

## M23 SERVO CABLE

specification: 6FX8002-5DG01-1CG5

Art.No.: 7000-PS202-8212650

Weight: 6.214 kg

Country of origin: DE

Model designation: M6FX8002-5DG01-1CG5

Female straight

M23, 6-pole

shielded

Power cable with brake wires for SINAMICS S120 and motors with M23 connection and holding brake

Mounting bracket

without cable sleeves

Further cable lengths on request.

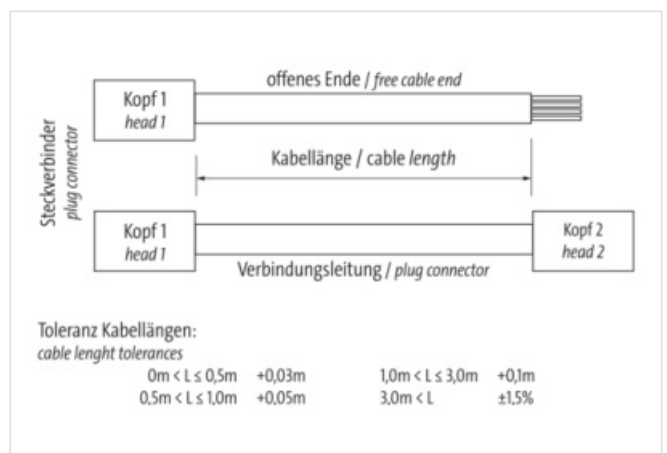
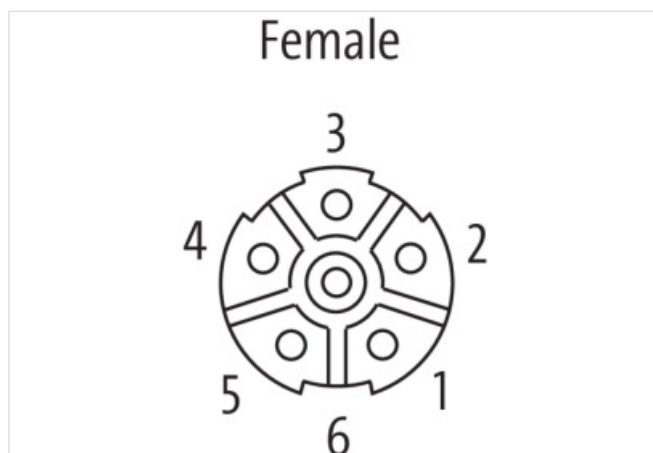
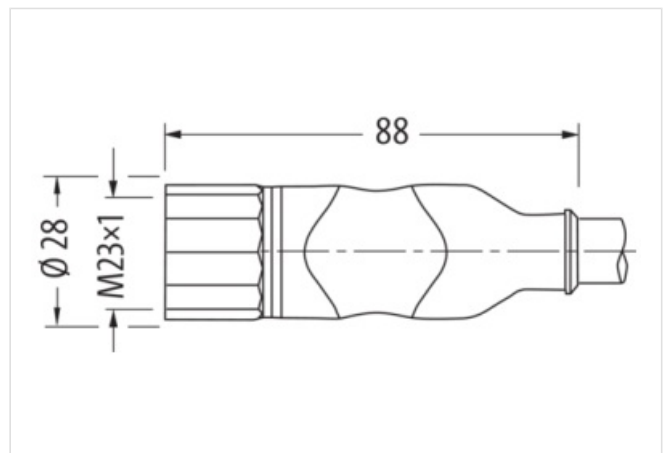
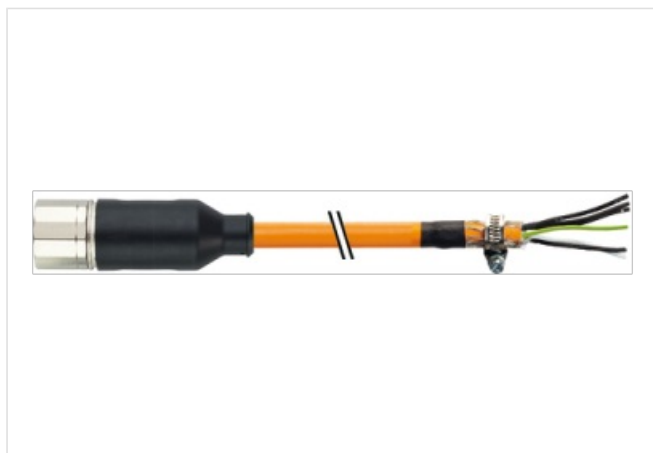
Plastic housings with good resistance against chemicals and oils.

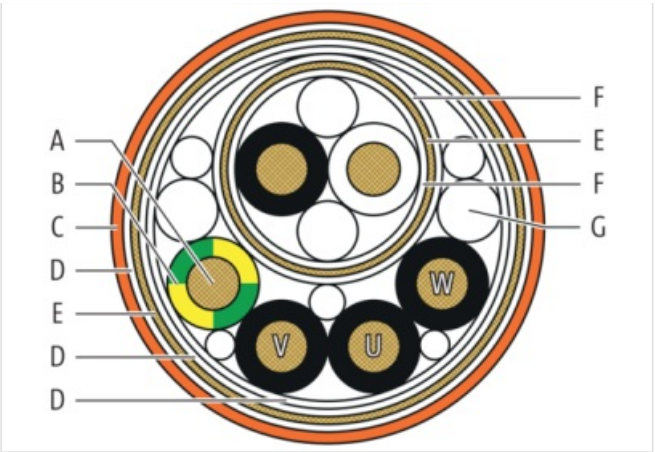
The resistance to aggressive media should be individually tested for your application. Further details on request.

Power cores: 12 A (1.5 mm<sup>2</sup>), 15 A (2.5 mm<sup>2</sup>); brake cores: 5 A (1.5 mm<sup>2</sup>)

### [Link to Product](#)

#### Illustration





Product may differ from Image



| Header                                    |   |
|---|---|
| Material short text                       | M6FX8002-5DG01-1CG5   |
| Cable length                              | 26,50 m   |
| Side 1                                    |   |
| Family construction form                  | M23   |
| Threaded hole                             | M23 x 1   |
| Tightening torque                         | 2 Nm  |
| Width across flats                        | SW27  |
| suitable for corrugated tube (internal Ø) | 16 mm   |
| Commercial data                           |   |
| URL Webshop                               | <a href="https://shop.murrelektronik.com/7000-PS202-8212650">https://shop.murrelektronik.com/7000-PS202-8212650</a> |
| GTIN                                      | 4048879684415   |
| ECLASS-6.0                                | 27279218  |
| ECLASS-6.1                                | 27279218  |
| ECLASS-7.0                                | 27279218  |
| ECLASS-7.1                                | 27279218  |
| ECLASS-8.0                                | 27279218  |
| ECLASS-8.1                                | 27279218  |
| ECLASS-9.0                                | 27060327  |
| ECLASS-9.1                                | 27060311  |
| ECLASS-10.0.1                             | 27060311  |
| ECLASS-10.1                               | 27060311  |
| ECLASS-11.0                               | 27060311  |
| ECLASS-11.1                               | 27060311  |
| ECLASS-12.0                               | 27060327  |
| ECLASS-13.0                               | 27060311  |
| ECLASS-14.0                               | 27060311  |
| ETIM-5.0                                  | EC001855  |
| ETIM-6.0                                  | EC001855  |
| ETIM-7.0                                  | EC001855  |
| ETIM-8.0                                  | EC001855  |
| customs tariff number                     | 85444290  |
| EAN                                       | 4048879684415   |

|                       |               |
|-----------------------|---------------|
| Packaging unit        | 1             |
| customs tariff number | 85444290      |
| EAN                   | 4048879684415 |
| Packaging unit        | 1             |

**Electrical data | Supply**

|  |       |
|--|-------|
| Operating voltage AC per power contact max.  | 600 V |
| Operating voltage DC per power contact max.  | 600 V |
| Operating voltage AC per signal contact max. | 250 V |
| Operating voltage DC per signal contact max. | 250 V |

**Device protection | Electrical**

|  |                   |
|--|-------------------|
| Degree of protection (EN IEC 60529)    | IP67, IP65        |
| Additional condition protection degree | inserted, screwed |
| Pollution Degree                       | 3                 |
| Rated surge voltage power contacts     | 4 kV              |
| Rated surge voltage signal contacts    | 2 kV              |
| Material group (IEC 60664-1)           | I                 |

**Mechanical data | Material data**

|                  |               |
|------------------|---------------|
| Material housing | PUR           |
| Locking material | Brass         |
| Coating locking  | nickel plated |

**Mechanical data | Mounting data**

|                 |                                       |
|-----------------|---------------------------------------|
| Mounting method | inserted, screwed, Shaking protection |
|-----------------|---------------------------------------|

**Environmental characteristics | Climatic**

|  |                            |
|--|----------------------------|
| Operating temperature min.             | -25 °C                     |
| Operating temperature max.             | 85 °C                      |
| Additional condition temperature range | depending on cable quality |

**Important installation notes**

|                        |   |
|------------------------|---|
| 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. |
| Note on strain relief  | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.   |

**Installation | Cable**

|  |  |
|--|--|
| Cable identification                     | 821  |
| Function cable                           | Hybrid, Signal, Power  |
| Amount stranding                         | 1  |
| Stranding                                | Wires  |
| Amount stranding (type 2)                | 1  |
| Stranding (type 2)                       | Wires  |
| Cable shielding (type)                   | copper braid, tinned   |
| Cable shielding (coverage)               | 85 %   |
| Pair shielding (type)                    | copper braid, tinned   |
| Pair shielding (coverage)                | 85 %   |
| Banding                                  | Fiber tape, Fleece, Foil   |
| Filler                                   | yes  |
| Wire arrangement                         | Black, white, (black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow) |
| Cable weight                             | 210 g/m  |
| Material wire insulation                 | TPM  |
| Amount wires                             | 2  |
| Outer diameter insulation                | 2,4 mm   |
| Outer diameter tolerance core insulation | ± 0,1 mm   |
| Ingredient freeness wire insulation      | CFC-free, silicone-free, halogen-free, lead-free                           |
| Amount strands (wire)                    | 84   |

|   |  |
|---|--|
| Diameter of single wires                                  | 0,15 mm  |
| Conductor crosssection (wire)                             | 1,5 mm <sup>2</sup>                              |
| Material conductor wire                                   | Stranded copper wire, bare                       |
| Conductor type (wire)                                     | strand class 6                                   |
| Material wire insulation (type 3)                         | TPM  |
| Outer diameter wire insulation (type 3)                   | 2,4 mm   |
| Tolerance outer diameter wire insulation (type 3)         | ± 0,1 mm   |
| Ingredient freeness wire insulation (type 3)              | CFC-free, silicone-free, halogen-free, lead-free |
| Printing colour wire insulation (type 3)                  | white (isolation black)                          |
| Amount wires (type 3)                                     | 4  |
| Amount strands wire (type 3)                              | 84   |
| Diameter of single wires (type 3)                         | 0,15 mm  |
| Wire conductor cross section (type 3)                     | 1,5 mm <sup>2</sup>                              |
| Material conductor wire (type 3)                          | Stranded copper wire, bare                       |
| Conductor type wire (type 3)                              | strand class 6                                   |
| Outer-diameter (jacket)                                   | 11,3 mm  |
| Tolerance outer diameter (sheath)                         | ± 5 %  |
| Material jacket   | TMPU   |
| Freedom from ingredients (jacket)                         | CFC-free, silicone-free, halogen-free, lead-free |
| Material property (jacket)                                | low adhesion                                     |
| Conductor resistance (wire)                               | 13.7 Ω/km @ 20 °C                                |
| Conductor resistance (wire type 3)                        | 13.7 Ω/km @ 20 °C                                |
| Electrical capacity line constant (wire - wire)           | 120.000 pF/km                                    |
| Electrical capacity line constant (wire - wire) (power)   | 90.000 pF/km                                     |
| Electrical capacity line constant (wire - shield)         | 160.000 pF/km                                    |
| Electrical capacity line constant (wire - shield) (power) | 160.000 pF/km                                    |
| Isolation resistance                                      | 2.500 MΩ × km                                    |
| Max. rated voltage (conductor - ground)                   | 600 V  |
| Max. rated voltage (conductor - conductor)                | 1.000 V  |
| Withstand voltage (wire - wire)                           | 4 kV @ 300 s                                     |
| Withstand voltage (wire - jacket)                         | 4 kV @ 300 s                                     |
| Withstand voltage (wire - shield)                         | 4 kV @ 300 s                                     |
| Current load capacity (standard)                          | to DIN VDE 0298-4                                |
| Current load capacity min. wire                           | 12,6 A   |
| Current carrying capacity min. wire (type 3)              | 12,6 A   |
| Operating temperature min. (static)                       | -30 °C   |
| Operating temperature max. (static)                       | 80 °C  |
| Operating temperature min. (dynamic)                      | -30 °C   |
| Operating temperature max. (dynamic)                      | 80 °C  |
| Operating temperature min. (drag chain)                   | -30 °C   |
| Operating temperature max. (drag chain)                   | 80 °C  |
| 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                                    |
| Acceleration (C-track)                                    | 50 m/s <sup>2</sup> @ 25 °C                      |
| Torsion stress  | 30 °C  |