ZK4000-5151-0xxx | Encoder cable, PUR, 5 x 0.25 mm², drag-chain suitable, shielded

M12, plug, straight, male, 5-pin, A-coded – M12, plug, straight, male, 5-pin, A-coded

Plugs

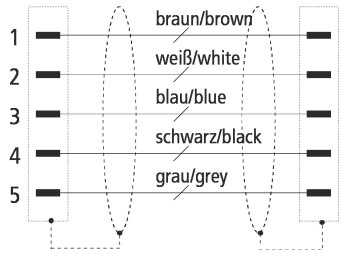
Electrical data	Head A	Head B
Rated voltage	60 V (according to IEC 61076-2-101)	60 V (according to IEC 61076-2-101)
Rated current	4 A at 40 °C (according to IEC 61076-2-101)	4 A at 40 °C (according to IEC 61076-2-101)
Shielding	yes	yes
Contact resistance	< 10 mΩ	< 10 mΩ
Insulation resistance	≥ 100 MΩ (according to IEC 60512)	≥ 100 MΩ (according to IEC 60512)
Mechanical data		
Installation size	M12	M12
Connector type	plug	plug
Configuration	straight	straight
Contact type	male	male
Number of positions (face)	5-pin	5-pin
Coding	A-coded	A-coded
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
Weight per piece	0.023 kg (0.0507 lb)	0.023 kg (0.0507 lb)
Body colour	black	black
Body material	TPU, UL 94 HB	TPU, UL 94 HB
Coupling nut material	GD-Zn, Ni	GD-Zn, Ni
Seal	FPM	FPM
Contact carrier colour	red	red
Contact carrier material	PA, UL 94 V-0	PA, UL 94 V-0
Contact plating	Au	Au
Contact material	CuZn, Ni b/Au 0.2 gal.	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	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)

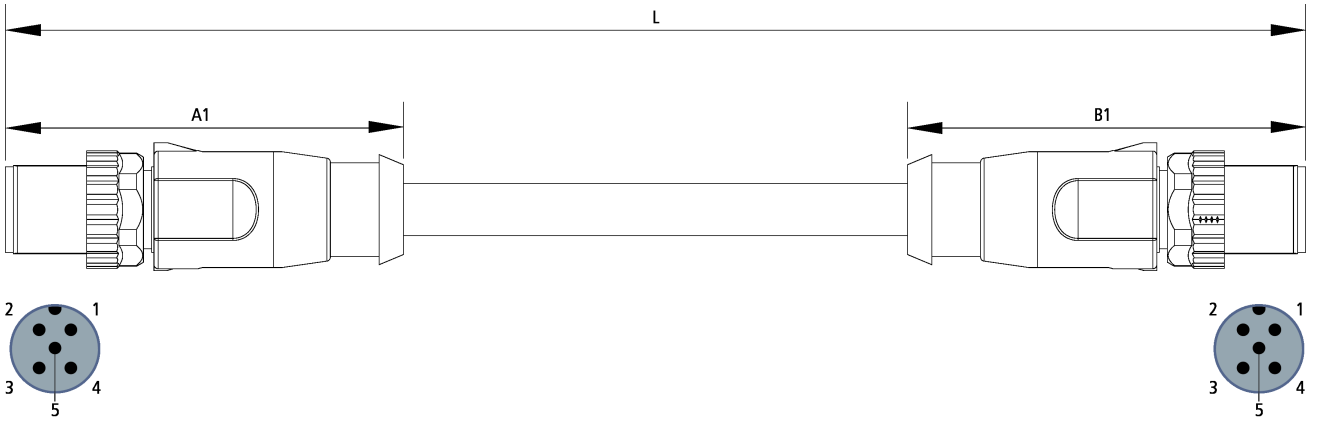
Cable

Electrical data	
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 mm²
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/s²
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
B1	49.00 mm
B2	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
ZK4000-5151-0001	0.15 m
ZK4000-5151-0005	0.50 m
ZK4000-5151-0010	1.00 m
ZK4000-5151-0020	2.00 m
ZK4000-5151-0100	10.00 m
ZK4000-6768-0005	0.50 m
ZK4000-6768-0010	1.00 m
ZK4000-6768-0020	2.00 m
ZK4000-6768-0050	5.00 m
ZK4000-6768-0100	10.00 m

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