

## M23 SIGNAL CABLE

Specification: M6FX8002-2CA31-1BA0

Art.No.: 7000-SS261-8111000

Weight: 1.405 kg

Country of origin: DE

Model designation: M6FX8002-2CA31-1BA0

### Advantages of our connectors:

Our connectors are versatile and specially optimised for industrial environments. All connectors are 100% tested during the manufacturing process to ensure the highest quality and reliability.

The contacts are gold-plated, which ensures optimum conductivity. Thanks to the high degree of protection, the connectors are ideal for demanding industrial environments. They are also vibration-resistant - this is ensured by the union nut with vibration protection.

Our connectors are resistant to oils and cooling lubricants, but resistance to aggressive media should be tested for each specific application. Different cable lengths available [on request](#)

If you are missing technical information? Please feel free to use our [dictionary](#) to find more technical details.

### Product details:

Signal cable for SINAMICS S120 and motors with connection M23

Female straight – female 90°

M23, 17-pole – SUB-D25

Shielded

without cable sleeves

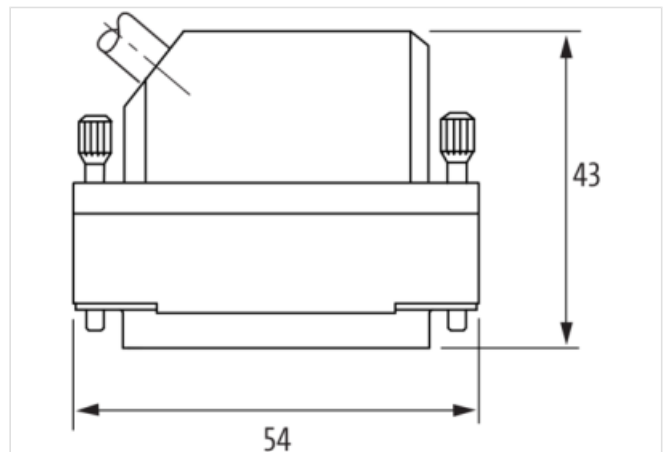
Further cable lengths on request.

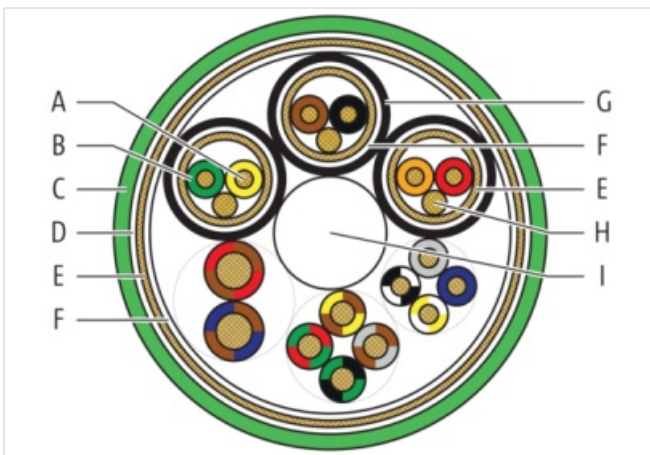
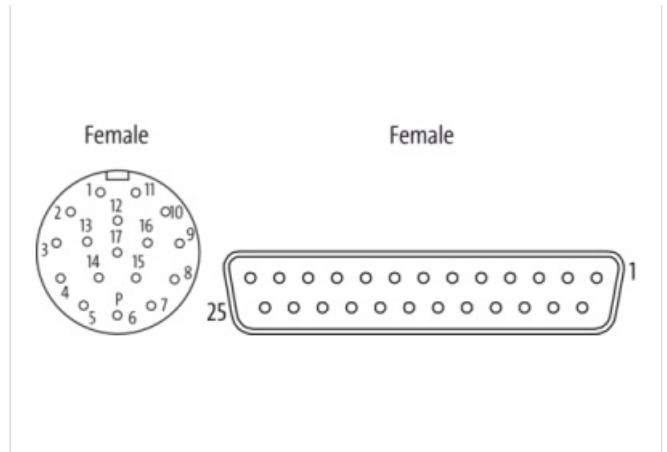
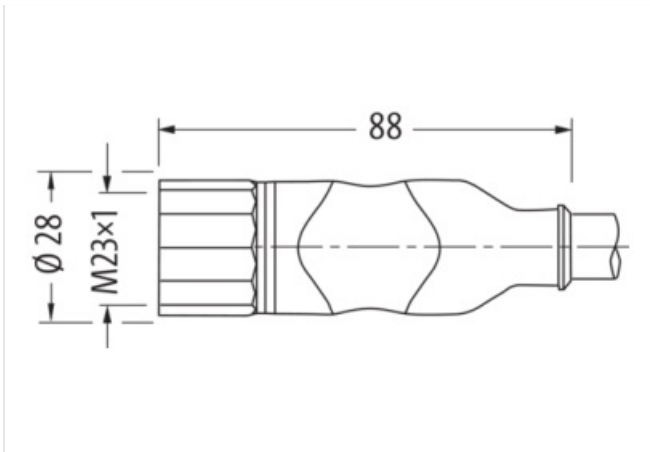
Plastic housings with good resistance against chemicals and oils.

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

### [Link to Product](#)

#### Illustration





Product may differ from Image

**Header**

Material short text	M6FX8002-2CA31-1BA0
Cable length	10,00 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
Degree of protection (EN IEC 60529)	IP67, IP65

**Side 2**

Family construction form	SUB-D25
Degree of protection (EN IEC 60529)	IP20

**Commercial data**

URL Webshop	<a href="https://shop.murrelektronik.com/7000-SS261-8111000">https://shop.murrelektronik.com/7000-SS261-8111000</a>
GTIN	4048879474955
ECLASS-6.0	27279218
ECLASS-6.1	27060307
ECLASS-7.0	27060307
ECLASS-7.1	27060307
ECLASS-8.0	27060307
ECLASS-8.1	27060307
ECLASS-9.0	27060307
ECLASS-9.1	27060307
ECLASS-10.0.1	27060307
ECLASS-10.1	27060307
ECLASS-11.0	27060307
ECLASS-11.1	27060307
ECLASS-12.0	27060307
ECLASS-13.0	27060307
ECLASS-14.0	27060307
ETIM-5.0	EC001855
ETIM-6.0	EC001855
ETIM-7.0	EC001855
ETIM-8.0	EC001855
customs tariff number	85444290
EAN	4048879474955
Packaging unit	1

**Electrical data | Supply**

Operating voltage AC max.	30 V
Operating voltage DC max.	30 V

**Device protection | Electrical**

Pollution Degree	3
Rated surge voltage	0,5 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	<b>Attention:</b> 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	811
Function cable	Hybrid
Amount stranding	2
Stranding	4 wires stranded
Amount stranding (type 2)	1
Stranding (type 2)	2 wires stranded
Amount stranding (type 3)	3
Stranding (type 3)	2 wires stranded with hatchet strand
Amount stranding (type 4)	1
Stranding (type 4)	6 stranding combinations stranded around core filler
Cable shielding (type)	copper braiding, bare
Cable shielding (coverage)	80 %
Banding	Fleece, Foil
Filler	Yes
Drain wire (cross-section)	10 mm <sup>2</sup>
Wire arrangement	brown-red, brown-blue, green-yellow, brown-yellow, brown-gray, black-green, red-green, red, orange, gray, blue, yellow-white, black-white, brown, black
Cable weight	122 g/m
Material wire insulation	PP
Amount wires	10
Outer diameter insulation	0,91 mm
Shore hardness wire insulation	65 ± 5 Shore D
Amount strands (wire)	7
Diameter of single wires	0,16 mm
Conductor crosssection (wire)	0,14 mm <sup>2</sup>
Drain wire (cross-section)	10 mm <sup>2</sup>
Material conductor wire	Stranded copper wire, bare
Material wire insulation (type 2)	PP
Outer diameter wire insulation (type 2)	1 mm
Shore hardness wire insulation (type 2)	65 ± 5 Shore D
Amount wires (type 2)	4
Amount strands wire (type 2)	7
Diameter of single wires (type 2)	0,127 mm
Conductor crosssection wire (type 2)	0,22 mm <sup>2</sup>
Material conductor wire (type 2)	copper stranded wire, tinned
Material wire insulation (type 3)	PP
Outer diameter wire insulation (type 3)	1,35 mm
Shore hardness wire insulation (type 3)	65 ± 5 Shore D
Amount wires (type 3)	2
Diameter of single wires (type 3)	0,18 mm
Wire conductor cross section (type 3)	0,5 mm <sup>2</sup>
Material conductor wire (type 3)	copper stranded wire, tinned
Outer-diameter (jacket)	9,5 mm
Tolerance outer diameter (sheath)	± 5 %
Material jacket	PUR
Freedom from ingredients (jacket)	CFC-free, silicone-free, halogen-free, lead-free
Conductor resistance (wire)	148.9 Ω/km @ 20 °C
Conductor resistance (wire type 2)	93.3 Ω/km @ 20 °C
Conductor resistance (wire type 3)	41 Ω/km @ 20 °C
Electrical capacity line constant (wire - shield)	8.000 pF/km
Isolation resistance	1.000 MΩ × km
Nominal voltage AC max.	30 V
Withstand voltage (wire - wire)	0.5 kV @ 60 s

Withstand voltage (wire - jacket)	0.5 kV @ 60 s
Withstand voltage (wire - shield)	0.5 kV @ 60 s
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	2,4 A
Current load capacity min. Wire (type 2)	2,4 A
Current carrying capacity min. wire (type 3)	9 A
Characteristic impedance	80 $\Omega$ 5 MHz
Operating temperature min. (dynamic)	-25 °C
Operating temperature max. (dynamic)	80 °C
Bending radius (fixed)	4 × Outer diameter
Bending radius (dynamic)	6 × Outer diameter
No. of bending cycles (C-track)	10 Mio. @ 25 °C
Traversing distance (C-track)	300 m @ 25 °C   horizontal
Travel speed (C-track)	3 m/s @ 25 °C
Acceleration (C-track)	5 m/s <sup>2</sup> @ 25 °C
Torsion stress	30 °C