

## **M23 SERVO CABLE**

Specification: 6FX5002-5CS01-1BK0

Power cable for SINAMICS S120 and Motors with M23 connection

Female straight - pre-wired terminals

M23, 6-pole

4-pole used

Further cable lengths on request.

Plastic housings with good resistance against chemicals and oils.

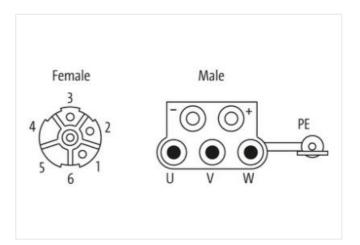
The resistance to aggressive media should be individually tested for your application. Further details on request.

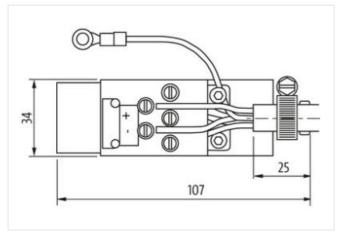
Power cores: 12 A (1.5 mm²), 15 A (2.5 mm²); brake cores: 5 A (1.5 mm²)

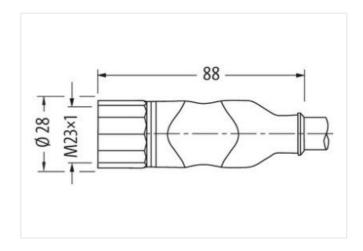
## **Link to Product**

## Illustration









Product may differ from Image

| Cable length             | 19 m    |
|--------------------------|---------|
| Side 1                   |         |
| Tightening torque        | 2 Nm    |
| Family construction form | M23     |
| Thread                   | M23 x 1 |
| Width across flats       | SW27    |

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: 2024-05-19



stay connected

| 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   | 4048879555104   |
| 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)                | IP20, IP67  |
| Pollution Degree                                   | 3   |
| 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                       |   |
|  | Dutat the consideration in a Night manager from make inclined a contribution  |
| 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                               |   |
| Cable identification                               | 865   |
| Jacket Color                                       | orange  |
| Type of Certificate                                | cURus   |
| Amount stranding                                   | 1   |
| Stranding  | 4 wires with Filler twisted   |
| Cable shielding (type)                             | copper braid, tinned  |
| Cable shielding (type)  Cable shielding (coverage) | 80 %  |
| 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                                       | 128,7 g/m   |
| Material jacket                                    | PVC   |
| Freedom from ingredients (jacket)                  | lead-free, CFC-free, silicone-free  |
| Outer-diameter (jacket)                            | 8,1 mm  |
| Tolerance outer diameter (sheath)                  | ± 5 %   |
| Material wire insulation (Power)                   | TPM   |
| Outer diameter wire insulation (Power)             | •••••   |



| 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)  | 30  |
| Diameter of single wires (Power)   | 0,25 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 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)  | 14,4 A  |
| Electrical resistance coating wire (Power)   | 13,7 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   |
| 1 1 2 2 2 2 2  | 10.140  |
| Isolation resistance   | $10 \text{ M}\Omega \times \text{km}$   |
| Electrical capacity line constant (wire - shield) (power)  | 250000 pF/km  |
| Electrical capacity line constant (wire - shield)  |   |
| Electrical capacity line constant (wire - shield) (power)  Electrical capacity line constant (wire - wire)   | 250000 pF/km  |
| Electrical capacity line constant (wire - shield) (power)  Electrical capacity line constant (wire - wire) (power)   | 250000 pF/km 150000 pF/km   |
| Electrical capacity line constant (wire - shield) (power)  Electrical capacity line constant (wire - wire) (power)  Min. operating temperature (static)  | 250000 pF/km<br>150000 pF/km<br>-25 °C  |
| Electrical capacity line constant (wire - shield) (power)  Electrical capacity line constant (wire - wire) (power)  Min. operating temperature (static)  Max. operating temperature (fixed)  | 250000 pF/km  150000 pF/km  -25 °C  80 °C   |
| Electrical capacity line constant (wire - shield) (power)  Electrical capacity line constant (wire - wire) (power)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature min. (dynamic)  | 250000 pF/km  150000 pF/km  -25 °C  80 °C  -5 °C  |
| Electrical capacity line constant (wire - shield) (power)  Electrical capacity line constant (wire - wire) (power)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature min. (dynamic)  Operating temperature max. (dynamic)  | 250000 pF/km  150000 pF/km  -25 °C  80 °C  -5 °C  60 °C   |
| Electrical capacity line constant (wire - shield) (power)  Electrical capacity line constant (wire - wire) (power)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature min. (dynamic)  Operating temperature max. (dynamic)  Flame resistance  | 250000 pF/km  150000 pF/km  -25 °C  80 °C  -5 °C  60 °C  IEC 60332-2-2   UL 1581 § 1090   UL 1581 § 1100 FT2  |
| Electrical capacity line constant (wire - shield) (power)  Electrical capacity line constant (wire - wire) (power)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature min. (dynamic)  Operating temperature max. (dynamic)  Flame resistance chemical resistance  | 250000 pF/km  150000 pF/km  -25 °C  80 °C  -5 °C  60 °C  IEC 60332-2-2   UL 1581 § 1090   UL 1581 § 1100 FT2  Good, application-related testing   |
| Electrical capacity line constant (wire - shield) (power)  Electrical capacity line constant (wire - wire) (power)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature min. (dynamic)  Operating temperature max. (dynamic)  Flame resistance  chemical resistance  Gasoline resistance  | 250000 pF/km  150000 pF/km  -25 °C  80 °C  -5 °C  60 °C  IEC 60332-2-2   UL 1581 § 1090   UL 1581 § 1100 FT2  Good, application-related testing  Good, application-related testing  |
| Electrical capacity line constant (wire - shield) (power)  Electrical capacity line constant (wire - wire) (power)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature min. (dynamic)  Operating temperature max. (dynamic)  Flame resistance chemical resistance  Gasoline resistance  Oil resistance   | 250000 pF/km  150000 pF/km  -25 °C  80 °C  -5 °C  60 °C  IEC 60332-2-2   UL 1581 § 1090   UL 1581 § 1100 FT2  Good, application-related testing  Good, application-related testing   DIN EN 60811-404   |
| Electrical capacity line constant (wire - shield) (power)  Electrical capacity line constant (wire - wire) (power)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature min. (dynamic)  Operating temperature max. (dynamic)  Flame resistance  chemical resistance  Gasoline resistance  Oil resistance  Bending radius (fixed)  Bending radius (dynamic)  No. of bending cycles (C-track) | 250000 pF/km  150000 pF/km  -25 °C  80 °C  -5 °C  60 °C  IEC 60332-2-2   UL 1581 § 1090   UL 1581 § 1100 FT2  Good, application-related testing  Good, application-related testing  Good, application-related testing   DIN EN 60811-404  5 x Outer diameter  18 x Outer diameter  0,1 Mio. @ 25 °C |
| Electrical capacity line constant (wire - shield) (power)  Electrical capacity line constant (wire - wire) (power)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature min. (dynamic)  Operating temperature max. (dynamic)  Flame resistance  chemical resistance  Gasoline resistance  Oil resistance  Bending radius (fixed)  Bending radius (dynamic)                                  | 250000 pF/km  150000 pF/km  -25 °C  80 °C  -5 °C  60 °C  IEC 60332-2-2   UL 1581 § 1090   UL 1581 § 1100 FT2  Good, application-related testing  Good, application-related testing  Good, application-related testing   DIN EN 60811-404  5 x Outer diameter  |
| Electrical capacity line constant (wire - shield) (power)  Electrical capacity line constant (wire - wire) (power)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature min. (dynamic)  Operating temperature max. (dynamic)  Flame resistance  chemical resistance  Gasoline resistance  Oil resistance  Bending radius (fixed)  Bending radius (dynamic)  No. of bending cycles (C-track) | 250000 pF/km  150000 pF/km  -25 °C  80 °C  -5 °C  60 °C  IEC 60332-2-2   UL 1581 § 1090   UL 1581 § 1100 FT2  Good, application-related testing  Good, application-related testing  Good, application-related testing   DIN EN 60811-404  5 x Outer diameter  18 x Outer diameter  0,1 Mio. @ 25 °C |