

Specification
for
General purpose AC Servo
Power supply cable

Type SC-PWC4JCBL□M-■-○L

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

Revision				Drawn	Check	Design	Approved
A	31 Mar.,2017			<i>N. Ito</i>	<i>S. Kanaya</i>	<i>Dr. Awamura</i>	<i>J. Sudoshima</i>
B	21 Apr.,2020						
Send to				Date		Dwg	
				27 Apr.,2016		X903703D50052-F26B	
				Order			

1. SCOPE

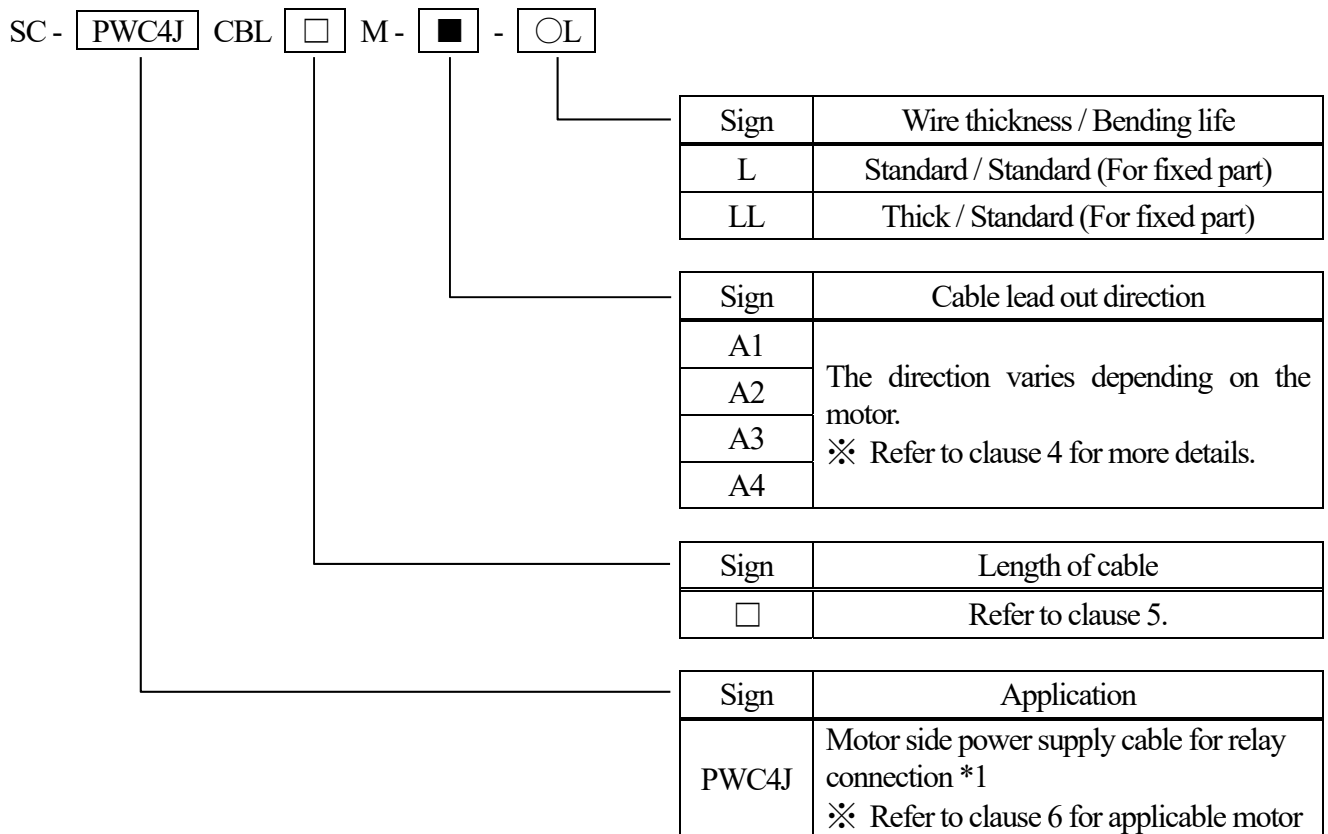
This specification covers the requirements for the General purpose AC Servo Power supply cable.

- SC-PWC4CBL□M-■-L
- SC-PWC4CBL□M-■-LL

※ 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



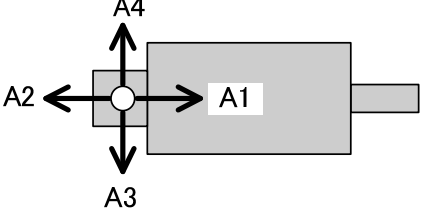
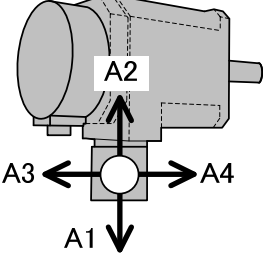
- * Please use it with amplifier side power supply cable.
Refer to clause 6 for confirming the combination and cable length.

3. APPLICABLE STANDARDS

Wire part : UL standard (UL 758 : AWM)

UL Style No.	Rated	
2501	105°C	600V

4. CABLE LEAD OUT DIRECTION

Applicable servo motor	Cable lead out direction (View from cable insertion direction)
HG-SR51, 52, 81, 102, 152, 524, 1024, 1524 motor HF-SP51, 52, 81, 102, 152, 524, 1024, 1524 motor	
HG-JR53, 73, 103, 153, 203, 534, 734, 1034, 1534, 2034, 3534, 5034 motor HF-JP53, 73, 103, 153, 203, 534, 734, 1034, 1534, 2034, 3534, 5034 motor	

(Note) Depending on the situation such as installation environment or combination of cables and connectors, there is a chance not to complete installation. (Even though it's mentioned above) Please make sure the cable lead out direction before your purchase.

5. LENGTH OF CABLE

1~50m Specified by 1m unit

6. CABLE LENGTH FOR RELAY CONNECTION

This is the relay connecting cable length when the amplifier side cable length is 10 m or less.

Please inquire separately for combinations other than the table below and relay connection cable length.

【Condition】 Amplifier side relay cable length : 10 m or less

Applicable motor	Combination		Total cable length
	Amplifier side	Motor side	
HG-SR51,52,524,1024 HG-JR53,534,734,1034 HF-SP51,52,81,524,1024 HF-JP53,534,734,1034	SC-PWC4CBL□M-ML SC-PWC4CBL□M-MH	SC-PWC4JCBL□M-■-L	50m or less
HG-SR102 HG-JR73,103 HF-SP102 HF-JP73,103	SC-PWC4CBL□M-ML SC-PWC4CBL□M-MH	SC-PWC4JCBL□M-■-L	40m or less
HG-SR81 (*1)	SC-PWC4CBL□M-ML	SC-PWC4JCBL□M-■-L	45m or less
	SC-PWC4CBL□M-MH	SC-PWC4JCBL□M-■-L	40m or less
HG-SR152 (*1)	SC-PWC4CBL□M-L	SC-PWC4JCBL□M-■-LL	40m or less
	SC-PWC4CBL□M-H	SC-PWC4JCBL□M-■-LL	35m or less
HF-SP152	SC-PWC4CBL□M-L SC-PWC4CBL□M-H	SC-PWC4JCBL□M-■-LL	45m or less
HG-SR1524 HF-SP1524	SC-PWC4CBL□M-L SC-PWC4CBL□M-H	SC-PWC4JCBL□M-■-L	50m or less
HG-JR1534,2034 HF-JP1534,2034	SC-PWC4CBL□M-L SC-PWC4CBL□M-H	SC-PWC4JCBL□M-■-LL	50m or less
HG-JR153,203 HF-JP153,203	SC-PWC4CBL□M-L SC-PWC4CBL□M-H	SC-PWC4JCBL□M-■-LL	30m or less
HG-JR3534 HF-JP3534 (*1)	SC-PWC4CBL□M-L	SC-PWC4JCBL□M-■-LL	45m or less
	SC-PWC4CBL□M-H	SC-PWC4JCBL□M-■-LL	40m or less
HG-JR5034 HF-JP5034	SC-PWC4CBL□M-LL SC-PWC4CBL□M-LH	SC-PWC4JCBL□M-■-LL	30m or less

*1 Total cable length varies depending on the bending life of amplifier side relay cable.

7. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-PWC4JCBL□M-■-○L ×××××××

- ※ □ is a figure from 1 to 50.
- ※ ■ is cable lead out direction from A1, A2, A3, A4.
- ※ ○ is wire thickness from none, L.
- ※ ××××××× are the serial number for seven digits.

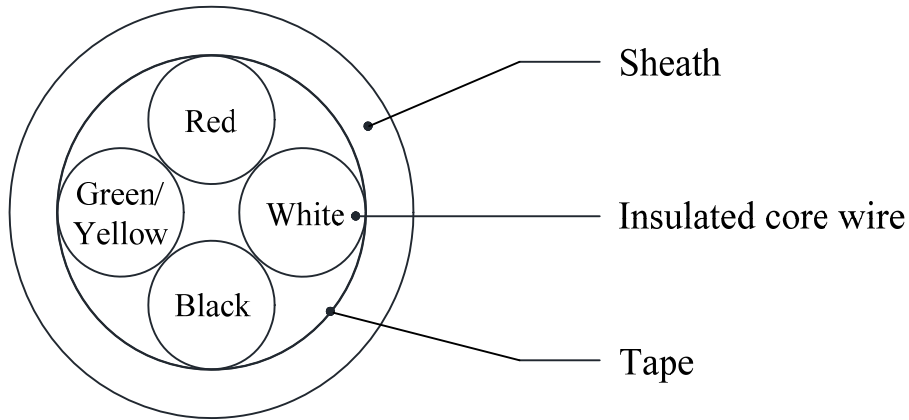
8. STRUCTURE AND CHARACTERISTICS

Item		Unit	Specification	
			L	LL
Structure		—	AWG14×4C	AWG12×4C
Conductor	Conductor size	—	AWG14	AWG12
	Outer diameter	mm	Approx. 1.92	Approx. 2.48
Insulation	Material	—	PVC	
	Outer diameter	mm	Approx. 3.62	Approx. 4.18
Twisted pair	Number of insulated core wire		4C	
Sheath	Material	—	Flame resisting PVC	
	Color	—	Black	
Overall diameter		mm	Approx.12.2	Approx. 13.6
Electrical characteristics	Insulation resistance	MΩ · km	Over 10	
	Withstand voltage	V for 1minute	AC2000*2	
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. D/MS3101A18-10P (D263) (Cable receptacle) CE3057-10A-1-D (Waterproof cable clamp) CE02-18BS-S-D (Waterproof back shell)	
		IP rating	IP67*1	
	Servo motor side	Type	DDK Ltd. CE05-8A18-10SD-D-BAS (Angle plug) CE3057-10A-1-D (Waterproof cable clamp)	
		IP rating	IP67*1	

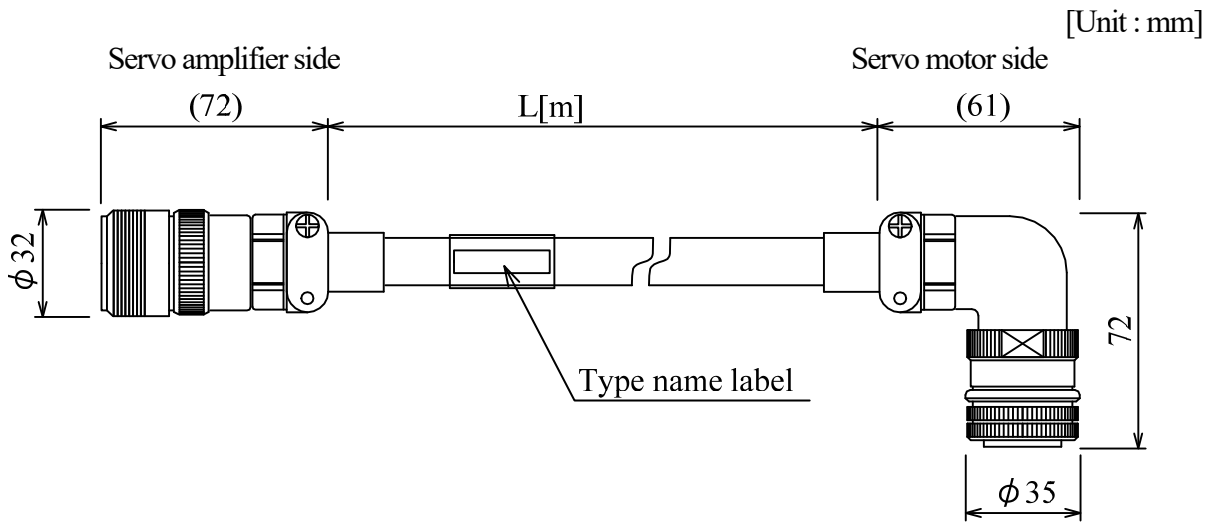
*1 The IP rating indicated is for the connector's protection against ingress of dust and water when coupled to a servo amplifier/servo motor. If the IP rating of the servo amplifier/servo motor differs from that of these connectors, overall IP rating depends on the lowest of all.

*2 In addition, the cable material alone is tested for a withstand voltage of 2000V / 5 minutes.

9. STRUCTURAL DRAWING



10. OUTLINE DRAWING



11. SYSTEM CONFIGURATION DIAGRAM

