

## M23 servo cable

specification: 6FX5002-5CA15-1AF0

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.

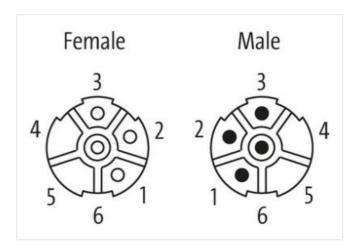
Plastic housings with good resistance against chemicals and oils.

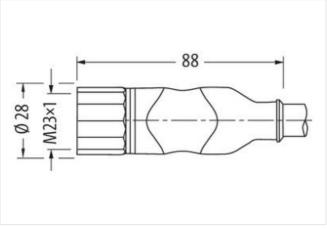
Power cores: 12 A (1.5 mm<sup>2</sup>), 15 A (2.5 mm<sup>2</sup>)

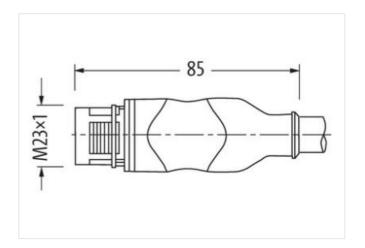
## **Link to Product**

## Illustration









Product may differ from Image

| Cable length      | 5 m  |
|-------------------|------|
| Side 1            |      |
| Tightening torque | 2 Nm |



stay connected

| 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   |
| GTIN                                      | 4048879507431  |
| 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)              | <u> </u>   |
| Mechanical data   Material data           |  |
| Coating locking                           | nickel plated  |
| Material housing                          | PUR  |
| Locking material                          | Brass  |
| 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              | selection & second desired   |
| Note on strain relief                     | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.    |
|   | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be |
| Note on bending radius                    | endangered by excessive bending forces.  |
| Installation   Cable                      |  |
| wire arrangement                          | black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow   |
| Cable identification                      | 869  |
| Jacket Color                              | orange   |
| Type of Certificate                       | cURus  |
| Amount stranding                          | 1  |
| <b>3</b>                                  |  |

The information in this Product-PDF has been compiled with the utmost care. Liability for the correctness completeness and topicality of the information is restricted to gross negligence. Version: 2024-05-24



| Cable shielding (type)                                    | copper braid, tinned                                       |
|---|--|
| Cable shielding (coverage)                                | 85 %   |
| Pair shielding (type)                                     | copper braid, tinned                                       |
| Banding   | Fiber tape, Fleece   |
| Filler  | yes  |
| wire arrangement  | black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow |
| Cable weigth  | 183,7 g/m  |
| Material jacket   | PVC  |
| Freedom from ingredients (jacket)                         | lead-free, CFC-free, silicone-free                         |
| Outer-diameter (jacket)                                   | 9,7 mm   |
| Tolerance outer diameter (sheath)                         | ± 5 %  |
| Material wire insulation (Power)                          | TPM  |
| Outer diameter wire insulation (Power)                    | 3 mm   |
| Tolerance outer diameter wire insulation (Power)          | ±5 %   |
| Ingredient freeness wire insulation (Power)               | lead-free, CFC-free, silicone-free                         |
| Printing colour wire insulation (Power)                   | white (isolation black)                                    |
| Amount wires (Power)                                      | 4  |
| Amount strands wire (Power)                               | 50   |
| Diameter of single wires (Power)                          | 0,25 mm  |
| Wire conductor cross section (Power)                      | 2,5 mm²  |
| Material conductor wire (Power)                           | Stranded copper wire, bare                                 |
| Conductor type wire (Power)                               | Strand class 5   |
| 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 @ 60 s  |
| Power frequency withstand voltage (wire - jacket)         | 4 kV @ 60 s  |
| AC withstand voltage (wire - shield)                      | 4 kV @ 60 s  |
| Isolation resistance                                      | 10 MΩ × km   |
| Electrical capacity line constant (wire - shield) (power) | 250000 pF/km   |
| Electrical capacity line constant (wire - wire) (power)   | 150000 pF/km   |
| Min. operating temperature (static)                       | -25 °C   |
| Max. operating temperature (fixed)                        | 80 °C  |
| Operating temperature min. (dynamic)                      | -5 °C  |
| Operating temperature max. (dynamic)                      | 60 °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)                                    | 5 x Outer diameter   |
| Bending radius (dynamic)                                  | 18 x Outer diameter  |
| No. of bending cycles (C-track)                           | 0,1 Mio. @ 25 °C   |
| Traversing distance (C-track)                             | 5 m @ 25 °C   horizontal                                   |
| Travel speed (C-track)                                    | 0,5 m/s @ 25 °C  |
| Torsion stress  | ± 30 °/m   |