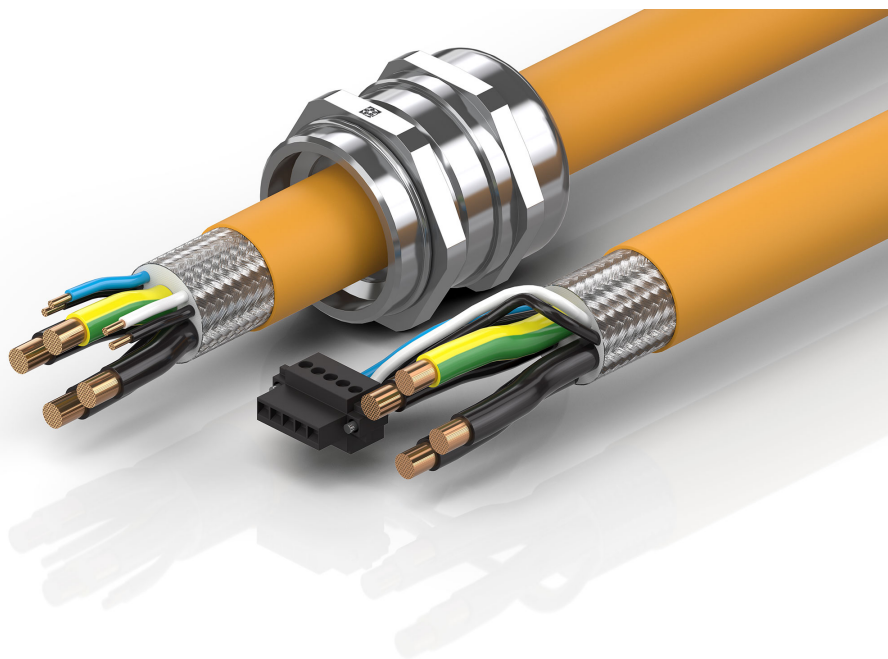


# ZK4506-8027-xxxx | Motor connection cable 10 mm<sup>2</sup> with M40 cable gland, drag-chain suitable



M40, cable gland, straight – open end, 8-wire + shield – plug, straight, female, 5-pin



## Plugs

Electrical data	Head A	Head B	Head C
Rated voltage (signal/24V)	-	-	300 V (accordig to UL 1059)
Rated current (signal/24V)	-	-	21 A at 40 °C (according to IEC 60664-1, IEC 61984), 20 A at 40 °C (according to UL 1059)
Rated impulse voltage (signal/24V)	-	-	4.0 kV
Contact resistance	-	-	< 5 mΩ
Insulation resistance	-	-	≥ 100 MΩ (according to IEC 60512)
Insulation group	-	-	IIIa
Mechanical data			
Accessories type	-	-	Connector/cable
Installation size	M40	open end	-
Connector type	cable gland	-	plug

Configuration	straight	-	straight
Contact type	-	-	female
Number of positions (face)	-	8-wire + shield	5-pin
Wire termination	-	-	Clamping yoke connection
Recommended torque, screw termination	-	-	0.4...0.5 Nm
Mating cycles	-	-	25
Way of locking	screw	-	-
Weight per piece	0.135 kg (0.2976 lb)	-	0.008 kg (0.0018 lb)
Body colour	metal	-	black, similar to RAL 9011
Body material	brass/nickel plated	-	PBT, UL 94 V-0
Seal	elastomers	-	-
O-ring	elastomers	-	-
Contact carrier material	-	-	PBT, UL 94 V-0
Contact material	-	-	copper alloy
Max. wire cross section	-	-	AWG26...AWG12
<b>Environmental data</b>			
Ambient temperature (operation)	-25...+100 °C, -13...+212 °F	-	-50...+100 °C, -58...+212 °F
Protection class	IP 68 at 10 bar / 30min (according to DIN EN 60529)	-	-
Pollution level	-	-	3
Overvoltage category	-	-	3

## Cable

<b>Electrical data</b>			
Operating voltage	max. 1000 V AC (UL), U <sub>0</sub> /U 600/1000 V (VDE)		
Insulation resistance	≥ 500 MΩ * km (DIN EN 50395)		
Mutual capacitance	Signal: 45 ± 15 pF/m, Power: 90 pF/m (at 800 Hz according to EN 50289-1-5)		
Wire resistance (power)	≤ 1.91 Ω/km (DIN EN 50395)		
Wire resistance (signal/24V)	≤ 55.0 Ω/km (DIN EN 50395)		
Wire resistance (brake)	≤ 13.3 Ω/km (DIN EN 50395)		
Characteristic impedance	Signal: 110 Ω ± 10 Ω (10 MHz) acc. to EN50289-1-11		
Dielectric strength wire/wire (power)	4 kV 50 Hz 5 min. (DIN VDE 0472 T.509C)		
Dielectric strength wire/shield (power)	4 kV 50 Hz 5 min. (DIN VDE 0472 T.509C)		
Dielectric strength wire/wire (signal/24V)	3 kV 50 Hz 1 min. (DIN VDE 0472 T.509C)		

Dielectric strength wire/shield (signal/24V)	3 kV 50 Hz 1 min. (DIN VDE 0472 T.509C)
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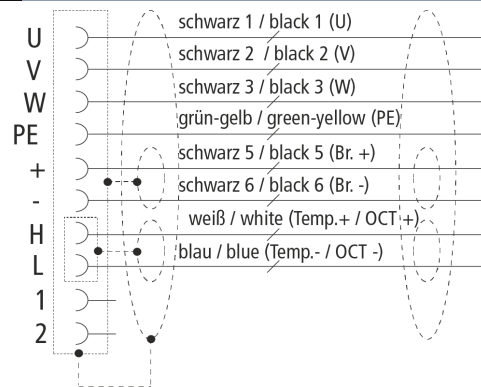
### Mechanical data

Cross section (power)	10 mm <sup>2</sup> (approx. AWG8)
Cross section (signal)	AWG22 (approx. 0.34 mm <sup>2</sup> )
Cross section (brake)	1.50 mm <sup>2</sup> (approx. AWG16)
Min. bending radius, moved in drag chain	10 x outer cable diameter
Min. bending radius, fixed installation	5 x outer cable diameter
Weight	760 kg/km (510.644 lb/1000 ft)
Outer cable diameter	20.9 mm ± 0.5 mm (0.8228" ± 0.0197")
Conductor material	Copper bare
Optical covering factor of shielding	≥ 85%
Use	drag-chain suitable
Max. acceleration	30 m/s <sup>2</sup> by 5 m travel distance 15 m/s <sup>2</sup> by 10 m travel distance 5 m/s <sup>2</sup> by 20 m travel distance
Max. speed	4 m/s
Max. travel distance	20 m (horizontal) 5 m (vertical)
Max. number of cycles	5 million
Jacket colour	orange
Material jacket	TPU (thermoplastic 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>

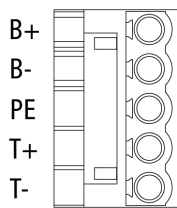
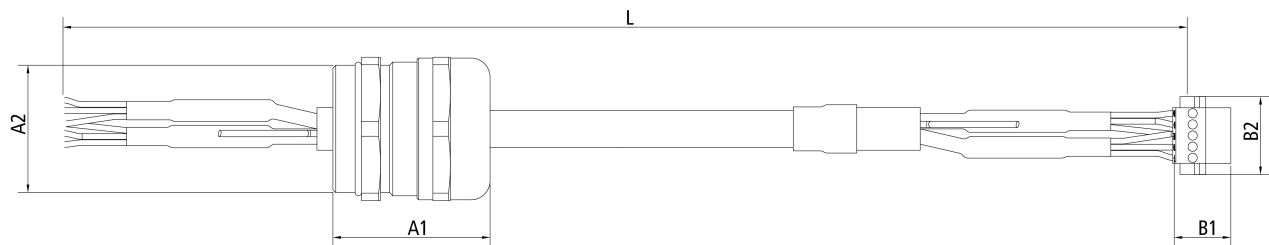
### Environmental data

Operation temperature range, moved	-20...+80 °C, -4...+176 °F. In drag-chain with mechanical strain: -20...+60 °C, -4...+140 °F
Operation temperature range, fixed installation	-40...+80 °C, -40...+176 °F
Oil resistance	according to DIN EN 60811-404, HD22.10 appendix A
Flame-retardant	according to IEC 60332-1-2 UL758 cable flame test
CFC-free	yes
Halogen-free	according to DIN VDE 0472 Teil 815
Silicone-free	yes
RoHS compliant	yes
Approvals	UL758 (AWM) Style 21223 (jacket) and Style 10492 (core)

Contact assembly



Dimensions



A1	50.00 mm
A2	45.00 mm
C1	20.00 mm
C2	27.00 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 decimetres, e.g. ZK4xxx-xxxx-x020 = cable length 2.00 m

Ordering information

Length

ZK4506-8027-xxxx	xxxx = cable length in decimetres
xxxx = 0050	example for 5 m length

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sold by the metre, admissible total cable length see documentation of Servo Drive

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