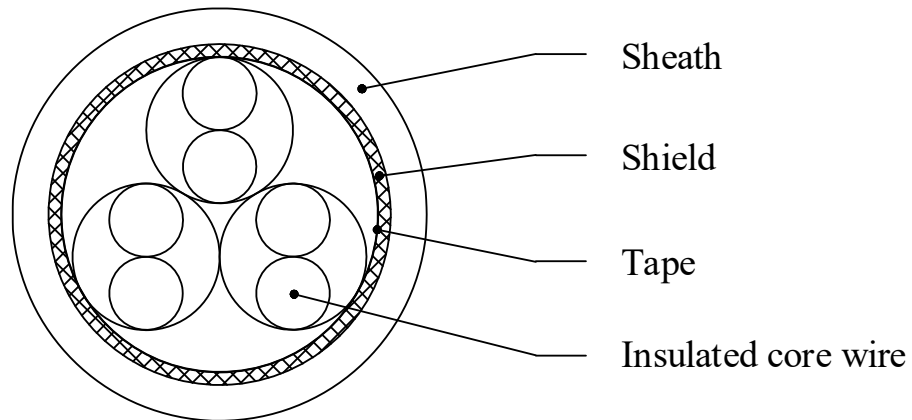
Item		Unit	Specification
Structure		—	AWG22×3P
Conductor	Conductor size	—	AWG22
	Outer diameter	mm	Approx. 0.8
Insulation	Material	—	ETFE
	Outer diameter	mm	Approx. 1.2
Twisted pair	Number of insulated core wire	—	2C
	Outer diameter	mm	Approx. 2.4
Twisted	Number of pairs	—	3P
Shield	Material	—	Tin coated copper braid
Sheath*3	Material	—	Flame resisting PVC
	color	—	Black
Overall diameter		mm	Approx. 7.2
Cable weight		kg/km	75
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: Minimum bend radius)
Flame Retardant		—	UL1581 VW-1
Connector	Servo amplifier side	Type	Molex Japan Co., Ltd. 54599-1016 (Connector set) or 3M Japan Limited. 36210-0100PL (Receptacle) 36310-3200-008 (Shell kit)
		IP rating	IP20*2
	Servo motor side	Type	Tyco Electronics Japan G.K. 2174053-1 (Micro motor connector)
		IP rating	IP65*2

*1 This is only the 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.

*3 Please note that the silk printing of the cable sheath varies depending on the manufacturer.

8. STRUCTURAL DRAWING



9. OUTLINE DRAWING

[Unit : mm]

