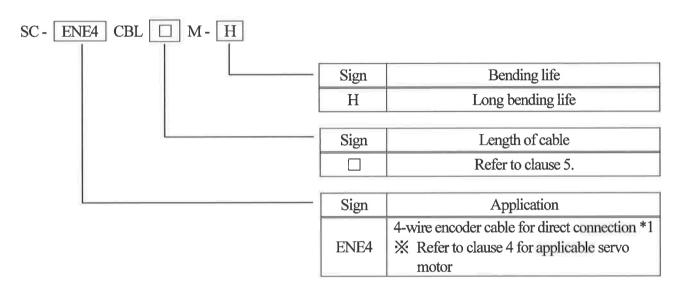
Specification for General purpose AC Servo Long Distance Encoder cable Type SC-ENE4CBL□M-H MITSUBISHI ELECTRIC SYSTEM & SERVICE CO.,LTD Note Approved Check Design Revision Drawn 2 September, 2015 n. Ishii & Faunemi M. Awamura H. Yomaguchi В 22 Mar.,2016 Dwg Send to Date 29 May,2012 Order X903703D50052-E17B

1. SCOPE

This specification covers the requirements for the General purpose AC Servo Lng Distance Encoder cable type SC-ENE4CBL 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 This cable is available in 4-wire type. Parameter setting is required to use the 4-wire type encoder cable. Refer to "SERVO AMPLIFIER INSTRUCTION MANUAL issued by Mitsubishi Electric Corporation" for more details.

3. APPLICABLE STANDARDS

UL758 AWM STYLE 20276 (wire part)

4. APPLICABLE SERVO MOTOR

HF-JP11K1M, 15K1M, 11K1M4, 15K1M4 motor

5. LENGTH OF CABLE

1 to 100m

Specified by 1m unit $(1\sim50\text{m})/5\text{m}$ unit $(55\sim100\text{m})$

6. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-ENE4CBL M-H ××××××

% \square is a figure from 1 to 100.

 $\times \times \times \times \times \times \times \times$ are the serial number for seven digits.

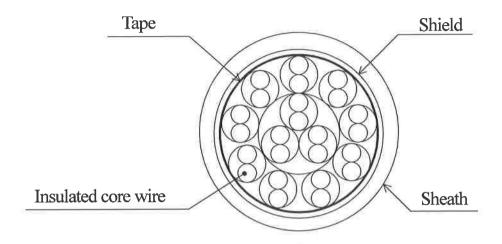
7. STRUCTURE AND CHARACTERISTICS

Item			Unit	Specification
Structure				AWG25×12P
C 1 - t -	Conductor size			AWG25
Conductor	Outer diameter		mm	Approx. 0.58
Insulation	Material		=	ETFE
	Outer diameter		mm	Approx. 0.88
Twisted pair	Number of insulated core wire		1=1	2C
	Outer diameter		mm	1.8
Twisted	Number of pairs (central layer)		ş—,	3P
	Number of pairs (the first layer)			9P
Shield	Material		=	Tin coated copper braid
Sheath	Material		2	Flame resisting PVC
	Color		·	Black
Overall diameter			mm	Approx. 8.9
Electrical characteristics	Insulation resistance		MΩ·km	Over 100
	Withstand voltage		V for1minute	AC500
Operating temperature range			$^{\circ}$ C	-10~+60 (without condensation)
Minimum Radius Bend			mm	Over 55
Bending Life			-	Over one million times*1 (Radius Bend 55mm)
Flame Retardant			-	UL1581 VW-1
Connector	Servo amplifier side	Туре	3M Japan 36210-0100PL (Receptacle) 36310-3200-008 (Shell kit)	
		IP rating	IP20*2	
	Servo motor side	Туре	DDK D/MS3106A20-29S (D190) (Plug) CE3057-12A-3-D (Cable Clamp)	
		IP rating	IP67*2	

^{*1} It is a test outcome, and not a guaranteed value. (The performance is different according to 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.

8. STRUCTURAL DRAWING



9. OUTLINE DRAWING

[Unit:mm]

