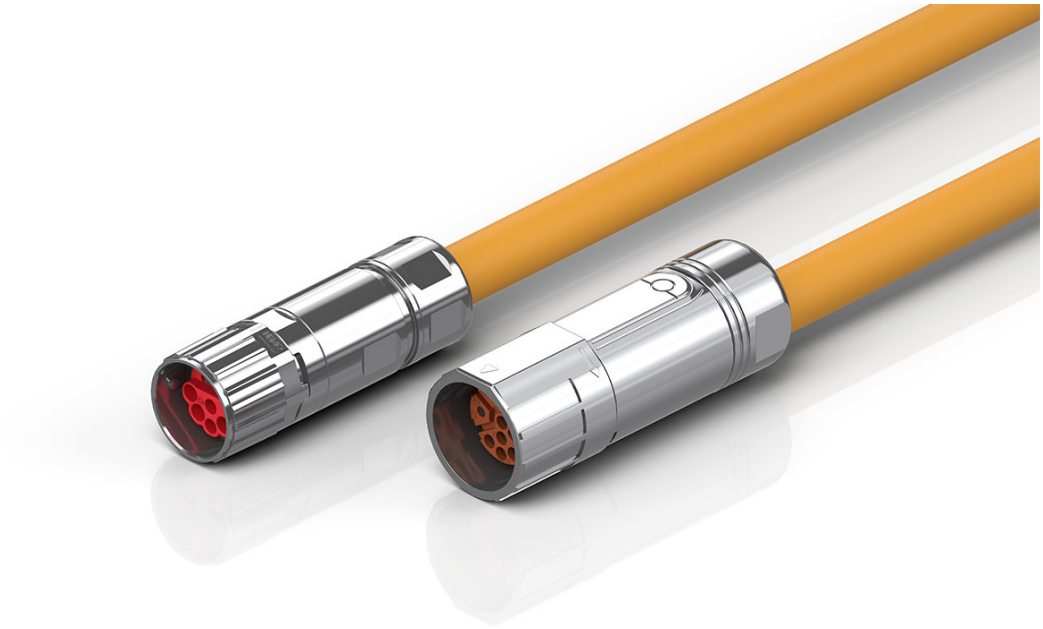
ZK7961-3673-0xxx | Motor cable, IP67, (4 G 1.5 mm² +(2 x 0.75 mm²)+(2 x AWG22)), PUR, orange, drag-chain suitable, Key 3 (24 V DC)

B17, plug, straight, male+male, pins 3+PE+2+2 – M23, plug, straight, female, Power: 3+PE, Signal: 5



Plugs

Electrical data	Head A	Head B
Rated voltage (power)	630 V AC / 850 V DC, 600V AC / DC (UL)	630 V AC/DC
Rated voltage (signal/24V)	-	250 V AC/DC
Rated current (power)	14 A + 10 A at 40°C	30 A max.
Rated current (signal/24V)	-	7 A max.
Rated current (DSL)	4 A at 40°C	-
Rated impulse voltage (power)	6.0 kV	6.0 kV
Rated impulse voltage (signal/24V)	-	2.5 kV
Rated impulse voltage (Ethernet)	1.0 kV	-
Rated impulse voltage (DSL)	50 V	-
Contact resistance	< 10 mΩ (signal), < 5 mΩ (power)	< 5 mΩ (signal), < 3 mΩ (power)
Insulation resistance	≥ 100 MΩ (according to IEC 60512)	-
Mechanical data		

Accessories type	-	Connectors
Installation size	B17	M23
Connector type	plug	plug
Configuration	straight	straight
Contact type	male+male	female
Number of positions (face)	pins 3+PE+2+2	Power: 3+PE, Signal: 5
Mechanical coding	key 3 (user-defined voltage)	-
Wire termination	crimp connection	crimp connection
Mating cycles	≥ 100	500
Way of locking	bayonet	Speedtec®
Weight	0.090 kg (0.1984 lb)	0.143 kg (0.3153 lb)
Body color	black	metal
Body material	**PA, UL 94, HB**	zinc diecast/nickel plated
Coupling nut material	GD-Zn, Ni	-
Seal	NBR, FPM	FKM
Clamp ring	-	brass/nickel plated
Contact carrier material	PA 6, UL 94 V0	PA 6.6 mod., UL 94 V-0
Contact carrier color (Ethernet)	red	-
Contact carrier color (power)	red	-
Contact plating	Au over Ni	-
Contact material	copper alloy	brass/gold plated
Environmental data		
Special features	-	Max. height for operation 2000 m
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	-20...+130°C, -4...+266°F
Protection rating	IP65/67 in screwed condition (according to IEC 60529)	IP66/67 in screwed condition
Pollution level	3/2 (according to IEC 60664-1)	3 (according to VDE 0110/EN61984 part 6.19.2.2)
UL	-	yes, UL E-file number: E247738
Overvoltage category	-	3 (according to VDE 0110/EN61984 part 6.19.2.2)

Cable

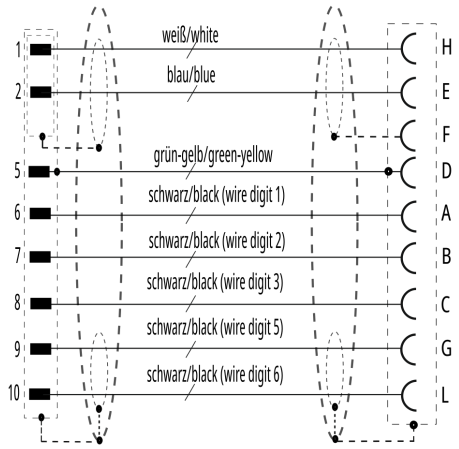
Electrical data	
Operating voltage	max. 1000 V AC (UL), Uo/U 600/1000 V (VDE)
Insulation resistance	≥ 500 MΩ * km (DIN EN 50395)
Mutual capacitance	Signal: 45 ± 15 pF/m, Power: 90 pF/m (at 800 Hz according to EN 50289-1-5)
Wire resistance (power)	≤ 13.3 Ω/km (DIN EN 50395)
Wire resistance (signal/24V)	≤ 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/mm²

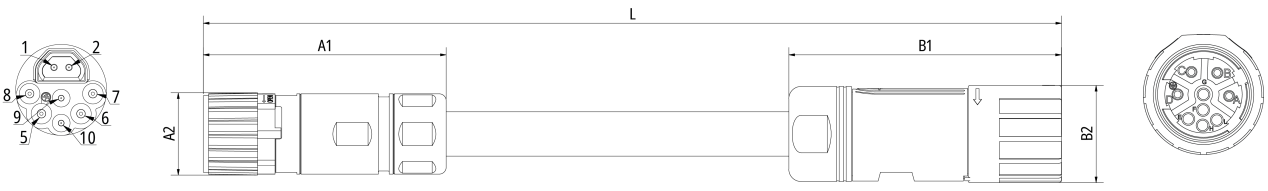
Environmental data

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
B1	79.00 mm
B2	28.00 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
- The design of the pre-assambled cable shown here may differ from the products supplied, despite technically identical specifications.

CE, UL	
CE	yes

Ordering information	Length
ZK7961-3673-0006	0.60 m
ZK7961-3673-0010	1.00 m
ZK7961-3673-0020	2.00 m
ZK7961-3673-0025	2.50 m
ZK7961-3673-0030	3.00 m
ZK7961-3673-0035	3.50 m
ZK7961-3673-0040	4.00 m
ZK7961-3673-0045	4.50 m
ZK7961-3673-0050	5.00 m
ZK7961-3673-0055	5.50 m
ZK7961-3673-0060	6.00 m
ZK7961-3673-0065	6.50 m
ZK7961-3673-0070	7.00 m
ZK7961-3673-0075	7.50 m
ZK7961-3673-0080	8.00 m
ZK7961-3673-0085	8.50 m
ZK7961-3673-0090	9.00 m
ZK7961-3673-0095	9.50 m
ZK7961-3673-0100	10.00 m
ZK7961-3673-0105	10.50 m
ZK7961-3673-0110	11.00 m
ZK7961-3673-0115	10.50 m

ZK7961-3673-0120	12.00 m
ZK7961-3673-0130	13.00 m
ZK7961-3673-0140	14.00 m
ZK7961-3673-0150	15.00 m
ZK7961-3673-0170	17.00 m
ZK7961-3673-0180	18.00 m
ZK7961-3673-0190	19.00 m
ZK7961-3673-0200	20.00 m
ZK7961-3673-0500	50.00 m
ZK7961-3673-0999	100 m

Further length on request

Accessories	
ZB8805-0001	Flange/Panel feed-through for B17 pre-assembled, for fixing the connector, plastic, including screws, washers and lock nuts
ZB8805-0002	Flange/Panel feed-through for B23 pre-assembled, for fixing the connector, plastic, including screws, washers and lock nuts
ZB8805-0003	Flange/Panel feed-through for M23, for fixing the connector, plastic



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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