ZK2000-2124-0xxx | Sensor cable, PUR, 3 x 0.25 mm², drag-chain suitable

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

Plugs

Electrical data	Head A	Head B
Rated voltage	50 V AC/60 V DC (according to IEC 61076-2-104)	50 V AC/60 V DC (according to IEC 61076-2-104)
Rated current	4 A at 40°C (leaning on IEC 61076-2-104)	4 A at 40°C (leaning on IEC 61076-2-104)
Rated current (signal/24V)	4 A at 40°C (acc.to IEC 61076-2-104)	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	M8	M8
Connector type	plug	socket
Configuration	straight	angled
Contact type	male	female
Number of positions (face)	3-pin	3-pin
Coding	A-coded	A-coded

Wire termination	crimp connection	crimp connection
Recommended torque, nut	0.4 Nm	0.4 Nm
Mating cycles	≥ 100 (according to IEC 60512-9a)	≥ 100 (according to IEC 60512-9a)
Way of locking	screw	screw
Weight	0.028 kg (0.0617 lb)	0.028 kg (0.0617 lb)
Body color	black	black
Body material	TPU, UL94	TPU, UL94
Coupling nut material	CuZn, Ni	CuZn, Ni
Seal	FPM	FPM
Contact carrier color	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)	-30...+80°C, -22...+176°F	-30...+80°C, -22...+176°F
Protection rating	IP67 in screwed condition (according to IEC 60529)	IP67 in screwed condition (according to IEC 60529)
Pollution level	3/2 (according to IEC 60664-1)	3/2 (according to IEC 60664-1)

Cable

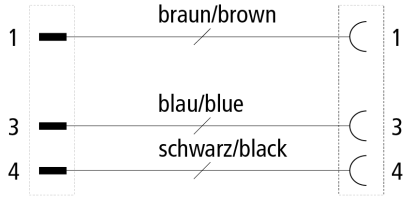
Electrical data	
Rated voltage	≤ 300 V
Insulation resistance	≥ 10 GΩ (according to IEC 60512-2)
Wire resistance (signal/24V)	≤ 58.0 Ω/km (20°C)
Test voltage	≥ 3000 V
Mechanical data	
Conductor construction (signal/24V)	32 x 0.10 mm
Cross-section	3 x 0.25 mm² (AWG24)
Outer cable diameter	4.4 mm ± 0.15 mm (0.173" ± 0.0059")
Min. bending radius, moved	6 x outer cable diameter
Weight	28 kg/km (18.8 lb/1000 ft)
Shielding	no
Use	drag-chain suitable

Max. acceleration	10 m/s²
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 color	black
Material jacket	PUR (polyurethane)
Wire color code	brown, blue, black
Wire insulation material	PP (polypropylene)
Printing on the jacket	Li9Y11Y 3x0.25mm² E257058 CRUus (UL-Logo) AWM Style 20549 AWM II A/B 80°C 300 V FT2
Printing color	white

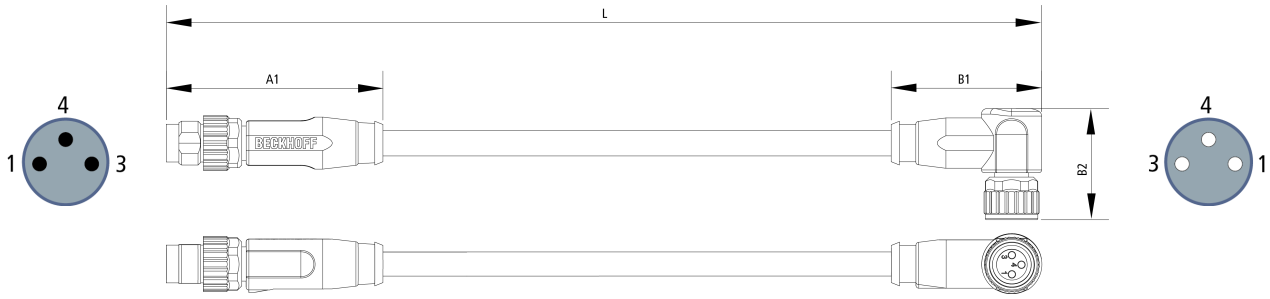
Environmental data

Operation temperature range, moved	-25...+80°C, -13...+176°F
Oil resistance	Oil and greases resistant
Flame-retardant	according to cULus 20549
Halogen-free	according to DIN VDE 0472 part 815
CE	yes
UL	yes, UL E-file number: E257058

Pin assignment



Dimensions



A1	39.60 mm
A2	Ø 10.1 mm
B1	27.50 mm
B2	20.30 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
UL	yes, UL E-file number: E480185

Ordering information	Length
ZK2000-2124-0005	0.50 m
ZK2000-2124-0006	0.60 m
ZK2000-2124-0010	1.00 m
ZK2000-2124-0012	1.20 m
ZK2000-2124-0015	1.50 m
ZK2000-2124-0020	2.00 m
ZK2000-2124-0025	2.50 m
ZK2000-2124-0027	2.70 m
ZK2000-2124-0030	3.00 m
ZK2000-2124-0040	4.00 m
ZK2000-2124-0050	5.00 m
ZK2000-2124-0060	6.00 m
ZK2000-2124-0100	10.00 m

Further length on request

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.

Beckhoff®, ATRO®, EtherCAT®, EtherCAT G®, EtherCAT G10®, EtherCAT P®, MX-System®, Safety over EtherCAT®, TC/BSD®, TwinCAT®, TwinCAT/BSD®, TwinSAFE®, XFC®, XPlanar® and XTS® 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 03/2026

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.