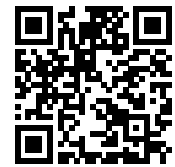
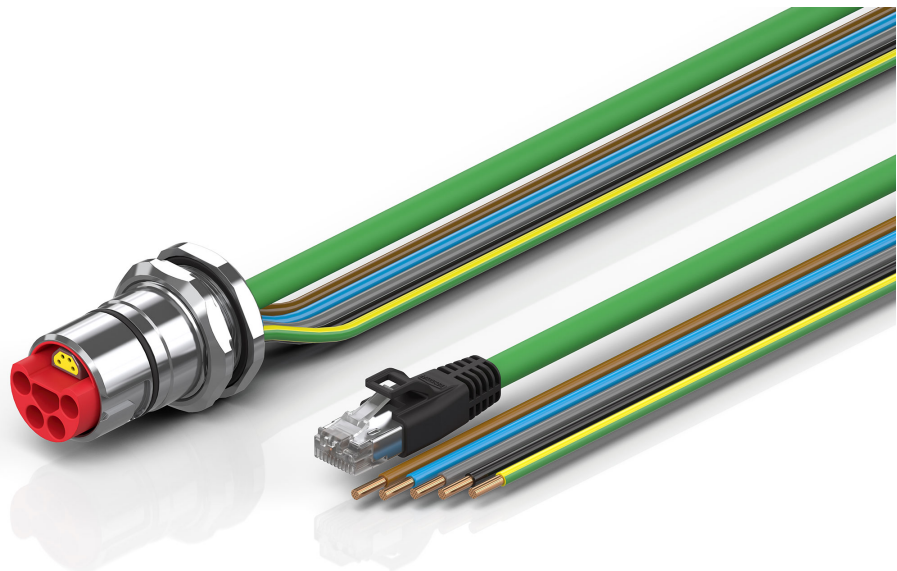


ZK7714-BZ00-Axxx | B23, ENP cable, PUR, 5 G 4.0 mm² + (1 x 4 x AWG22), drag chain suitable, key 2 (400 V AC)



B23, flange rear assembly, straight, long, male+female, pins 4+PE+4, EtherCAT-coded – RJ45, plug, straight, male, 4-pin – open end, 5-wire



Plugs

| Electrical data | Head A | Head B | Head C |
|----------------------------------|---|--------|--------|
| Rated voltage | - | 150 V | - |
| Rated voltage (Ethernet) | 60 V DC | - | - |
| Rated current (Ethernet) | 4 A at 40 °C | - | - |
| Rated voltage (power) | 630 V AC / 850 V DC, 600V AC / DC (UL) | - | - |
| Rated current (power) | 28 A at 45 °C | - | - |
| Rated current | - | 1.5 A | - |
| Rated impulse voltage (power) | 6.0 kV | - | - |
| Rated impulse voltage (Ethernet) | 1.0 kV | - | - |
| Voltage proof (contact/contact) | 1.5 kV (power - Ethernet), 3.31 kV AC (power), 1.0 kV AC (Ethernet) | - | - |
| Shielding | - | yes | - |

| | | | |
|----------------------------------|--|---------------------------------------|----------|
| Shielding (Ethernet) | yes | - | - |
| Contact resistance | < 10 mΩ (signal), < 5 mΩ (power) | - | - |
| Insulation resistance | ≥ 100 MΩ (according to IEC 60512) | ≥ 10 GΩ (according to IEC 60512-2) | - |
| Mechanical data | | | |
| Installation size | B23 | RJ45 | open end |
| Connector type | flange rear assembly | plug | - |
| Configuration | straight, long | straight | - |
| Contact type | male+female | male | - |
| Number of positions (face) | pins 4+PE+4 | 4-pin | 5-wire |
| Coding | EtherCAT-coded | - | - |
| Mechanical coding | key 2 (400 V AC) | - | - |
| Wire termination | crimp connection | - | - |
| Mating cycles | ≥ 100 | ≥ 750 | - |
| Way of locking | bayonet | - | - |
| Weight per piece | 0.200 kg (0.441 lb) | - | - |
| Body color | - | black | - |
| Body material | - | TPU, UL 94 HB | - |
| Flange housing material | GD-Zn, Ni | - | - |
| Seal | NBR | - | - |
| Contact carrier material | PA, UL 94 | PC UL 94 V-0 | - |
| Contact carrier color (Ethernet) | yellow | - | - |
| Contact carrier color (power) | red | - | - |
| Contact plating | Au over Ni | Ni, Au gal. | - |
| Contact material | copper alloy | CuZn | - |
| Environmental data | | | |
| Shock resistance | 50 g (490 m/s ²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes | - | - |
| Vibration resistance | 5 g (50 m /s ²) conforms to IEC 60512-6d, 10 Hz. ... 500 Hz.; 10 cycles per axis; 6 h full duration | - | - |
| RoHS compliant | yes | yes | - |
| Ambient temperature (operation) | -30...+80 °C, -22...+176 °F | -40...+70 °C, -40...+158 °F | - |
| Protection rating | IP65/67 in screwed condition (according to IEC 60529) | IP20 | - |
| Pollution level | 3/2 (according to IEC 60664-1) | - | - |

Approvals

UL 2237: File E484763

-

-

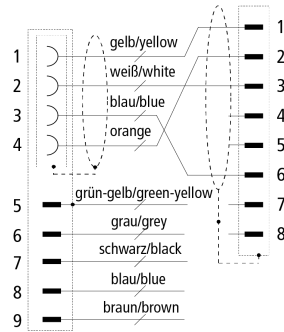
Cable

| Electrical data | |
|---|--|
| Rated voltage (Ethernet) | max. 300 V (peak value, not for high voltage purposes) |
| Rated voltage (power) | 600 V |
| Attenuation of shielding | ≥ 40 dB |
| Insulation resistance | ≥ 500 MΩ/km |
| Unbalanced capacitance to ground | 1600 pF/km |
| Mutual capacitance | 52 nF/km (1 kHz) |
| Characteristic impedance (Ethernet) | 100 Ω ±15 Ω (100 MHz) |
| Loop resistance (Ethernet) | ≤ 115 Ω/km |
| Differential impedance (Ethernet) | 250 Ω/km |
| Unbalanced resistance (Ethernet) | 2 % |
| Dielectric strength wire/wire (Ethernet) | 1000 V DC/700 V AC |
| Dielectric strength wire/shield (Ethernet) | 1000 V DC/700 V AC |
| Signal running time (Ethernet) | 5.3 ns/m |
| Electrical parameters (Ethernet) | based on Cat.5 |
| Test voltage | ≥ 2000 V |
| Mechanical data | |
| Cable structure (Ethernet) | star quad |
| Conductor construction (power) | 19 x 0.30 mm |
| Conductor construction (Ethernet) | 7 x 0.25 mm |
| Cross-section (power) | 5 x 4.0 mm ² (approx. AWG12) |
| Cross-section (Ethernet) | 1 x 4 x 0.34 mm ² (AWG 22) |
| Min. bending radius, moved | 7.5 x outer cable diameter |
| Min. bending radius, fixed installation | 5 x outer cable diameter |
| Weight | 61 kg/km (41 lb/1000 ft) |
| Outer cable diameter | 6.5 mm ± 0.2 mm (0.2559" ± 0.0079") |
| Conductor material (Ethernet) | copper, tinned |
| Shielding | aluminum-clad foil, braiding of tinned copper wires |
| Optical covering factor of shielding (Ethernet) | ≥ 85 % |
| Use | drag-chain suitable |
| Max. acceleration | 4 m/s ² |
| Max. speed | 4 m/s |

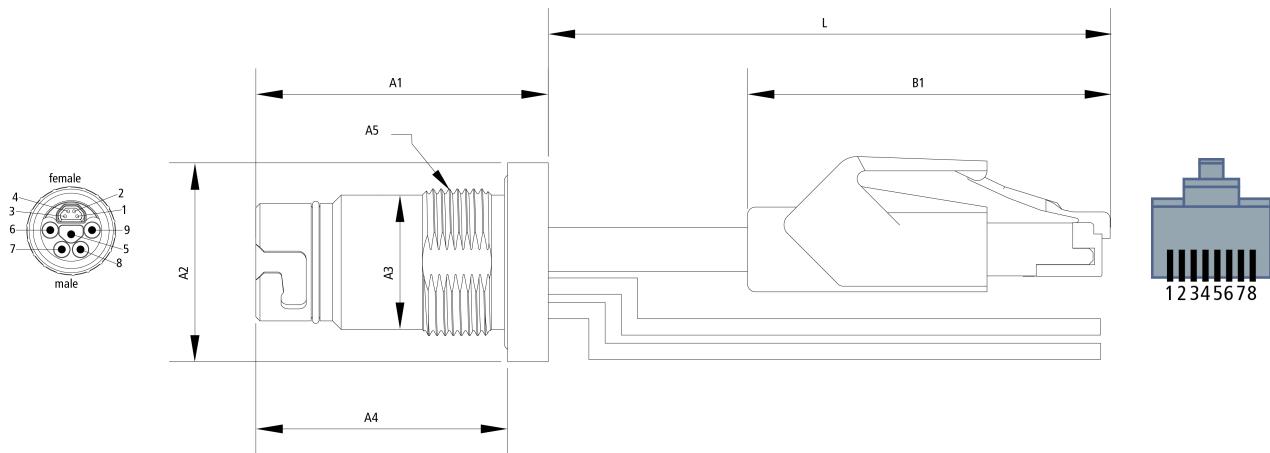
| | |
|---|--|
| Max. number of cycles | 3 million |
| Wall thickness of wire insulation (Ethernet) | 0.375 mm |
| Jacket color | green |
| Material jacket | PUR (polyurethane) |
| Wire color code | yellow, orange, white, blue (Ethernet) gray, green/yellow, black, blue, brown (Power) |
| Wire insulation material | PP polypropylene (Ethernet), PPE polyphenyl ether (Power) |
| Printing on the jacket | BECKHOFF ZB9020 Industrial Ethernet / EtherCAT Trailing Cable * CAT5PLUS * 22AWG (SHIELDED) (UL) E119100 CMX 75°C VERIFIED (UL) CAT 5E PATCH CABLE FRNC **"length in meters" |
| Printing color | black |
| Environmental data | |
| Operation temperature range, moved | -40...+70 °C, -40...+158 °F |
| Operation temperature range, fixed installation | -20...+60 °C, -4...+140 °F |
| UV resistance | yes |
| Oil resistance | according to DIN EN 60811-2-1 |
| Acid, lye and solvent resistance | depends on medium, concentration, temperature and duration |
| LABS-free | yes |
| Flame-retardant | yes |
| CFC-free | yes |
| Halogen-free | yes |
| Silicone-free | yes |
| Approvals | UL-Style AWM 20963 |

| | |
|-------------------------------------|---|
| Attenuation | |
| Max. insertion loss | |
| Frequency [MHz] | 1 4 10 16 20 31.25 62.5 100 |
| [db/100 m] | 2.1 4.0 6.3 8.0 9.0 11.4 16.5 21.3 |
| [db/100 ft] | 0.6 1.2 1.9 2.4 2.7 3.5 5 6.5 |
| Min. near-end crosstalk attenuation | |
| Frequency [MHz] | 1 4 10 16 20 31.25 62.5 100 |
| [db/100 m] | 80 76.0 70.0 65.0 63.0 60.0 55.0 50.0 |
| [db/100 ft] | 24.4 23.2 21.3 19.8 19.2 18.3 16.8 15.2 |

| |
|-------------------------|
| Contact assembly |
|-------------------------|



Dimensions



| | |
|----|----------|
| A1 | 47.50 mm |
| A2 | 30.00 mm |
| A3 | 23.80 mm |
| A4 | 42.50 mm |
| A5 | M25 |
| B1 | 43.80 mm |

Notes

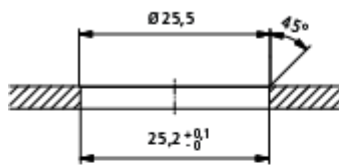
- Depending on the cable length (L), the following length tolerances apply:
0 m...3.0 m: + 100 mm | 3.0...10.0 m: ± 100 mm | ≥ 10.0 m: ± 2 %
- Illustrations similar
- Delivery with counter nut
- Further cable length on request. The last three digits of the ordering information is the cable length in decimeters, e.g.
ZKxxxx-xxxx-x020 = cable length 2.00 m

CE, UL

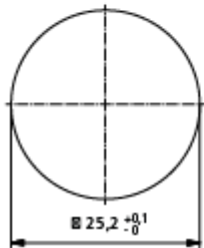
| | |
|----|---------------------------------------|
| CE | yes |
| UL | yes UL2237, UL E-file number: E484763 |

Installation dimensions

Hole/ Durchgangsloch

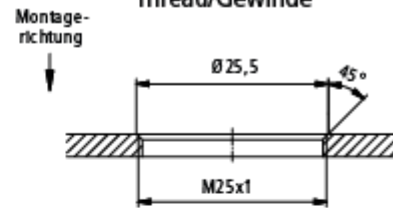


Panel cut out without twist protection/
Montageausschnitt ohne Verdrehsicherung

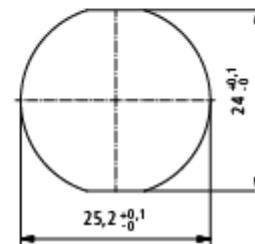


min. wall thickness 1 mm/
Min. Wandstärke 1 mm
max. wall thickness 5 mm/
Max. Wandstärke 5 mm

Thread/Gewinde



Panel cut out with twist protection/
Montageausschnitt mit Verdrehsicherung



Ordering information

Length

ZK7714-BZ00-Axxx

Accessories

| | |
|-------------|---|
| ZS7300-B003 | B23 protection cap, plug, plastic, IP67, packaging unit = 10 pieces |
| ZS7300-B004 | B23 protection cap, plug, metal, IP67, packaging unit = 5 pieces |
| ZS7300-B009 | B23 color coding flange for front/rear assembly, red, packaging unit = 10 pieces |
| ZS7300-B010 | B23 color coding flange for front/rear assembly, yellow, packaging unit = 10 pieces |
| ZS7300-B011 | B23 color coding flange for front/rear assembly, blue, packaging unit = 10 pieces |
| ZS7300-B012 | B23 color coding flange for front/rear assembly, green, packaging unit = 10 pieces |
| ZS7300-B013 | B23 color coding flange for front/rear assembly, orange, packaging unit = 10 pieces |
| ZS7300-B014 | B23 color coding flange for front/rear assembly, gray, packaging unit = 10 pieces |



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