

M23 SERVO CABLE

Specification: 6FX8002-5CS01-1DF0

Power cable for SINAMICS S120 and Motors with M23 connection  
Female straight – pre-wired terminals  
M23, 6-pole  
4-pole used  
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	35 m
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Side 1

Tightening torque	2 Nm
Family construction form	M23
Thread	M23 x 1
Width across flats	SW27

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	EC001855
customs tariff number	85444290
GTIN	4048879555098
Packaging unit	1
Electrical data   Supply	
Operating voltage AC max.	630 V
Operating voltage DC max.	630 V
Device protection   Electrical	
Degree of protection (EN IEC 60529)	IP20, IP67
Pollution Degree	3
Mechanical data   Material data	
Coating locking	nickel plated
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	
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	
wire arrangement	black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow
Cable identification	854
Jacket Color	orange
Type of Certificate	cURus
Amount stranding	1
Stranding	4 wires with Filler twisted
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	85 %
Banding	Fiber tape, Fleece
Filler	yes
wire arrangement	black W/L3/D/L-, black U/L1/C/L+, black V/L2, green-yellow
Cable weight	141,9 g/m
Material jacket	TMPU
Freedom from ingredients (jacket)	lead-free, CFC-free, halogen-free, silicone-free
Outer-diameter (jacket)	8,6 mm
Tolerance outer diameter (sheath)	± 5 %
Material wire insulation (Power)	TPM
Outer diameter wire insulation (Power)	2,4 mm

Tolerance outer diameter wire insulation (Power)	±5 %
Ingredient freeness wire insulation (Power)	lead-free, CFC-free, halogen-free, silicone-free
Printing colour wire insulation (Power)	white (isolation black)
Amount wires (Power)	4
Amount strands wire (Power)	84
Diameter of single wires (Power)	0,15 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 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 carrying capacity min. wire (Power)	14,4 A
Electrical resistance coating wire (Power)	13,7 Ω/km @20 °C
AC withstand voltage (wire - wire)	4 kV @ 300 s
Electrical capacity line constant (wire - wire)	90000 pF/km
Electrical capacity line constant (wire - shield)	160000 pF/km
Power frequency withstand voltage (wire - jacket)	4 kV @ 300 s
AC withstand voltage (wire - shield)	4 kV @ 300 s
Isolation resistance	2500 MΩ × km
Electrical capacity line constant (wire - shield) (power)	200000 pF/km
Electrical capacity line constant (wire - wire) (power)	120000 pF/km
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   IEC 60332-2-2   UL 1581 § 1100 FT2
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)	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