

**M23 servo cable**

specification: 6FX5002-5DG01-1AF0

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 mm²), 15 A (2.5 mm²); brake cores: 5 A (1.5 mm²)

**Link to Product**

**Illustration**



Product may differ from Image

Cable length	5 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
<b>Commercial data</b>	
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
GTIN	4048879654166
Packaging unit	1
<b>Electrical data   Supply</b>	
Operating voltage AC per power contact max.	600 V
Operating voltage AC per signal contact max.	250 V
Operating voltage DC per power contact max.	600 V
Operating voltage DC per signal contact max.	250 V
<b>Device protection   Electrical</b>	
Degree of protection (EN IEC 60529)	IP65, IP67
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
<b>Mechanical data   Material data</b>	
Coating locking	nickel plated
Material housing	PUR
Locking material	Brass
<b>Mechanical data   Mounting data</b>	
Mounting method	inserted, screwed, Shaking protection
<b>Environmental characteristics   Climatic</b>	
Operating temperature min.	-25 °C
Operating temperature max.	85 °C
Additional condition temperature range	depending on cable quality
<b>Installation   Cable</b>	
Cable identification	861
Jacket Color	orange
Type of Certificate	cURus
STOOW style jacket	Hybrid, Signal, Power
Amount stranding	1
Stranding	2 wires with Filler twisted
Amount stranding (type 2)	1
Stranding (type 2)	4 wires with Filler around Stranding combination twisted
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	85 %
Pair shielding (type)	copper braid, tinned
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	203,5 g/m
Material jacket	PVC
Freedom from ingredients (jacket)	lead-free, CFC-free, silicone-free
Outer-diameter (jacket)	10,4 mm
Tolerance outer diameter (sheath)	± 5 %
Material wire insulation	TPM
Amount wires	2
Outer diameter insulation	2,4 mm
Outer diameter tolerance core insulation	± 5 %
Ingredient freeness wire insulation	lead-free, CFC-free, silicone-free
Amount strands (wire)	30
Diameter of single wires	0,25 mm
Conductor crosssection (wire)	1,5 mm <sup>2</sup>
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	Strand class 5
Outer diameter wire insulation (Power)	2,4 mm
Tolerance outer diameter wire insulation (Power)	±5 %
Ingredient freeness wire insulation (Power)	lead-free, CFC-free, silicone-free
Printing colour wire insulation (Power)	white (isolation black)
Amount strands wire (Power)	30
Diameter of single wires (Power)	0,25 mm
Wire conductor cross section (Power)	1,5 mm <sup>2</sup>
Material conductor wire (Power)	Stranded copper wire, bare
Conductor type wire (Power)	Strand class 5
Traversing distance (C-track)	5 m @ 25 °C
Travel speed (C-track)	4
Max. rated voltage (conductor - conductor)	1000 V
Max. rated voltage (conductor - ground)	600 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	12,6 A
Electrical resistance line constant wire	13,7 Ω/km @ 20 °C
Electrical resistance coating wire (Power)	13,7 Ω/km @20 °C
Min. operating temperature (static)	-25 °C
Max. operating temperature (fixed)	80 °C
Operating temperature min. (dynamic)	-5 °C
Operating temperature max. (dynamic)	60 °C
Flame resistance	UL 1581 § 1090   UL 1581 § 1100 FT2   IEC 60332-2-2
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)	5 x Outer diameter
Bending radius (dynamic)	18 x Outer diameter
No. of bending cycles (C-track)	0,1 Mio. @ 25 °C
Torsion stress	± 30 °/m