# ZK4000-6800-2xxx | Motor connection cable 0.5 mm<sup>2</sup> with M12 plug, drag-chain suitable



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



#### Plugs

Electrical data	Head A	Head B
Rated voltage	160 V (according to IEC 61076-2-101)	-
Rated current	5 A at 40 °C	-
Shielding	yes	-
Contact resistance	< 10 mΩ	-
Insulation resistance	≥ 100 M $\Omega$ (according to IEC 60512)	-
Mechanical data		
Installation size	M12	open end
Connector type	plug	-
Configuration	straight	-
Contact type	male	-
Number of positions (face)	4-pin	4-wire + shielding
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	TPU, UL 94 HB, schwarz	-
Coupling nut material	GD-Zn, Ni	-
Seal	FPM	-
Contact carrier color	red	-
Contact carrier material	PA, 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)	-40+85 °C, -40+185 °F	-
Protection rating	IP65/67 in screwed condition (according to IEC 60529)	-
Pollution level	3/2 (according to IEC 60664-1)	-

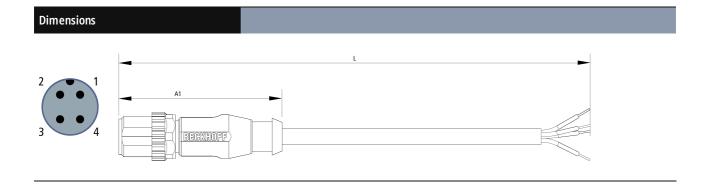
### Cable

Electrical data	
Rated voltage	≤ 300 V
Operating voltage	≤ 300 V
Insulation resistance	≥ 1 GΩ * km
Wire resistance	$\leq$ 39 $\Omega$ /km (20 °C)
Wire resistance (signal/24V)	ca. 39 Ω/km
Test voltage	≥ 3000 V
Mechanical data	
Conductor construction	28 x 0.15 mm
Cross-section	4 x 0.5 mm <sup>2</sup> (AWG20)
Min. bending radius, moved	10 x outer cable diameter
Outer cable diameter	6.0 mm ± 0.2 mm ("0.23622 ± 0.0079")
Conductor material	copper bare
Shielding	braiding of tinned copper wires
Use	drag-chain suitable
Max. acceleration	10 m/s <sup>2</sup>
Max. speed	3 m/s



Max. number of cycles	4 million
Jacket color	orange
Material jacket	PUR (polyurethane)
Wire color code	brown, white, blue, black
Wire insulation material	PP (polypropylene)
Printing color	black
Environmental data	
Operation temperature range, moved	-15+80 °C, +5+176 °F
Operation temperature range, fixed installation	-30+80 °C, -22+176 °F

## 



#### **Notes**

- Depending on the cable length (L), the following length tolerances apply: 0 m...<0.2 m:  $\pm$  10 mm | 0.2...4.0 m:  $\pm$  40 mm |  $\geq$  4.0 m:  $\pm$  1 %
- Illustrations similar
- Further cable length on request.

Ordering information	Length
ZK4000-6800-2010	1.00 m
ZK4000-6800-2020	2.00 m
ZK4000-6800-2050	5.00 m



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



Beckhoff®, TwinCAT®, TwinCAT/BSD®, TC/BSD®, EtherCAT®, EtherCAT G®, EtherCAT G®, EtherCAT P®, Safety over EtherCAT®, TwinSAFE®, XFC®, XTS® and XPlanar® are registered trademarks of and licensed by Beckhoff Automation GmbH. Other designations used in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owners.

© Beckhoff Automation GmbH & Co. KG 02/2022

The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual application do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressively agreed in the terms of contract.

