

ZK4800-8022-xxxx | Motor connection cable

1 mm² with itec[®] plug system, drag-chain suitable



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 (according 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 |

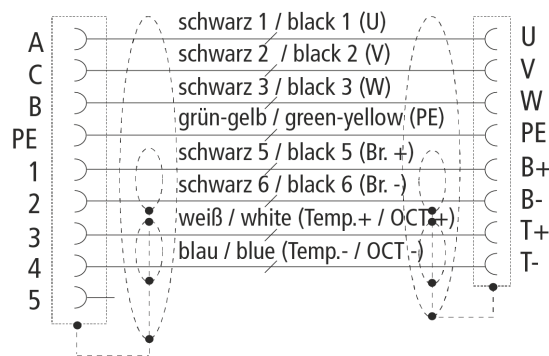
Cable

| | | |
|------------------------------|--|--|
| Electrical data | | |
| Operating voltage | max. 1000 V AC (UL), U _o /U 600/1000 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) | ≤ 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) | |

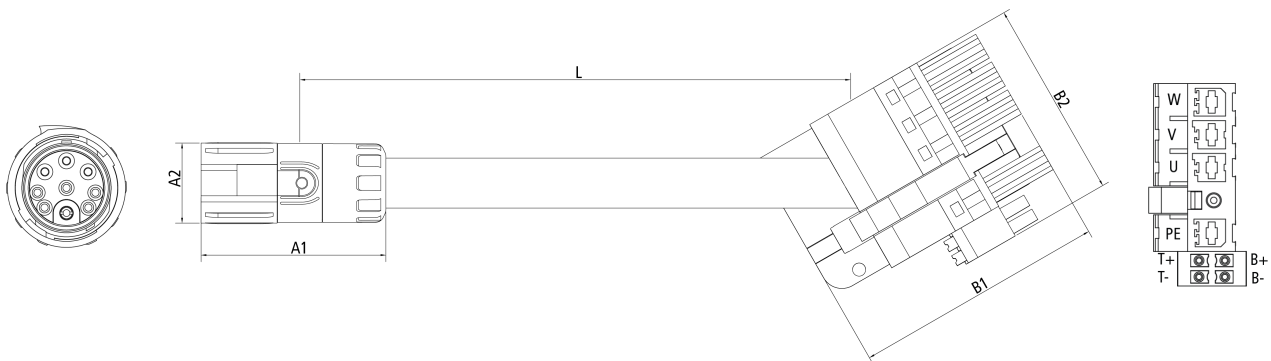
| | |
|---|---|
| Characteristic impedance | Signal: 110 Ω \pm 10 Ω (10 MHz) acc. to EN50289-1-11 |
| Dielectric strength wire/wire (power) | 4 kV 50 Hz 5 min. (DIN VDE 0472 T.509C) |
| Dielectric strength wire/shield (power) | 4 kV 50 Hz 5 min. (DIN VDE 0472 T.509C) |
| Dielectric strength wire/wire (signal/24V) | 3 kV 50 Hz 1 min. (DIN VDE 0472 T.509C) |
| Dielectric strength wire/shield (signal/24V) | 3 kV 50 Hz 1 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 | 11.6 mm \pm 0.4 mm (0.4567" \pm 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 | 215 kg/km (144.459 lb/1000 ft) |
| Conductor material | copper bare |
| Optical covering factor of shielding | \geq 85% |
| Use | drag-chain suitable |
| 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 | 5 million |
| Jacket color | orange |
| Material jacket | TPU (thermoplastic polyurethane) |
| Wire insulation material | PP (polypropylene) |
| Printing color | black |
| Torsion angle in $^{\circ}$ /m | max. \pm 30 $^{\circ}$ /m |
| Max. tensile load, dynamic | 20 N/mm ² |
| Max. tensile load, static | 50 N/mm ² |
| Environmental data | |
| Operation temperature range, moved | -20...+80 $^{\circ}$ C, -4...+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...+176 $^{\circ}$ F |
| UV resistance | UV resistance of the outer jacket referred to DIN EN ISO 4892-2 |
| Oil resistance | according to DIN EN 60811-404, HD22.10 appendix A |
| Flame-retardant | according to IEC 60332-1-2 UL758 cable flame test |

| | |
|----------------|---|
| 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

ZK4800-8022-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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