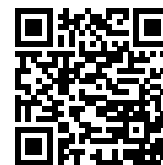


ZK2002-2164-0xxx | Sensor cable, with LED, PUR, 3 x 0.25 mm², drag-chain suitable



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	-	4 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

LED	-	with LED
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)	-
Body color	black	transparent
Body material	TPU, UL94	PA6 GF, UL 94 HB
Coupling nut material	CuZn, Ni	CuZn, Ni
Seal	FPM	-
O-ring	-	FPM/NBR
Contact carrier color	red	black
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 rating	IP67 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

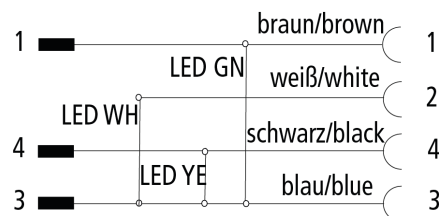
Electrical data		
Rated voltage	≤ 300 V	
Insulation resistance	≥ 10 GΩ (according to IEC 60512-2)	
Wire resistance (signal/24V)	≤ 58.0 Ω/km (20 °C)	
Test voltage	≥ 3000 V	
Mechanical data		
Conductor construction (signal/24V)	32 x 0.10 mm	
Cross-section	3 x 0.25 mm ² (AWG24)	
Outer cable diameter	4.4 mm ± 0.15 mm (0.173" ± 0.0059")	
Min. bending radius, moved	6 x outer cable diameter	
Weight	28 kg/km (18.8 lb/1000 ft)	

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 color	black
Material jacket	PUR (polyurethane)
Wire color code	brown, blue, black
Wire insulation material	PP (polypropylene)
Printing on the jacket	Li9Y11Y 3x0.25mm ² E257058 CRUus (UL-Logo) AWM Style 20549 AWM II A/B 80°C 300 V FT2
Printing color	white

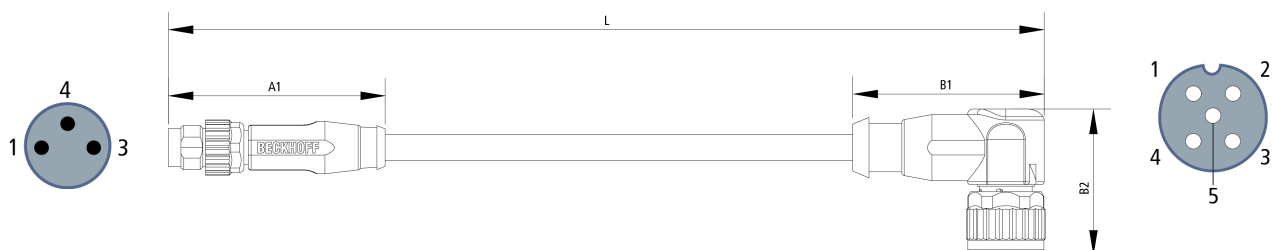
Environmental data

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
CE	yes
UL	yes, UL E-file number: E257058

Contact assembly



Dimensions



A1	39.60 mm
B1	35.00 mm
B2	26.80 mm

CE, UL

CE yes

Ordering information**Length**

ZK2002-2164-0050 5.00 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



Products marked with a crossed-out wheeled bin shall not be discarded with the normal waste stream. The device is considered as waste electrical and electronic equipment. The national regulations for the disposal of waste electrical and electronic equipment must be observed.

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