

## **M23 SERVO CABLE**

Specification: 6FX8002-5CS01-1CB0

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.

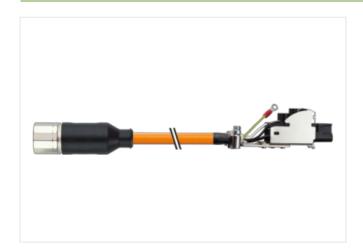
Plastic housings with good resistance against chemicals and oils.

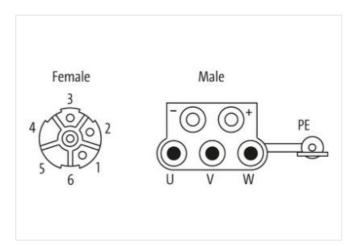
The resistance to aggressive media should be individually tested for your application. Further details on request.

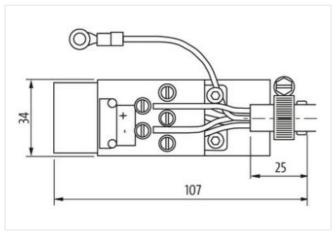
Power cores: 12 A (1.5 mm²), 15 A (2.5 mm²); brake cores: 5 A (1.5 mm²)

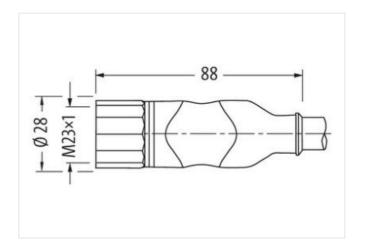
## **Link to Product**

## Illustration









Product may differ from Image

Cable length	21 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: 2024-05-20



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-10.1	27060311
ECLASS-11.1	
	27060327
ETIM-5.0	EC001855
customs tariff number	85444290
GTIN	4048879558563
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
<u> </u>	3
Pollution Degree	ა 
Mechanical data   Material data	
Coating locking	nickel plated
Material housing	PUR
ocking material	Brass
Mechanical data   Mounting data	
· · · · · ·	inserted, screwed, Shaking protection
	inserted, screwed, snaking protection
Mounting method	• •
Environmental characteristics   Climatic	
	-25 °C
Environmental characteristics   Climatic	
Environmental characteristics   Climatic  Operating temperature min.	-25 °C
Environmental characteristics   Climatic  Departing temperature min.  Departing temperature max.  Additional condition temperature range	-25 °C 85 °C
Environmental characteristics   Climatic Departing temperature min. Departing temperature max. Additional condition temperature range Important installation notes	-25 °C 85 °C depending on cable quality
Environmental characteristics   Climatic  Departing temperature min.  Departing temperature max.  Additional condition temperature range	-25 °C  85 °C  depending on cable quality  Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.
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Environmental characteristics   Climatic Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes Note on strain relief Note on bending radius Installation   Cable Cable identification Jacket Color Type of Certificate Amount stranding	-25 °C  85 °C  depending on cable quality  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 endangered by excessive bending forces.  854  orange cURus 1
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Environmental characteristics   Climatic Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes Note on strain relief Note on bending radius Installation   Cable Cable identification Jacket Color Type of Certificate Amount stranding Stranding Cable shielding (type)	-25 °C  85 °C  depending on cable quality  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 endangered by excessive bending forces.  854  orange  cURus  1  4 wires with Filler twisted  copper braid, tinned
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Environmental characteristics   Climatic Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes Note on strain relief Note on bending radius Installation   Cable Cable identification Jacket Color Type of Certificate Amount stranding Stranding Cable shielding (type) Cable shielding (coverage) Banding Filler wire arrangement Cable weigth	-25 °C  depending on cable quality  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 endangered by excessive bending forces.  854  orange cURus  1  4 wires with Filler twisted copper braid, tinned 85 %  Fiber tape, Fleece yes black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow  141,9 g/m
Environmental characteristics   Climatic Departing temperature min. Departing temperature max. Additional condition temperature range Important installation notes Note on strain relief Note on bending radius Installation   Cable Cable identification Jacket Color Type of Certificate Amount stranding Stranding Cable shielding (type) Cable shielding (coverage) Banding Filler wire arrangement Cable weigth Material jacket	-25 °C  depending on cable quality  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 endangered by excessive bending forces.  854  orange cURus  1  4 wires with Filler twisted copper braid, tinned 85 %  Fiber tape, Fleece yes  black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow 141,9 g/m TMPU
Environmental characteristics   Climatic Departing temperature min. Departing temperature max. Additional condition temperature range Important installation notes Note on strain relief Note on bending radius Installation   Cable Cable identification Jacket Color Type of Certificate Amount stranding Stranding Cable shielding (type) Cable shielding (coverage) Banding Filler wire arrangement Cable weigth Material jacket Freedom from ingredients (jacket)	-25 °C  85 °C  depending on cable quality  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 endangered by excessive bending forces.  854  orange  cURus  1  4 wires with Filler twisted  copper braid, tinned  85 %  Fiber tape, Fleece  yes  black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow  141,9 g/m  TMPU  lead-free, CFC-free, halogen-free, silicone-free
Environmental characteristics   Climatic Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes Note on strain relief Note on bending radius Installation   Cable Cable identification Jacket Color Type of Certificate Amount stranding Stranding Cable shielding (type) Cable shielding (coverage) Banding Filler Wire arrangement Cable weigth Material jacket Freedom from ingredients (jacket) Outer-diameter (jacket)	-25 °C  85 °C  depending on cable quality  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 endangered by excessive bending forces.  854  orange  cURus  1  4 wires with Filler twisted  copper braid, tinned  85 %  Fiber tape, Fleece  yes  black W/L3/D/L-, black U/L1/G/L+, black V/L2, green-yellow  141,9 g/m  TMPU  lead-free, CFC-free, halogen-free, silicone-free  8,6 mm



stay	connected
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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 MΩ × km
Electrical capacity line constant (wire - shield) (power)	200000 pF/km
Electrical capacity line constant (wire - wire) (power)	120000 pF/km
AC withstand voltage power (wire - shield)	4 kV @ 300 s
Power frequency withstand voltage power (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