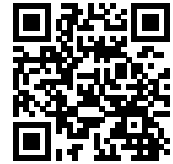


ZK4800-8064-xxxx | Motor connection cable 2.5 mm² with M23 speedtec[®] plug, torsionable



M23, 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) | 250 V AC/DC | - |
| Rated current (power) | 30 A max. | 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) | 7 A max. | - |
| Rated impulse voltage (power) | 6.0 kV | 8.0 kV |
| Rated impulse voltage (signal/24V) | 2.5 kV | - |
| Contact resistance | < 5 mΩ (signal), < 3 mΩ (power) | 4.5 mΩ |
| Insulation resistance | - | ≥ 100 MΩ (according to IEC 60512) |
| Insulation group | - | II |
| Mechanical data | | |
| Accessories type | Connectors/Cables | Connectors/Cables |

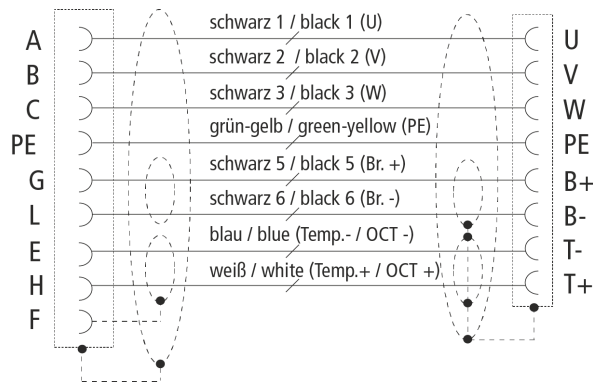
| | | |
|---------------------------------|-------------------------------------------------|--------------------------------------------------------------|
| Installation size | M23 | Pitch dimension 7.62 mm |
| Connector type | plug | plug |
| Configuration | straight | angled |
| Contact type | female | 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 | Speedtec® | flange and screw |
| Weight per piece | 0.143 kg (0.3153 lb) | 0.029 kg (0.0640 lb) |
| Body color | metal | black, similar to RAL 9011 |
| Body material | zinc diecast/nickel plated | PA GF, UL 94 V-0 |
| Seal | FKM | - |
| Clamp ring | brass/nickel plated | - |
| Contact carrier material | PA 6.6 mod., 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 | - |
| 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

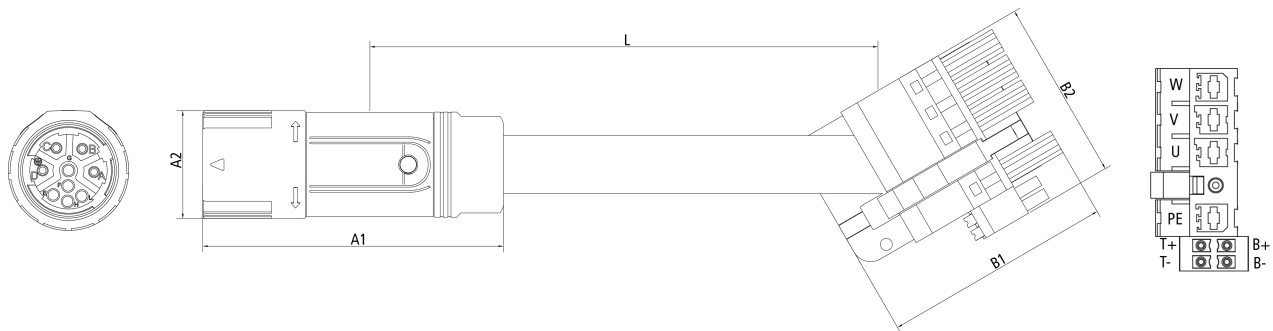
| | | |
|-----------------------------------------|------------------------------------------------------------|--|
| Electrical data | | |
| Operating voltage | max. 1000 V AC (UL), U _o /U 600/1000 V (VDE) | |
| Insulation resistance | ≥ 500 MΩ * km (DIN EN 50395) | |
| Mutual capacitance | Signal: 45 ± 15 pF/m (at 800 Hz according to EN 50289-1-5) | |
| Wire resistance (power) | ≤ 7.98 Ω/km (DIN EN 50395) | |
| Wire resistance (signal/24V) | ≤ 55.0 Ω/km (DIN EN 50395) | |
| Wire resistance (brake) | ≤ 19.5 Ω/km (DIN EN 50395) | |
| Characteristic impedance | Signal: 110 Ω ± 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) | |
| Mechanical data | | |

| | |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Cross-section (power) | 2.50 mm ² (approx. AWG14) |
| Cross-section (signal) | AWG22 (approx. 0.34 mm ²) |
| Cross-section (brake) | 1.00 mm ² (approx. AWG18) |
| Outer cable diameter | 15.2 mm ± 0.3 mm (0.5984" ± 0.0118") |
| 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 | ≥ 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 °/m | max. ± 180°/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 °C, -22...+176 °F; in drag-chain with mechanical strain: -20...+60 °C, -4...+140 °F |
| Operation temperature range, fixed installation | -40...+80 °C, -40...+176 °F |
| Oil resistance | according to DIN EN 60811-404 |
| Flame-retardant | according to IEC 60332-1-2 |
| CFC-free | yes |
| Halogen-free | DIN VDE 0472 part 815 |
| Silicone-free | yes |
| RoHS compliant | yes |
| Approvals | UL758 (AWM) Style 21223 (jacket) and Style 10492 (core) |

Contact assembly



Dimensions



| | |
|----|----------|
| A1 | 79.00 mm |
| A2 | 28.00 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 |
|----------------------|-----------------------------------------------------------------------------------|
| ZK4800-8064-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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