



## ZK2000-5152-1xxx | Sensor cable, PUR, 5 x 0.25 mm<sup>2</sup>, fixed installation, shielded

M12, plug, straight, male, 5-pin, A-coded – M12, socket, straight, female, 5-pin, A-coded

### Plugs

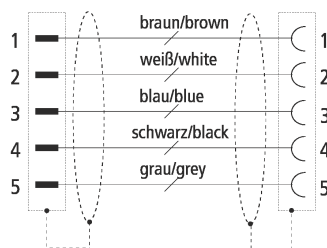
Electrical data	Head A	Head B
Rated voltage	60 V (according to IEC 61076-2-101)	60 V (according to IEC 61076-2-101)
Rated current	4 A at 40 °C (according to IEC 61076-2-101)	4 A at 40 °C (according to IEC 61076-2-101)
Shielding	yes	yes
Contact resistance	< 10 mΩ	< 10 mΩ
Insulation resistance	≥ 100 MΩ (according to IEC 60512)	≥ 100 MΩ (according to IEC 60512)
Mechanical data		
Installation size	M12	M12
Connector type	plug	socket
Configuration	straight	straight
Contact type	male	female
Number of positions (face)	5-pin	5-pin
Coding	A-coded	A-coded
Recommended torque, nut	0.6 Nm	0.6 Nm
Mating cycles	≥ 100 (according to IEC 60512-9a)	≥ 100 (according to IEC 60512-9a)
Way of locking	screw	screw
Weight per piece	0.023 kg (0.0507 lb)	0.023 kg (0.0507 lb)
Body colour	black	black
Body material	TPU, UL 94 HB	TPU, UL 94 HB
Coupling nut material	GD-Zn, Ni	GD-Zn, Ni
Seal	FPM	FPM
Contact carrier colour	red	red
Contact carrier material	PA, UL 94 V-0	PA, UL 94 V-0
Contact plating	Au	Ni, Au gal.
Contact material	CuZn, Ni b/Au 0.2 gal.	CuZn, Ni b/Au 0.2 gal.
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...+85 °C, -22...+185 °F	-30...+85 °C, -22...+185 °F
Protection class	IP 65/67 in screwed condition (according to IEC 60529)	IP 65/67 in screwed condition (according to IEC 60529)
Pollution level	3/2 (according to IEC 60664-1)	3/2 (according to IEC 60664-1)

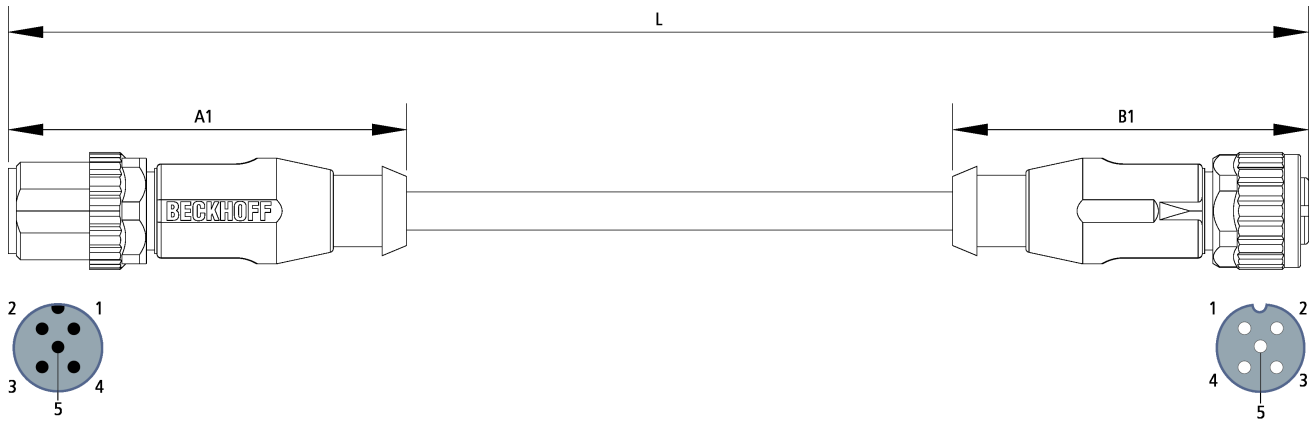
## Cable

Electrical data	
Rated voltage	300 V
Operating voltage	≤ 300 V
Wire resistance	≤ 78 Ω/km (20 °C)
Test voltage	≥ 3000 V
Mechanical data	
Cross section (power)	5 x 0.25 mm <sup>2</sup> (AWG24)
Cross section (signal)	5 x 0.25 mm <sup>2</sup> (AWG24)
Min. bending radius, moved	10 x outer cable diameter
Min. bending radius, fixed installation	5 x outer cable diameter
Weight	41 kg/km (27.84 lb/1000 ft)
Outer cable diameter	5.4 mm ± 0.2 mm (0.213" ±0.0079")
Shielding	braiding of tinned copper wires
Optical covering factor of shielding	≥ 85%
Use	fixed installation
Jacket colour	black
Material jacket	PUR (polyurethane)
Wire colour code	brown, white, blue, black, grey
Wire insulation material	PP (polypropylene)
Printing colour	white
Environmental data	
Operation temperature range, fixed installation	-30...+80 °C, -22...+176 °F
Oil resistance	according to DIN EN 60811-2-1
Special features	Hydrolysis and microbe-resistant, low adhesion
Flame-retardant	according to cULus 20549
Halogen-free	DIN VDE 0472 part 815
RoHS compliant	yes

### Contact assembly



## Dimensions



A1	49.00 mm
A2	20.00 mm
B1	44.00 mm
B2	20.00 mm

## Notes

- Depending on the cable length ( $L$ ), the following length tolerances apply:  
 $0\text{ m} \dots < 0.2\text{ m}$ :  $\pm 10\text{ mm}$  |  $0.2 \dots 4.0\text{ m}$ :  $+ 40\text{ mm}$  |  $\geq 4.0\text{ m}$ :  $+ 1\%$
- 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
ZK2000-5152-1050	5.00 m

Accessories	
ZB8801-0000	torque wrench for hexagonal plugs, adjustable
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.