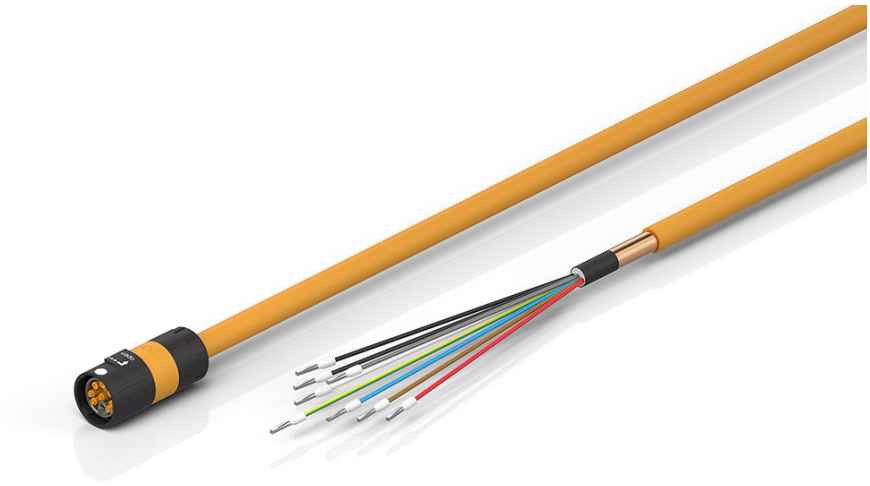
ZK4704-0421-2xxx | Motor connection cable 0.75 mm² with itec® plug for motors with OCT, drag-chain suitable

itec® (Series 915), 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)	63 V AC/DC	-
Rated current (power)	14 A	-
Rated current (signal/24V)	3.6 A	-
Rated impulse voltage (power)	6.0 kV	-
Rated impulse voltage (signal/24V)	1.5 kV	-
Contact resistance	< 5 mΩ	-
Mechanical data		
Accessories type	Connectors/Cables	-
Installation size	itec® (Series 915)	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	bayonet	-
Weight per piece	0.035 kg (0.0772 lb)	-
Body color	black, similar to RAL 9011	-
Body material	zinc diecast/plastic	-
Seal	FKM	-
Clamp ring	brass/nickel plated	-
Contact carrier material	PBT, PA, UL 94 V-0	-
Contact material	brass/gold plated	-
Environmental data		
Special features	Max. height for operation 2000 m	-
Shock resistance	30 g (conforms to EN 60060-2-27), 11 ms; 18 shocks per direction, 3 axes	-
Vibration resistance	10 g (conforms to EN 60068-2-27), 50 Hz...2000 Hz; 1 Octave/min.; 10 cycles per axis	-
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)	-

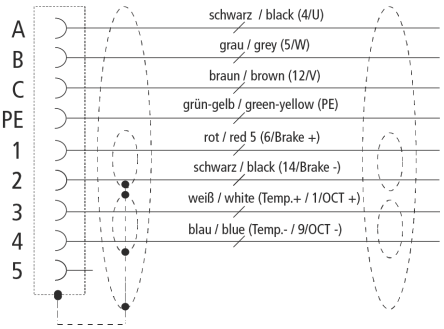
Cable

Electrical data	
Rated voltage	≤ 300 V
Operating voltage	max. 300 V AC (UL), Uo/U 300/500 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)	≤ 26.0 Ω/km (DIN EN 50395)
Wire resistance (signal/24V)	≤ 55.0 Ω/km (DIN EN 50395)
Wire resistance (brake)	≤ 55.0 Ω/km (DIN EN 50395)
Characteristic impedance	Signal: 110 Ω ± 10 Ω (10 MHz) acc. to EN50289-1-11
Dielectric strength wire/wire (power)	2 kV 50 Hz 5 min. (DIN VDE 0472 T.509C)
Dielectric strength wire/shield (power)	2 kV 50 Hz 5 min. (DIN VDE 0472 T.509C)

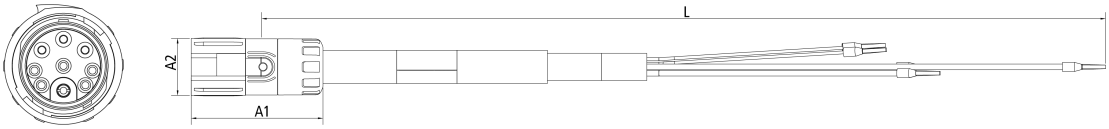
Dielectric strength wire/wire (signal/24V)	2 kV 50 Hz 5 min. (DIN VDE 0472 T.509C)
Dielectric strength wire/shield (signal/24V)	2 kV 50 Hz 5 min. (DIN VDE 0472 T.509C)
Mechanical data	
Cross-section (power)	0.75 mm² (approx. AWG18)
Cross-section (signal)	AWG22 (approx. 0.34 mm²)
Cross-section (brake)	0.34 mm² (AWG22)
Outer cable diameter	11.0 mm ± 0.4 mm (0.433" ± 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	175.0 kg/km (117.583 lb/1000 ft)
Conductor material (signal/24V)	copper bare
Optical covering factor of shielding	≥ 85%
Use	drag-chain suitable
Max. acceleration	30 m/s² by 5 m travel distance 15 m/s² by 10 m travel distance 5 m/s² 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
Wall thickness of wire insulation (power)	0.4 mm
Wall thickness of wire insulation (signal/24V)	0.6 mm
Wall thickness of wire insulation (brake)	0.33 mm
Wall thickness of jacket	0.9 mm
Jacket color	orange
Material jacket	PUR (polyurethane)
Wire insulation material	PP (polypropylene)
Printing on the jacket	Beckhoff Automation GmbH & Co. KG - D - Verl - 4 G 0,75 + (2x0,34)/C + (2x22AWG)/C C E170315 cRUus AWM STYLE 20233 AWM I/II A/B 80°C 300V FT1 XX/YY - DESINA – XX/YY = week of production / year of production
Printing color	black
Torsion angle in °/m	max. ± 30 °/m
Max. tensile load, dynamic	20 N/mm²
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 60811-2-1, HD22.10 appendix A
Flame-retardant	according to IEC 60332-1-2 UL758 cable flame test
CFC-free	yes
Halogen-free	DIN VDE 0472 part 815
Silicone-free	yes
RoHS compliant	yes
UL	yes, UL E-file number: E170315
Approvals	UL758 (AWM) Style 20233 (jacket) and Style 10493 (core)

Contact assembly



Dimensions



A1	44.00 mm
A2	19.00 mm

Notes

- The following length tolerances apply: 2-3%
- Illustrations similar

CE, UL

CE	yes

Ordering information	Length
ZK4704-0421-2xxx	xxx = cable length in decimeters

xxx = 050	example for 5 m length
	sold by the meter, admissible total cable length 20 m

Accessories	
ZB8804-0004	Flange/Panel feed-through for itec®, for fixing the connector, plastic, including screws, washers and lock nuts

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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