



## ZK2000-6522-3xxx | Sensor cable, PVC, 4 x 0.34 mm<sup>2</sup>, fixed installation

M12, plug, straight, male, 4-pin, A-coded – M8, socket, straight, female, 3-pin, A-coded

### Plugs

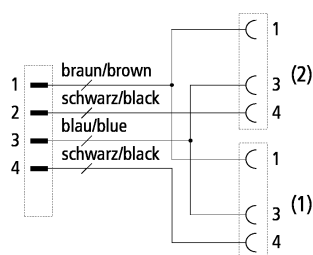
| Electrical data            | Head A  | Head B  |
|----------------------------|---|---|
| Rated voltage              | 250 V (according to IEC 61076-2-101)  | 60 V (according to IEC 61076-2-104)   |
| Rated current              | 4 A at 40 °C (according to IEC 61076-2-101)   | -   |
| Rated current (signal/24V) | -   | 4 A at 40 °C (acc.to IEC 61076-2-104)   |
| Shielding                  | no  | no  |
| Insulation resistance      | ≥ 10 GΩ (according to IEC 60512-2)  | ≥ 10 GΩ (according to IEC 60512-2)  |
| Mechanical data            |   |   |
| Installation size          | M12   | M8  |
| Connector type             | plug  | socket  |
| Configuration              | straight  | straight  |
| Contact type               | male  | female  |
| Number of positions (face) | 4-pin   | 3-pin   |
| Coding                     | A-coded   | A-coded   |
| Wire termination           | -   | crimp connection  |
| Recommended torque, nut    | 0.6 Nm  | 0.4 Nm  |
| Mating cycles              | ≥ 100 (according to IEC 60512-9a)   | ≥ 100 (according to IEC 60512-9a)   |
| Way of locking             | screw   | screw   |
| Weight per piece           | -   | 0.028 kg (0.0617 lb)  |
| Body colour                | black   | black   |
| Body material              | TPU, self-extinguishing   | TPU, UL94   |
| Coupling nut material      | CuZn, Ni  | CuZn, Ni  |
| Seal                       | FPM   | FPM   |
| Contact carrier colour     | red   | red   |
| Contact carrier material   | TPU GF, UL 94   | TPU GF, 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 |

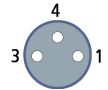
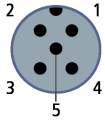
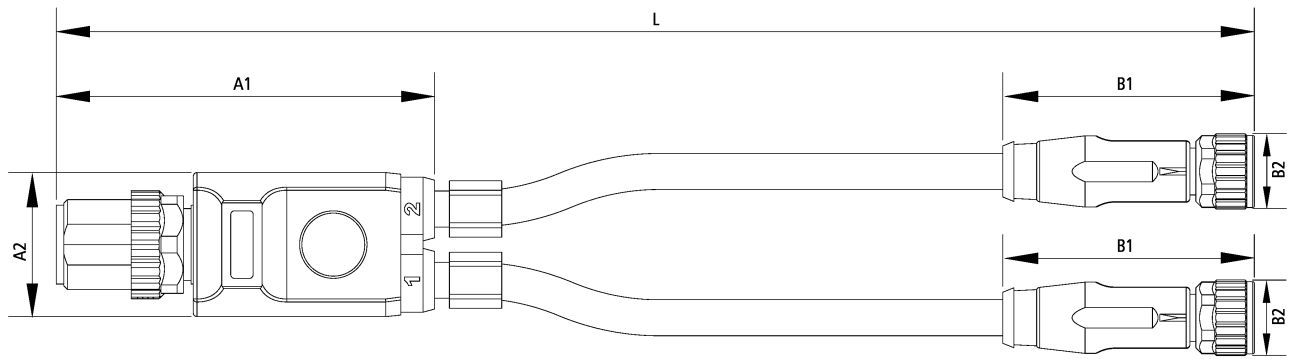
|                                 |  |   |
|---------------------------------|--|---|
| RoHS compliant                  | yes  | yes   |
| Ambient temperature (operation) | -25...+80 °C, -13...+176 °F                            | -30...+80 °C, -22...+176 °F                         |
| Protection class                | IP 65/67 in screwed condition (according to IEC 60529) | IP 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  |
| Insulation resistance               | ≥ 10 GΩ (according to IEC 60512-2)   |
| Wire resistance (signal/24V)        | ≤ 58.0 Ω/km (20 °C)  |
| Test voltage                        | ≥ 3000 V   |
| Mechanical data                     |  |
| Conductor construction (signal/24V) | 32 x 0.10 mm   |
| Cross section                       | 3 x 0.25 mm <sup>2</sup> (AWG24)   |
| Min. bending radius, moved          | 6 x outer cable diameter   |
| Weight                              | 28 kg/km (18.8 lb/1000 ft)   |
| Outer cable diameter                | 4.4 mm ± 0.15 mm (0.173" ± 0.0059")  |
| Shielding                           | no   |
| Use                                 | drag-chain suitable  |
| Max. acceleration                   | 10 m/s <sup>2</sup>  |
| Max. speed                          | 5 m/s  |
| Max. number of cycles               | 10 million at max. 20 m travel distance, 2 million at max. 100 m travel distance |
| Jacket colour                       | black  |
| Material jacket                     | PUR (polyurethane)   |
| Wire colour code                    | brown, blue, black   |
| Wire insulation material            | PP (polypropylene)   |
| Printing colour                     | white  |
| Environmental data                  |  |
| Operation temperature range, moved  | -25...+80 °C, -13...+176 °F  |
| Oil resistance                      | Oil and greases resistant  |
| Flame-retardant                     | according to cULus 20549   |
| Halogen-free                        | DIN VDE 0472 part 815  |
| Approvals                           | UL Listed: FILE E480185  |

### Contact assembly





|    |          |
|----|----------|
| A1 | 50.00 mm |
| A2 | 19.30 mm |
| B1 | 33.60 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. The last three digits of the ordering information is the cable length in decimeters, e.g. ZKxxxx-xxxx-x020 = cable length 2.00 m

| Ordering information | Length     |
|----------------------|------------|
| ZK2000-6522-3005     | 2 x 0.50 m |

| Accessories |   |
|-------------|---|
| ZB8801-0000 | torque wrench for hexagonal plugs, adjustable         |
| ZB8801-0001 | torque cable key, M8/wrench size 9, for ZB8801-0000   |
| ZB8801-0002 | torque cable key, M12/wrench size 13, for ZB8801-0000 |

Beckhoff®, TwinCAT®, EtherCAT®, EtherCAT G®, EtherCAT G10®, EtherCAT P®, Safety over EtherCAT®, TwinSAFE®, XFC®, XTS® and XPlanar® are registered trademarks of and licensed by Beckhoff Automation GmbH. Other designations used in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owners.

© Beckhoff Automation GmbH & Co. KG 02/2021

The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual application do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.