# Specification for General purpose AC Servo/ Sensor less servo Ultra Long Bending Life Power supply cable

Type SC-PWS1CBL□M-■-S

# MITSUBISHI ELECTRIC SYSTEM & SERVICE CO.,LTD

Note

Revision Drawn Check Design Approved

A 8 Jun., 2018

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Send to Date Dwg

27 Apr., 2016

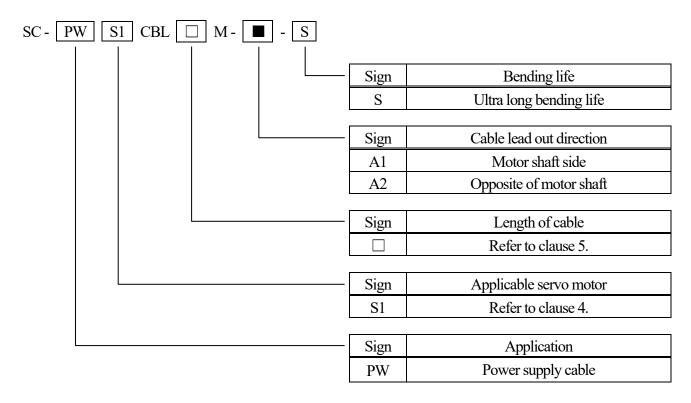
Order X903703D50052-F47A

### 1. SCOPE

This specification covers the requirements for the General purpose AC Servo / Sensor less servo Ultra Long Bending Life Power supply cable.

- · SC-PWS1CBL□M-■-S
- X The Products covered in this specification don'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



### 3. APPLICABLE STANDARDS

UL758 AWM STYLE 20921 (wire part)

### 4. APPLICABLE SERVO MOTOR

(1) General purpose AC servo

HG-KR, HG-MR series motor HF-KN, HF-KP, HF-MP series motor

(2) Sensor less servo

MM-GKR series motor

### 5. LENGTH OF CABLE

1 to 10m specified by 1m unit

### 6. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-	PWS1CBL□M-■-S ××××××			
*	$\square$ is a figure from 1 to 10.			
*	■ is cable lead out direction from A1, A2.			
*	$\times \times \times \times \times \times$ are the serial number for seven digits.			

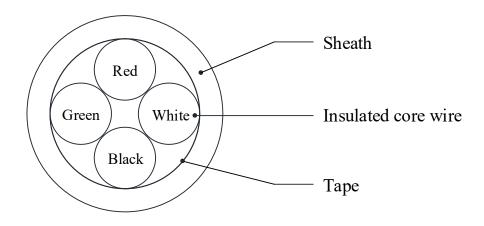
### 7. STRUCTURE AND CHARACTERISTICS

Item			Unit	Specification
Structure			_	AWG21×4C
Conductor	Conductor size		_	AWG21
Conductor	Outer diameter		mm	Approx. 1.00
Insulation	Material		_	ETFE
Insulation	Outer diameter		mm	Approx. 1.46
Twisted pair	Number of core wire	insulated		4C
Sheath	Material			High Elastic PVC
Sheam	color		_	Black
Overall diameter			mm	Approx. 6.3
Electrical	Insulation resistance		$M\Omega \cdot km$	Over 1000
characteristics	Withstand voltage		V/for 1min	AC1500
Operating temperature range			$^{\circ}\!\mathbb{C}$	$-10\sim+60$ (without condensation)
Minimum bend ra	dius		mm	6 times the overall diameter
Bending life			_	Over 10 million times*1 (Bend radius: Minimum bend radius)
Flame retardant			_	UL1581 VW-1
	Servo amplifier side/ Drive unit side		_	
Connector	Servo motor side	Туре	*	n Electronics Industry, Limited 4FT04SJ1-R (Angle plug)
		IP rating	IP65*2	

<sup>\*1</sup> It is a test outcome, and not a guaranteed value. (The performance is different according to customer's environment.)

<sup>\*2</sup> 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

Servo amplifier / Drive unit side

L[m]

200

Mark label

Type name label

Refer to the following table for mark label and insulation color.

Mark label	Insulation color
U	Red
V	White
W	Black
Е	Green