MURR ELEKTRONIK
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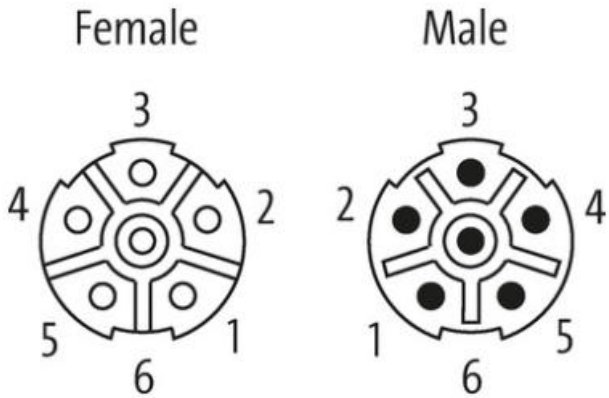
M23 SERVO CABLE

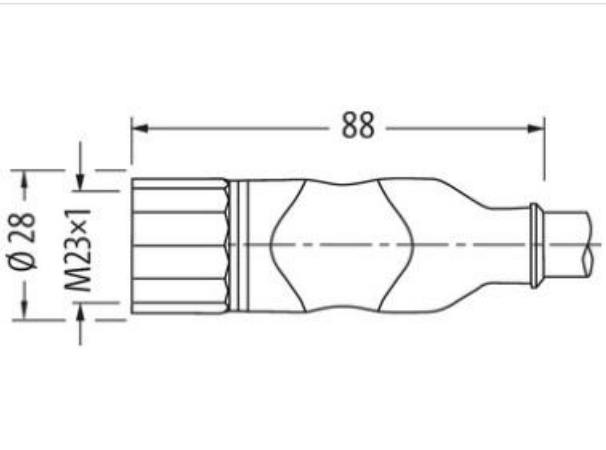
Specification: 6FX8002-5DA05-1AF5

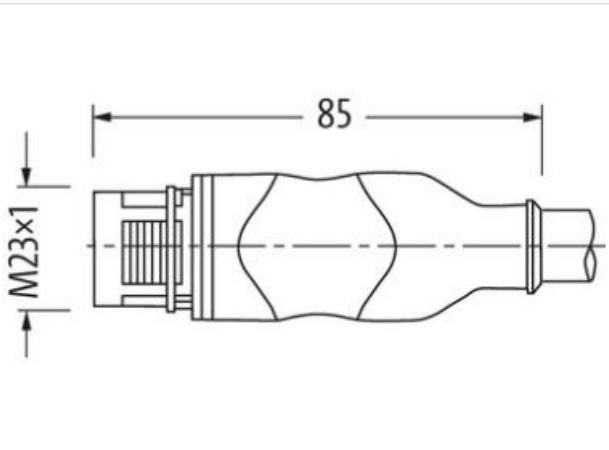
Power cable with brake wires for SINAMICS S120 and motors with M23 connection and holding brake
Female straight – male straight
M23 – M23, 6-pole
shielded
without cable sleeves
Further cable lengths on request.
Plastic housings with good resistance against chemicals and oils.
The resistance to aggressive media should be individually tested for your application. Further details on request.
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	5,5 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
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	EC001855
customs tariff number	85444290
GTIN	4048879796811
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 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	**Attention:** Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.
Installation | Cable	
Cable identification	821
Function cable	Hybrid, Signal, Power
Jacket Color	orange
Type of Certificate	cURus
Amount stranding	1
Stranding	2 wires with Filler twisted

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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 weigth	231 g/m
Material jacket	TMPU
Freedom from ingredients (jacket)	lead-free, CFC-free, halogen-free, silicone-free
Outer-diameter (jacket)	11,3 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, halogen-free, silicone-free
Amount strands (wire)	84
Diameter of single wires	0,15 mm
Conductor crosssection (wire)	1,5 mm²
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
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 mm²
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 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)	4 kV @ 300 s
Electrical capacity line constant (wire - wire)	120000 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)	160000 pF/km
Electrical capacity line constant (wire - wire) (power)	90000 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 § 1100 FT2 | IEC 60332-2-2 | UL 1581 § 1090
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