

# ZK2000-3162-9xxx | Sensor cable, PUR, 4 x 0.34 mm², drag-chain suitable

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

## **Plugs**

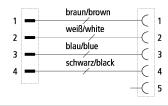
Rated voltage Rated current Rated impulse voltage Shielding Contact resistance	30 V (according to IEC 61076-2-104)  4 A at 40 °C (according to IEC 61076-2-104)  -  no  - ≥ 10 GΩ (according to IEC 60512-2)	250 V (according to IEC 61076-2-101)  4 A at 40 °C (according to IEC 61076-2-101)  1.5 kV  no  < 10 mΩ
Rated impulse voltage Shielding Contact resistance	no -	1.5 kV no < 10 mΩ
Shielding Contact resistance	-	no < 10 mΩ
Contact resistance	-	<10 mΩ
	- ≥ 10 GΩ (according to IEC 60512-2)	· · · · · · · · · · · · · · · · · · ·
	≥ 10 G $\Omega$ (according to IEC 60512-2)	100 110 / 15 - 150 00510)
Insulation resistance		$\geq$ 100 M $\Omega$ (according to IEC 60512)
Mechanical data		
Installation size	M8	M12
Connector type	plug	socket
Configuration	straight	straight
Contact type	male	female
Number of positions (face)	4-pin	4-pin
Coding	A-coded	A-coded
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)	-
Body colour	black	black
Body material	TPU, UL94	TPU, UL 94
Coupling nut material	CuZn, Ni	GD-Zn, Ni
Seal	FPM	FPM
Contact carrier colour	red	red
Contact carrier material	TPU GF, UL 94	PA 6, UL 94 V0
Contact plating	Ni, Au gal.	Ni, Au gal.
Contact material	CuZn	CuZn
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

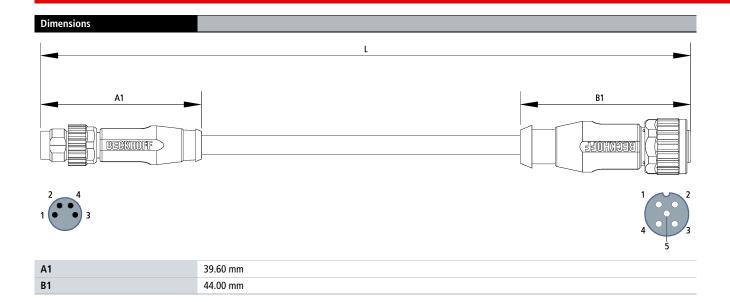
RoHS compliant	yes	yes
Ambient temperature (operation)	-30+80 °C, -22+176 °F	-30+85 °C, -22+185 °F
Protection class	IP 65/67 in screwed condition (according to IEC 60529)	IP 65/67 in screwed condition (according to IEC 60529)
Pollution level	3/2 (according to IEC 60664-1)	3/2 (according to IEC 60664-1)

## Cable

Electrical data	
Rated voltage	≤ 300 V
Insulation resistance	$\geq$ 10 G $\Omega$ * 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 <sup>2</sup> (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 <sup>2</sup>
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 <sup>2</sup> 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





#### **Notes**

- Depending on the cable length (L), the following length tolerances apply:
- $0 \text{ m...} < 0.2 \text{ m: } \pm 10 \text{ mm} \mid 0.2...4.0 \text{ m: } + 40 \text{ mm} \mid \ge 4.0 \text{ m: } + 1 \text{ }\%$
- 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
ZK2000-3162-9001	3.00 m
ZK2000-3162-9002	5.00 m
ZK2000-3162-9003	8.00 m
ZK2000-3162-9004	10.00 m
ZK2000-3162-9005	15.00 m
ZK2000-3162-9006	20.00 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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