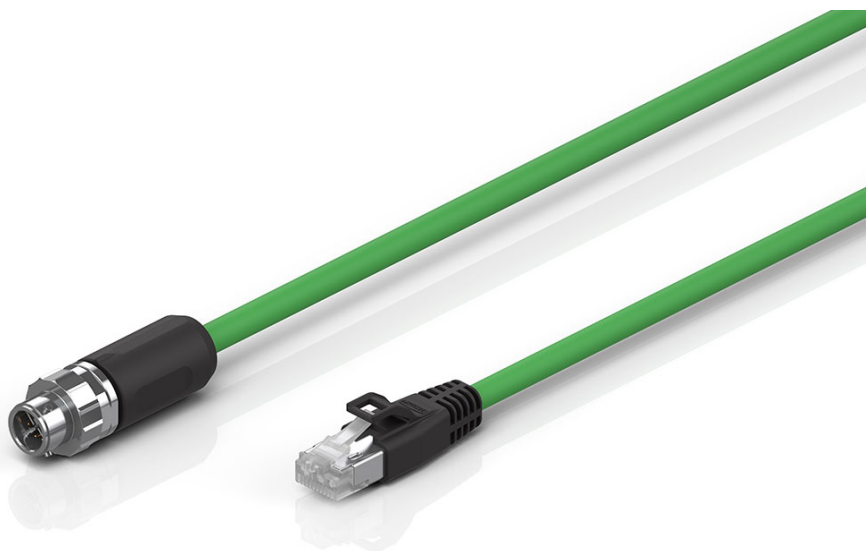


ZK1B96-8191-0xxx | Industrial Ethernet/EtherCAT G/G10 cable, Cat.6/Cat.6A, PUR, 4 x 2 x AWG26, fixed installation



M12, plug, straight, male, 8-pin, X-coded – RJ45, plug, straight, male, 4-pin



Plugs

| Electrical data | Head A | Head B |
|------------------------------|--|------------------------------------|
| Rated voltage | 50 V AC / 60 V DC (according to IEC 61076-2-104) | 150 V |
| Rated current | 0.5 A at 40°C | 1.5 A |
| Shielding | yes | yes |
| Contact resistance | < 5 mΩ | - |
| Insulation resistance | ≥ 100 MΩ | ≥ 10 GΩ (according to IEC 60512-2) |
| Transmission characteristics | Cat.6A | - |
| Mechanical data | | |
| Installation size | M12 | RJ45 |
| Connector type | plug | plug |
| Configuration | straight | straight |
| Contact type | male | male |
| Number of positions (face) | 8-pin | 4-pin |

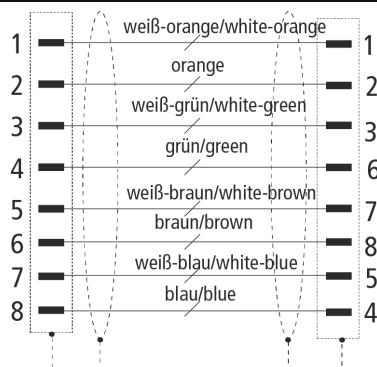
| | | |
|---------------------------------|-----------------------------------|---------------------------|
| Coding | X-coded | - |
| Recommended torque, nut | 0.6 Nm | - |
| Mating cycles | ≥ 100 (according to IEC 60512-9a) | ≥ 750 |
| Way of locking | bayonet | - |
| Body color | black | black |
| Body material | TPU | TPU, UL 94 HB |
| Coupling nut material | CuZn, Ni | - |
| Contact carrier color | transparent | - |
| Contact carrier material | PA | PC UL 94 V-0 |
| Contact plating | Au | Ni, Au gal. |
| Contact material | CuSn (bronze) | CuZn |
| Environmental data | | |
| RoHS compliant | yes | yes |
| Ambient temperature (operation) | -30...+90°C, -22...+194°F | -40...+70°C, -40...+158°F |
| Protection rating | IP65/67/68 in screwed condition | IP20 |
| Pollution level | 3 | - |
| Approvals | UL listed, EAC | - |

Cable

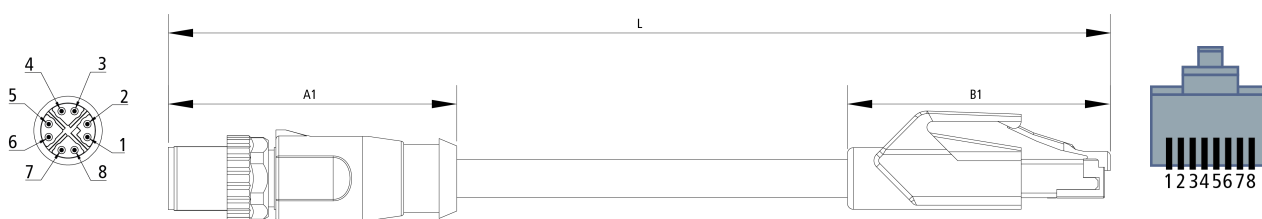
| | | |
|----------------------------------|--|--|
| Electrical data | | |
| Rated voltage | 125 V | |
| Insulation resistance | ≥ 150 MΩ * km | |
| Unbalanced capacitance to ground | 1600 pF/km | |
| Mutual capacitance | 46 pF/m at 1 kHz | |
| Characteristic impedance | 100 Ω ± 15 Ω (100 MHz) | |
| Loop resistance | ≤ 290 Ω/km | |
| Unbalanced resistance | < 2 % | |
| Unbalanced resistance (Ethernet) | ≤ 2 % in the pair, ≤ 4 % between the pairs | |
| Dielectric strength wire/wire | 750 V | |
| Dielectric strength wire/shield | 750 V | |
| Signal running time | nom. 427 ns / 100 m | |
| Signal running time (Ethernet) | 4.27 ns/m | |
| Electrical parameters (Ethernet) | Cat.7 acc. to EN50288-4-2 | |
| Test voltage | 750 V, 50 Hz, 1 min. | |
| Mechanical data | | |
| Cable structure | S/FTP | |

| | |
|--|---|
| Cable structure (Ethernet) | twisted shielded pair |
| Conductor construction (Ethernet) | 7-strand |
| Cross-section (Ethernet) | 4 x 2 x 0.14 mm ² (AWG26) |
| Outer cable diameter | 6.2 mm ± 0.2mm (0.244" ± 0.0079") |
| Min. bending radius, moved | 8 x outer cable diameter |
| Min. bending radius, fixed installation | 4 x outer cable diameter |
| Weight | 41 kg/km (27.55 lb/1000 ft) |
| Conductor material (Ethernet) | bare copper |
| Shielding | braiding of tinned copper wires, metallized plastic fleece for pair shielding |
| Optical covering factor of shielding (total) | ≥ 60 % |
| Use | fixed installation |
| Jacket color | green |
| Material jacket | PUR (polyurethane) |
| Wire color code | white/orange, orange, white/green, green, blue, white/blue, white/brown, brown |
| Wire insulation material | PE (polyethylene) |
| Printing on the jacket | Cat.7 S/FTP 4x2xAWG26/7 PUR LI02YSC11Y PIMF IEC 60332-1 E344985 AA c(UL)us CMX -40°C - +85°C "length in meters" |
| Printing color | blue |
| Environmental data | |
| Operation temperature range, moved | -40...+85°C, -40...+185°F |
| Ambient temperature, transport/storage | -10...+60°C, -14...+140°F |
| UV resistance | according to IEC 60068-2-5 (2 cycles of test method B) |
| Oil resistance | according to UL 758 |
| Acid, lye and solvent resistance | depends on medium, concentration, temperature and duration |
| Special features | Series of ISO/IEC 11801-x; Class F, Series of EN 50173-x; Class F, IEEE802.3: 10Base-T; 100Base-T; 1000Base-T; 10GBase-T, IEEE 802.3: Power over Ethernet PoE; PoE+ |
| LABS-free | yes |
| Flame-retardant | according to IEC 60332-1 |
| Halogen-free | according to IEC 60754-2 |
| Silicone-free | yes |
| Approvals | E499669 |

Contact assembly



Dimensions



A1 50.5 mm

A2 \varnothing 15.0 mm

B1 43.80 mm

Notes

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

CE, UL

CE yes

Ordering information

Length

ZK1B96-8191-0030 3.00 m

ZK1B96-8191-0050 5.00 m

Accessories

ZB8801-0000 torque wrench for hexagonal plugs, adjustable

ZB8801-0001 torque cable key, M8/wrench size 9, for ZB8801-0000

ZB8803-0001 Flange/Panel feed-through for M8 pre-assembled, for fixing the connector, plastic, including screws, washers and lock nuts



Products marked with a crossed-out wheeled bin shall not be discarded with the normal waste stream. The device is considered as waste electrical and electronic equipment. The national regulations for the disposal of waste electrical and electronic equipment must be observed.

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