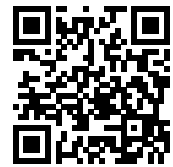
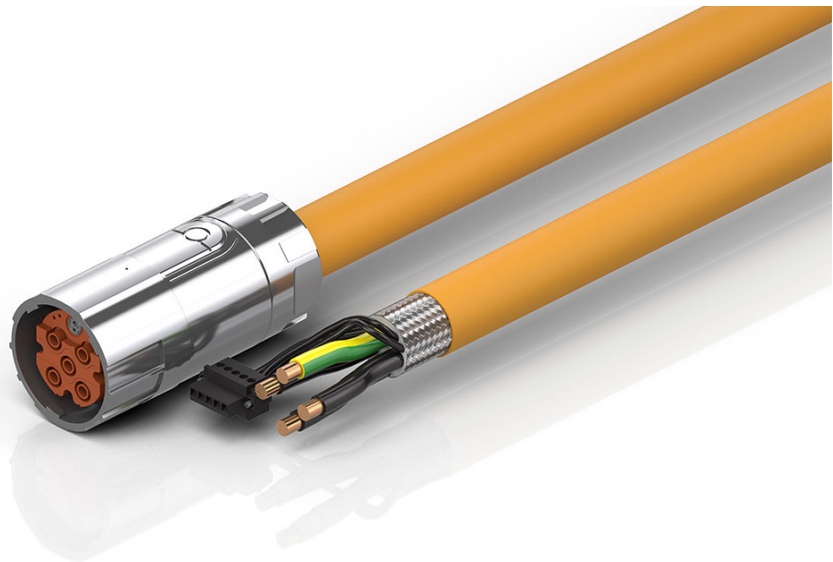


ZK4504-8018-xxxx | Motor connection cable 16 mm² with M40 speedtec[®] plug, drag-chain suitable



M40, plug, straight, female, Power: 4+PE, Signal: 4, Data: 2 – Pitch dimension 5.08 mm, plug, straight, female, 5-pin – open end, 8-wire + shield



Plugs

Electrical data	Head A	Head B	Head C
Rated voltage (power)	630 V AC / 850 V DC	-	-
Rated voltage (signal/24V)	150 V AC/DC	300 V (accordig to UL 1059)	-
Rated current (power)	70 A max.	-	-
Rated current (signal/24V)	7 A max.	16 A at 40 °C (according to IEC 60664-1, IEC 61984), 10 A at 40 °C (according to UL 1059)	-
Rated impulse voltage (power)	6.0 kV	-	-
Rated impulse voltage (signal/24V)	2.5 kV	4.0 kV	-
Contact resistance	< 5 mΩ (signal), < 1 mΩ (power)	< 5 mΩ	-
Insulation resistance	-	≥ 100 MΩ (according to IEC 60512)	-
Insulation group	-	IIIa	-

Mechanical data			
Accessories type	Connectors/Cables	Connectors/Cables	-
Installation size	M40	Pitch dimension 5.08 mm	open end
Connector type	plug	plug	-
Configuration	straight	straight	-
Contact type	female	female	-
Number of positions (face)	Power: 4+PE, Signal: 4, Data: 2	5-pin	8-wire + shield
Wire termination	crimp connection	Clamping yoke connection	-
Recommended torque, screw termination	-	0.4...0.5 Nm	-
Mating cycles	500	25	-
Way of locking	Speedtec®	-	-
Weight per piece	0.450 kg (0.9921 lb)	0.008 kg (0.0018 lb)	-
Body color	metal	black, similar to RAL 9011	-
Body material	zinc diecast/nickel plated	PBT, UL 94 V-0	-
Seal	FKM	-	-
Clamp ring	zinc diecast/nickel plated	-	-
Contact carrier material	PA 6.6 mod., UL 94 V-0	PBT, UL 94 V-0	-
Contact material	brass/gold plated	copper alloy	-
Max. wire cross-section	-	AWG26 ... AWG12 (0.13 mm ² ... 4 mm ²)	-

Environmental data			
Special features	Max. height for operation 2000 m	-	-
Ambient temperature (operation)	-20...+130°C, -4...+266°F	-50...+100°C, -58...+212°F	-
Protection rating	IP66/67 in screwed condition	-	-
Pollution level	3 (according to VDE 0110/EN61984 part 6.19.2.2)	3	-
Overvoltage category	3 (according to VDE 0110/EN61984 part 6.19.2.2)	3	-

Cable

Electrical data	
Operating voltage	max. 1000 V AC (UL)
Insulation resistance	≥ 500 MΩ * km (DIN EN 50395)
Wire resistance (power)	≤ 1.21 Ω/km (DIN EN 50395)

Wire resistance (brake)	≤ 13.3 Ω/km (DIN EN 50395)
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)

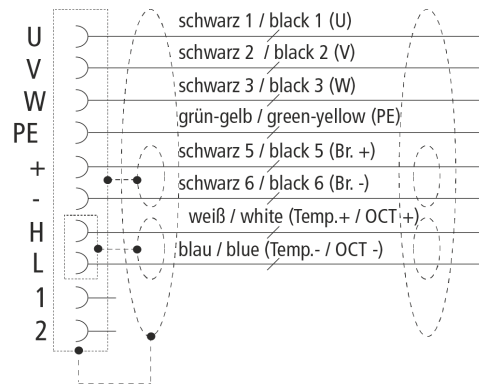
Mechanical data

Cross-section (power)	16 mm ² (approx. AWG5)
Cross-section (brake)	1.50 mm ² (approx. AWG16)
Outer cable diameter	23.0 mm ± 0.5 mm (0.9055" ± 0.0197")
Min. bending radius, moved in drag-chain	10 x outer cable diameter
Min. bending radius, fixed installation	5 x outer cable diameter
Conductor material	copper bare
Optical covering factor of shielding	≥ 85%
Use	drag-chain suitable
Max. acceleration	5 m/s ² (depending on travel distance)
Max. speed	3 m/s
Max. number of cycles	10 million
Wall thickness of wire insulation (power)	0.7 mm
Wall thickness of wire insulation (brake)	0.4 mm
Wall thickness of jacket	1.6 mm
Jacket color	orange
Material jacket	PUR (polyurethane)
Wire insulation material	PP (polypropylene)
Printing color	black
Torsion angle in °/m	max. ± 30 °/m

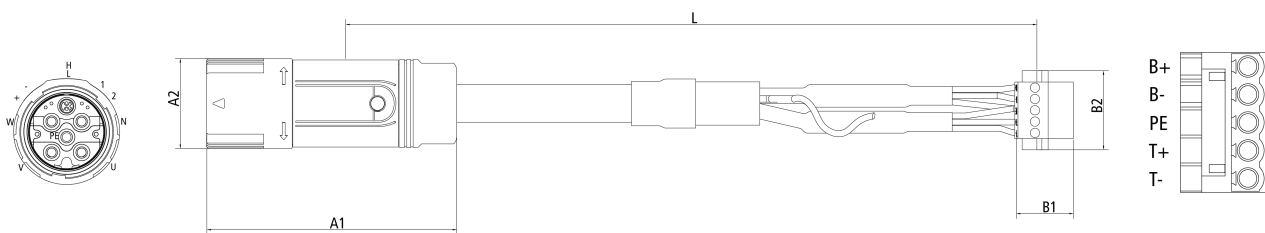
Environmental data

Operation temperature range, moved	-30...+80°C, -22...+176°F, in drag-chain applications: -20...+60°C, -4...+140°F
Operation temperature range, fixed installation	-50...+80°C, -58...+176°F
Oil resistance	according to DIN EN 60811-2-1, HD22.10 appendix A
Flame-retardant	according to IEC 60332-1-2 UL758 cable flame test
Halogen-free	DIN VDE 0472 part 815
Silicone-free	yes
RoHS compliant	yes
Approvals	UL758 (AWM) Style 20234 (jacket) and Style 10492 (core)

Contact assembly



Dimensions



A1	100.00 mm
A2	46.00 mm
B1	20.00 mm
B2	27.00 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

ZK4504-8018-xxxx	xxxx = cable length in decimeters
xxxx = 0050	example for 5 m length
	admissible total cable length 50 m

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