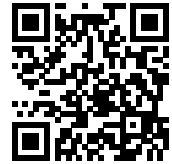


ZK4500-8002-xxxx | Motor connection cable 1 mm² with itec[®] plug, fixed installation



itec[®] (Series 915), plug, straight, female, Power: 3+PE, Signal: 5 – Pitch dimension 7.62 mm, plug, angled, female, 4-pin – Pitch dimension 3.50 mm, plug, straight, female, 5-pin



Plugs

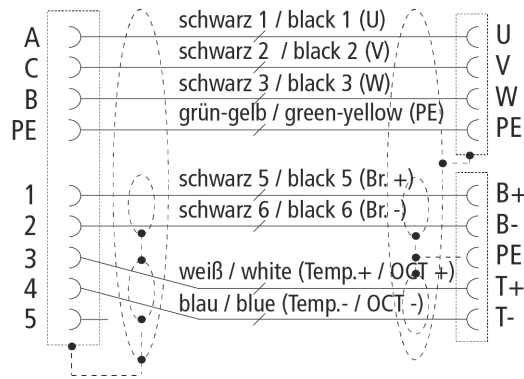
Electrical data	Head A	Head B	Head C
Rated voltage (power)	630 V AC/DC	1000 V AC/DC (according to IEC 60664-1, IEC 61984), 600 V (according to UL 1059)	-
Rated voltage (signal/24V)	63 V AC/DC	-	10 A at 40 °C (according to IEC 60664-1, IEC 61984), 10 A at 40 °C (according to UL 1059)
Rated current (power)	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
Mechanical data			
Accessories type	Connectors/Cables	Connectors/Cables	Connectors/Cables
Installation size	itec® (Series 915)	Pitch dimension 7.62 mm	Pitch dimension 3.50 mm
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 (0.2 mm ² ... 10 mm ²)	AWG28 ... AWG14 (0.2 mm ² ... 1.5 mm ²)
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	-50...+125 °C, -58...+257 °F	-50...+100 °C, -58...+212 °F
Protection rating	IP66/67 in screwed condition	IP20	IP20

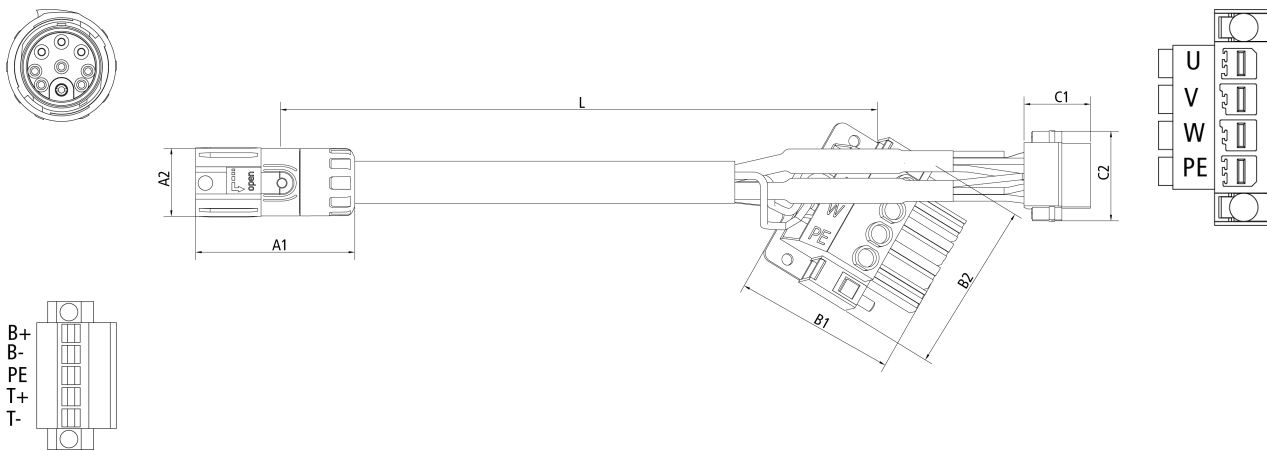
Pollution level	3 (according to VDE 0110/EN61984 part 6.19.2.2)	3	3
Overvoltage category	3 (according to VDE 0110/EN61984 part 6.19.2.2)	3	3

Cable

Electrical data	
Operating voltage	max. 1000 V AC (UL)
Insulation resistance	$\geq 500 \text{ M}\Omega \cdot \text{km}$ (DIN EN 50395)
Mutual capacitance	AWG 26: nom. 45 nF/km
Wire resistance (power)	$\leq 21.0 \text{ }\Omega/\text{km}$
Wire resistance (signal/24V)	$\leq 145.0 \text{ }\Omega/\text{km}$
Wire resistance (brake)	$\leq 42.0 \text{ }\Omega/\text{km}$
Characteristic impedance	Signal: $110 \text{ }\Omega \pm 10 \text{ }\Omega$ (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 ² (approx. AWG18)
Cross-section (signal)	AWG26 (approx. 0.14 mm ²)
Cross-section (brake)	0.50 mm ² (approx. AWG20)
Outer cable diameter	10.0 mm \pm 0.3 mm (0.3937" \pm 0.0118")
Min. bending radius, fixed installation	4 x outer cable diameter
Conductor material	copper bare
Optical covering factor of shielding	$\geq 85\%$
Use	fixed installation
Jacket color	orange
Material jacket	PVC (polyvinyl chloride)
Wire insulation material	PO (Polyolefine)
Printing color	black
Environmental data	
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	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: ± 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	xxxx = cable length in decimeters
xxxx = 0050	example for 5 m length
	sold by the meter, admissible total cable length see documentation of Servo Drive

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