ZK4000-6768-0xxx | Motor connection cable 0.5 mm² with M12 plug, drag-chain suitable



M12, socket, straight, female, 4-pin, A-coded – M12, plug, straight, male, 4-pin, A-coded



Plugs

| Electrical data | Head A | Head B |
|----------------------------|---|---|
| Rated voltage | 160 V (according to IEC 61076-2-101) | 160 V (according to IEC 61076-2-101) |
| Rated current | 5 A at 40 °C | 5 A at 40 °C |
| Shielding | braiding of tinned copper wires | yes |
| Contact resistance | < 10 mΩ | < 10 mΩ |
| Insulation resistance | ≥ 100 M Ω (according to IEC 60512) | ≥ 100 M Ω (according to IEC 60512) |
| Mechanical data | | |
| Installation size | M12 | M12 |
| Connector type | socket | plug |
| Configuration | straight | straight |
| Contact type | female | male |
| Number of positions (face) | 4-pin | 4-pin |
| Coding | A-coded | A-coded |
| Recommended torque, nut | 0.6 Nm | 0.6 Nm |



| Mating cycles | ≥ 100 (according to IEC 60512-9a) | ≥ 100 (according to IEC 60512-9a) |
|---------------------------------|---|---|
| Way of locking | screw | screw |
| Body color | black | black |
| Body material | TPU, UL 94 HB, schwarz | TPU, UL 94 HB, schwarz |
| Coupling nut material | GD-Zn, Ni | GD-Zn, Ni |
| Seal | FPM | FPM |
| Contact carrier color | red | red |
| Contact carrier material | PA, UL 94 | PA, UL 94 |
| Contact plating | Ni, Au gal. | Ni, Au gal. |
| Contact material | CuZn | CuZn |
| Environmental data | | |
| Special features | halogen-free, flame-resistant as per IEC 60332-1-2, oil-resistant as per DIN EN 60811-2-1 | halogen-free, flame-resistant as per IEC 60332-1-2, oil-resistant as per DIN EN 60811-2-1 |
| RoHS compliant | yes | yes |
| Ambient temperature (operation) | -40+85 °C, -40+185 °F | -40+85 °C, -40+185 °F |
| Protection rating | IP65/67 in screwed condition (according to IEC 60529) | IP65/67 in screwed condition (according to IEC 60529) |
| Pollution level | 3/2 (according to IEC 60664-1) | 3/2 (according to IEC 60664-1) |

Cable

| Electrical data | |
|------------------------------|--------------------------------------|
| Rated voltage | ≤ 300 V |
| Operating voltage | ≤ 300 V |
| Insulation resistance | ≥ 1 GΩ * km |
| Wire resistance | ≤ 39 Ω/km (20 °C) |
| Wire resistance (signal/24V) | ca. 39 Ω/km |
| Test voltage | ≥ 3000 V |
| Mechanical data | |
| Conductor construction | 28 x 0.15 mm |
| Cross-section | 4 x 0.5 mm ² (AWG20) |
| Min. bending radius, moved | 10 x outer cable diameter |
| Outer cable diameter | 6.0 mm ± 0.2 mm ("0.23622 ± 0.0079") |
| Conductor material | copper bare |
| Shielding | braiding of tinned copper wires |
| Use | drag-chain suitable |
| Max. acceleration | 10 m/s ² |



| Max. speed | 3 m/s |
|---|---------------------------|
| Max. number of cycles | 4 million |
| Jacket color | orange |
| Material jacket | PUR (polyurethane) |
| Wire color code | brown, white, blue, black |
| Wire insulation material | PP (polypropylene) |
| Printing color | black |
| Environmental data | |
| Operation temperature range, moved | -15+80 °C, +5+176 °F |
| Operation temperature range, fixed installation | -30+80 °C, -22+176 °F |

Dimensions



Notes

- Depending on the cable length (L), the following length tolerances apply: 0 m...<0.2 m: \pm 10 mm | 0.2...4.0 m: \pm 40 mm | \geq 4.0 m: \pm 1 %
- Illustrations similar
- Further cable length on request.

| Ordering information | Length |
|----------------------|--------|
| ZK4000-6768-0005 | 0.50 m |



| ZK4000-6768-0xxx | www.beckhoff.com/ZK4000-6768-0xxx |
|------------------|-----------------------------------|
|------------------|-----------------------------------|

| ZK4000-6768-0010 | 1.00 m |
|------------------|---------|
| ZK4000-6768-0020 | 2.00 m |
| ZK4000-6768-0100 | 10.00 m |

| Accessories | |
|-------------|---|
| ZB8801-0000 | torque wrench for hexagonal plugs, adjustable |
| ZB8801-0002 | torque cable key, M12/wrench size 13, for ZB8801-0000 |

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