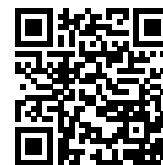


ZK4800-8062-xxxx | Motor connection cable 1 mm² with itec[®] plug, torsionable



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



Plugs

Electrical data	Head A	Head B
Rated voltage (power)	630 V AC/DC	1000 V AC/DC (according to IEC 60664-1, IEC 61984), 600 V (accordig to UL 1059)
Rated voltage (signal/24V)	63 V AC/DC	-
Rated current (power)	14 A	34 A at 40 °C (according to IEC 60664-1, IEC 61984), 33 A at 40 °C (according to UL 1059)
Rated current (signal/24V)	3.6 A	-
Rated impulse voltage (power)	6.0 kV	8.0 kV
Rated impulse voltage (signal/24V)	1.5 kV	-
Contact resistance	< 5 mΩ	4.5 mΩ
Insulation resistance	-	≥ 100 MΩ (according to IEC 60512)
Insulation group	-	II
Mechanical data		
Accessories type	Connectors/Cables	Connectors/Cables

Installation size	itec® (Series 915)	Pitch dimension 7.62 mm
Connector type	plug	plug
Configuration	straight	angled
Contact type	female	female
Number of positions (face)	Power: 3+PE, Signal: 5	4-pin
Wire termination	crimp connection	PUSH IN
Mating cycles	500	25
Way of locking	bayonet	flange and screw
Weight per piece	0.035 kg (0.0772 lb)	0.029 kg (0.0640 lb)
Body color	black, similar to RAL 9011	black, similar to RAL 9011
Body material	zinc diecast/plastic	PA GF, 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
Contact material	brass/gold plated	copper alloy
Max. wire cross-section	-	AWG24 ... AWG8 (0.5 mm ² ... 10 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
Protection rating	IP66/67 in screwed condition	IP20
Pollution level	3 (according to VDE 0110/EN61984 part 6.19.2.2)	3
Overvoltage category	3 (according to VDE 0110/EN61984 part 6.19.2.2)	3

Cable

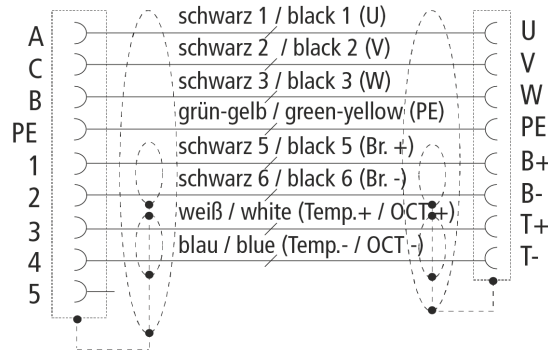
Electrical data		
Operating voltage	max. 1000 V AC (UL), U ₀ /U 600/1000 V (VDE)	
Insulation resistance	≥ 500 MΩ * km (DIN EN 50395)	
Mutual capacitance	Signal: 45 ± 15 pF/m (at 800 Hz according to EN 50289-1-5)	
Wire resistance (power)	≤ 19.5 Ω/km (DIN EN 50395)	
Wire resistance (signal/24V)	≤ 55.0 Ω/km (DIN EN 50395)	
Wire resistance (brake)	≤ 26.0 Ω/km (DIN EN 50395)	

Characteristic impedance	Signal: 110 $\Omega \pm 10 \Omega$ (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)
Mechanical data	
Cross-section (power)	1.00 mm ² (approx. AWG18)
Cross-section (signal)	AWG22 (approx. 0.34 mm ²)
Cross-section (brake)	0.75 mm ² (AWG 18)
Outer cable diameter	12.0 mm \pm 0.2 mm (0.472" \pm 0.0079")
Min. bending radius, moved in drag-chain	12 x outer cable diameter
Min. bending radius, fixed installation	5 x outer cable diameter
Conductor material	copper bare
Optical covering factor of shielding	$\geq 90\%$
Use	suitable for torsion/robotic application
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	2 million
Jacket color	orange
Material jacket	TPU (thermoplastic polyurethane)
Wire insulation material	PP (polypropylene)
Printing color	black
Torsion angle in $^{\circ}/m$	max. $\pm 180^{\circ}/m$
Max. tensile load, dynamic	20 N/mm ²
Max. tensile load, static	50 N/mm ²
Environmental data	
Operation temperature range, moved	-30...+80 $^{\circ}C$, -22...+176 $^{\circ}F$; in drag-chain with mechanical strain: -20...+60 $^{\circ}C$, -4...+140 $^{\circ}F$
Operation temperature range, fixed installation	-40...+80 $^{\circ}C$, -40...+185 $^{\circ}F$
Oil resistance	according to DIN EN 60811-404
Flame-retardant	according to IEC 60332-1-2
CFC-free	yes
Halogen-free	according to DIN VDE 0472 Teil 815
Silicone-free	yes
RoHS compliant	yes

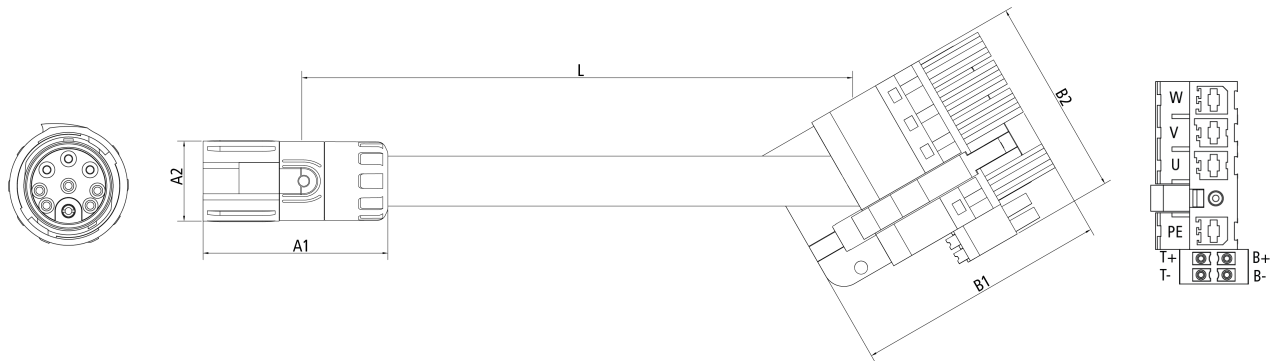
Approvals

UL758 (AWM) Style 21223 (jacket) and Style 10492 (core)

Contact assembly



Dimensions



A1	44.00 mm
A2	19.00 mm
B1	60.00 mm
B2	47.00 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
ZK4800-8062-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

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.