

Specification
for
General purpose AC Servo
Power supply cable

Type SC-PWS5JCBL□M-■-L

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO.,LTD

Note

| Revision | | | | Drawn | Check | Design | Approved |
|----------|--------------|--|--|---------------|------------------|--------------------|---------------------|
| A | 23 Apr.,2020 | | | <i>N. Ito</i> | <i>S. Kariya</i> | <i>T. Kasahara</i> | <i>D. Fukushima</i> |
| B | 11 Jul.,2022 | | | | | | |
| | | | | | | | |
| Send to | | | | Date | | Dwg | |
| | | | | 27 Apr.,2016 | | X903703D50052-F24B | |
| | | | | Order | | | |
| | | | | | | | |

1. SCOPE

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

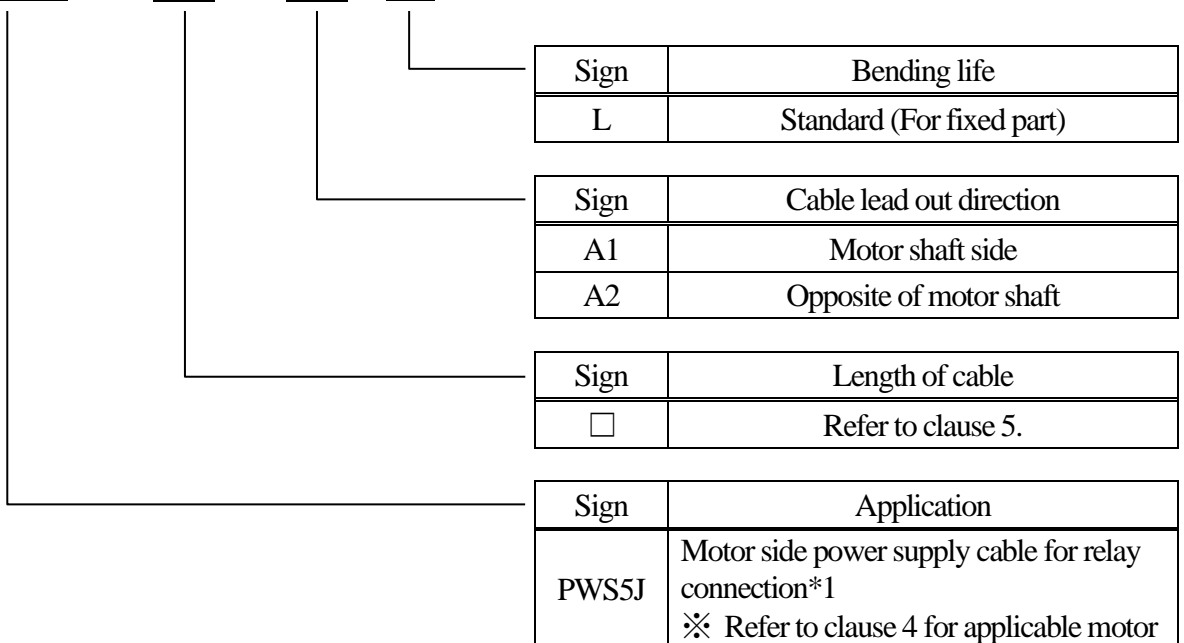
- SC-PWS5JCBL□M-■-L

※ 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

SC - PWS5J CBL □ M - ■ - L



*1 This cable cannot be used alone. Please refer to the specifications below.

| | Specification type name | Drawing number | Bending life |
|----------------------|-------------------------|-------------------|---------------------------|
| Servo amplifier side | SC-PWS5CBL□M-LL | X903703D50052-F23 | Standard (For fixed part) |
| | SC-PWS5CBL□M-LH | X903703D50052-F43 | Long bending life |

Refer to clause 6 for confirming the combination and cable length.

3. APPLICABLE STANDARDS

Wire part : UL standard (UL13 PLCC CL3)

| UL Style No. | Rated | |
|--------------|-------|------|
| 2517 | 105°C | 300V |

4. APPLICABLE SERVO MOTOR

HG-KR, HG-MR series motor

HF-KN, HF-KP, HF-MP series motor

5. LENGTH OF CABLE

1 to 5m Specified by 1m unit

※It is a cable length that can be manufactured.

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-PWS5CBL□M-LL SC-PWS5CBL□M-LH | SC-PWS5JCBL□M-■-L | 50m or less |
| HG-KR73 HF-KP73 | SC-PWS5CBL□M-LL SC-PWS5CBL□M-LH | SC-PWS5JCBL□M-■-L | 5m or less 30m or less 25m or less |
| HG-MR73 HF-MP73 | SC-PWS5CBL□M-LL SC-PWS5CBL□M-LH | SC-PWS5JCBL□M-■-L | 25m or less |

7. EXAMPLE OF PRINTING CABLE TYPE NAME

SC-PWS5JCBL□M-■-L ×××××××

※ □ is a figure from 1 to 5.

※ ■ is cable lead out direction from A1, A2.

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

8. STRUCTURE AND CHARACTERISTICS

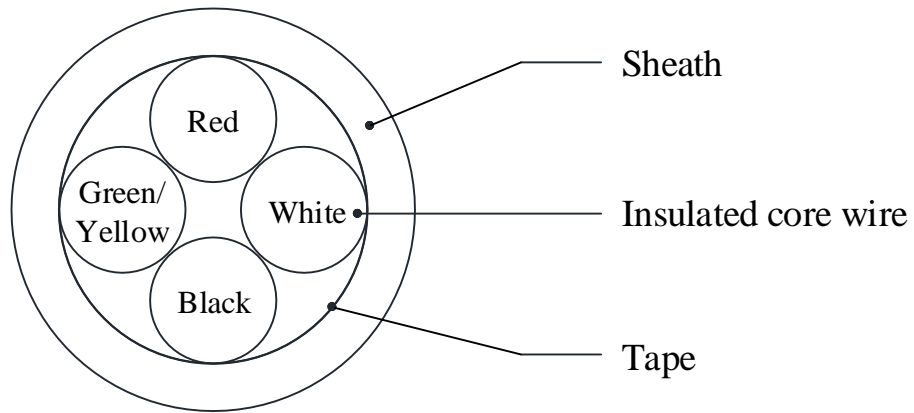
| Item | | Unit | Specification |
|-----------------------------|-------------------------------|------------|--|
| Structure | | — | AWG18×4C |
| Conductor | Conductor size | — | AWG18 |
| | Outer diameter | mm | Approx. 1.3 |
| Insulation | Material | — | ETFE |
| | Outer diameter | mm | Approx. 1.8 |
| Twisted pair | Number of insulated core wire | — | 4C |
| Sheath | Material | — | Flame resisting PVC |
| | color | — | Black |
| Overall diameter | | mm | Approx. 6.2 |
| Cable weight | | kg/km | 65 |
| Electrical characteristics | Insulation resistance | MΩ · km | Over 100 |
| | Withstand voltage | V/for 1min | AC1500 ^{*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 | Hirose Electric Co., Ltd. RM15WTPZ-4P (71) or RM15WTPZ-4P (76) ^{*3} (Straight plug) JR13WCCA-6 (72) (Cord clamp) |
| | | IP rating | IP67 ^{*1} |
| | Servo motor side | Type | Japan Aviation Electronics Industry, Limited KN4FT04SJ1-R (Angle plug) |
| | | IP rating | IP65 ^{*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.

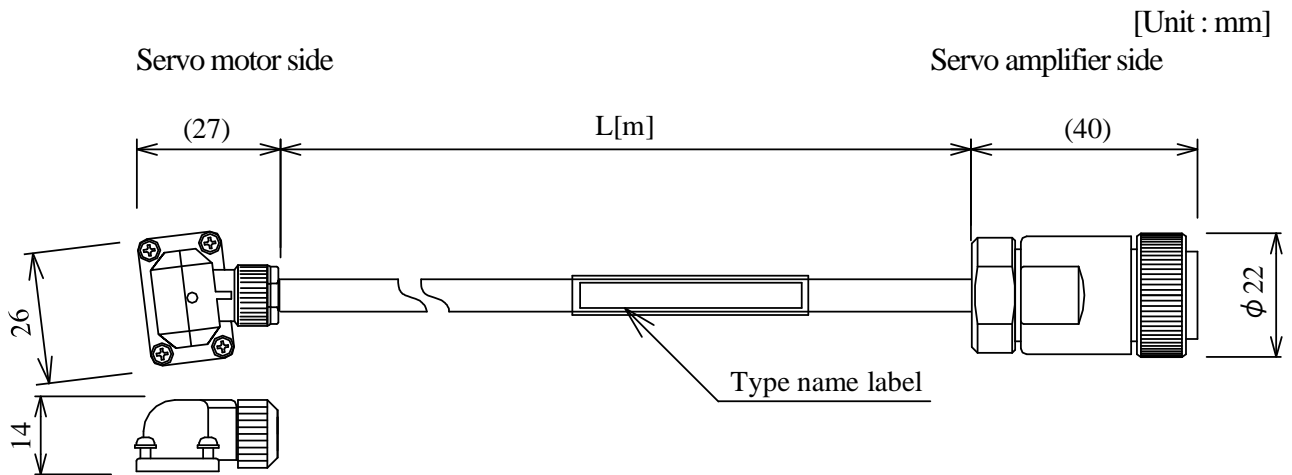
*2 In addition, the cable material alone is tested for a withstand voltage of 2000V / 5 minutes.

*3 From May 2022 production, we will switch from "RM15WTPZ-4P (71)" to "RM15WTPZ-4P (76)". Switching does not affect function and performance.

9. STRUCTURAL DRAWING



10. OUTLINE DRAWING



11. SYSTEM CONFIGURATION DIAGRAM

