

M23 SERVO CABLE

Specification: 6FX8002-5DS16-1BC0

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.

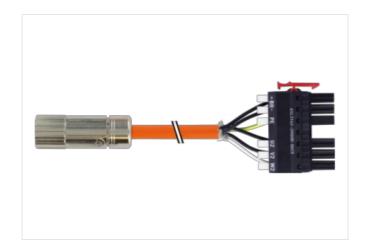
Plastic housings with good resistance against chemicals and oils.

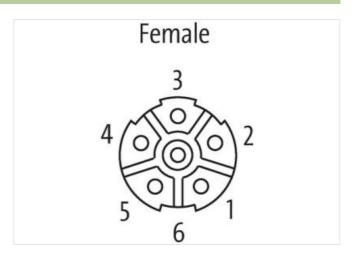
The resistance to aggressive media should be individually tested for your application. Further details on request.

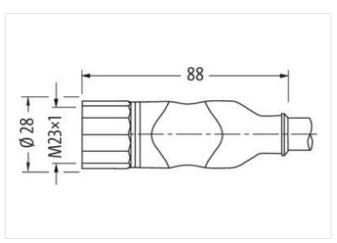
Power cores: 12 A (1.5 mm²), 15 A (2.5 mm²); brake cores: 5 A (1.5 mm²)

Link to Product

Illustration







Product may differ from Image

Cable length	12 m	
Side 1		
Tightening torque	2 Nm	
Family construction form	M23	
Thread	M23 x 1	

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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	
	07070040
ECLASS-6.0	27279218
ECLASS-6.1 ECLASS-7.0	27279218 27279218
ECLASS-7.0 ECLASS-8.0	
ECLASS-8.0 ECLASS-9.0	27279218
ECLASS-9.0 ECLASS-10.1	27060327
	27060311
ECLASS-11.1	27060311
ECLASS-12.0	27060327
ETIM-5.0	EC000830
customs tariff number	85444290
GTIN 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.	600 V
Operating voltage DC per signal contact max.	250 V
Device protection Electrical	
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
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	
Operating temperature min.	-25 °C
Operating temperature max.	85 °C
Additional condition temperature range	depending on cable quality
Important installation notes	
	Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.
Note on strain relief	
Note on strain relief 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 bending radius	endangered by excessive bending forces.
Note on bending radius Installation Cable Cable identification	endangered by excessive bending forces. 833
Note on bending radius	endangered by excessive bending forces.

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Amount stranding (type 2) Stranding (type 2) Cable shielding (type) Cable shielding (coverage) Banding Fiber ta Filler wire arrangement Cable weigth Material jacket TMPU Freedom from ingredients (jacket) Tolerance outer diameter (sheath) Amount wires 4 wires 2 copper 85 % Fiber ta yes wire arrangement black, v 311,3 g TMPU Freedom from ingredients (jacket) Tamm Tolerance outer diameter (sheath) 4 5 % Material wire insulation TPM Amount wires 2	ee, CFC-free, halogen-free, silicone-free
Amount stranding (type 2) Stranding (type 2) Cable shielding (type) Cable shielding (coverage) Banding Fiber ta Filler yes wire arrangement Cable weigth Material jacket TMPU Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Amount wires 1 4 wires 2 4 wires 1 4 wires 1 5 % A wires 1 5 %	with Filler around Stranding combination twisted braid, tinned braid, tinned ape, Fleece, Foil white, (black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow) g/m ee, CFC-free, halogen-free, silicone-free
Stranding (type 2) 4 wires Cable shielding (type) copper Cable shielding (coverage) 85 % Pair shielding (type) copper Banding Fiber ta Filler yes wire arrangement black, v Cable weigth 311,3 g Material jacket TMPU Freedom from ingredients (jacket) lead-free Outer-diameter (jacket) 13 mm Tolerance outer diameter (sheath) ± 5 % Material wire insulation TPM Amount wires 2	braid, tinned braid, tinned ape, Fleece, Foil white, (black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow) g/m ee, CFC-free, halogen-free, silicone-free
Cable shielding (type) Cable shielding (coverage) Pair shielding (type) Banding Fiber ta Filler wire arrangement Cable weigth Material jacket TMPU Freedom from ingredients (jacket) Tolerance outer diameter (sheath) Amount wires 2	braid, tinned braid, tinned ape, Fleece, Foil white, (black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow) g/m ee, CFC-free, halogen-free, silicone-free
Cable shielding (coverage) Pair shielding (type) Copper Banding Fiber ta Filler yes wire arrangement Cable weigth Material jacket TMPU Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation TPM Amount wires 2	braid, tinned ape, Fleece, Foil white, (black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow) ag/m pe, CFC-free, halogen-free, silicone-free
Pair shielding (type) Banding Fiber ta Filler yes wire arrangement Cable weigth Material jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Amount wires Copper 13 mm 15 % 16 Material wire insulation TPM Amount wires 2	white, (black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow) g/m ee, CFC-free, halogen-free, silicone-free
Banding Fiber to Filler yes wire arrangement black, where arrangement black, which are arrangement	white, (black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow) g/m ee, CFC-free, halogen-free, silicone-free
Filler yes wire arrangement black, v Cable weigth 311,3 g Material jacket TMPU Freedom from ingredients (jacket) lead-free Outer-diameter (jacket) 13 mm Tolerance outer diameter (sheath) ± 5 % Material wire insulation TPM Amount wires 2	white, (black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow) g/m ee, CFC-free, halogen-free, silicone-free
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Outer-diameter (jacket) 13 mm Tolerance outer diameter (sheath) ± 5 % Material wire insulation TPM Amount wires 2	
Material wire insulation TPM Amount wires 2	
Amount wires 2	
()Liter diameter inculation	1
Outer diameter insulation 2,4 mm Outer diameter tolerance core insulation ± 5 %	1
	on CEC tran halagan tran silingan tran
	ee, CFC-free, halogen-free, silicone-free
Diameter of single wires 0,15 m	
Conductor crosssection (wire) 1,5 mm	
	ed copper wire, bare
Conductor type (wire) strand	Class 6
Material wire insulation (Power) TPM	
Outer diameter wire insulation (Power) 3,1 mm	
Tolerance outer diameter wire insulation (Power) ±5 %	
Ingredient freeness wire insulation (Power) lead-free	ee, CFC-free, halogen-free, silicone-free
Printing colour wire insulation (Power) white (i	solation black)
Amount wires (Power) 4	
Amount strands wire (Power) 140	
Diameter of single wires (Power) 0,15 m	m
Wire conductor cross section (Power) 2,5 mm	12
Material conductor wire (Power) Strande	ed 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 load capacity min. wire 12,6 A	
Current carrying capacity min. wire (Power) 18,2 A	
Electrical resistance line constant wire 13,7 Ω	/km @ 20 °C
Electrical resistance coating wire (Power) 8 Ω /km	@20 °C
AC withstand voltage (wire - wire) 4 kV @	2 300 s
Electrical capacity line constant (wire - wire) 90000	pF/km
Electrical capacity line constant (wire - shield) 160000	•
Power frequency withstand voltage (wire - jacket) 4 kV @	<u>*</u>
AC withstand voltage (wire - shield) 4 kV @	2 300 s
	IΩ × km
Flectrical canacity line constant (wire - shield)) pF/km
Flectrical capacity line constant (wire - wire)) pF/km

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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 UL 1581 § 1100 FT2 IEC 60332-2-2
chemical resistance	Good, application-related testing
Gasoline resistance	Good, application-related testing
Oil resistance	Good, application-related testing DIN EN 60811-404
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