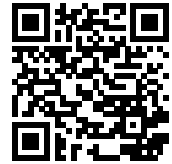


# ZK4501-8002-xxxx | Motor extension cable 1 mm<sup>2</sup> with itec<sup>®</sup> plug, fixed installation



itec<sup>®</sup> (Series 915), plug, straight, female, Power: 3+PE, Signal: 5 – itec<sup>®</sup> (Series 915), socket, straight, male, Power: 3+PE, Signal: 5



## Plugs

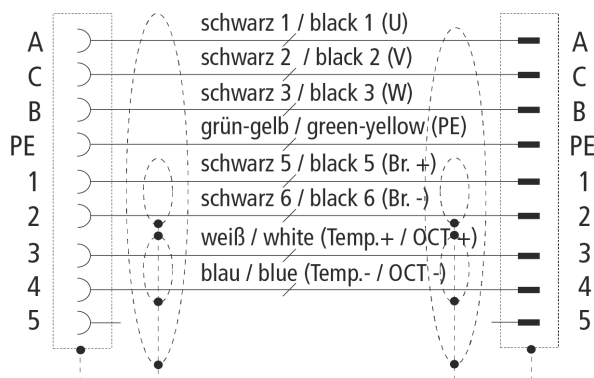
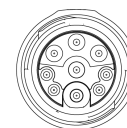
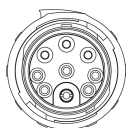
Electrical data	Head A	Head B
Rated voltage (power)	630 V AC/DC	630 V AC/DC
Rated voltage (signal/24V)	63 V AC/DC	63 V AC/DC
Rated current (power)	14 A	14 A
Rated current (signal/24V)	3.6 A	3.6 A
Rated impulse voltage (power)	6.0 kV	6.0 kV
Rated impulse voltage (signal/24V)	1.5 kV	1.5 kV
Contact resistance	< 5 mΩ	< 5 mΩ
Mechanical data		
Accessories type	Connectors/Cables	Connectors/Cables
Installation size	itec <sup>®</sup> (Series 915)	itec <sup>®</sup> (Series 915)
Connector type	plug	socket
Configuration	straight	straight
Contact type	female	male

Number of positions (face)	Power: 3+PE, Signal: 5	Power: 3+PE, Signal: 5
Wire termination	crimp connection	crimp connection
Mating cycles	500	500
Way of locking	bayonet	bayonet
Weight per piece	0.035 kg (0.0772 lb)	0.035 kg (0.0772 lb)
Body color	black, similar to RAL 9011	-
Body material	zinc diecast/plastic	zinc diecast/plastic
Seal	FKM	FKM
Clamp ring	brass/nickel plated	brass/nickel plated
Contact carrier material	PBT, PA, UL 94 V-0	PBT, PA, UL 94 V-0
Contact material	brass/gold plated	brass/gold plated
Max. wire cross-section	-	AWG16 (1.5 mm <sup>2</sup> )
Max. cable outer diameter	-	10.5 - 12.0 mm
<b>Environmental data</b>		
Special features	Max. height for operation 2000 m	Max. height for operation 2000 m
Shock resistance	30 g (conforms to EN 60060-2-27), 11 ms; 18 shocks per direction, 3 axes	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	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	-20...+130 °C, -4...+266 °F
Protection rating	IP66/67 in screwed condition	IP66/67 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

<b>Electrical data</b>		
Operating voltage	max. 1000 V AC (UL)	
Insulation resistance	≥ 500 MΩ * km (DIN EN 50395)	
Mutual capacitance	AWG 26: nom. 45 nF/km	
Wire resistance (power)	≤ 21.0 Ω/km	
Wire resistance (signal/24V)	≤ 145.0 Ω/km	
Wire resistance (brake)	≤ 42.0 Ω/km	
Characteristic impedance	Signal: 110 Ω ± 10 Ω (10 MHz) acc. to EN50289-1-11	
Test voltage	4000 V (wire/wire), 3000 V (wire/screen)	
<b>Mechanical data</b>		

Cross-section (power)	1.00 mm <sup>2</sup> (approx. AWG18)
Cross-section (signal)	AWG26 (approx. 0.14 mm <sup>2</sup> )
Cross-section (brake)	0.50 mm <sup>2</sup> (approx. AWG20)
Outer cable diameter	10.0 mm ± 0.3 mm (0.3937" ± 0.0118")
Min. bending radius, fixed installation	4 x outer cable diameter
Conductor material	copper bare
Optical covering factor of shielding	≥ 85%
Use	fixed installation
Jacket color	orange
Material jacket	PVC (polyvinyl chloride)
Wire insulation material	PO (Polyolefine)
Printing color	black
<b>Environmental data</b>	
Operation temperature range, fixed installation	-20...+80 °C, -4...+176 °F
Silicone-free	yes
Approvals	UL-Style AWM 2570 80°C 1000V

**Contact assembly****Dimensions**

A1	44.00 mm
A2	19.00 mm
B1	44.00 mm
B2	19.00 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
ZK4500-8002-xxxx	1.00 m - 100.00 m* (sold by the meter)

Beckhoff®, TwinCAT®, TwinCAT/BSD®, TC/BSD®, EtherCAT®, EtherCAT G®, EtherCAT G10®, EtherCAT P®, Safety over EtherCAT®, TwinSAFE®, XFC®, XTS® and XPlanar® are registered trademarks of and licensed by Beckhoff Automation GmbH. Other designations used in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owners.

© Beckhoff Automation GmbH & Co. KG 12/2022

The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual application do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.