

## **M23 SERVO CABLE**

Specification: 6FX5002-5DS06-1AF0

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.

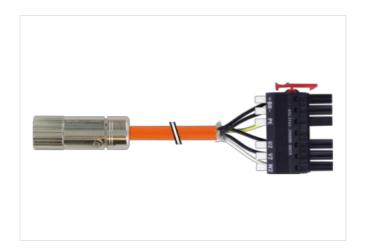
Plastic housings with good resistance against chemicals and oils.

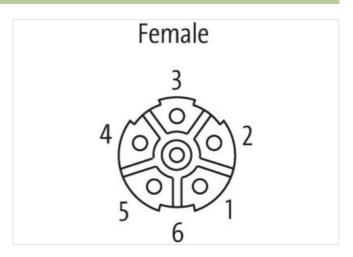
The resistance to aggressive media should be individually tested for your application. Further details on request.

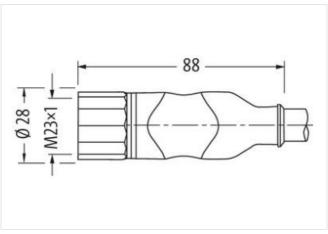
Power cores: 12 A (1.5 mm²), 15 A (2.5 mm²); brake cores: 5 A (1.5 mm²)

## **Link to Product**

## Illustration







Product may differ from Image

Cable length	5 m	
Side 1		
Tightening torque	2 Nm	
Family construction form	M23	
Thread	M23 x 1	

The information in this Product-PDF has been compiled with the utmost care.

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stay connected

suitable for corrugated tube (internal Ø) Width across flats	16 mm SW27	
	OVE	
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	EC000830	
customs tariff number	85444290	
GTIN	4048879683661	
Packaging unit	1	
Electrical data   Supply		
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.		
Operating voltage DC per signal contact max.	250 V	
Device protection   Electrical		
	IDEC IDEC	
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)	l	
Mechanical data   Material data		
Coating locking	nickel plated	
Material gasket	FKM	
Material housing	PUR	
Locking material	Brass	
Mechanical data   Mounting data		
Mounting method	inserted, screwed, Shaking protection	
Environmental characteristics   Climatic	,	
•	05.00	
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	<b>Attention:</b> Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.	
Installation   Cable		
	861	
Cable identification		
Cable identification  Function cable	Hybrid, Signal, Power	
	Hybrid, Signal, Power orange	

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## stay connected

Amount stranding	1
Stranding	2 wires with Filler twisted
Amount stranding (type 2)	2 wies with the twisted
Stranding (type 2)	4 wires with Filler around Stranding combination twisted
Cable shielding (type)	copper braid, tinned
Cable shielding (type)  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 weigth	203,5 g/m
<u> </u>	PVC
Material jacket	<u> </u>
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 wires (Power)	4
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
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
Current carrying capacity min. wire (Power)	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
AC withstand voltage (wire - wire)	2 kV @ 60 s
Electrical capacity line constant (wire - wire)	100000 pF/km
Electrical capacity line constant (wire - shield)	160000 pF/km
Power frequency withstand voltage (wire - jacket)	2 kV @ 60 s
AC withstand voltage (wire - shield)	2 kV @ 60 s
Isolation resistance	5000 MΩ × km
Electrical capacity line constant (wire - shield)	_
(power)  Electrical capacity line constant (wire - shield)  Electrical capacity line constant (wire - wire)	250000 pF/km
(power)	150000 pF/km
AC withstand voltage power (wire - shield)	4 kV @ 60 s



Power frequency withstand voltage power (wire - jacket)	4 kV @ 60 s
AC withstand voltage power (wire - wire)	4 kV @ 60 s
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
Traversing distance (C-track)	5 m @ 25 °C
Travel speed (C-track)	0,5 m/s @ 25 °C
Torsion stress	± 30 °/m