ZK4531-8010-xxxx | Resolver extension cable with M23 speedtec® plug, drag-chain suitable



M23, plug, straight, female, 12-pin – M23, socket, straight, male, 12-pin



Plugs

Electrical data	Head A	Head B
Rated voltage (signal/24V)	160 V AC/DC	160 V AC/DC
Rated current (signal/24V)	7 A max.	7 A max.
Rated impulse voltage (signal/24V)	2.5 kV	2.5 kV
Contact resistance	< 5 mΩ	< 5 mΩ
Mechanical data		
Accessories type	Connector/cable	Connector/cable
Installation size	M23	M23
Connector type	plug	socket
Configuration	straight	straight
Contact type	female	male
Number of positions (face)	12-pin	12-pin
Wire termination	crimp connection	crimp connection
Mating cycles	500	500
Way of locking	Speedtec®	Speedtec®

Weight per piece	0.087 kg (0.1918 lb)	0.088 kg (0.1940 lb)
Body colour	metal	metal
Body material	zinc diecast/nickel plated	zinc diecast/nickel plated
Seal	FKM	FKM
Clamp ring	brass/nickel plated	brass/nickel plated
Contact carrier material	PBT, UL 94 V-0	PBT, UL 94 V-0
Contact material	brass/gold plated	brass/gold plated
Environmental data		
Special features	Max. height for operation 2000 m	Max. height for operation 2000 m
Ambient temperature (operation)	-20+130 °C, -4+266 °F	-20+130 °C, -4+266 °F
Protection class	IP 66/67 in screwed condition	IP 66/67 in screwed condition
Pollution level	3 (according to VDE 0110/EN61984 part 6.19.2.2)	3 (according to VDE 0110/EN61984 part 6.19.2.2)
Overvoltage category	3 (according to VDE 0110/EN61984 part 6.19.2.2)	3 (according to VDE 0110/EN61984 part 6.19.2.2)

Cable

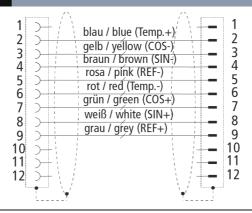
Electrical data	
Operating voltage	max. 300 V AC (UL), Uo/U 300/300 V (VDE)
Insulation resistance	≥ 500 MΩ
Wire resistance	≤ 76.0 Ω/km
Test voltage	1500 V (wire/wire and wire/screen)
Mechanical data	
Cross section	4 x 2 x 0.25 mm ²
Min. bending radius, moved in drag chain	10 x outer cable diameter
Min. bending radius, fixed installation	8 x outer cable diameter
Weight	80.3 kg/km (53.954 lb/1000 ft)
Outer cable diameter	7.5 mm ± 0.3 mm (0.2952" ± 0.0118")
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 colour	green



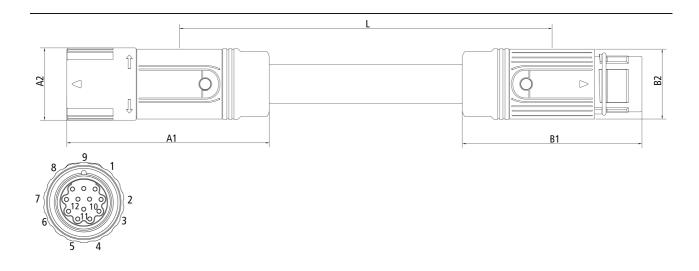
ZK4531-8010-xxxx www.beckhoff.com/ZK4531-8010-xxxx

Material jacket	PUR (polyurethane)
Wire insulation material	PP (polypropylene)
Printing colour	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



Dimensions



A1	59.00 mm
A2	26.00 mm
B1	57.00 mm
B2	25.00 mm

Notes

- Depending on the cable length (L), the following length tolerances apply: $\pm\,2\text{--}3\,\%$
- Illustrations similar
- The last three digits of the ordering information is the cable length in decimeters, e.g. ZK4xxx-xxxx-x020 = cable length 2.00 m

Ordering information	Length
ZK4531-8010-xxxx	xxxx = cable length in decimetres
xxxx = 0050	example for 5 m length
	sold by the metre, admissible total cable length see documentation of Servo Drive

Beckhoff®, TwinCAT®, TwinCAT/BSD®, TC/BSD®, EtherCAT®, EtherCAT G®, EtherCAT G10®, 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 09/2021

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.