

# ZK4540-0020-xxxx | Connection cable for thermal protection cables 0.14 mm<sup>2</sup>, drag-chain suitable



D-sub, plug, straight, female, 9-pin – plug, straight, female, 5-pin



## Plugs

Electrical data	Head A	Head B
Rated voltage (signal/24V)	-	320 V (according to IEC 60664-1, IEC 61984), 300 V (according to UL 1059)
Rated current (signal/24V)	-	14.5 A at 40 °C (according to IEC 60664-1, IEC 61984), 10 A at 40 °C (according to UL 1059)
Rated impulse voltage (signal/24V)	-	2.5 kV
Contact resistance	-	< 5 mΩ
Insulation resistance	-	≥ 100 MΩ (according to IEC 60512)
Insulation group	-	IIIa
Mechanical data		
Accessories type	Connector/cable	Connector/cable
Installation size	D-sub	-
Connector type	plug	plug
Configuration	straight	straight
Contact type	female	female

Number of positions (face)	9-pin	5-pin
Wire termination	solder connection	Clamping yoke connection
Recommended torque, screw termination	-	0.2...0.25 Nm
Recommended torque, screw flange	-	0.15...0.2 Nm
Mating cycles	-	25
Way of locking	screw	screw
Weight per piece	-	0.004 kg (0.0088 lb)
Body colour	metal	black, similar to RAL 9011
Body material	-	PBT, UL 94 V-0
Contact carrier material	-	PBT, UL 94 V-0
Contact material	-	copper alloy
Max. wire cross section	-	AWG28...AWG14
<b>Environmental data</b>		
Ambient temperature (operation)	-50...+105 °C, -58...+221 °F	-50...+100 °C, -58...+212 °F
Protection class	IP 20	IP 20
Pollution level	-	3
Overvoltage category	-	3

## Cable

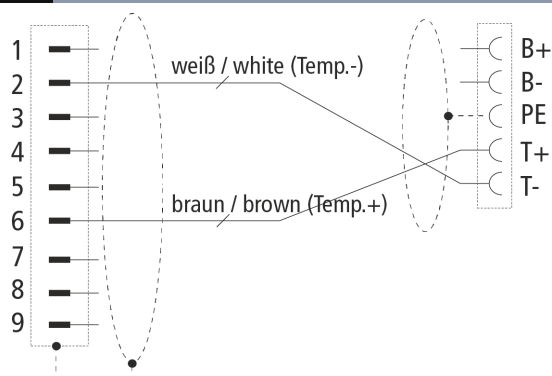
<b>Electrical data</b>		
Operating voltage	≤ 300 V	
Insulation resistance	≥ 1 GΩ * km	
Wire resistance	≤ 138.8 Ω/km	
Test voltage	1500 V (wire/wire and wire/screen)	
<b>Mechanical data</b>		
Cross section	2 x 2 x 0.14 mm <sup>2</sup>	
Min. bending radius, moved in drag chain	7 x outer cable diameter	
Outer cable diameter	5.4 mm ± 0.2 mm (0.213" ± 0.0079")	
Conductor material	copper, tinned	
Optical covering factor of shielding	≥ 85%	
Use	drag-chain suitable	
Max. acceleration	30 m/s <sup>2</sup>	
Max. speed	4 m/s	
Max. travel distance	20 m (horizontal)	
Max. number of cycles	10 million	

Jacket colour	green
Material jacket	PUR (polyurethane)
Torsion angle in °/m	max. $\pm 30$ °/m
Max. tensile load, dynamic	20 N/mm <sup>2</sup>
Max. tensile load, static	50 N/mm <sup>2</sup>

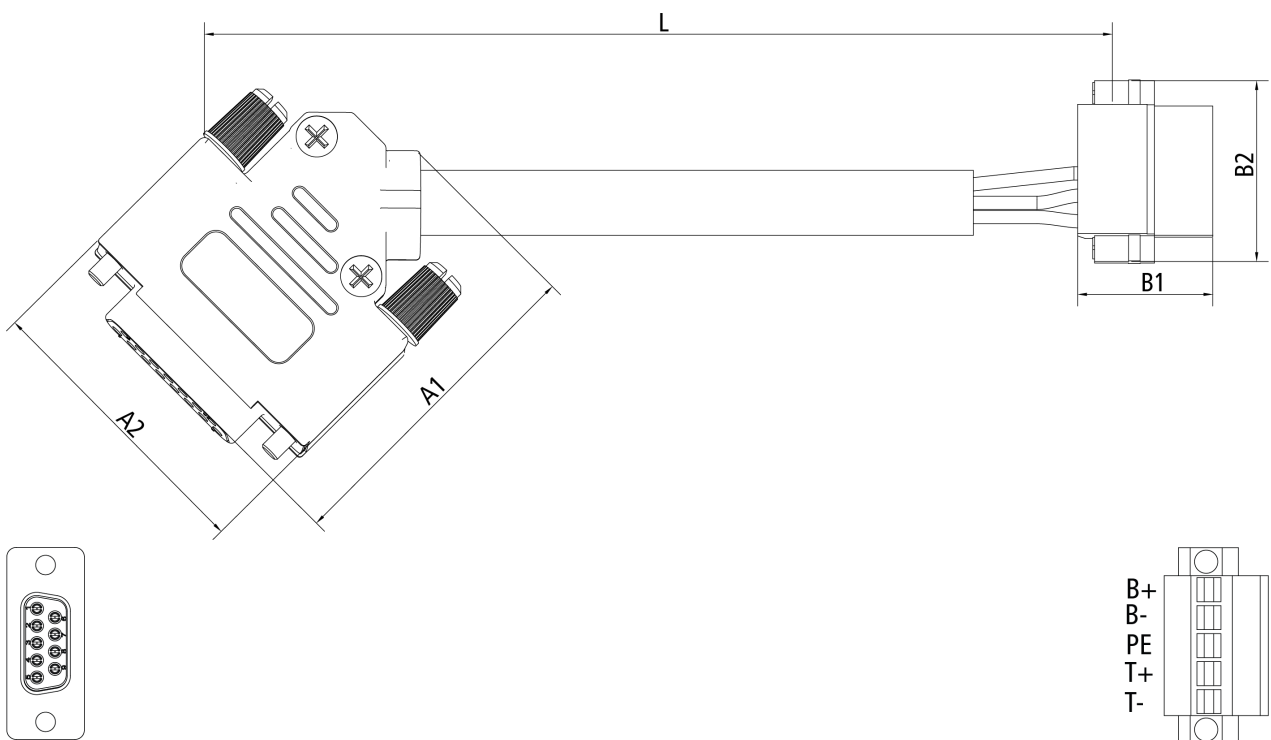
#### Environmental data

Operation temperature range, moved	-20...+80 °C, -4...+176 °F
Operation temperature range, fixed installation	-50...+80 °C, -58...+176 °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	UL 758 (AWM) Style 20549 80°C 300V

#### Contact assembly



#### Dimensions



A1	43.00 mm
A2	32.00 mm
B1	19.00 mm
B2	25.00 mm

## Notes

- Depending on the cable length (L), the following length tolerances apply:  $\pm 2-3\%$
- 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
ZK4540-0020-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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