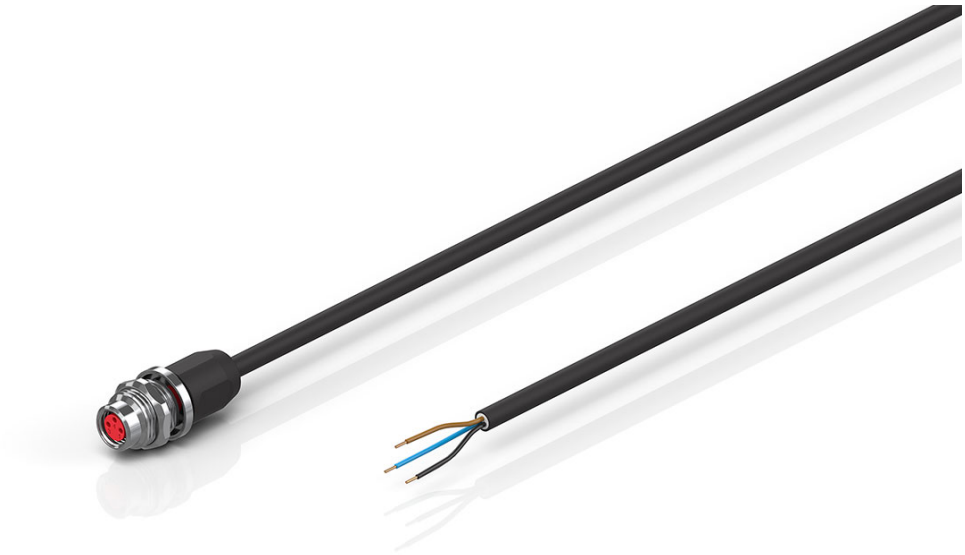
ZK2000-2800-0xxx | Sensor cable, PUR, 3 x 0.25 mm², drag-chain suitable

M8, flange, straight, female, 3-pin, A-coded – open end, 3-wire



Plugs

Electrical data	Head A	Head B
Rated voltage	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)	-
Rated current (signal/24V)	4 A at 40°C (acc.to IEC 61076-2-104)	-
Shielding	no	-
Insulation resistance	≥ 10 GΩ (according to IEC 60512-2)	-
Mechanical data		
Installation size	M8	open end
Connector type	flange	-
Configuration	straight	-
Contact type	female	-
Number of positions (face)	3-pin	3-wire
Coding	A-coded	-
Wire termination	crimp connection	-

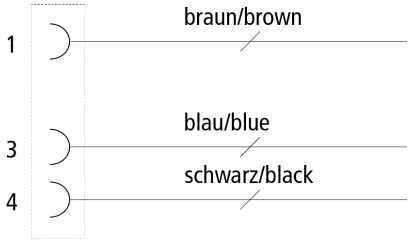
Recommended torque, nut	0.4 Nm	-
Mating cycles	≥ 100 (according to IEC 60512-9a)	-
Way of locking	screw	-
Weight	0.028 kg (0.0617 lb)	-
Body color	black	-
Body material	TPU, UL94	-
Coupling nut material	CuZn, Ni	-
Seal	FPM	-
Contact carrier color	red	-
Contact carrier material	TPU GF, UL 94	-
Contact 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 rating	IP67 in screwed condition (according to IEC 60529)	-
Pollution level	3/2 (according to IEC 60664-1)	-

Cable

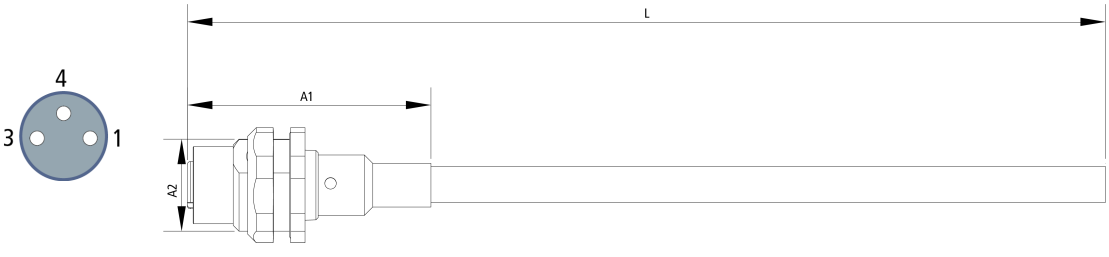
Electrical data	
Rated voltage	≤ 300 V
Insulation resistance	≥ 10 GΩ (according to IEC 60512-2)
Wire resistance (signal/24V)	≤ 58.0 Ω/km (20°C)
Test voltage	≥ 3000 V
Mechanical data	
Conductor construction (signal/24V)	32 x 0.10 mm
Cross-section	3 x 0.25 mm² (AWG24)
Outer cable diameter	4.4 mm ± 0.15 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	34.50 mm
A2	M8

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.

Ordering information	Length
ZK2000-2800-0010	1.00 m
ZK2000-2800-0030	3.00 m
ZK2000-2800-0050	5.00 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

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.