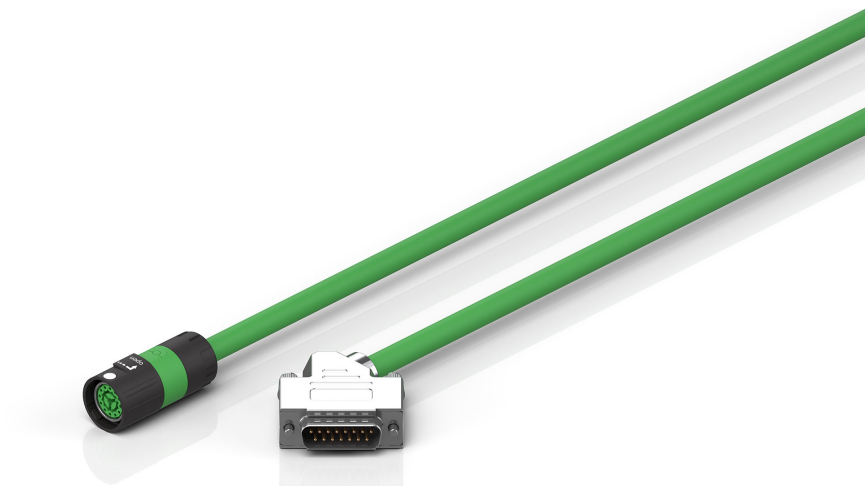


ZK4510-8110-xxxx | Encoder connection cable with itec® plug, drag-chain suitable



itec (Series 615), plug, straight, female, 12-pin – D-sub, socket, angled, male, 15-pin



Plugs

| Electrical data | Head A | Head B |
|------------------------------------|-------------------|-------------------|
| Rated voltage (signal/24V) | 63 V AC/DC | - |
| Rated current (signal/24V) | 5 A max. | - |
| Rated impulse voltage (signal/24V) | 1.5 kV | - |
| Contact resistance | < 5 mΩ | - |
| Mechanical data | | |
| Accessories type | Connector/cable | Connector/cable |
| Installation size | itec (Series 615) | D-sub |
| Connector type | plug | socket |
| Configuration | straight | angled |
| Contact type | female | male |
| Number of positions (face) | 12-pin | 15-pin |
| Wire termination | crimp connection | solder connection |
| Mating cycles | 500 | - |

| | | |
|---------------------------------|---|------------------------------|
| Way of locking | bayonet | screw |
| Weight per piece | 0.025 kg (0.0551 lb) | 0.055 kg (0.1213 lb) |
| Body colour | black, similar to RAL 9011 | metal |
| Body material | zinc diecast/plastic | zinc diecast/nickel plated |
| Seal | FKM | - |
| Clamp ring | plastic | - |
| Contact carrier material | PBT, PA, UL 94 V-0 | - |
| Contact material | brass/gold plated | - |
| Environmental data | | |
| Special features | Max. height for operation 2000 m | - |
| Ambient temperature (operation) | -20...+130 °C, -4...+266 °F | -40...+120 °C, -40...+248 °F |
| Protection class | IP 66/67 in screwed condition | IP 20 |
| Pollution level | 3 (according to VDE 0110/EN61984 part 6.19.2.2) | - |
| Overvoltage category | 3 (according to VDE 0110/EN61984 part 6.19.2.2) | - |

Cable

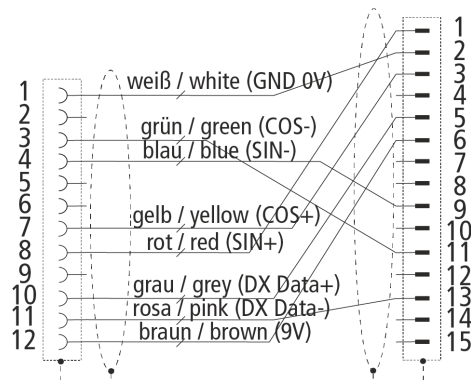
| | | |
|--|---|--|
| Electrical data | | |
| Operating voltage | max. 300 V AC (UL), U _o /U 300/300 V (VDE) | |
| Insulation resistance | ≥ 500 MΩ | |
| Wire resistance | ≤ 76.0 Ω/km | |
| Test voltage | 1500 V (wire/wire and wire/screen) | |
| Mechanical data | | |
| Cross section | 4 x 2 x 0.25 mm ² | |
| Min. bending radius, moved in drag chain | 10 x outer cable diameter | |
| Min. bending radius, fixed installation | 8 x outer cable diameter | |
| Weight | 80.3 kg/km (53.954 lb/1000 ft) | |
| Outer cable diameter | 7.5 mm ± 0.3 mm (0.2952" ± 0.0118") | |
| Conductor material | copper, tinned | |
| Optical covering factor of shielding | ≥ 85% | |
| Use | drag-chain suitable | |
| Max. acceleration | 20 m/s ² | |
| Max. speed | 3 m/s | |
| Max. travel distance | 5 m | |
| Max. number of cycles | 5 million | |

| | |
|----------------------------|----------------------|
| Jacket colour | green |
| Material jacket | PUR (polyurethane) |
| Wire insulation material | PP (polypropylene) |
| Printing colour | black |
| Torsion angle in °/m | max. ± 30 °/m |
| Max. tensile load, dynamic | 20 N/mm ² |
| Max. tensile load, static | 50 N/mm ² |

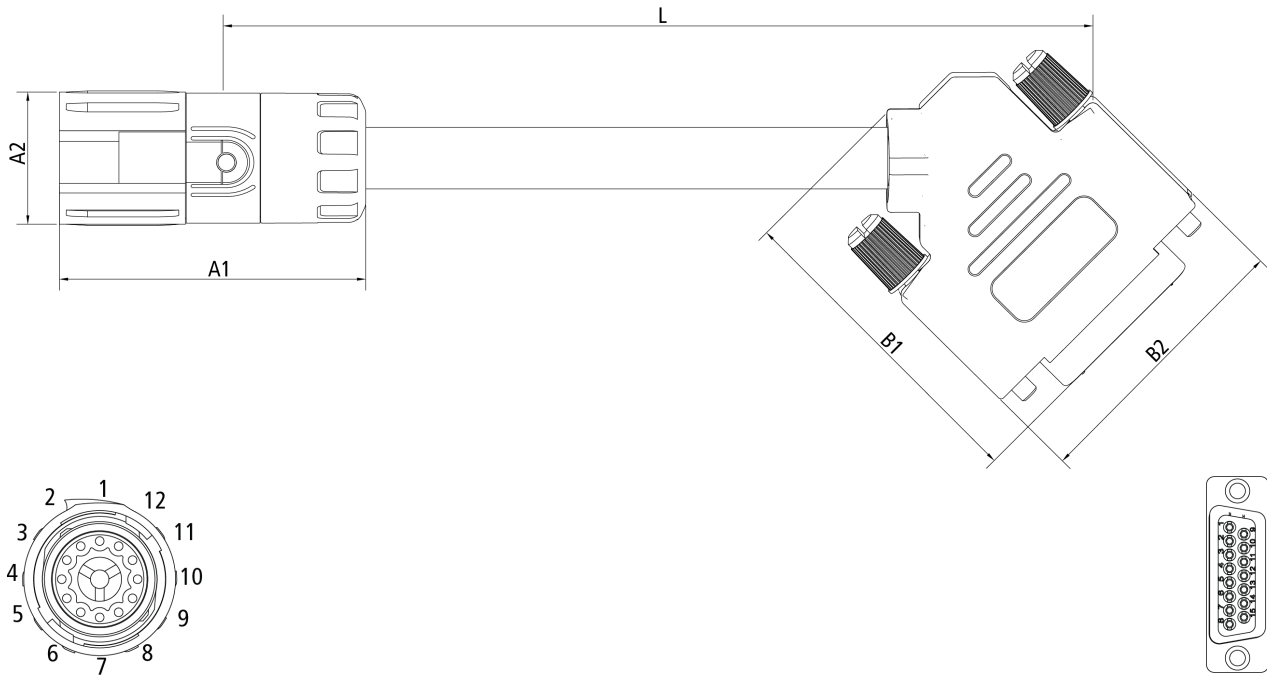
Environmental data

| | |
|---|-------------------------------------|
| Operation temperature range, moved | -20...+80 °C, -4...+176 °F |
| Operation temperature range, fixed installation | -40...+80 °C, -40...+185 °F |
| Oil resistance | according to UL 1581 |
| Flame-retardant | according to IEC 60332-1 |
| CFC-free | yes |
| Halogen-free | yes |
| Silicone-free | yes |
| RoHS compliant | yes |
| Approvals | cRUus AWM Style 20233, CE compliant |

Contact assembly



Dimensions



| | |
|----|----------|
| A1 | 44.00 mm |
| A2 | 19.00 mm |
| B1 | 46.00 mm |
| B2 | 41.00 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 decimetres, e.g. ZK4xxx-xxxx-x020 = cable length 2.00 m

| Ordering information | Length |
|---|-----------------------------------|
| ZK4510-8110-xxxx | xxxx = cable length in decimetres |
| xxxx = 0050 | example for 5 m length |
| sold by the metre, admissible total cable length see documentation of Servo Drive | |

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