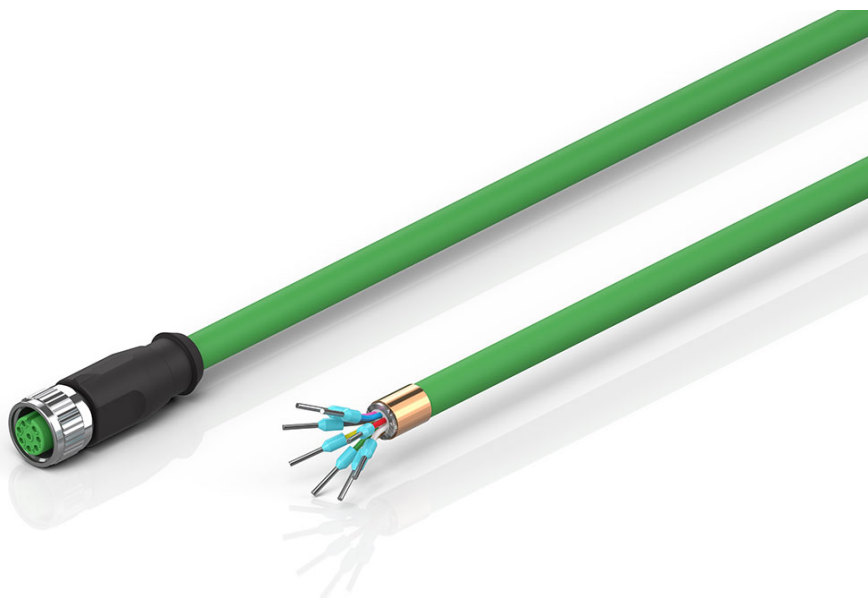# ZK4000-8200-2xxx | Encoder connection cable 0.25 mm² with M12 plug, drag-chain suitable

M12, socket, straight, female, 8-pin, A-coded – open end, 8-wire + shield

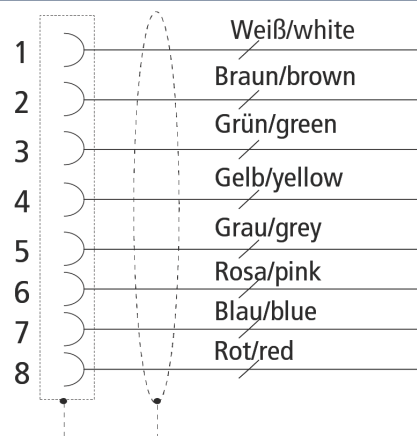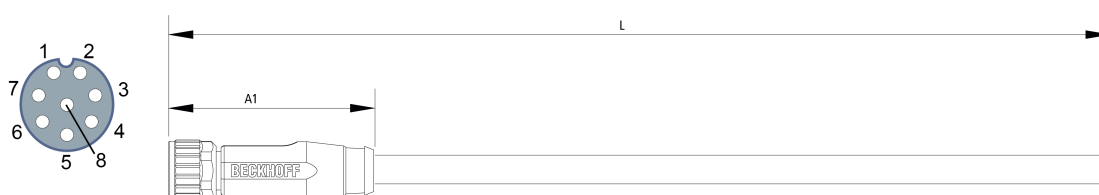

Plugs

Electrical data	Head A	Head B
Rated voltage	30 V (according to IEC 61076-2-101)	-
Rated voltage x-pin	8-pin, 30 V (according to IEC 61076-2-101)	-
Rated current	2 A at 40°C (according to IEC 61076-2-101)	-
Shielding	yes	-
Insulation resistance	≥ 100 MΩ (according to IEC 60512)	-
Mechanical data		
Installation size	M12	open end
Connector type	socket	-
Configuration	straight	-
Contact type	female	-
Number of positions (face)	8-pin	8-wire + shield
Coding	A-coded	-
Recommended torque, nut	0.6 Nm	-
Mating cycles	≥ 100 (according to IEC 60512-9a)	-

Way of locking	screw	-
Body color	black	-
Body material	PA6	-
Coupling nut material	GD-Zn, Ni	-
Seal	elastomers	-
O-ring	NBR	-
Contact carrier color	green	-
Contact carrier material	PA, UL 94	-
Contact plating	Ni, Au gal.	-
Contact material	CuZn	-
Environmental data		
RoHS compliant	yes	-
Ambient temperature (operation)	-30...+85°C, -22...+185°F	-
Protection rating	IP65/67 in screwed condition (according to IEC 60529)	-
Pollution level	3/2 (according to IEC 60664-1)	-

Cable

Electrical data	
Operating voltage	max. 300 V AC (UL), Uo/U 300/300 V (VDE)
Insulation resistance	≥ 500 MΩ
Wire resistance	≤ 76.0 Ω/km
Test voltage	1500 V (wire/wire and wire/screen)
Mechanical data	
Cross-section	4 x 2 x 0.25 mm²
Outer cable diameter	7.5 mm ± 0.3 mm (0.2952" ± 0.0118")
Min. bending radius, moved in drag-chain	10 x outer cable diameter
Min. bending radius, fixed installation	8 x outer cable diameter
Weight	80.3 kg/km (53.954 lb/1000 ft)
Conductor material	copper, tinned
Optical covering factor of shielding	≥ 85%
Use	drag-chain suitable
Max. acceleration	20 m/s²
Max. speed	3 m/s
Max. travel distance	5 m
Max. number of cycles	5 million

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Jacket color	green
Material jacket	PUR (polyurethane)
Wire color code	brown, green, yellow, gray, pink, blue, red, white
Wire insulation material	PP (polypropylene)
Printing color	black
Torsion angle in °/m	max. ± 30 °/m
Max. tensile load, dynamic	20 N/mm²
Max. tensile load, static	50 N/mm²
Environmental data	
Operation temperature range, moved	-20...+80°C, -4...+176°F
Operation temperature range, fixed installation	-40...+80°C, -40...+185°F
Oil resistance	according to UL 1581
Flame-retardant	according to IEC 60332-1
CFC-free	yes
Halogen-free	yes
Silicone-free	yes
RoHS compliant	yes
Approvals	cRUus AWM Style 20233, CE compliant

Contact assembly

1 Weiß/white
2 Braun/brown
3 Grün/green
4 Gelb/yellow
5 Grau/grey
6 Rosa/pink
7 Blau/blue
8 Rot/red

Dimensions

A1	44.00 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.

CE, UL	
CE	yes

Ordering information	Length
ZK4000-8200-2xxx	xxxx = cable length in decimeters
xxxx = 0050	example for 5 m length

Further length on request

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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