

## stay connected

## M23 servo cable

specification: 6FX5002-5CA05-1AC4

Art.No.: 7000-PS105-8650240

Weight: 0.472 Country of origin: DE

Model designation: M6FX5002-5CA05-1AC4

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.

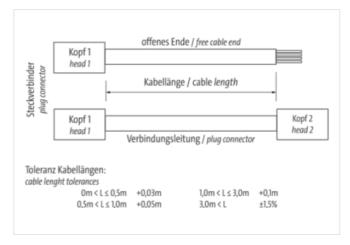
Plastic housings with good resistance against chemicals and oils.

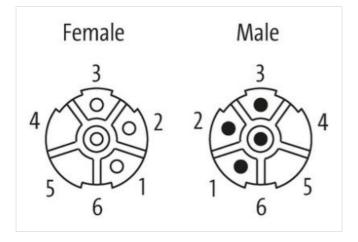
Power cores: 12 A (1.5 mm<sup>2</sup>), 15 A (2.5 mm<sup>2</sup>)

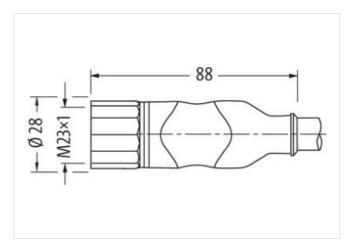
## **Link to Product**

## Illustration

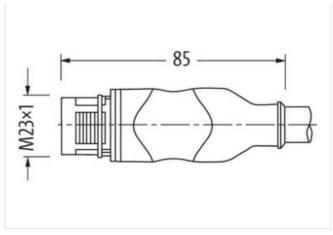












Product may differ from Image

Cable length	2,4 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	4048879617673
EAN	4048879617673
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)	ı
Mechanical data   Material data	



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Material housing	PUR
Coating locking	nickel plated
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.
	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	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 %
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)  Material wire insulation (Power)	±5% 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, 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
Electrical capacity line constant (wire - shield) (power)	250000 pF/km

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: 2025-11-04



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	IEC 60332-2-2   UL 1581 § 1090   UL 1581 § 1100 FT2
chemical resistance	Good, application-related testing
Gasoline resistance	Good, application-related testing
Oil resistance	Good, application-related testing   DIN EN 60811-404
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