



Plug, 4-pin

EtherCAT cable | M8 plug, straight, 4-pin – open end

Electrical data	ZK1090-3100-0xxx
Rated voltage	30 V (according to IEC 61076-2-101)
Rated current	4 A at 40 °C (according to IEC 61076-2-101)
Insulation resistance	≥ 150 MΩ/km
DC resistance	125 Ω/km
Nominal impedance	100 MHz, (100 ±5) Ω
Shielding	braiding of tinned copper wires, coupling nut/screw
Attenuation	Return loss (100 m) 1...20 MHz: 23 dB 20...100 MHz: 23 dB - 10 log (f/20)
Unbalanced resistance	max. 3 % Ω at 20 °C
Mutual capacitance	51 pF/m at 1 kHz
Unbalanced capacitance	≤ 3400 pF/km
Electrical parameters	based on CAT 5

Mechanical data	
Protection class	IP 67 in screwed condition (according to IEC 60529)
Ambient temperature	-30 °C...+80 °C (according to IEC 60644-1)
Insertion cycles	≤ 100 (according to IEC 60512-9a)
Contamination level	3/2 (according to IEC 60664-1)

Mechanical properties cable	
Temperature range (cable)	-40 °C...+80 °C
Cable outside diameter	5.40 ±0.3 mm
Drag chain suitable	yes
Bending radius	20 x D, single 4 x D
Number of cycles	20 million
Parameter	max. velocity 10 m/s, acceleration max. 15 m/sec <sup>2</sup>
Approbations	UL Style 20963
Material properties	ROHS-compliant, halogen-free, silicone-free, CFC-free, oil-resistant
Wire pair 1	19 x 0.1 mm, BU/OR/WHBU/WHOR

Materials	
Contact material	CuZn
Contact surface	Ni, Au gal.
Contact carrier/body	TPU GF, UL 94/TPU, UL 94
Coupling screw/nut	CuZn, Ni
Seal	FPM
Cable	PUR, Kevlar as filler, 4-wire, green, star quad

Ordering information	Cable length
ZK1090-3100-0020	2.00 m
ZK1090-3100-0030	3.00 m
ZK1090-3100-0050	5.00 m
ZK1090-3100-0070	7.00 m
ZK1090-3100-0100	10.00 m