



ZK2000-2164-0xxx | Sensor cable, PUR, 3 x 0.25 mm², drag-chain suitable

M8, plug, straight, male, 3-pin, A-coded – M12, socket, angled, female, 4-pin, A-coded

Plugs

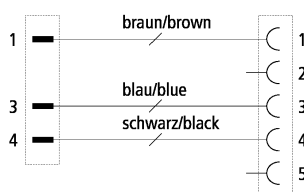
Electrical data	Head A	Head B
Rated voltage	60 V (according to IEC 61076-2-104)	250 V (according to IEC 61076-2-101)
Rated current	-	7,5 A at 40 °C (according to IEC 61076-2-101)
Rated current (signal/24V)	4 A at 40 °C (acc.to IEC 61076-2-104)	-
Shielding	no	no
Contact resistance	-	< 10 mΩ
Insulation resistance	≥ 10 GΩ (according to IEC 60512-2)	≥ 100 MΩ (according to IEC 60512)
Mechanical data		
Installation size	M8	M12
Connector type	plug	socket
Configuration	straight	angled
Contact type	male	female
Number of positions (face)	3-pin	4-pin
Coding	A-coded	A-coded
Wire termination	crimp connection	-
Recommended torque, nut	0.4 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	0.028 kg (0.0617 lb)	0.023 kg (0.0507 lb)
Body colour	black	black
Body material	TPU, UL94	PA6 GF, UL 94 HB
Coupling nut material	CuZn, Ni	CuZn, Ni
Seal	FPM	elastomers
O-ring	-	FPM/NBR
Contact carrier colour	red	red
Contact carrier material	TPU GF, UL 94	PA 6, UL 94 V0
Contact plating	Ni, Au gal.	Au
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...+80 °C, -22...+176 °F	-30...+85 °C, -22...+185 °F
Protection class	IP 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)

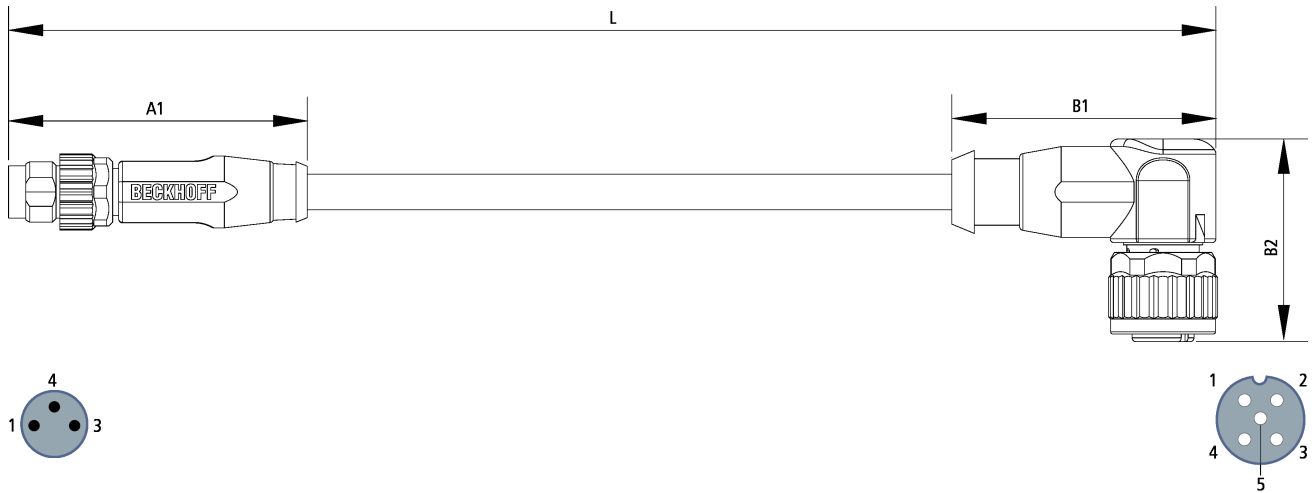
Cable

Electrical data	
Rated voltage	≤ 300 V
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 mm ² (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



Dimensions



A1	39.60 mm
B1	35.00 mm
B2	26.80 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. 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
ZK2000-2164-0005	0.50 m
ZK2000-2164-0010	1.00 m
ZK2000-2164-0015	1.50 m
ZK2000-2164-0020	2.00 m
ZK2000-2164-0030	3.00 m
ZK2000-2164-0040	4.00 m
ZK2000-2164-0050	5.00 m
ZK2000-2164-0070	7.00 m
ZK2000-2164-0080	8.00 m
ZK2000-2164-0100	10.00 m
ZK2000-2164-0120	12.00 m
ZK2000-2164-0150	15.00 m

Accessories	
ZB8801-0000	torque wrench for hexagonal plugs, adjustable
ZB8801-0001	torque cable key, M8/wrench size 9, for ZB8801-0000
ZB8801-0002	torque cable key, M12/wrench size 13, for ZB8801-0000

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