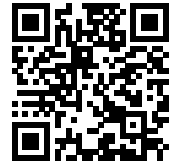
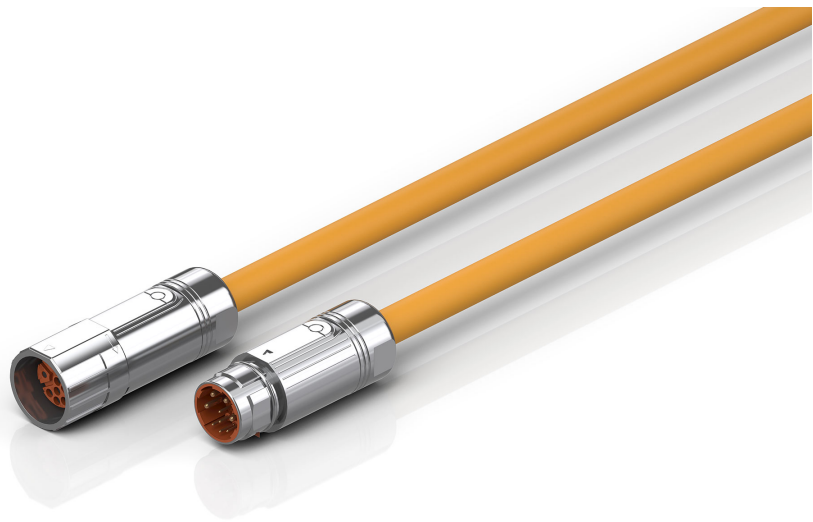


ZK4501-8004-xxxx | Motor extension cable 2.5 mm² with M23 speedtec® plug, fixed installation



M23, plug, straight, female, Power: 3+PE, Signal: 5 – M23, socket, straight, male, Power: 3+PE, Signal: 5



Plugs

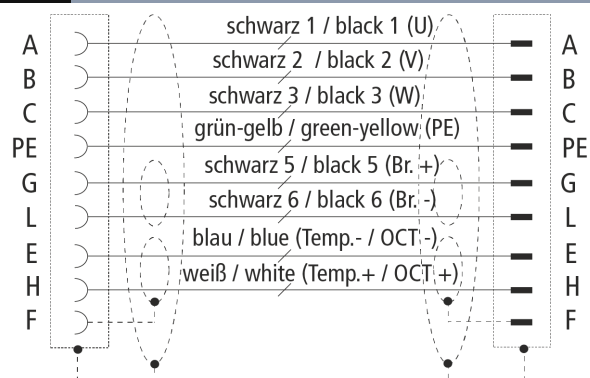
Electrical data	Head A	Head B
Rated voltage (power)	630 V AC/DC	630 V AC/DC
Rated voltage (signal/24V)	250 V AC/DC	250 V AC/DC
Rated current (power)	30 A max.	30 A max.
Rated current (signal/24V)	7 A max.	7 A max.
Rated impulse voltage (power)	6.0 kV	6.0 kV
Rated impulse voltage (signal/24V)	2.5 kV	2.5 kV
Contact resistance	< 5 mΩ (signal), < 3 mΩ (power)	< 5 mΩ (signal), < 3 mΩ (power)
Mechanical data		
Accessories type	Connector/cable	Connector/cable
Installation size	M23	M23
Connector type	plug	socket
Configuration	straight	straight

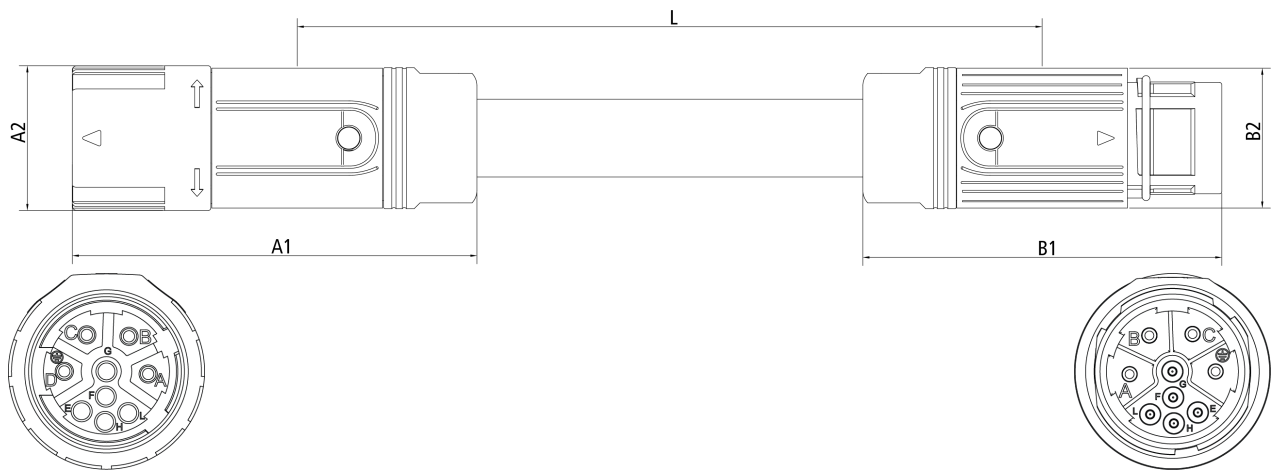
Contact type	female	male
Number of positions (face)	Power: 3+PE, Signal: 5	Power: 3+PE, Signal: 5
Wire termination	crimp connection	crimp connection
Mating cycles	500	500
Way of locking	Speedtec®	Speedtec®
Weight per piece	0.143 kg (0.3153 lb)	0.120 kg (0.2646 lb)
Body colour	metal	metal
Body material	zinc diecast/nickel plated	zinc diecast/nickel plated
Seal	FKM	FKM
Clamp ring	brass/nickel plated	brass/nickel plated
Contact carrier material	PA 6.6 mod., UL 94 V-0	PA 6.6 mod., UL 94 V-0
Contact material	brass/gold plated	brass/gold plated
Environmental data		
Special features	Max. height for operation 2000 m	Max. height for operation 2000 m
Ambient temperature (operation)	-20...+130 °C, -4...+266 °F	-20...+130 °C, -4...+266 °F
Protection class	IP 66/67 in screwed condition	IP 66/67 in screwed condition
Pollution level	3 (according to VDE 0110/EN61984 part 6.19.2.2)	3 (according to VDE 0110/EN61984 part 6.19.2.2)
Overvoltage category	3 (according to VDE 0110/EN61984 part 6.19.2.2)	3 (according to VDE 0110/EN61984 part 6.19.2.2)

Cable

Electrical data		
Operating voltage	max. 1000 V AC (UL)	
Insulation resistance	≥ 500 MΩ * km (DIN EN 50395)	
Mutual capacitance	Signal: 45 ± 15 pF/m, Power: 90 pF/m (at 800 Hz according to EN 50289-1-5)	
Wire resistance (power)	≤ 7.98 Ω/km (DIN EN 50395)	
Wire resistance (signal/24V)	≤ 55.0 Ω/km (DIN EN 50395)	
Wire resistance (brake)	≤ 19.5 Ω/km (DIN EN 50395)	
Characteristic impedance	Signal: 110 Ω ± 10 Ω (10 MHz) acc. to EN50289-1-11	
Dielectric strength wire/wire (power)	4 kV 50 Hz 5 min. (DIN VDE 0472 T.509C)	
Dielectric strength wire/shield (power)	4 kV 50 Hz 5 min. (DIN VDE 0472 T.509C)	
Dielectric strength wire/wire (signal/24V)	3 kV 50 Hz 1 min. (DIN VDE 0472 T.509C)	
Dielectric strength wire/shield (signal/24V)	3 kV 50 Hz 1 min. (DIN VDE 0472 T.509C)	
Mechanical data		
Cross section (power)	2.50 mm ² (approx. AWG14)	

Cross section (signal)	AWG22 (approx. 0.34 mm ²)
Cross section (brake)	1.00 mm ² (approx. AWG18)
Min. bending radius, fixed installation	5 x outer cable diameter
Outer cable diameter	13,8 mm ± 0,4 mm (0,5433" ± 0,0157")
Conductor material	Copper bare
Optical covering factor of shielding	≥ 85%
Use	fixed installation
Jacket colour	orange
Material jacket	PVC (polyvinyl chloride)
Wire insulation material	PP (polypropylene)
Printing colour	black
Torsion angle in °/m	max. ± 30 °/m
Max. tensile load, dynamic	20 N/mm ²
Max. tensile load, static	50 N/mm ²
Environmental data	
Operation temperature range, fixed installation	-20...+80 °C, -4...+176 °F
Oil resistance	according to DIN EN 60811-2-1, HD22.10 appendix A
Flame-retardant	according to IEC 60332-1-2 UL758 cable flame test
Halogen-free	no
Silicone-free	yes
RoHS compliant	yes
Approvals	UL758 (AWM) Style 2570 (jacket) and Style 10492 (core)

Contact assembly**Dimensions**



A1	79.00 mm
A2	28.00 mm
B1	70.00 mm
B2	20.00 mm

Notes

- Depending on the cable length (L), the following length tolerances apply: $\pm 2-3\%$
- Illustrations similar
- The last three digits of the ordering information is the cable length in decimeters, e.g. ZK4xxx-xxxx-x020 = cable length 2.00 m

Ordering information	Length
ZK4501-8004-xxxx	xxxx = cable length in decimetres
xxxx = 0050	example for 5 m length
	sold by the metre, admissible total cable length see documentation of Servo Drive

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