

ZK4000-8182-0xxx | Encoder connection cable 0.25 mm² with M12 plug, drag-chain suitable



M12, plug, straight, male, 8-pin, A-coded – M12, socket, straight, female, 8-pin, A-coded



Plugs

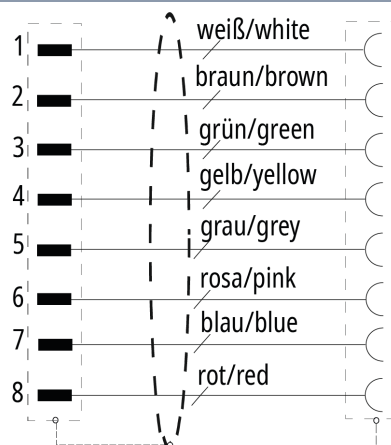
Electrical data	Head A	Head B
Rated voltage	30 V (according to IEC 61076-2-101)	30 V (according to IEC 61076-2-101)
Rated voltage x-pin	-	8-pin, 30 V (according to IEC 61076-2-101)
Rated current	2 A at 40°C (according to IEC 61076-2-101)	2 A at 40°C (according to IEC 61076-2-101)
Shielding	yes	yes
Insulation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

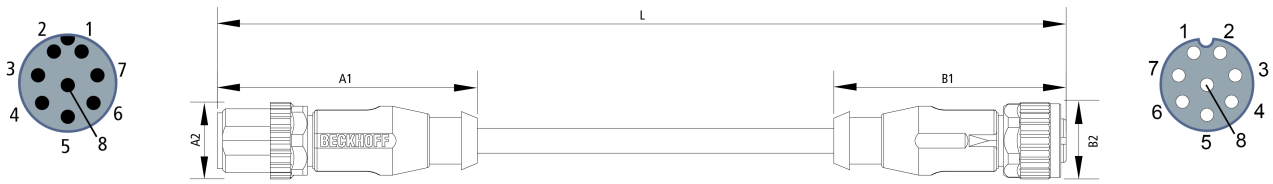
Mating cycles	≥ 100 (according to IEC 60512-9a)	≥ 100 (according to IEC 60512-9a)
Way of locking	screw	screw
Weight per piece	0.046 kg (0.1014 lb)	-
Body color	black	black
Body material	PA6	PA6
Coupling nut material	GD-Zn, Ni	GD-Zn, Ni
Seal	elastomers	elastomers
O-ring	NBR	NBR
Contact carrier color	green	green
Contact carrier material	PA, UL 94	PA, UL 94
Contact plating	Ni, Au gal.	Ni, Au gal.
Contact material	CuZn	CuZn
Environmental data		
RoHS compliant	yes	yes
Ambient temperature (operation)	-30...+85°C, -22...+185°F	-30...+85°C, -22...+185°F
Protection rating	IP65/67 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		
Operating voltage	max. 300 V AC (UL), U _o /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 mm ²	
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/s ²	
Max. speed	3 m/s	

Max. travel distance	5 m
Max. number of cycles	5 million
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/mm ²
Max. tensile load, static	50 N/mm ²
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**Dimensions**



A1	44.00 mm
B1	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
ZK4000-8182-0xxx	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



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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