



ZK2002-6164-0xxx | Sensor cable, PUR, 4 x 0.34 mm², drag-chain suitable

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

Plugs

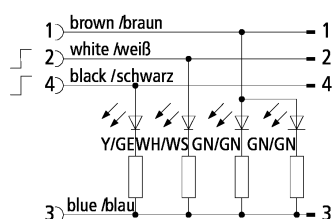
Electrical data	Head A	Head B
Rated voltage	250 V (according to IEC 61076-2-101)	250 V (according to IEC 61076-2-101)
Rated current	4 A at 40 °C (according to IEC 61076-2-101)	4 A at 40 °C (according to IEC 61076-2-101)
Rated impulse voltage	1.5 kV	-
Shielding	no	no
Contact resistance	< 10 mΩ	< 10 mΩ
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	angled
Contact type	male	female
Number of positions (face)	4-pin	4-pin
Coding	A-coded	A-coded
LED	-	with LED
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
Body colour	black	transparent
Body material	TPU, UL 94	PA6 GF, UL 94 HB
Coupling nut material	GD-Zn, Ni	CuZn, Ni
Seal	FPM	-
O-ring	-	FPM/NBR
Contact carrier colour	red	black
Contact carrier material	PA, UL 94 V-0	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...+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)

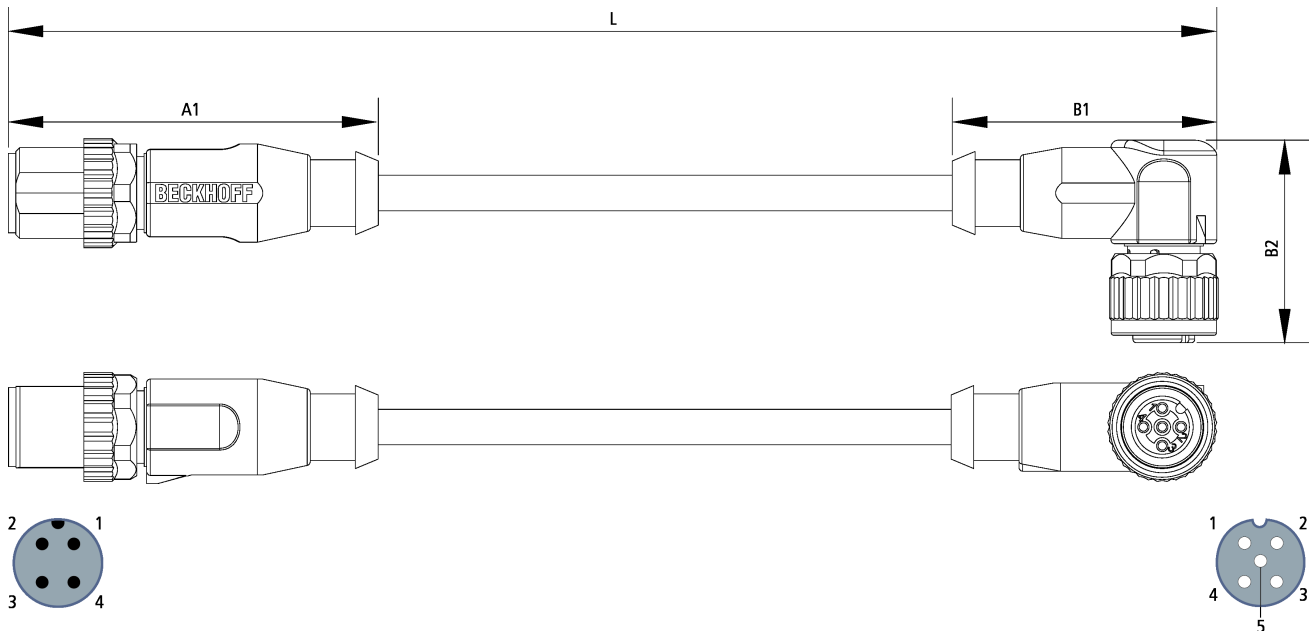
Cable

Electrical data	
Rated voltage	≤ 300 V
Insulation resistance	≥ 10 GΩ * km
Wire resistance (signal/24V)	≤ 58.0 Ω/km (20 °C)
Test voltage	≥ 3000 V
Mechanical data	
Conductor construction (power)	42 x 0.10 mm
Cross section	4 x 0.34 mm ² (AWG 22)
Min. bending radius, moved	6 x outer cable diameter
Min. bending radius, moved in drag chain	10 x outer cable diameter
Weight	31 kg/km (20.8 lb/1000 ft)
Outer cable diameter	4.7 mm ± 0.15 mm (0.185" ± 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
Wall thickness of wire insulation (power)	≥ 0.21 mm
Jacket colour	black
Material jacket	PUR (polyurethane)
Wire colour code	white, blue, black, brown
Wire insulation material	PP (polypropylene)
Printing on the jacket	Li9Y11Y 4x0,34mm ² E242293 (cULus-Symbol) AWM STYLE 20549 80C 300V AWM I A/B 80C 300V FT2
Printing colour	white
Environmental data	
Operation temperature range, moved	-25...+80 °C, -13...+176 °F
Flame-retardant	according to DIN EN 60332-2-2
Halogen-free	DIN VDE 0472 part 815

Contact assembly



Dimensions



A1	49.00 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
ZK2002-6164-5045	0.45 m
ZK2002-6164-0010	1.00 m
ZK2002-6164-0030	3.00 m
ZK2002-6164-0050	5.00 m
ZK2002-6164-0100	10.00 m
ZK2002-6164-0150	15.00 m
ZK2002-6164-0200	20.00 m

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

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