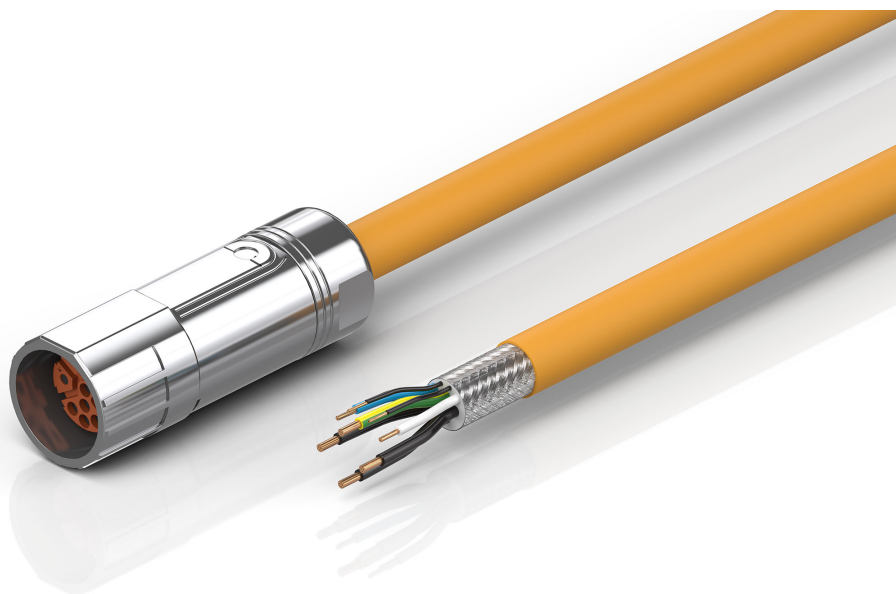


ZK4704-0422-2xxx | Motor connection cable 1 mm² with M23 speedtec® plug, drag-chain suitable



M23, plug, straight, female, Power: 3+PE, Signal: 5 – open end, 8-wire + shield



Plugs

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

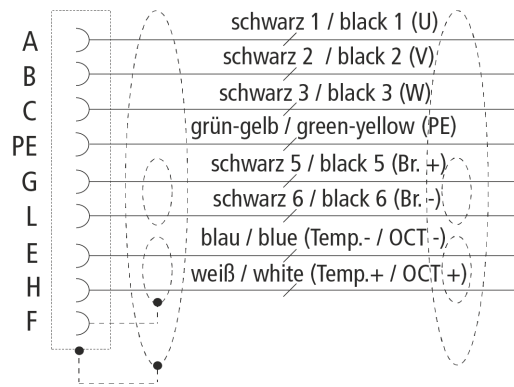
Number of positions (face)	Power: 3+PE, Signal: 5	8-wire + shield
Wire termination	crimp connection	-
Mating cycles	500	-
Way of locking	Speedtec®	-
Weight per piece	0.143 kg (0.3153 lb)	-
Body color	metal	-
Body material	zinc diecast/nickel plated	-
Seal	FKM	-
Clamp ring	brass/nickel plated	-
Contact carrier material	PA 6.6 mod., UL 94 V-0	-
Contact material	brass/gold plated	-
Environmental data		
Special features	Max. height for operation 2000 m	-
Ambient temperature (operation)	-20...+130 °C, -4...+266 °F	-
Protection rating	IP66/67 in screwed condition	-
Pollution level	3 (according to VDE 0110/EN61984 part 6.19.2.2)	-
Overvoltage category	3 (according to VDE 0110/EN61984 part 6.19.2.2)	-

Cable

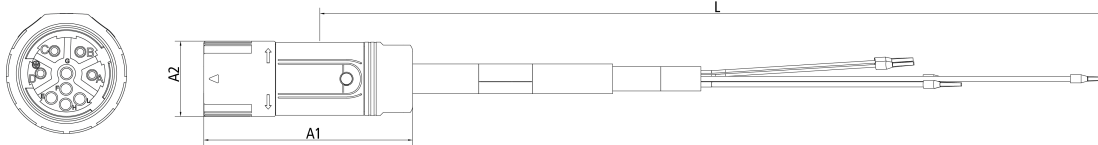
Electrical data		
Operating voltage	max. 1000 V AC (UL), U ₀ /U 600/1000 V (VDE)	
Insulation resistance	≥ 500 MΩ * km (DIN EN 50395)	
Mutual capacitance	Signal: 45 ± 15 pF/m, Power: 90 pF/m (at 800 Hz according to EN 50289-1-5)	
Wire resistance (power)	≤ 19.5 Ω/km (DIN EN 50395)	
Wire resistance (signal/24V)	≤ 55.0 Ω/km (DIN EN 50395)	
Wire resistance (brake)	≤ 26.0 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)	1.00 mm ² (approx. AWG18)	
Cross-section (signal)	AWG22 (approx. 0.34 mm ²)	

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	5 x outer cable diameter
Weight	215 kg/km (144.459 lb/1000 ft)
Outer cable diameter	11.6 mm ± 0.4 mm (0.4567" ± 0.0157")
Conductor material	copper bare
Optical covering factor of shielding	≥ 85%
Use	drag-chain suitable
Max. acceleration	30 m/s ² by 5 m travel distance 15 m/s ² by 10 m travel distance 5 m/s ² by 20 m travel distance
Max. speed	4 m/s
Max. travel distance	20 m (horizontal) 5 m (vertical)
Max. number of cycles	5 million
Jacket color	orange
Material jacket	TPU (thermoplastic polyurethane)
Wire insulation material	PP (polypropylene)
Printing color	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. In drag-chain with mechanical strain: -20...+60 °C, -4...+140 °F
Operation temperature range, fixed installation	-40...+80 °C, -40...+176 °F
UV resistance	UV resistance of the outer jacket referred to DIN EN ISO 4892-2
Oil resistance	according to DIN EN 60811-404, HD22.10 appendix A
Flame-retardant	according to IEC 60332-1-2 UL758 cable flame test
CFC-free	yes
Halogen-free	according to DIN VDE 0472 Teil 815
Silicone-free	yes
RoHS compliant	yes
Approvals	UL758 (AWM) Style 21223 (jacket) and Style 10492 (core)

Contact assembly



Dimensions



A1 79.00 mm

A2 28.00 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

ZK4704-0422-2xxx xxx = cable length in decimeters

xxx = 050 example for 5 m length

sold by the meter, admissible total cable length 20 m

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