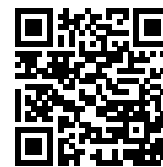


ZK2000-8172-0xxx | Sensor cable, PUR, 4 x 0.34 mm², drag chain suitable



M12, plug, straight, male, 8-pin, A-coded – M12, socket, straight, female, 5-pin, A-coded



Plugs

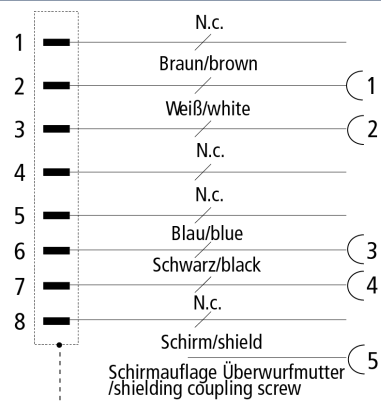
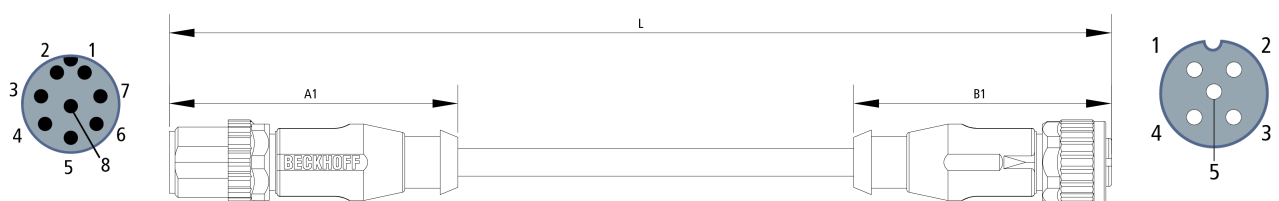
Electrical data	Head A	Head B
Rated voltage	30 V (according to IEC 61076-2-101)	60 V (according to IEC 61076-2-101)
Rated current	2 A at 40 °C (according to IEC 61076-2-101)	4 A at 40 °C (according to IEC 61076-2-101)
Shielding	no	no
Contact resistance	-	< 10 mΩ
Insulation resistance	≥ 100 MΩ (according 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)	8-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	0.046 kg (0.1014 lb)	0.023 kg (0.0507 lb)
Body color	metal	black
Body material	GD-Zn, Ni	TPU, UL 94 HB
Coupling nut material	GD-Zn, Ni	GD-Zn, Ni
Seal	elastomers	FPM
O-ring	NBR	-
Contact carrier color	black	red
Contact carrier material	PA, UL 94	PA, UL 94 V-0
Contact plating	Ni, Au gal.	-
Contact material	CuZn	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
RoHS compliant	yes	yes
Ambient temperature (operation)	-30...+85 °C, -22...+185 °F	-30...+85 °C, -22...+185 °F
Protection rating	IP65/67 in screwed condition (according to IEC 60529)	IP65/67 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 MΩ * km	
Wire resistance (signal/24V)	≤ 58.0 Ω/km (20 °C)	
Test voltage	≥ 3000 V	
Mechanical data		
Conductor construction (signal/24V)	42 x 0.10 mm	
Cross-section (power)	4 x 0.34 mm ² (AWG 22) and shield	
Cross-section (signal)	4 x 0.34 mm ² (AWG22) and shield	
Min. bending radius, moved	10 x outer cable diameter	
Min. bending radius, fixed installation	5 x outer cable diameter	
Weight	45 kg/km (30.2 lb/1000 ft)	
Outer cable diameter	5.4 mm ± 0.2 mm (0.213" ±0.0079")	

Shielding	aluminum-clad foil, braiding of tinned copper wires
Optical covering factor of shielding	≥ 85%
Use	drag-chain suitable
Max. acceleration	5 m/s ²
Max. speed	1.6 m/s
Max. travel distance	5 m (horizontal with 5 m/s ²), 2 m (vertical with 5 m/s ²)
Max. number of cycles	2 million
Jacket color	black
Material jacket	PUR (polyurethane)
Wire color code	brown, white, blue, black
Wire insulation material	PP (polypropylene)
Printing color	white
Environmental data	
Operation temperature range, moved	-30...+80 °C, -22...+176 °F
Flame-retardant	according to UL 758/1581 (cUL-FT2)
Halogen-free	DIN VDE 0472 part 815
CE	yes
UL	yes, UL E-file number: E257058

Contact assembly**Dimensions**

A1 49.00 mm

A2	Ø14.50 mm
B1	44.00 mm
B2	20.00 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

Ordering information	Length
ZK2000-8172-0001	0.15 m
ZK2000-8172-0010	1.00 m
ZK2000-8172-0020	2.00 m
ZK2000-8172-0030	3.00 m

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



Beckhoff®, TwinCAT®, TwinCAT/BSD®, TC/BSD®, 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 08/2022

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.