

**M23 servo cable**

specification: 6FX8002-5CA15-1AG0

Power cable for SINAMICS S120 and Motors with M23 connection

The resistance to aggressive media should be individually tested for your application. Further details on request.

Female straight – male straight

M23 – M23, 6-pole

4-pole used

shielded

without brake wires

without cable sleeves

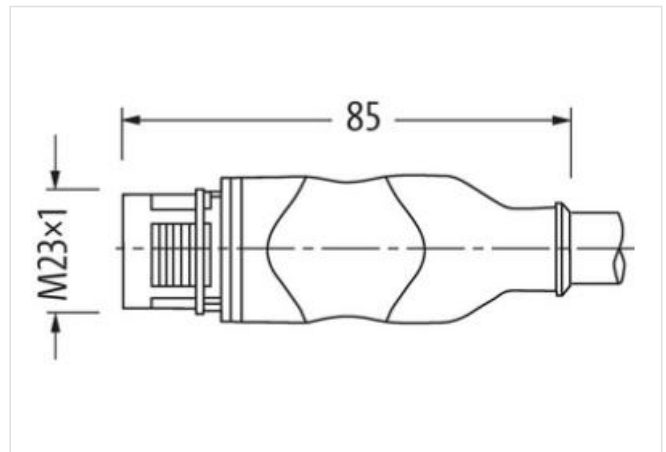
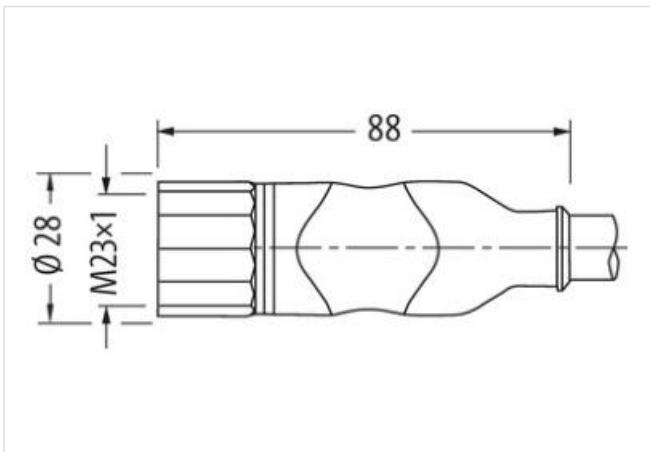
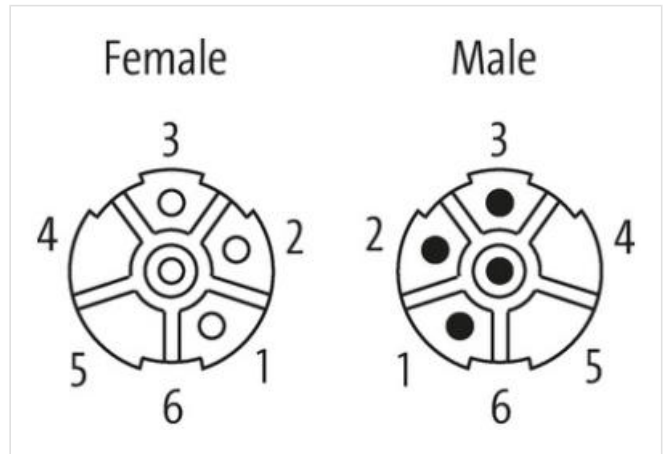
Further cable lengths on request.

Plastic housings with good resistance against chemicals and oils.

Power cores: 12 A (1.5 mm<sup>2</sup>), 15 A (2.5 mm<sup>2</sup>)

[Link to Product](#)

**Illustration**



Product may differ from Image

|                   |      |
|-------------------|------|
| Cable length      | 6 m  |
| <b>Side 1</b>     |      |
| Tightening torque | 2 Nm |

|   |   |
|---|---|
| Family construction form                        | M23   |
| Thread  | M23 x 1   |
| suitable for corrugated tube (internal Ø)       | 16 mm   |
| Width across flats                              | SW27  |
| <b>Side 2</b>                                   |   |
| Family construction form                        | M23   |
| suitable for corrugated tube (internal Ø)       | 23 mm   |
| <b>Commercial data</b>                          |   |
| ECLASS-6.0                                      | 27279218  |
| ECLASS-6.1                                      | 27279218  |
| ECLASS-7.0                                      | 27279218  |
| ECLASS-8.0                                      | 27279218  |
| ECLASS-9.0                                      | 27060327  |
| ECLASS-10.1                                     | 27060311  |
| ECLASS-11.1                                     | 27060311  |
| ECLASS-12.0                                     | 27060327  |
| ETIM-5.0  | EC001855  |
| customs tariff number                           | 85444290  |
| GTIN  | 4048879906371   |
| Packaging unit                                  | 1   |
| <b>Electrical data   Supply</b>                 |   |
| Operating voltage AC max.                       | 630 V   |
| Operating voltage DC max.                       | 630 V   |
| <b>Device protection   Electrical</b>           |   |
| Degree of protection (EN IEC 60529)             | IP65, IP67  |
| Additional condition protection degree          | inserted, screwed   |
| Pollution Degree                                | 3   |
| Rated surge voltage                             | 6 kV  |
| Material group (IEC 60664-1)                    | I   |
| <b>Mechanical data   Material data</b>          |   |
| Coating locking                                 | nickel plated   |
| Material housing                                | PUR   |
| Locking material                                | Brass   |
| <b>Mechanical data   Mounting data</b>          |   |
| Mounting method                                 | inserted, screwed, Shaking protection   |
| <b>Environmental characteristics   Climatic</b> |   |
| Operating temperature min.                      | -25 °C  |
| Operating temperature max.                      | 85 °C   |
| Additional condition temperature range          | depending on cable quality  |
| <b>Important installation notes</b>             |   |
| Note on strain relief                           | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.   |
| Note on bending radius                          | <b>Attention:</b> Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces. |
| <b>Installation   Cable</b>                     |   |
| wire arrangement                                | black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow  |
| Cable identification                            | 857   |
| Jacket Color                                    | orange  |
| Type of Certificate                             | cURus   |
| Amount stranding                                | 1   |
| Stranding                                       | 4 wires with Filler twisted   |

|   |  |
|---|--|
| Cable shielding (type)                                    | copper braid, tinned                                       |
| Cable shielding (coverage)                                | 85 %   |
| Banding   | Fiber tape, Fleece   |
| Filler  | yes  |
| wire arrangement  | black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow |
| Cable weight  | 201,3 g/m  |
| Material jacket   | TMPU   |
| Freedom from ingredients (jacket)                         | lead-free, CFC-free, halogen-free, silicone-free           |
| Outer-diameter (jacket)                                   | 10,2 mm  |
| Tolerance outer diameter (sheath)                         | ± 5 %  |
| Material wire insulation (Power)                          | TPM  |
| Outer diameter wire insulation (Power)                    | 3,1 mm   |
| Tolerance outer diameter wire insulation (Power)          | ±5 %   |
| Ingredient freeness wire insulation (Power)               | lead-free, CFC-free, halogen-free, silicone-free           |
| Printing colour wire insulation (Power)                   | white (isolation black)                                    |
| Amount wires (Power)                                      | 4  |
| Amount strands wire (Power)                               | 140  |
| Diameter of single wires (Power)                          | 0,15 mm  |
| Wire conductor cross section (Power)                      | 2,5 mm <sup>2</sup>  |
| Material conductor wire (Power)                           | Stranded copper wire, bare                                 |
| Conductor type wire (Power)                               | strand class 6   |
| Max. rated voltage (conductor - conductor)                | 1000 V   |
| Max. rated voltage (conductor - ground)                   | 600 V  |
| Current load capacity (standard)                          | to DIN VDE 0298-4  |
| Current carrying capacity min. wire (Power)               | 20,8 A   |
| Electrical resistance coating wire (Power)                | 8 Ω/km @20 °C  |
| AC withstand voltage (wire - wire)                        | 4 kV @ 300 s   |
| Electrical capacity line constant (wire - wire)           | 90000 pF/km  |
| Electrical capacity line constant (wire - shield)         | 160000 pF/km   |
| Power frequency withstand voltage (wire - jacket)         | 4 kV @ 300 s   |
| AC withstand voltage (wire - shield)                      | 4 kV @ 300 s   |
| Isolation resistance                                      | 2500 MΩ × km   |
| Electrical capacity line constant (wire - shield) (power) | 200000 pF/km   |
| Electrical capacity line constant (wire - wire) (power)   | 120000 pF/km   |
| AC withstand voltage power (wire - shield)                | 4 kV @ 300 s   |
| Power frequency withstand voltage power (wire - jacket)   | 4 kV @ 300 s   |
| AC withstand voltage power (wire - wire)                  | 4 kV @ 300 s   |
| Min. operating temperature (static)                       | -30 °C   |
| Max. operating temperature (fixed)                        | 80 °C  |
| Operating temperature min. (dynamic)                      | -30 °C   |
| Operating temperature max. (dynamic)                      | 80 °C  |
| Flame resistance  | UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090        |
| chemical resistance                                       | Good, application-related testing                          |
| Gasoline resistance                                       | Good, application-related testing                          |
| Oil resistance  | DIN EN 60811-404   Good, application-related testing       |
| Bending radius (fixed)                                    | 4 × Outer diameter   |
| Bending radius (dynamic)                                  | 7,5 × Outer diameter                                       |
| No. of bending cycles (C-track)                           | 10 Mio. @ 25 °C  |
| Traversing distance (C-track)                             | 50 m @ 25 °C   horizontal                                  |
| Travel speed (C-track)                                    | 5 m/s @ 25 °C  |

Torsion stress

$\pm 30 \text{ }^\circ/\text{m}$