

## **M23 SERVO CABLE**

Specification: 6FX5002-5CS01-1BA0

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.

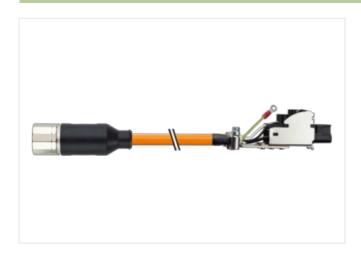
Plastic housings with good resistance against chemicals and oils.

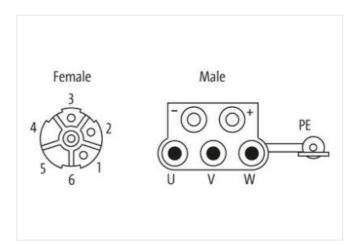
The resistance to aggressive media should be individually tested for your application. Further details on request.

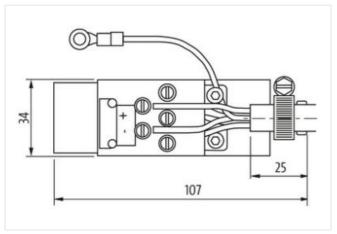
Power cores: 12 A (1.5 mm²), 15 A (2.5 mm²); brake cores: 5 A (1.5 mm²)

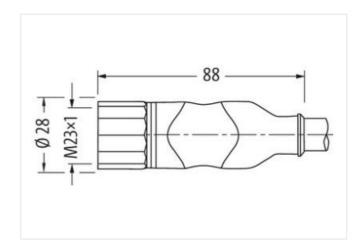
## **Link to Product**

## Illustration









Product may differ from Image

Cable length	10 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: 2024-06-26



stay connected

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	4048879507158
Packaging unit	1
Electrical data   Supply	
Operating voltage AC max.	630 V
Operating voltage DC max.	630 V
Device protection   Electrical	
•	IDOO IDO7
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	
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.
Installation   Cable	
wire arrangement	black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow
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 (coverage)	80 %
	Fiber tape, Fleece
Banding	
	yes
Filler	yes black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow
Filler wire arrangement	<u> </u>
Filler wire arrangement Cable weigth	black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow
Filler wire arrangement Cable weigth Material jacket	black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow 128,7 g/m
Filler wire arrangement Cable weigth Material jacket Freedom from ingredients (jacket)	black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow 128,7 g/m PVC
Banding  Filler wire arrangement  Cable weigth  Material jacket  Freedom from ingredients (jacket)  Outer-diameter (jacket)  Tolerance outer diameter (sheath)	black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow  128,7 g/m  PVC  lead-free, CFC-free, silicone-free
Filler wire arrangement Cable weigth Material jacket Freedom from ingredients (jacket) Outer-diameter (jacket)	black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow  128,7 g/m  PVC  lead-free, CFC-free, silicone-free  8,1 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)	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
Isolation resistance	10 MΩ × km
Isolation resistance Electrical capacity line constant (wire - shield) (power)	10 MΩ × km 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 150000 pF/km -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)	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)  Traversing distance (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  18 x Outer diameter  0,1 Mio. @ 25 °C  5 m @ 25 °C   horizontal
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   DIN EN 60811-404  5 x Outer diameter  18 x Outer diameter  0,1 Mio. @ 25 °C