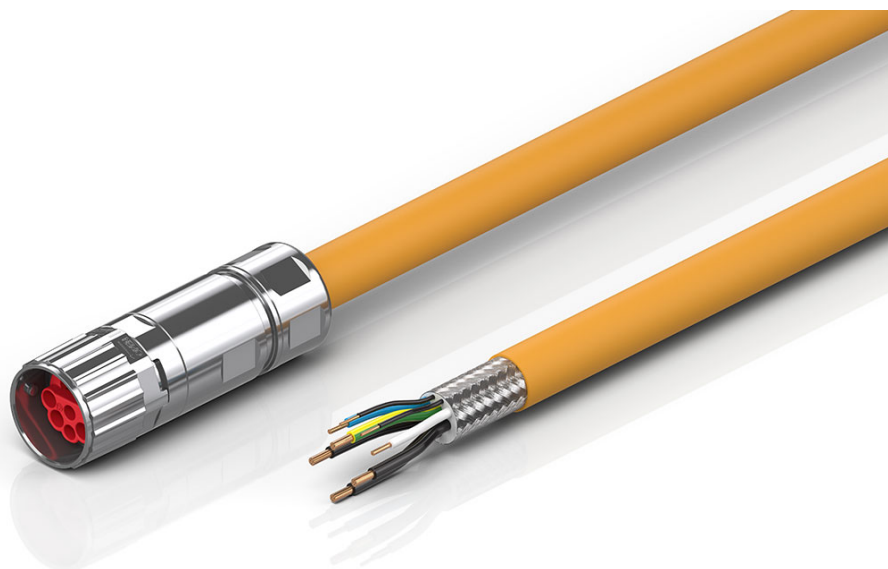


ZK7961-3600-0xxx | Motor cable, B17, PUR, (2 x AWG22) + 2 x 0.75 mm² + 4 x 1.5 mm², drag-chain suitable, Key 3 (24 V DC)



B17, plug, straight, male+male, pins 3+PE+2+2 – open end, 8-wire + shield



Plugs

Electrical data	Head A	Head B
Rated voltage (power)	630 V AC / 850 V DC, 600V AC / DC (UL)	-
Rated current (power)	14 A + 10 A at 40°C	-
Rated current (DSL)	4 A at 40°C	-
Rated impulse voltage (power)	6.0 kV	-
Rated impulse voltage (Ethernet)	1.0 kV	-
Rated impulse voltage (DSL)	50 V	-
Contact resistance	< 10 mΩ (signal), < 5 mΩ (power)	-
Insulation resistance	≥ 100 MΩ (according to IEC 60512)	-
Mechanical data		
Installation size	B17	open end
Connector type	plug	-
Configuration	straight	-
Contact type	male+male	-

Number of positions (face)	pins 3+PE+2+2	8-wire + shield
Mechanical coding	key 3 (user-defined voltage)	-
Wire termination	crimp connection	-
Mating cycles	≥ 100	-
Way of locking	bayonet	-
Weight	0.090 kg (0.1984 lb)	-
Body color	black	-
Body material	PA, UL 94, HB	-
Coupling nut material	GD-Zn, Ni	-
Seal	NBR, FPM	-
Contact carrier material	PA 6, UL 94 V0	-
Contact carrier color (Ethernet)	red	-
Contact carrier color (power)	red	-
Contact plating	Au over Ni	-
Contact material	copper alloy	-
Environmental data		
Shock resistance	50 g (490 m/s ²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes	-
Vibration resistance	5 g (50 m/s ²) conforms to IEC 60512-6d, 10 Hz. ... 500 Hz; 10 cycles per axis; 6 h full duration	-
Ambient temperature (operation)	-30...+80°C, -22...+176°F	-
Protection rating	IP65/67 in screwed condition (according to IEC 60529)	-
Pollution level	3/2 (according to IEC 60664-1)	-

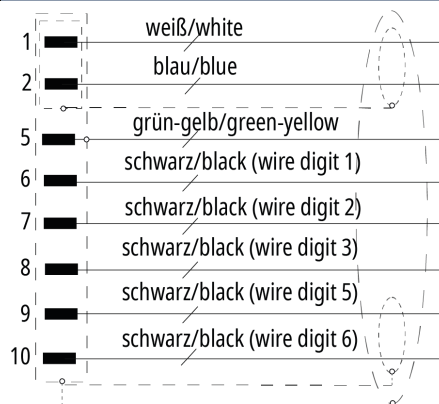
Cable

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)	≤ 13.3 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)	

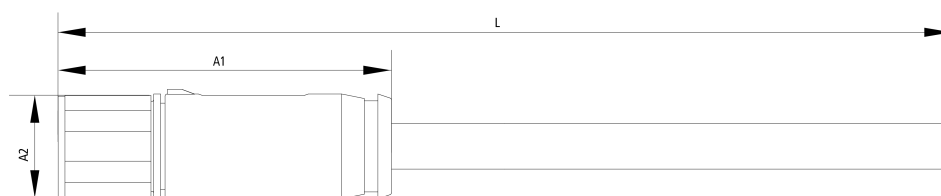
Dielectric strength wire/wire (signal/24V)	3 kV 50 Hz 1 min. (DIN VDE 0472 T.509C)
Dielectric strength wire/shield (signal/24V)	3 kV 50 Hz 1 min. (DIN VDE 0472 T.509C)
Mechanical data	
Cross-section (power)	1.50 mm ² (approx. AWG16)
Cross-section (signal)	AWG22 (approx. 0.34 mm ²)
Cross-section (brake)	0.75 mm ² (AWG18)
Outer cable diameter	12.7 mm ± 0.4 mm (0.5" ± 0.0157")
Min. bending radius, moved in drag-chain	7 x outer cable diameter
Min. bending radius, fixed installation	5 x outer cable diameter
Weight	250.0 kg/km (167.975 lb/1000 ft)
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
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 part 815
Silicone-free	yes
RoHS compliant	yes

UL	yes, UL E-file number: E170315
Approvals	UL758 (AWM) Style 21223 (jacket) and Style 10492 (core)

Pin assignment



Dimensions



A1	73.60 mm
A2	23.00 mm

Mechanical coding

Mechanical keying uses defined keyways that only allow insertion and subsequent locking rotation when correctly aligned. For more information, please refer to the [keying guide for correct use](#).

Notes

- Depending on the cable length (L), the following length tolerances apply:
0 m...3.0 m: + 100 mm | 3.0...10.0 m: ± 100 mm | ≥ 10.0 m: ± 2%
- Illustrations similar
- Further cable length on request. The last three digits of the ordering information is the cable length in decimeters, e.g. ZKxxxx-xxxx-x020 = cable length 2.00 m
- B17 3-pin 1.5 mm² and B17 3 3-pin 2.5 mm² are not pin compatible

CE, UL

CE	yes
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Ordering information

Length

ZK7961-3600-0030	3.00 m
ZK7961-3600-0040	4.00 m
ZK7961-3600-0070	7.00 m
ZK7961-3600-0080	8.00 m
ZK7961-3600-0120	12.00 m
ZK7961-3600-0150	15.00 m
ZK7961-3600-0200	20.00 m
ZK7961-3600-0300	30.00 m

Further length on request



Products marked with a crossed-out wheeled bin shall not be discarded with the normal waste stream. The device is considered as waste electrical and electronic equipment. The national regulations for the disposal of waste electrical and electronic equipment must be observed.

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