

M23 servo cable

specification: 6FX8002-5CA05-1AH0

Art.No.: 7000-PS105-8540700

Weight: 1.094

Country of origin: DE

Model designation: M6FX8002-5CA05-1AH0

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

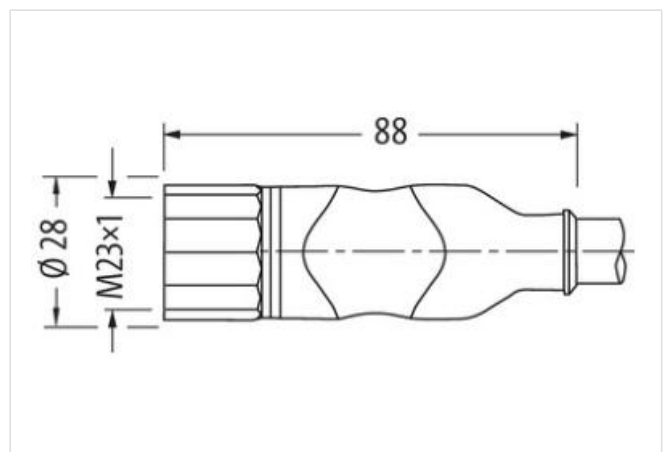
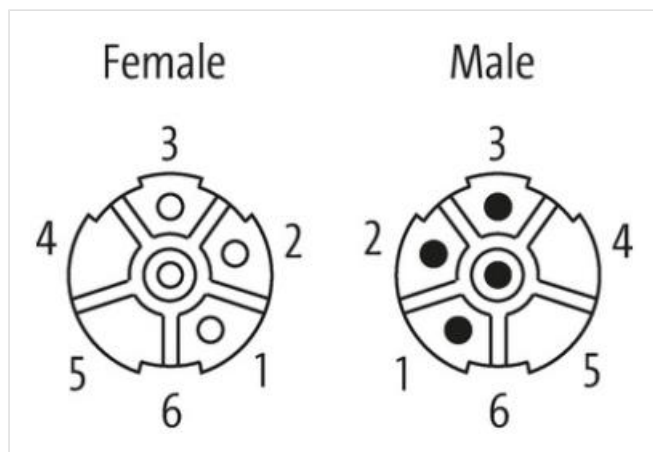
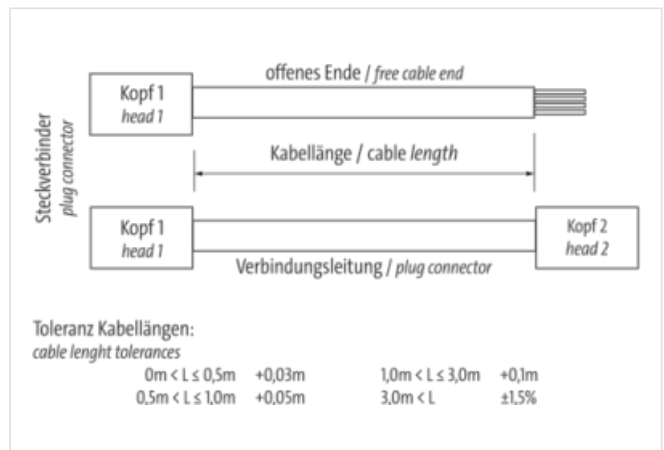
Further cable lengths on request.

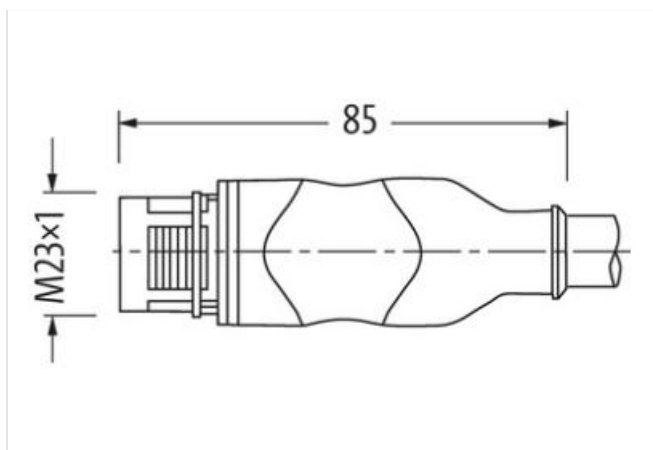
Plastic housings with good resistance against chemicals and oils.

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

Link to Product

Illustration





Product may differ from Image

Cable length	7 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
EAN	4048879553414
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 854

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 141,9 g/m

Material jacket TPU

Freedom from ingredients (jacket) lead-free, CFC-free, halogen-free, silicone-free

Outer-diameter (jacket) 8,6 mm

Tolerance outer diameter (sheath) $\pm 5 \%$

Material wire insulation (Power) TPM

Outer diameter wire insulation (Power) 2,4 mm

Tolerance outer diameter wire insulation (Power) $\pm 5 \%$

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 mm²

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 M Ω x 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