

ZK2000-3500-0xxx | Sensor cable, PUR, 3 x 0.25 mm², drag-chain suitable

M8, plug, straight, male, 4-pin, A-coded – open end, 3-wire

Plugs

Electrical data	Head A	Head B
Rated voltage	30 V (according to IEC 61076-2-104)	-
Rated current	3 A at 40 °C (according to IEC 61076-2-104)	-
Shielding	no	-
Insulation resistance	\geq 100 M Ω (according to IEC 60512)	-
Mechanical data		
Installation size	M8	open end
Connector type	plug	-
Configuration	straight	-
Contact type	male	-
Number of positions (face)	4-pin	3-wire
Coding	A-coded	-
Recommended torque, nut	0.4 Nm	-
Mating cycles	\geq 100 (according to IEC 60512-9a)	-
Way of locking	screw	-
Body colour	black	-
Body material	TPU, UL 94	-
Coupling nut material	GD-Zn, Ni	-
Seal	FPM	-
Contact carrier colour	red	-
Contact carrier material	PA, UL 94	-
Contact plating	Ni, Au gal.	-
Contact material	CuZn	-
Environmental data		
Special features	halogen-free, flame-resistant as per IEC 60332-1-2, oil-resistant as per DIN EN 60811-2-1	-
RoHS compliant	yes	-
Ambient temperature (operation)	-30+80 °C, -22+176 °F	-
Protection class	IP 65/67 in screwed condition (according to IEC 60529)	-

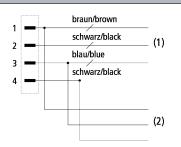
BECKHOFF New Automation Technology

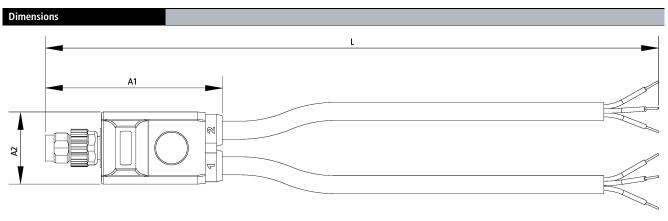
Cable

Electrical data	
Rated voltage	≤ 300 V
Insulation resistance	\geq 10 G Ω (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 mm² (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 ²
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	47.10 mm
A2	19.20 mm

Notes

- Depending on the cable length (L), the following length tolerances apply:
- $0 \text{ m...} < 0.2 \text{ m} \pm 10 \text{ mm} | 0.2...4.0 \text{ m} \pm 40 \text{ mm} | \ge 4.0 \text{ m} \pm 1 \%$
- Illustrations similar

- Further cable length on request. The last three digits of the ordering information is the cable length in decimeters, e.g. ZKxxxx-xx2020 = cable length 2.00 m

Ordering information	Length
ZK2000-3500-0010	2 x 1.00 m
ZK2000-3500-0020	2 x 2.00 m
ZK2000-3500-0075	2 x 7.50 m

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

Beckhoff®, TwinCAT®, EtherCAT®, EtherCAT @, 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 expressively agreed in the terms of contract.