

M23 SERVO CABLE

specification: 6FX8002-5CG11-1BA0

Art.No.: 7000-PS206-8571000

Weight: 2.115

Country of origin: DE

Model designation: M6FX8002-5CG11-1BA0

Female straight

Plastic housings with good resistance against chemicals and oils.

M23, 6-pole

4-pole used

shielded

without brake wires

Power cable for SINAMICS S120 and Motors with M23 connection

Mounting bracket

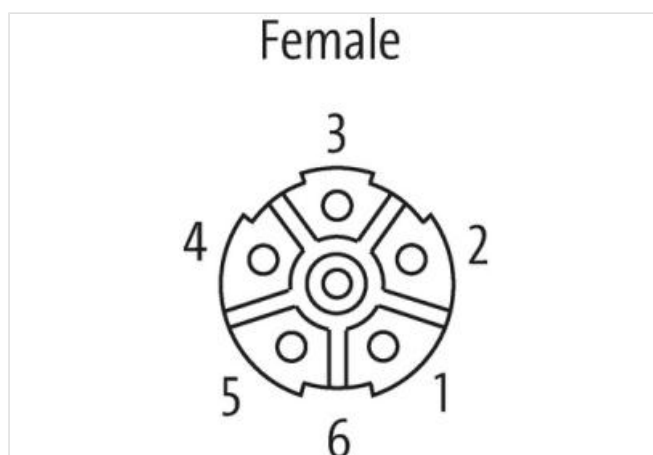
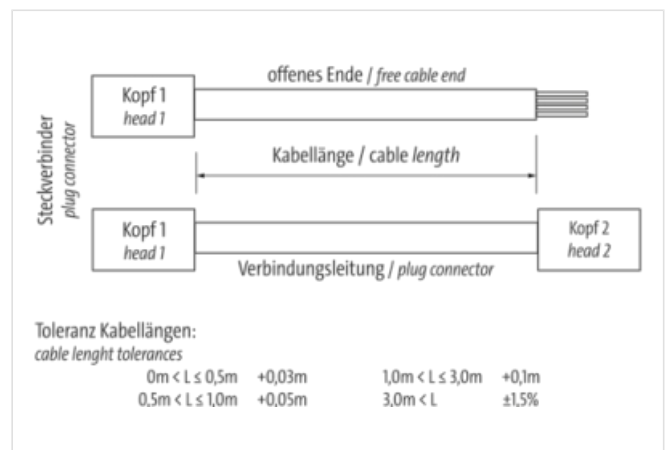
without cable sleeves

Further cable lengths on request.

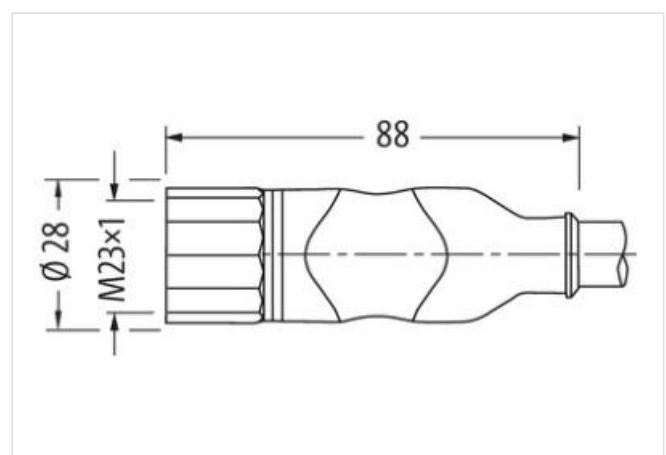
Power cores: 12 A (1.5 mm²), 15 A (2.5 mm²)

[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
suitable for corrugated tube (internal Ø)	16 mm
Width across flats	SW27
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	4048879789301
EAN	4048879789301
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)	I
Mechanical data Material data	
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.
Note on bending radius	Attention: 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	857
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)	85 %
Banding	Fiber tape, Fleece
Filler	yes
wire arrangement	black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow
Cable weight	201,3 g/m
Material jacket	TMPU
Freedom from ingredients (jacket)	lead-free, CFC-free, halogen-free, silicone-free
Outer-diameter (jacket)	10,2 mm
Tolerance outer diameter (sheath)	± 5 %
Material wire insulation (Power)	TPM
Outer diameter wire insulation (Power)	3,1 mm
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)	140
Diameter of single wires (Power)	0,15 mm
Wire conductor cross section (Power)	2,5 mm ²
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)	20,8 A
Electrical resistance coating wire (Power)	8 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 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090
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

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: 2025-07-13

Murrelektronik GmbH | Grabenstraße 29 | 71570 Oppenweiler | Fon +49 (71 91) 47-0 | Fax +49 (71 91) 47-491000 | shop@murrelektronik.com | shop.murrelektronik.com

Torsion stress $\pm 30 \text{ }^{\circ}/\text{m}$