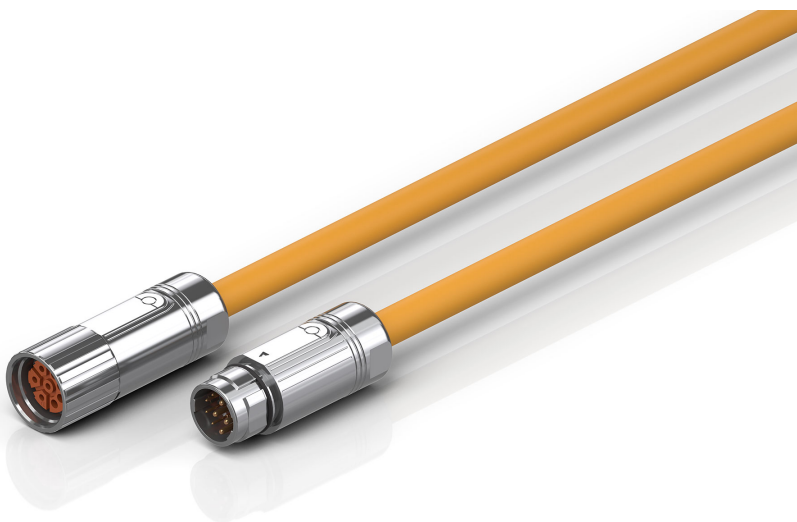


ZK4501-0023-xxxx | Motor extension cable 1.5 mm² with M23 plug, drag-chain suitable



M23, plug, straight, female, 8-pin – M23, socket, straight, male, 8-pin



Plugs

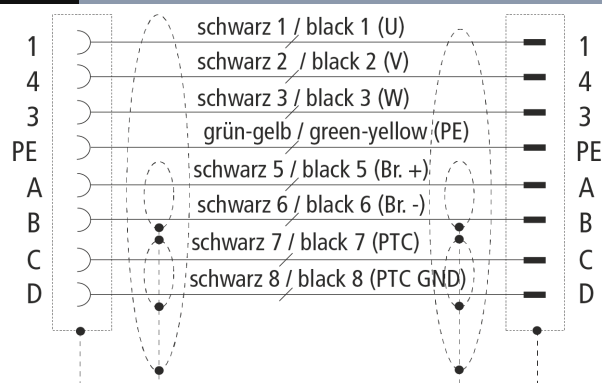
Electrical data	Head A	Head B
Rated voltage (power)	630 V AC/DC	630 V AC/DC
Rated voltage (signal/24V)	250 V AC/DC	250 V AC/DC
Rated current (power)	30 A max.	30 A max.
Rated current (signal/24V)	7 A max.	7 A max.
Rated impulse voltage (power)	6.0 kV	6.0 kV
Rated impulse voltage (signal/24V)	2.5 kV	2.5 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)	8-pin	8-pin

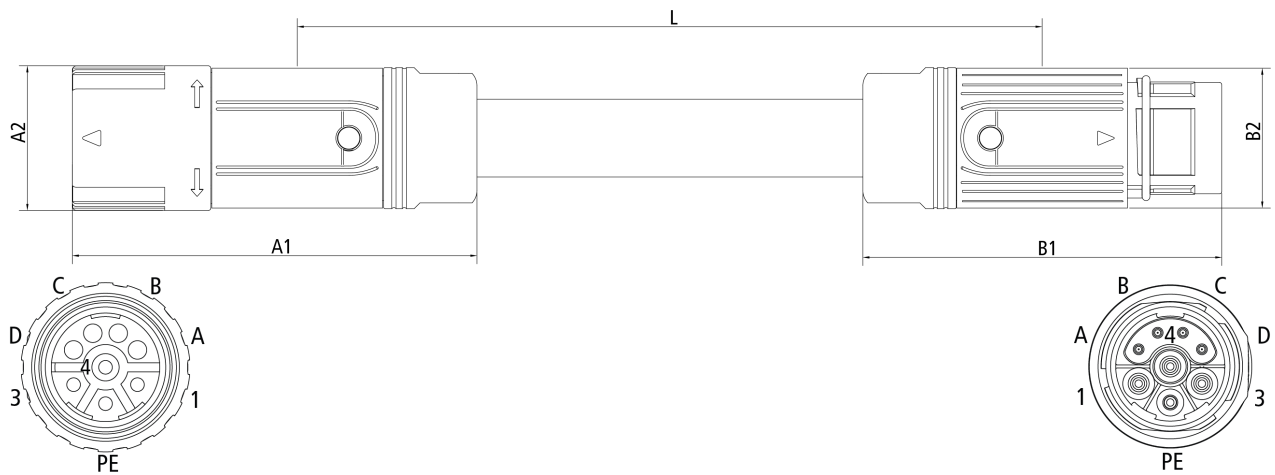
Wire termination	crimp connection	crimp connection
Mating cycles	500	500
Way of locking	Speedtec®	Speedtec®
Weight per piece	0.143 kg (0.3153 lb)	0.115 kg (0.2535 lb)
Body colour	metal	metal
Body material	zinc diecast/nickel plated	zinc diecast/nickel plated
Seal	FKM	FKM
Clamp ring	zinc diecast/nickel 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), U ₀ /U 600/1000 V (VDE)
Insulation resistance	10 MΩ * km
Wire resistance (power)	≤ 13.3 Ω/km (DIN EN 50395)
Wire resistance (signal/24V)	≤ 26.0 Ω/km (DIN EN 50395)
Wire resistance (brake)	≤ 26.0 Ω/km (DIN EN 50395)
Test voltage	4000 V (wire/wire), 2000 V (wire/screen)
Mechanical data	
Cross section (power)	1.50 mm ² (approx. AWG16)
Cross section (signal)	0.75 mm ² (approx. AWG18)
Cross section (brake)	0.75 mm ² (AWG 18)
Min. bending radius, moved in drag chain	7 x outer cable diameter
Min. bending radius, fixed installation	4 x outer cable diameter
Weight	237 kg/km (159.240 lb/1000 ft)
Outer cable diameter	12.4 mm ± 0.3 mm (0.4882" ± 0.0118")
Conductor material	Copper bare

Optical covering factor of shielding	≥ 85%
Use	drag-chain suitable
Max. acceleration	30 m/s ²
Max. speed	4 m/s
Max. travel distance	20 m
Max. number of cycles	10 million
Jacket colour	orange
Material jacket	PUR (polyurethane)
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, moved	-20...+80 °C, -4...+176 °F
Operation temperature range, fixed installation	-50...+80 °C, -58...+176 °F
Oil resistance	according to UL 1581
Flame-retardant	according to IEC 60332-1
CFC-free	yes
Halogen-free	according to DIN VDE 0472 Teil 815
Silicone-free	yes
RoHS compliant	yes
Approvals	cRUus-Style AWM 20234, CE compliant

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: $\pm 2\text{-}3\%$
- 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
ZK4501-0023-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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