

M23 SERVO CABLE

Specification: 6FX5002-5DS16-1EB0

Art.No.: 7000-PS411-8634100

Weight: 11.188 kg

Country of origin: DE

Model designation: M6FX5002-5DS16-1EB0

Female straight – pre-wired terminals

M23, 6-pole

Shielded

Power connector SIEMENS

Power cable with brake wires for SINAMICS S120 and motors with M23 connection and holding brake without cable sleeves

Further cable lengths on request.

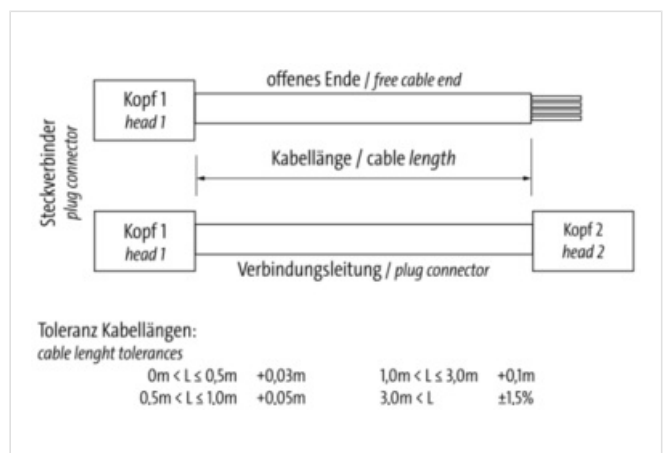
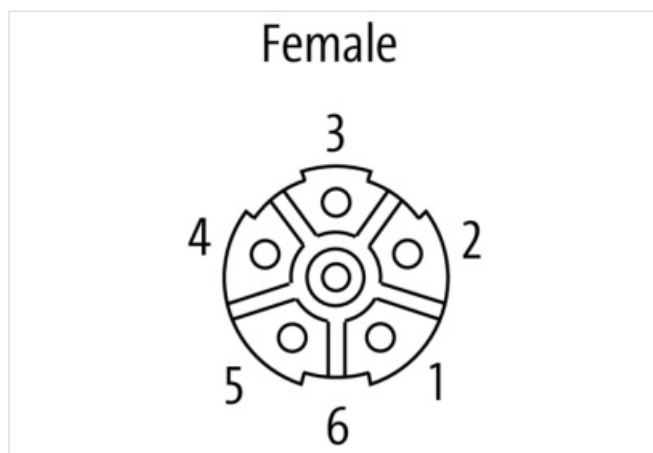
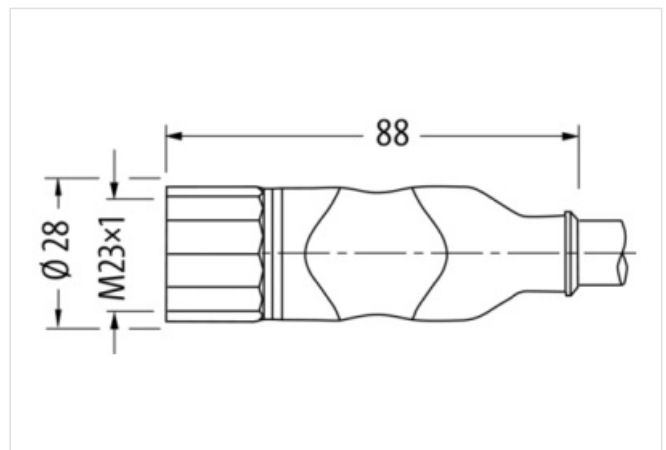
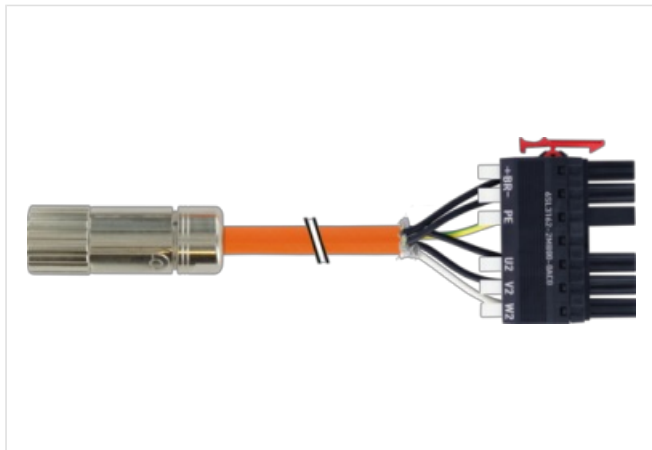
Plastic housings with good resistance against chemicals and oils.

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

Cable length 41,00 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

Side 2

Family construction form	M23
suitable for corrugated tube (internal Ø)	23 mm

Commercial data

URL Webshop	https://shop.murrelektronik.com/7000-PS411-8634100
GTIN	4048879729765
EU-Customs tariff number	85444290
US-Customs tariff number	8544429090
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	4048879729765
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, IP65
Additional condition protection degree	inserted, screwed
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

housing	PUR
Locking material	Brass
Coating locking	nickel plated
Gasket	FKM

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

Stranding	1 Wires
Stranding (type 2)	1 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	BK, WH, (BK W/L3/D/L-, BK U/L1/C/L+, BK V/L2, GNYE)
Shield	shielded
Material wire insulation	TPM
Amount wires	2
Outer diameter insulation	2.4 mm ± 0.1 mm
Conductor crosssection (wire)	1,5 mm ²
Material conductor wire	Stranded copper wire, bare
Core construction (wire)	30 × 0.25 mm
Ingredient freeness wire insulation	lead-free, CFC-free, silicone-free
Material wire insulation (type 3)	TPM
Amount wires (type 3)	4
Outer diameter wire insulation (type 3)	3 mm ± 0.1 mm
Conductor crosssection (wire type 3)	2,5 mm ²
Material conductor wire (type 3)	Stranded copper wire, bare
Core construction (wire type 3)	50 × 0.25 mm
Ingredient freeness wire insulation (type 3)	lead-free, CFC-free, silicone-free

Material jacket	PVC
Outer-diameter (jacket)	12 mm ± 5 %
Jacket Color	orange / RAL 2003
Freedom from ingredients (jacket)	lead-free, CFC-free, silicone-free
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	85 %
Pair shielding (type)	copper braid, tinned
Pair shielding (coverage)	85 %
Conductor resistance (wire)	13.7 Ω/km @ 20 °C
Conductor resistance (wire type 3)	7.98 Ω/km @ 20 °C
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 max. (wire)	12,6 A
Current carrying capacity max. wire (type 3)	18,2 A
Current load capacity (standard)	to DIN VDE 0298-4
Electrical capacity line constant (wire - wire)	100 pF/m
Electrical capacity line constant (wire - wire) (power)	150 pF/m
Electrical capacity line constant (wire - shield)	160 pF/m
Electrical capacity line constant (wire - shield) (power)	250 pF/m
Isolation resistance	10 MΩ × km
Operating temperature (static)	-25 °C ... 80 °C
Operating temperature (dynamic)	-5 °C ... 60 °C
Operating temperature (drag chain)	-5 °C ... 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 horizontal
Travel speed (C-track)	0.5 m/s @ 25 °C
Acceleration (C-track)	2 m/s² @ 25 °C
Torsion stress	± 30 °/m