

Specification
for
General purpose AC Servo
Long Bending Life Power supply cable

Type SC-PWS4CBL□M-LH

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

| Revision | | | | | | | | Drawn | Check | Design | Approved |
|----------|--|--|--|--|--|--|--|-----------------|-----------------|-------------------|----------------------|
| | | | | | | | | <i>N. Ishii</i> | <i>S. Kaiya</i> | <i>M. Asumura</i> | <i>S. Tsuboshima</i> |
| | | | | | | | | | | | |
| Send to | | | | | | | | Date | | Dwg | |
| | | | | | | | | 27 Apr.,2016 | | X903703D50052-F41 | |
| | | | | | | | | Order | | | |
| | | | | | | | | | | | |

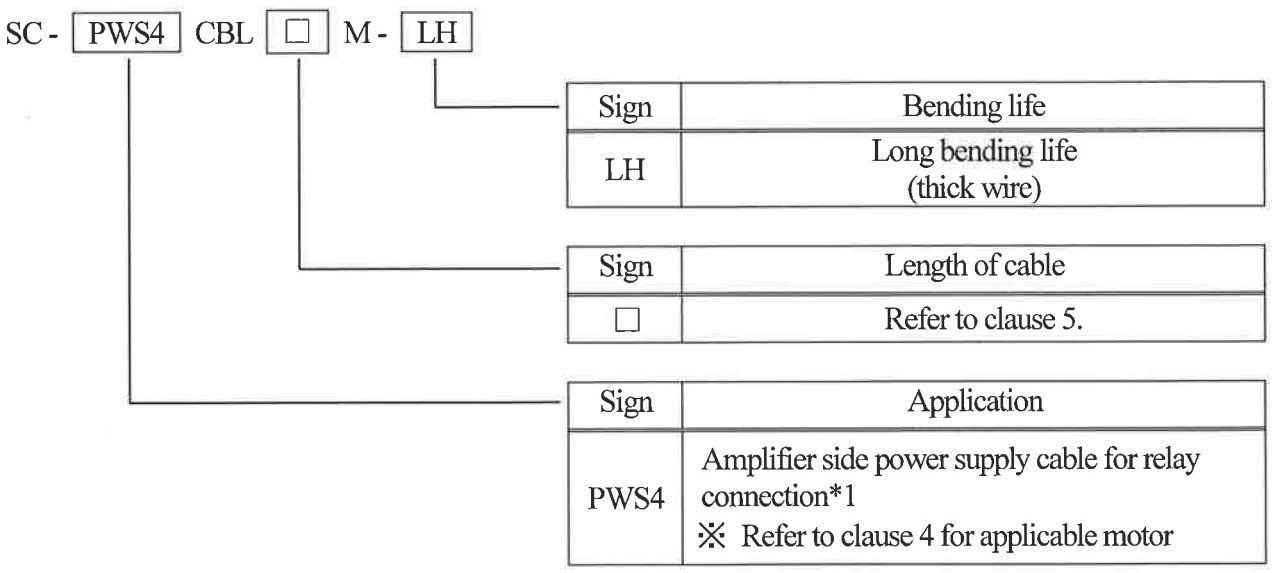
1. SCOPE

This specification covers the requirements for the General purpose AC Servo Long Bending Life Power supply cable type SC-PWS4CBL□M-LH.

※ 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



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

(Note) This cable doesn't have clamps for fixture. Please use cable ties or alternatives which can fix cable part; otherwise it might put too much stress on cables and cause disconnection.

3. APPLICABLE STANDARDS

UL758 AWM STYLE 2586 (wire part)

4. APPLICABLE SERVO MOTOR

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

5. LENGTH OF CABLE

1 to 50m Specified by 1m unit

6. CABLE LENGTH FOR RELAY CONNECTION

| Motor type name | Combination | | Total cable length |
|---|-----------------|-------------------|--------------------|
| | Amplifier side | Motor side | |
| HG-KR/MR 053,13,23,43 HF-KN/KP/MP 053,13,23,43 | SC-PWS4CBL□M-LH | SC-PWS4JCBL□M-■-L | 50m or less |
| | | SC-PWS4JCBL□M-■-H | |
| HG-KR73 HF-KP73 | SC-PWS4CBL□M-LH | SC-PWS4JCBL□M-■-S | 40m or less |
| | | SC-PWS4JCBL□M-■-L | 5m or less |
| | | SC-PWS4JCBL□M-■-H | |
| HG-MR73 HF-MP73 | SC-PWS4CBL□M-LH | SC-PWS4JCBL□M-■-S | 25m or less |
| | | SC-PWS4JCBL□M-■-L | 15m or less |
| | | SC-PWS4JCBL□M-■-H | 25m or less |
| HG-MR73 HF-MP73 | SC-PWS4CBL□M-LH | SC-PWS4JCBL□M-■-L | 25m or less |
| | | SC-PWS4JCBL□M-■-H | 20m or less |
| | | SC-PWS4JCBL□M-■-S | 15m or less |

7. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-PWS4CBL□M-LH ×××××××

※ □ is a figure from 1 to 50.

※ ××××××× are the serial number for seven digits.

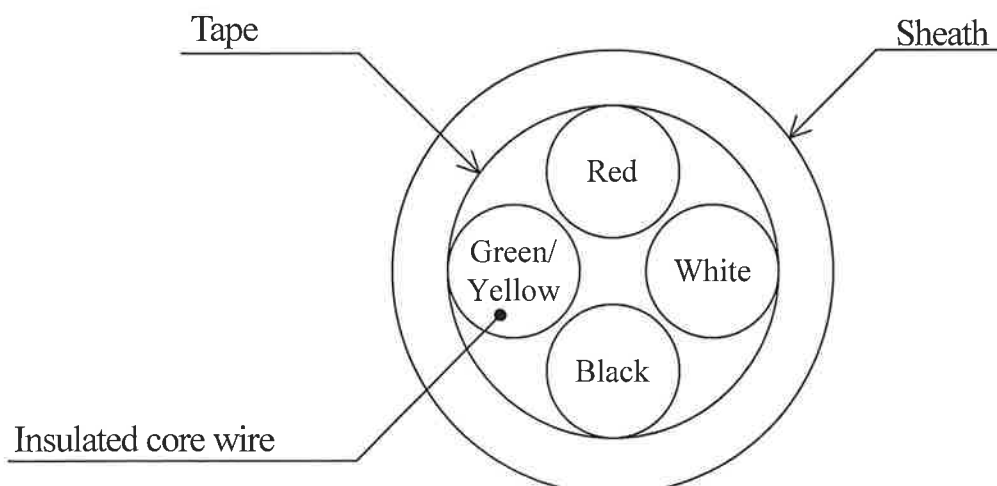
8. STRUCTURE AND CHARACTERISTICS

| Item | | Unit | Specification |
|-----------------------------|-------------------------------|------------|---|
| Structure | | — | AWG16×4C |
| Conductor | Conductor size | — | AWG16 |
| | Outer diameter | mm | Approx. 1.75 |
| Insulation | Material | — | ETFE |
| | Outer diameter | mm | Approx. 2.55 |
| Twisted pair | Number of insulated core wire | — | 4C |
| Sheath | Material | — | Flame resisting PVC |
| | color | — | Black |
| Overall diameter | | mm | Approx. 8.3 |
| Electrical characteristics | Insulation resistance | MΩ · km | Over 100 |
| | Withstand voltage | V/for 1min | AC1500 |
| Operating temperature range | | °C | -10~+60 (without condensation) |
| Minimum Bend Radius | | mm | Over 50 |
| Bending life | | — | Over 1 million times ^{*1} (bend radius: 50mm) |
| Flame Retardant | | — | UL1581 VW-1 |
| Connector | Servo amplifier side | | — |
| | Servo motor side | Type | Molex 5559-04P-210 (Plug housing) |
| | | IP rating | IP20 ^{*2} |

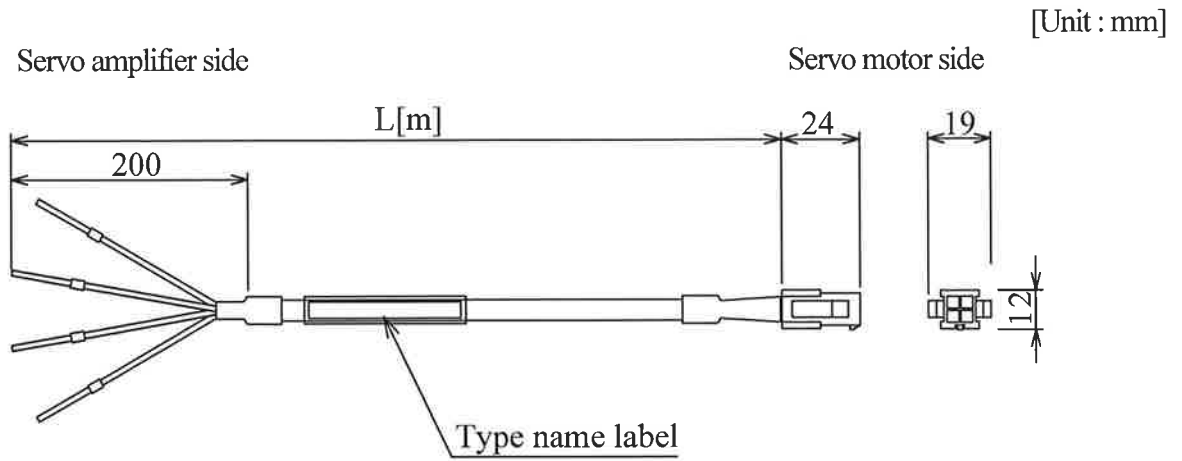
*1 It is a test outcome, and not a guaranteed value. (The performance is different according to customer's environment.)

*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.

9. STRUCTURAL DRAWING



10. OUTLINE DRAWING



11. SYSTEM CONFIGURATION DIAGRAM

