

ZK1031-6100-1xxx | PROFIBUS cable, PUR, drag-chain suitable

M12, plug, straight, male, 4-pin, B-coded – open end, 2-wire + shielding

Plugs

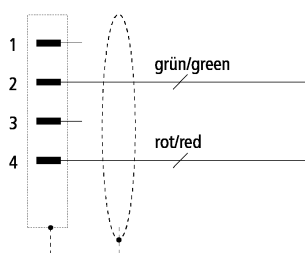
Electrical data	Head A	Head B
Rated voltage	160 V (according to IEC 61076-2-101)	-
Rated current	4 A at 40 °C (according to IEC 61076-2-101)	-
Rated impulse voltage	1.5 kV	-
Shielding	yes	-
Contact resistance	< 5 mΩ	-
Mechanical data		
Installation size	M12	open end
Connector type	plug	-
Configuration	straight	-
Contact type	male	-
Number of positions (face)	4-pin	2-wire + shielding
Coding	B-coded	-
Recommended torque, nut	0.6 Nm	-
Mating cycles	≥ 100 (according to IEC 60512-9a)	-
Way of locking	screw	-
Body colour	black	-
Body material	TPU, UL 94	-
Coupling nut material	CuZn, Ni	-
Seal	FPM	-
Contact carrier colour	violet RAL 4001	-
Contact carrier material	TPU GF, UL 94	-
Contact plating	Ni, Au gal.	-
Contact material	CuZn	-
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...+80 °C, -22...+176 °F	-

Protection class	IP 65/67 in screwed condition (according to IEC 60529)	-
Pollution level	3/2 (according to IEC 60664-1)	-

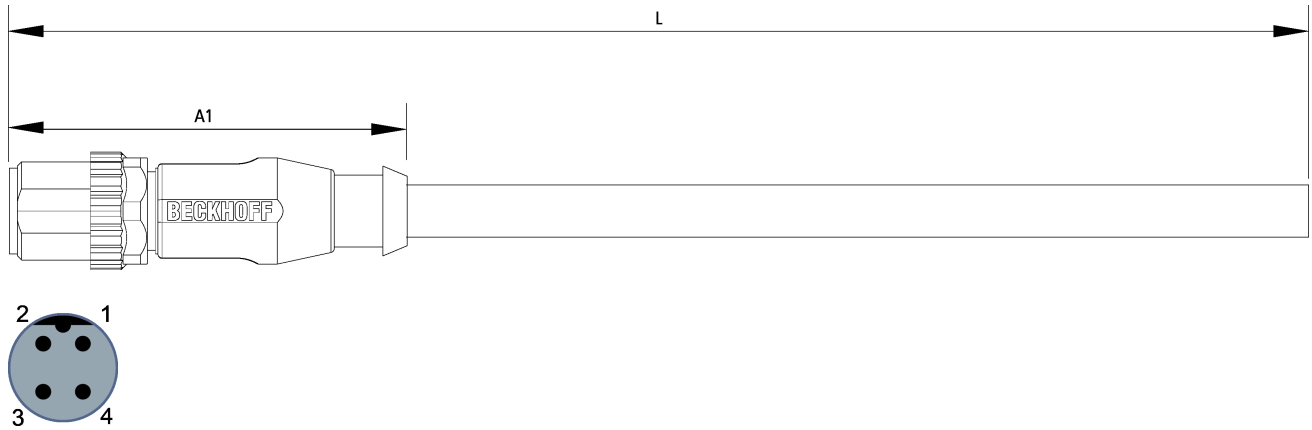
Cable

Electrical data	
Rated voltage	250 V
Operating voltage	≤ 300 V
Mutual capacitance wire/wire	max. 30 nF/km (800 Hz)
Insulation resistance	≥ 16 GΩ/km
Wire resistance	≤ 58 Ω/km (20 °C)
Loop resistance	≤ 133 Ω/km
Test voltage	≥ 3000 V
Mechanical data	
Cable structure	2 wires stranded with 2 drain wires
Cross section	2 x 0.34 mm ² (AWG22)
Min. bending radius, fixed installation	7.5 x outer cable diameter
Weight	62 kg/km (41.66 lb/1000 ft)
Outer cable diameter	8.5 mm ± 0.4 mm (0.3346" ± 0.0157")
Conductor material	Copper bare
Shielding	aluminium-clad foil, braiding of tinned copper wires
Optical covering factor of shielding	≥ 85%
Use	drag-chain suitable
Max. acceleration	4 m/s ²
Max. number of cycles	5 million
Jacket colour	violet (similar to RAL 4001)
Material jacket	PUR (polyurethane)
Wire colour code	red, green
Wire insulation material	PE (polyethylene)
Printing on the jacket	BECKHOFF AUTOMATION ZB3200 PROFIBUS-DP 1x2x0.25 [length in meters] [internal number]
Printing colour	black
Environmental data	
Operation temperature range, fixed installation	-40...+80 °C, -40...+176 °F
Flame-retardant	according to IEC 60332-1-2

Contact assembly



Dimensions



A1	49.00 mm
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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
ZK1031-6100-1020	2.00 m
ZK1031-6100-1050	5.00 m
ZK1031-6100-1100	10.00 m
ZK1031-6100-1125	12.50 m
ZK1031-6100-1150	15.00 m
ZK1031-6100-1245	24.50 m
ZK1031-6100-1280	28.00 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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