# ZK4511-8110-xxxx | Encoder extension cable with itec® plug, drag-chain suitable



itec (Series 615), plug, straight, female, 12-pin – itec (Series 615), socket, straight, male, 12-pin



## Plugs

Electrical data	Head A	Head B
Rated voltage (signal/24V)	63 V AC/DC	63 V AC/DC
Rated current (signal/24V)	5 A max.	5 A max.
Rated impulse voltage (signal/24V)	1.5 kV	1.5 kV
Contact resistance	< 5 mΩ	< 5 mΩ
Mechanical data		
Accessories type	Connector/cable	Connector/cable
Installation size	itec (Series 615)	itec (Series 615)
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



Technical changes reserved Revision 1.0 | Site 1 of 4

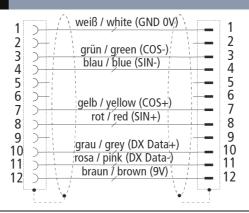
Way of locking	bayonet	bayonet
Weight per piece	0.025 kg (0.0551 lb)	0.027 kg (0.0595 lb)
Body colour	black, similar to RAL 9011	black, similar to RAL 9011
Body material	zinc diecast/plastic	zinc diecast/plastic
Seal	FKM	FKM
Clamp ring	plastic	plastic
Contact carrier material	PBT, PA, UL 94 V-0	PBT, PA, 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 <sup>2</sup>
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 <sup>2</sup>
Max. speed	3 m/s
Max. travel distance	5 m
Max. number of cycles	5 million

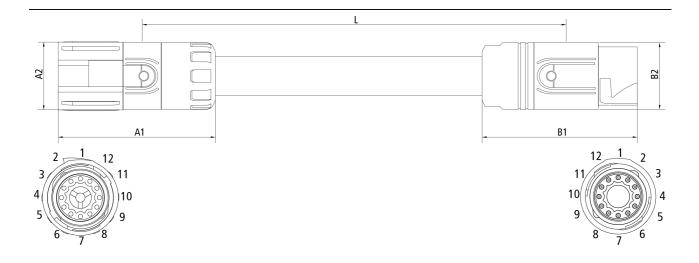
Jacket colour	green
Material jacket	PUR (polyurethane)
Wire insulation material	PP (polypropylene)
Printing colour	black
Torsion angle in °/m	max. ± 30 °/m
Max. tensile load, dynamic	20 N/mm <sup>2</sup>
Max. tensile load, static	50 N/mm <sup>2</sup>
Environmental data	
Operation temperature range, moved	-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
A2	19.00 mm
B1	44.00 mm
B2	19.00 mm

### Notes

- Depending on the cable length (L), the following length tolerances apply: ± 2-3 %

- 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
ZK4511-8110-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

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