

M23 servo cable

specification: 6FX5002-5DS01-1AH0

Art.No.: 7000-PS011-8610700

Weight: 1.538 kg

Country of origin: DE

Model designation: M6FX5002-5DS01-1AH0

Power cable with brake wires for SINAMICS S120 and motors with M23 connection and holding brake

Female straight – pre-wired terminals

M23, 6-pole

shielded

without cable sleeves

Further cable lengths on request.

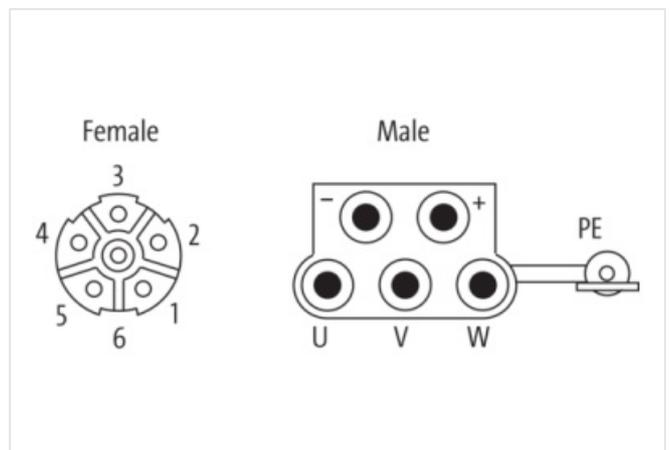
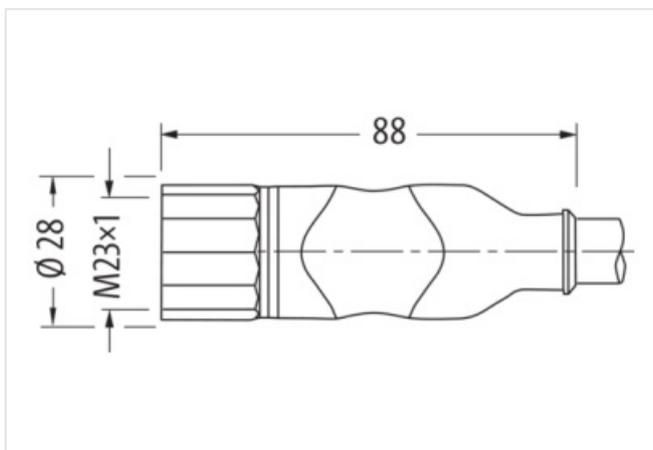
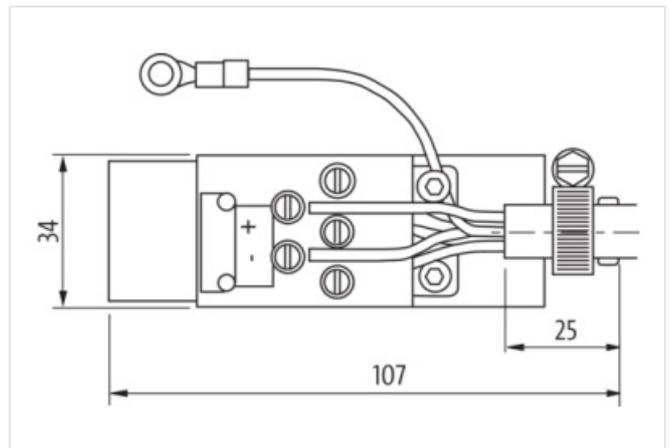
Plastic housings with good resistance against chemicals and oils.

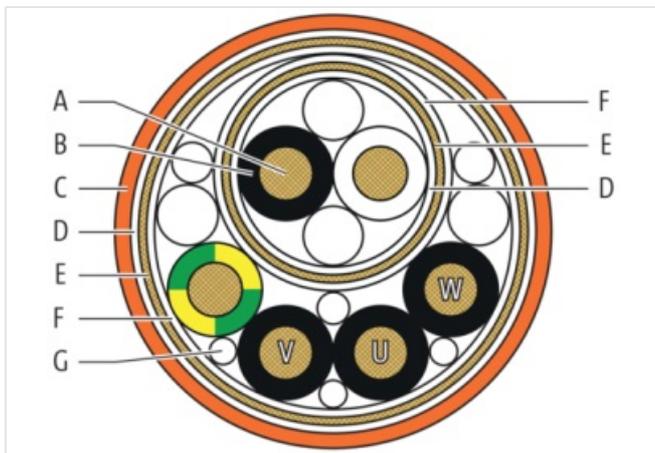
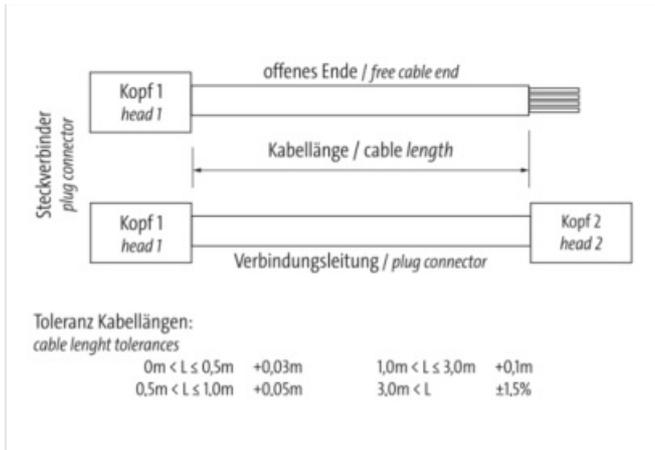
The resistance to aggressive media should be individually tested for your application. Further details on request.

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



Header

Material short text	M6FX5002-5DS01-1AH0
Cable length	7,00 m

Side 1

Family construction form	M23
Threaded hole	M23 x 1
Tightening torque	2 Nm
Width across flats	SW27
suitable for corrugated tube (internal Ø)	16 mm

Commercial data

URL Webshop	https://shop.murrelektronik.com/7000-PS011-8610700
GTIN	4048879584319
ECLASS-6.0	27279218
ECLASS-6.1	27279218
ECLASS-7.0	27279218
ECLASS-7.1	27279218
ECLASS-8.0	27279218
ECLASS-8.1	27279218

ECLASS-9.0	27060327
ECLASS-9.1	27060311
ECLASS-10.0.1	27060311
ECLASS-10.1	27060311
ECLASS-11.0	27060311
ECLASS-11.1	27060311
ECLASS-12.0	27060327
ECLASS-13.0	27060311
ECLASS-14.0	27060311
ETIM-5.0	EC001855
ETIM-6.0	EC001855
ETIM-7.0	EC001855
ETIM-8.0	EC001855
customs tariff number	85444290
EAN	4048879584319
Packaging unit	1
customs tariff number	85444290
EAN	4048879584319
Packaging unit	1

Electrical data | Supply

Operating voltage AC per power contact max.	600 V
Operating voltage DC per power contact max.	600 V
Operating voltage AC per signal contact max.	250 V
Operating voltage DC per signal contact max.	250 V

Device protection | Electrical

Degree of protection (EN IEC 60529)	IP67, IP20
Pollution Degree	3
Rated surge voltage power contacts	4 kV
Rated surge voltage signal contacts	2 kV
Material group (IEC 60664-1)	I

Mechanical data | Material data

Material housing	PUR
Locking material	Brass
Coating locking	nickel plated

Mechanical data | Mounting data

Mounting method	inserted, screwed, Shaking protection
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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 bending radius	Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.
Note on strain relief	Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.

Installation | Cable

Cable identification	861
Function cable	Hybrid, Signal, Power
Amount stranding	1
Stranding	Wires
Amount stranding (type 2)	1
Stranding (type 2)	Wires

Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	85 %
Pair shielding (type)	copper braid, tinned
Pair shielding (coverage)	85 %
Banding	Fiber tape, Fleece, Foil
Filler	yes
Wire arrangement	Black, white, (black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow)
Cable weight	185 g/m
Material wire insulation	TPM
Amount wires	2
Outer diameter insulation	2,4 mm
Outer diameter tolerance core insulation	± 0,1 mm
Ingredient freeness wire insulation	CFC-free, silicone-free, lead-free
Amount strands (wire)	30
Diameter of single wires	0,25 mm
Conductor crosssection (wire)	1,5 mm ²
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	Strand class 5
Outer diameter wire insulation (type 3)	2,4 mm
Tolerance outer diameter wire insulation (type 3)	± 0,1 mm
Ingredient freeness wire insulation (type 3)	CFC-free, silicone-free, lead-free
Printing colour wire insulation (type 3)	white (isolation black)
Amount wires (type 3)	4
Amount strands wire (type 3)	30
Diameter of single wires (type 3)	0,25 mm
Wire conductor cross section (type 3)	1,5 mm ²
Material conductor wire (type 3)	Stranded copper wire, bare
Conductor type wire (type 3)	Strand class 5
Outer-diameter (jacket)	10,4 mm
Tolerance outer diameter (sheath)	± 5 %
Material jacket	PVC
Freedom from ingredients (jacket)	CFC-free, silicone-free, lead-free
Conductor resistance (wire)	13.7 Ω/km @ 20 °C
Conductor resistance (wire type 3)	13.7 Ω/km @ 20 °C
Electrical capacity line constant (wire - wire)	100.000 pF/km
Electrical capacity line constant (wire - wire) (power)	150.000 pF/km
Electrical capacity line constant (wire - shield)	160.000 pF/km
Electrical capacity line constant (wire - shield) (power)	250.000 pF/km
Isolation resistance	5.000 MΩ × km
Max. rated voltage (conductor - ground)	600 V
Max. rated voltage (conductor - conductor)	1.000 V
Withstand voltage (wire - wire)	2 kV @ 60 s
Withstand voltage (wire - jacket)	2 kV @ 60 s
Withstand voltage (wire - shield)	2 kV @ 60 s
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity max. (wire)	12,6 A
Current carrying capacity max. wire (type 3)	12,6 A
Operating temperature min. (static)	-25 °C
Operating temperature max. (static)	80 °C
Operating temperature min. (dynamic)	-5 °C
Operating temperature max. (dynamic)	60 °C
Operating temperature min. (drag chain)	-5 °C

Operating temperature max. (drag chain)	60 °C
Bending radius (fixed)	5 × Outer diameter
Bending radius (dynamic)	18 × Outer diameter
No. of bending cycles (C-track)	0.1 Mio. @ 25 °C
Traversing distance (C-track)	5 m @ 25 °C
Travel speed (C-track)	0.5 m/s @ 25 °C
Acceleration (C-track)	2 m/s ² @ 25 °C
Torsion stress	30 °C