

ZK4000-5100-2xxx | Encoder cable, PUR, 5 x 0.25 mm², drag-chain suitable, shielded

M12, plug, straight, male, 5-pin, A-coded – open end, 5-wire + shielding

Plugs

Electrical data	Head A	Head B
Rated voltage	60 V (according to IEC 61076-2-101)	-
Rated current	4 A at 40 °C (according to IEC 61076-2-101)	-
Shielding	yes	-
Contact resistance	< 10 mΩ	-
Insulation resistance	≥ 100 MΩ (according to IEC 60512)	-
Mechanical data		
Installation size	M12	open end
Connector type	plug	-
Configuration	straight	-
Contact type	male	-
Number of positions (face)	5-pin	5-wire + shielding
Coding	A-coded	-
Recommended torque, nut	0.6 Nm	-
Mating cycles	≥ 100 (according to IEC 60512-9a)	-
Way of locking	screw	-
Weight per piece	0.023 kg (0.0507 lb)	-
Body colour	black	-
Body material	TPU, UL 94 HB	-
Coupling nut material	GD-Zn, Ni	-
Seal	FPM	-
Contact carrier colour	red	-
Contact carrier material	PA, UL 94 V-0	-
Contact plating	Au	-
Contact material	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	-

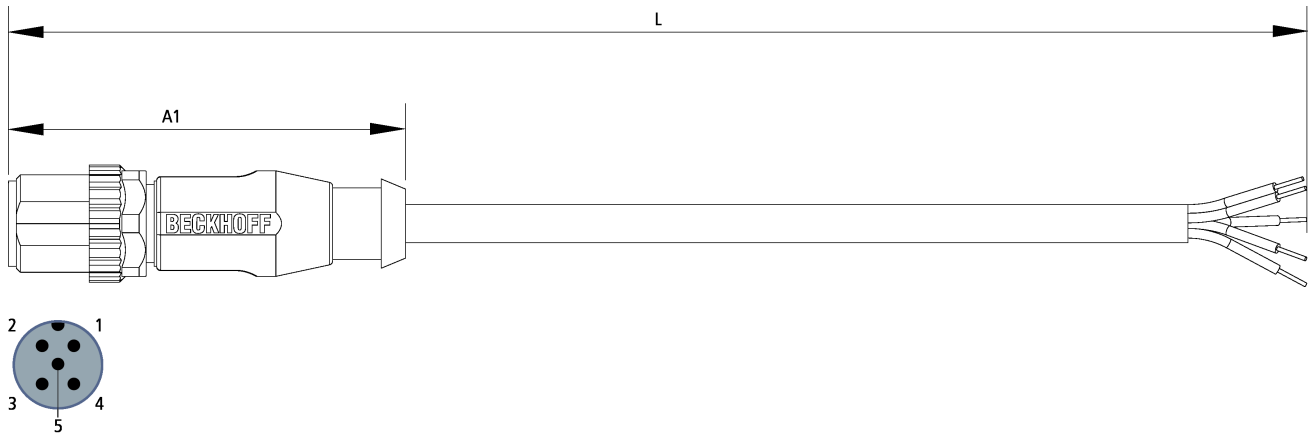
RoHS compliant	yes	-
Ambient temperature (operation)	-30...+85 °C, -22...+185 °F	-
Protection class	IP 65/67 in screwed condition (according to IEC 60529)	-
Pollution level	3/2 (according to IEC 60664-1)	-

Cable

Electrical data	
Operating voltage	≤ 300 V
Insulation resistance	≥ 1 GΩ * km
Wire resistance	≤ 78 Ω/km (20 °C)
Test voltage	≥ 3000 V
Mechanical data	
Conductor construction	32 x 0.10 mm
Cross section	5 x 0.25 mm ²
Min. bending radius, moved	10 x outer cable diameter
Weight	45 kg/km (30.24 lb/1000 ft)
Outer cable diameter	5.65 mm ± 0.2 mm (0.2224" ± 0.0079")
Conductor material	Copper bare
Use	drag-chain suitable
Max. acceleration	10 m/s ²
Max. speed	3 m/s
Max. number of cycles	2 million
Jacket colour	green
Material jacket	PUR (polyurethane)
Wire colour code	brown, white, blue, black, green
Wire insulation material	PP (polypropylene)
Printing colour	black
Environmental data	
Operation temperature range, moved	-15...+80 °C, +5...+176 °F
Operation temperature range, fixed installation	-30...+80 °C, -22...+176 °F
Flame-retardant	according to AWM Style 20549 UL 758/1581 FT2
Halogen-free	according to IEC 60754 respectively DIN VDE 0472 part 815
Approvals	UL, CSA

Contact assembly	

Dimensions



A1	49.00 mm
A2	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. 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
ZK4000-5100-2003	0.30 m
ZK4000-5100-2010	1.00 m
ZK4000-5100-2030	3.00 m
ZK4000-5100-2050	5.00 m
ZK4000-5100-2080	8.00 m
ZK4000-5100-2100	10.00 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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