

## M23 SERVO CABLE

specification: 6FX8002-5DG01-1BA5

Art.No.: 7000-PS202-8211050

Weight: 2.529 kg

Country of origin: DE

Model designation: M6FX8002-5DG01-1BA5

Female straight

M23, 6-pole

Shielded

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

Mounting bracket

without cable sleeves

Further cable lengths on request.

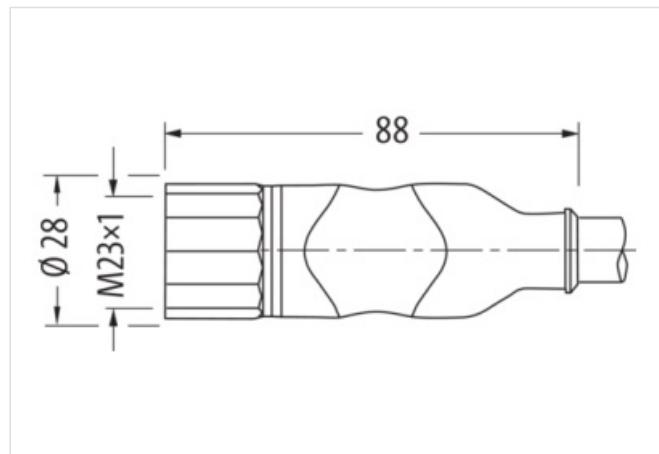
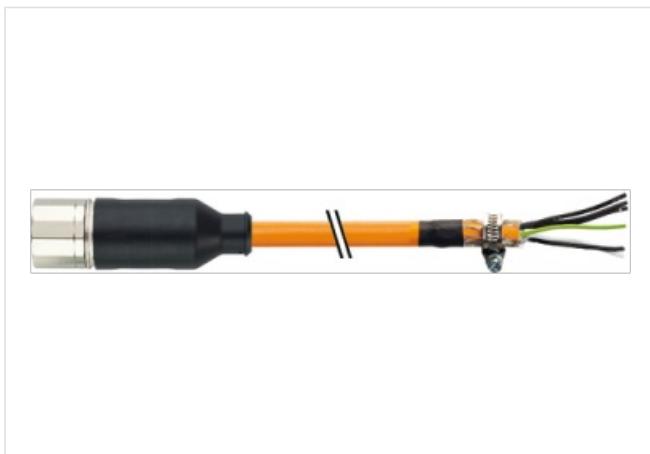
Plastic housings with good resistance against chemicals and oils.

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

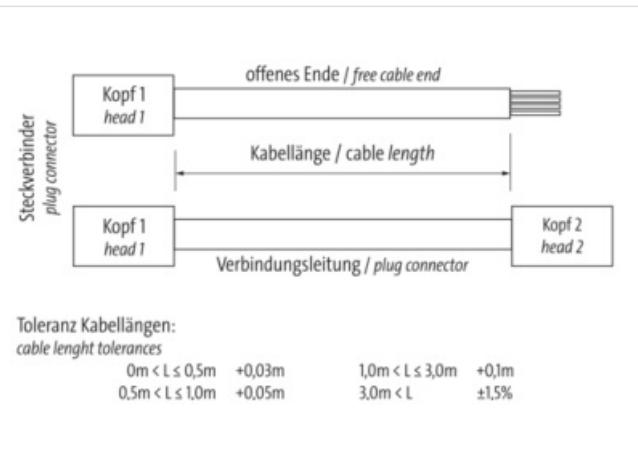
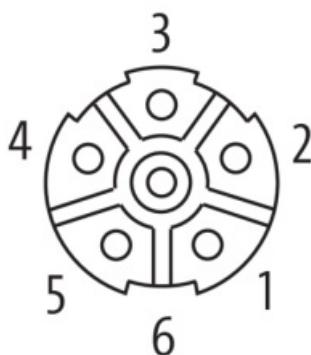
Power cores: 12 A (1.5 mm<sup>2</sup>), 15 A (2.5 mm<sup>2</sup>); brake cores: 5 A (1.5 mm<sup>2</sup>)

### Link to Product

#### Illustration



Female





Product may differ from Image



#### Header

Material short text M6FX8002-5DG01-1BA5

Cable length 10,50 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-PS202-8211050>

GTIN 4048879689403

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 EC000830

ETIM-6.0 EC000830

customs tariff number 85444290

EAN 4048879689403

Packaging unit 1

#### Electrical data | Supply

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: 2026-02-09

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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

Material housing PUR

Locking material Brass

Coating locking nickel plated

#### 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 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 821

Function cable Hybrid, Signal, Power

Stranding 1 x Wires

Amount stranding (type 2) 1

Stranding (type 2) 1 x 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 210 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 lead-free, CFC-free, halogen-free, silicone-free

Amount strands (wire) 84

Diameter of single wires 0,15 mm

Conductor crosssection (wire) 1,5 mm<sup>2</sup>

Material conductor wire Stranded copper wire, bare

Conductor type (wire) strand class 6

Material wire insulation (type 3) TPM

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)	lead-free, CFC-free, halogen-free, silicone-free
Printing colour wire insulation (type 3)	white (isolation black)
Amount wires (type 3)	4
Amount strands wire (type 3)	84
Diameter of single wires (type 3)	0,15 mm
Wire conductor cross section (type 3)	1,5 mm <sup>2</sup>
Material conductor wire (type 3)	Stranded copper wire, bare
Conductor type wire (type 3)	strand class 6
Outer-diameter (jacket)	11,3 mm
Tolerance outer diameter (sheath)	± 5 %
Material jacket	TMPU
Freedom from ingredients (jacket)	lead-free, CFC-free, halogen-free, silicone-free
Material property (jacket)	low adhesion
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)	120.000 pF/km
Electrical capacity line constant (wire - wire) (power)	90.000 pF/km
Electrical capacity line constant (wire - shield)	160.000 pF/km
Electrical capacity line constant (wire - shield) (power)	160.000 pF/km
Isolation resistance	2.500 MΩ × km
Max. rated voltage (conductor - ground)	600 V
Max. rated voltage (conductor - conductor)	1.000 V
Withstand voltage (wire - wire)	4 kV @ 300 s
Withstand voltage (wire - jacket)	4 kV @ 300 s
Withstand voltage (wire - shield)	4 kV @ 300 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)	-30 °C
Operating temperature max. (static)	80 °C
Operating temperature min. (dynamic)	-30 °C
Operating temperature max. (dynamic)	80 °C
Operating temperature min. (drag chain)	-30 °C
Operating temperature max. (drag chain)	80 °C
Other resistances	resistant to hydrolysis
Bending radius (fixed)	4 × Outer diameter
Bending radius (dynamic)	7.5 × 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
Acceleration (C-track)	50 m/s <sup>2</sup> @ 25 °C
Torsion stress	± 30 °/m