

# ZK4500-8222-xxxx | Motor connection cable 1 mm<sup>2</sup> with itec® plug, drag-chain suitable



itec (Series 915), plug, straight, female, Power: 3+PE, Signal: 5 – plug, angled, female, 4-pin – plug, straight, female, 5-pin

## Plugs

Electrical data	Head A	Head B	Head C
Rated voltage (power)	630 V AC/DC	1000 V AC/DC (according to IEC 60664-1, IEC 61984), 600 V (according to UL 1059)	-
Rated voltage (signal/24V)	63 V AC/DC	-	320 V (according to IEC 60664-1, IEC 61984), 300 V (according to UL 1059)
Rated current (power)	14 A	41 A at 40 °C (according to IEC 60664-1, IEC 61984), 40.5 A at 40 °C (according to UL 1059)	-
Rated current (signal/24V)	3.6 A	-	14.5 A at 40 °C (according to IEC 60664-1, IEC 61984), 10 A at 40 °C (according to UL 1059)
Rated impulse voltage (power)	6.0 kV	8.0 kV	-
Rated impulse voltage (signal/24V)	1.5 kV	-	2.5 kV
Contact resistance	< 5 mΩ	4.5 mΩ	< 5 mΩ

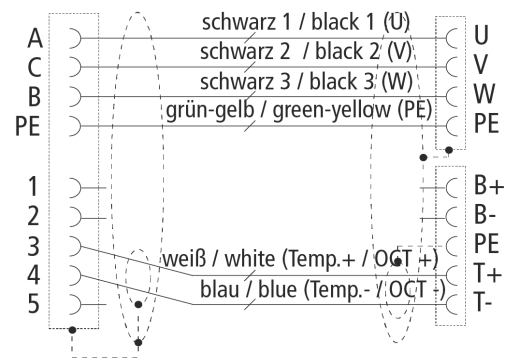
Insulation resistance	-	≥ 100 MΩ (according to IEC 60512)	≥ 100 MΩ (according to IEC 60512)
Insulation group	-	II	IIIa
<b>Mechanical data</b>			
Accessories type	Connector/cable	Connector/cable	Connector/cable
Installation size	itec (Series 915)	-	-
Connector type	plug	plug	plug
Configuration	straight	angled	straight
Contact type	female	female	female
Number of positions (face)	Power: 3+PE, Signal: 5	4-pin	5-pin
Wire termination	crimp connection	Clamping yoke connection	Clamping yoke connection
Recommended torque, screw termination	-	0.5...0.6 Nm	0.2...0.25 Nm
Recommended torque, screw flange	-	0.6 Nm	0.15...0.2 Nm
Mating cycles	500	25	25
Way of locking	bayonet	screw	screw
Weight per piece	0.035 kg (0.0772 lb)	0.052 kg (0.1146 lb)	0.004 kg (0.0088 lb)
Body color	black, similar to RAL 9011	black, similar to RAL 9011	black, similar to RAL 9011
Body material	zinc diecast/plastic	PA GF, UL 94 V-0	PBT, UL 94 V-0
Seal	FKM	-	-
Clamp ring	brass/nickel plated	-	-
Contact carrier material	PBT, PA, UL 94 V-0	PA GF, UL 94 V-0	PBT, UL 94 V-0
Contact material	brass/gold plated	copper alloy	copper alloy
Max. wire cross-section	-	AWG24...AWG8	AWG28...AWG14
<b>Environmental data</b>			
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	-50...+125 °C, -58...+257 °F	-50...+100 °C, -58...+212 °F
Protection class	IP66/67 in screwed condition	IP20	IP20
Pollution level	3 (according to VDE 0110/EN61984 part 6.19.2.2)	3	3

Overvoltage category	3 (according to VDE 0110/EN61984 part 6.19.2.2)	3	3
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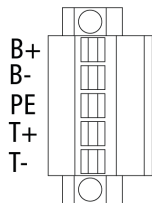
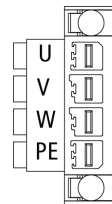
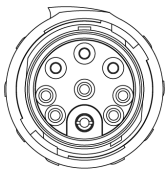
## Cable

Electrical data	
Operating voltage	max. 1000 V AC (UL)
Insulation resistance	≥ 100 MΩ * km
Mutual capacitance	AWG 26: nom. 45 nF/km
Wire resistance (power)	≤ 21.0 Ω/km
Wire resistance (signal/24V)	≤ 136.0 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)
Mechanical data	
Cross-section (power)	1.00 mm <sup>2</sup> (approx. AWG18)
Cross-section (signal)	AWG26 (approx. 0.14 mm <sup>2</sup> )
Min. bending radius, moved in drag-chain	7.5 x outer cable diameter
Min. bending radius, fixed installation	4 x outer cable diameter
Outer cable diameter	9.0 mm ± 0.3 mm (0.3543" ± 0.0118")
Conductor material	copper bare
Optical covering factor of shielding	≥ 85%
Use	drag-chain suitable
Max. number of cycles	5 million
Jacket color	orange
Material jacket	PUR (polyurethane)
Wire insulation material	PO (Polyolefine)
Printing color	black
Environmental data	
Operation temperature range, moved	-20...+80 °C, -4...+176 °F
Operation temperature range, fixed installation	-20...+80 °C, -4...+176 °F
Halogen-free	yes
Silicone-free	yes
Approvals	UL-Style AWM 21223 80°C 1000V

## Contact assembly



## Dimensions



A1	44.00 mm
A2	19.00 mm
B1	45.00 mm
B2	45.00 mm
C1	19.00 mm
C2	25.00 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

ZK4500-8222-xxxx

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