

## M23 servo cable

specification: 6FX8002-5CA05-1AB2

Art.No.: 7000-PS105-8540120

Weight: 0.346

Country of origin: DE

Model designation: M6FX8002-5CA05-1AB2

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

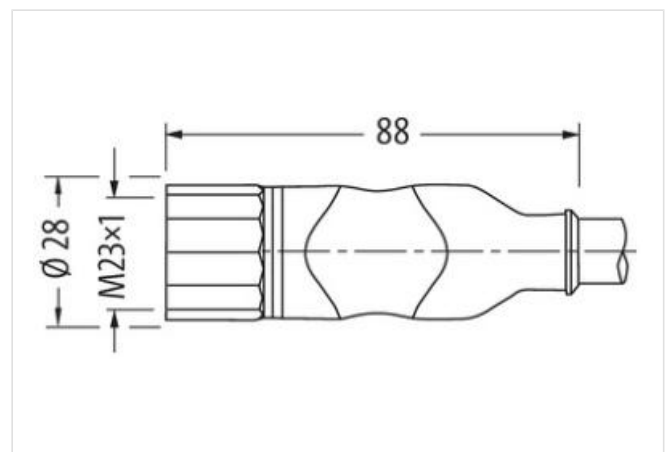
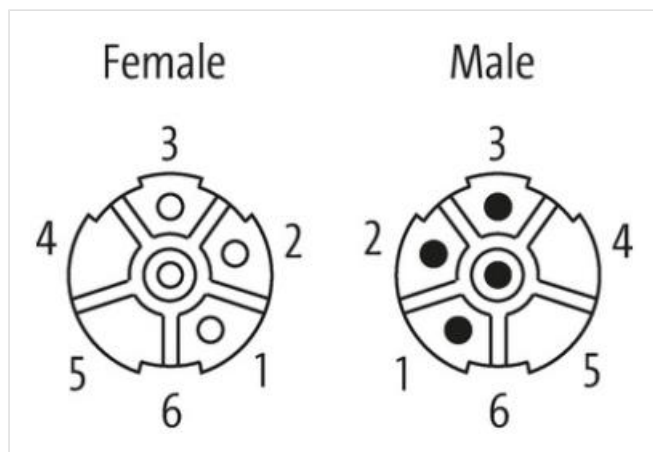
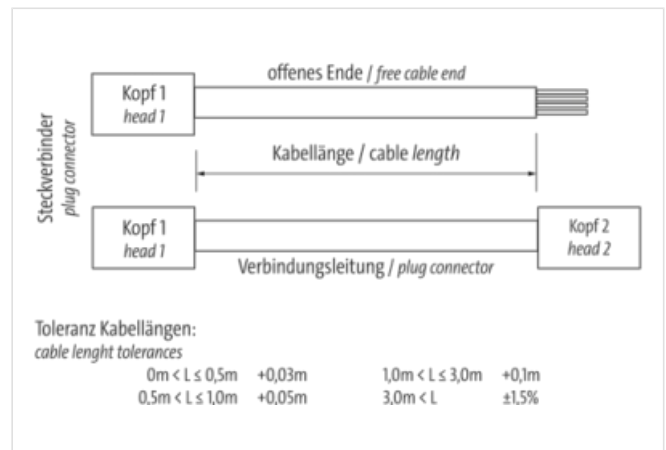
Further cable lengths on request.

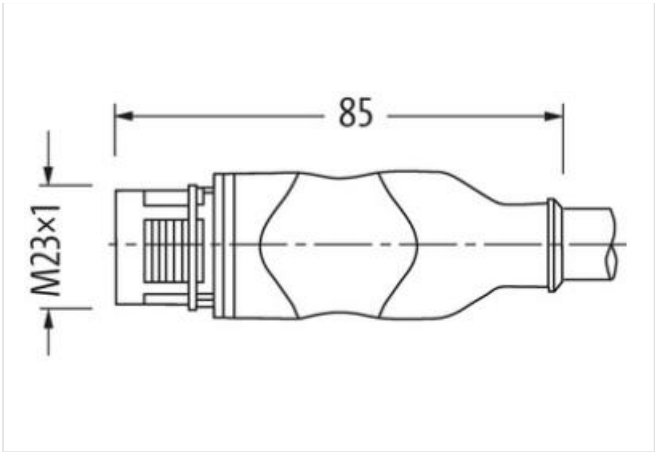
Plastic housings with good resistance against chemicals and oils.

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                              | 1,2 m             |
| Side 1                                    |                   |
| Tightening torque                         | 2 Nm              |
| Family construction form                  | M23               |
| Thread                                    | M23 x 1           |
| suitable for corrugated tube (internal Ø) | 16 mm             |
| Width across flats                        | SW27              |
| Side 2                                    |                   |
| Family construction form                  | M23               |
| suitable for corrugated tube (internal Ø) | 23 mm             |
| Commercial data                           |                   |
| 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          |
| customs tariff number                     | 85444290          |
| EAN                                       | 4048879655781     |
| EAN                                       | 4048879655781     |
| Packaging unit                            | 1                 |
| Packaging unit                            | 1                 |
| Electrical data   Supply                  |                   |
| Operating voltage AC max.                 | 630 V             |
| Operating voltage DC max.                 | 630 V             |
| Device protection   Electrical            |                   |
| 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                 |
| Mechanical data   Material data           |                   |

|                                                   |                                                                                                                                                       |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material housing                                  | PUR                                                                                                                                                   |
| Coating locking                                   | nickel plated                                                                                                                                         |
| 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                              | 854                                                                                                                                                   |
| 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                                      | 141,9 g/m                                                                                                                                             |
| Material jacket                                   | TMPU                                                                                                                                                  |
| Freedom from ingredients (jacket)                 | lead-free, CFC-free, halogen-free, silicone-free                                                                                                      |
| Outer-diameter (jacket)                           | 8,6 mm                                                                                                                                                |
| Tolerance outer diameter (sheath)                 | ± 5 %                                                                                                                                                 |
| Material wire insulation (Power)                  | TPM                                                                                                                                                   |
| Outer diameter wire insulation (Power)            | 2,4 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)                       | 84                                                                                                                                                    |
| Diameter of single wires (Power)                  | 0,15 mm                                                                                                                                               |
| Wire conductor cross section (Power)              | 1,5 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)       | 14,4 A                                                                                                                                                |
| Electrical resistance coating wire (Power)        | 13,7 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 M $\Omega$ × km                                 |
| Electrical capacity line constant (wire - shield)<br>(power) | 200000 pF/km                                         |
| Electrical capacity line constant (wire - wire)<br>(power)   | 120000 pF/km                                         |
| AC withstand voltage power (wire - shield)                   | 4 kV @ 300 s                                         |
| Power frequency withstand voltage power<br>(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 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  |
| 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 x Outer diameter                                   |
| Bending radius (dynamic)                                     | 7,5 x 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                                               | ± 30 °/m                                             |