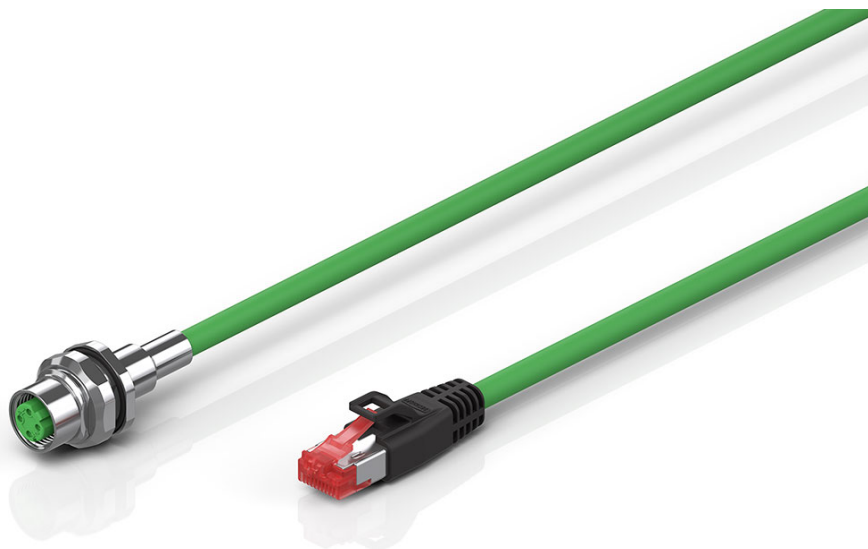


ZK1090-6292-3xxx | EtherCAT cable, PVC, AWG26, fixed installation



M12, flange, straight, female, 4-pin, D-coded – RJ45, plug, straight, male, 8-pin



Plugs

Electrical data	Head A	Head B
Rated voltage	160 V (according to IEC 61076-2-101)	125 V
Rated current	4 A at 40°C (according to IEC 61076-2-101)	1 A at 40°C
Shielding	yes	yes
Insulation resistance	≥ 100 MΩ (according to IEC 60512)	≥ 100 MΩ (according to IEC 60512)
Mechanical data		
Installation size	M12	RJ45
Connector type	flange	plug
Configuration	straight	straight
Contact type	female	male
Number of positions (face)	4-pin	8-pin
Coding	D-coded	-
Recommended torque, nut	1...1.2 Nm	-
Mating cycles	≥ 100 (according to IEC 60512-9a)	≥ 750

Way of locking	screw	-
Body color	metal	black
Body material	CuZn, Ni	PC UL 94 V0
Coupling nut material	CuZn, Ni	-
Seal	FPM	-
Contact carrier color	green	-
Contact carrier material	PBT GF, UL 94	PC UL 94
Contact plating	Ni, Au gal.	Ni, Au gal.
Contact material	CuZn	CuZn
Environmental data		
Special features	halogen-free, flame-resistant as per IEC 60332-1-2, oil-resistant as per DIN EN 60811-2-1	-
RoHS compliant	yes	yes
Ambient temperature (operation)	-30...+70°C, -22...+158°F	-40...+60°C, -40...+140°F
Protection rating	IP65/67 in screwed condition (according to IEC 60529)	IP20
Pollution level	3/2 (according to IEC 60664-1)	3/2 (according to IEC 60664-1)
Approvals	-	UL

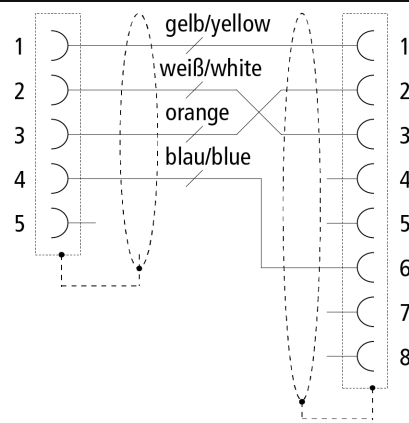
Cable

Electrical data	
Rated voltage	max. 300 V (not for high voltage purposes)
Attenuation of shielding	≥ 43 dB
Insulation resistance	≥ 500 MΩ/km
Unbalanced capacitance to ground	1600 pF/km
Mutual capacitance	52 nF/km
Characteristic impedance (Ethernet)	100 Ω ±5 Ω (100 MHz) (EN 50289-1-11)
Loop resistance (Ethernet)	280 Ω/km
Unbalanced resistance (Ethernet)	2 %
Dielectric strength wire/wire (Ethernet)	2000 V
Dielectric strength wire/shield (Ethernet)	2000 V
Signal running time (Ethernet)	5.3 ns/m
Electrical parameters (Ethernet)	based on Cat.5
Test voltage	≥ 2000 V
Mechanical data	
Cable structure (Ethernet)	star quad

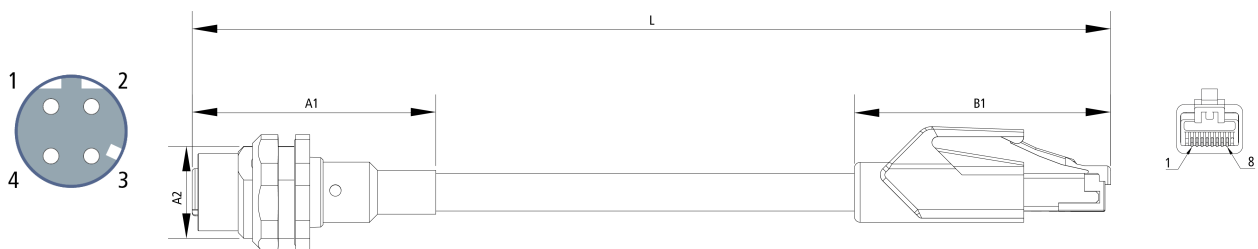
Conductor construction (Ethernet)	7 x 0.167
Cross-section (Ethernet)	1 x 4 x 0.14 mm ² (AWG26)
Outer cable diameter	4.9 mm ± 0.2mm (0.193" ± 0.0079")
Min. bending radius, moved	7 x outer cable diameter
Min. bending radius, fixed installation	5 x outer cable diameter
Weight	33 kg/km (22.2 lb/1000ft)
Conductor material (Ethernet)	bare copper
Shielding	aluminum-clad foil, braiding of tinned copper wires
Optical covering factor of shielding (Ethernet)	≥ 80 %
Use	fixed installation
Wall thickness of wire insulation (Ethernet)	0.25 mm
Jacket color	green
Material jacket	PVC (polyvinyl chloride)
Wire color code	yellow, orange, white, blue
Wire insulation material	PE (polyethylene)
Printing on the jacket	"sequential length in metres" Industrial Ethernet Cat5 flex *E130266 AWM STYLE 2464 80 °C 300 V* ZB9030 "month/year" "internal order number"
Printing color	black
Environmental data	
Operation temperature range, fixed installation	-40...+80°C, -40...+176°F
Flame-retardant	according to IEC 60332-1-2
Halogen-free	no
UL	yes, UL E-file number: E130266

Attenuation								
Max. insertion loss								
Frequency [MHz]	1	4	10	16	20	31.25	62.5	100
[db/100 m]	3.2	6.0	9.5	12.1	13.6	17.1	24.8	32.0
[db/100 ft]	1	1.8	2.9	3.7	4.1	5.2	7.6	9.8
Min. near-end crosstalk attenuation								
Frequency [MHz]	1	4	10	16	20	31.25	62.5	100
[db/100 m]	65.3	56.3	50.3	47.2	45.8	42.9	38.4	35.3
[db/100 ft]	19.9	17.2	15.3	14.4	14	13.1	11.7	10.8

Pin assignment	
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Dimensions



A1	43.00 mm
A2	M12 inner diameter, M16 outer diameter
B1	44.0 mm

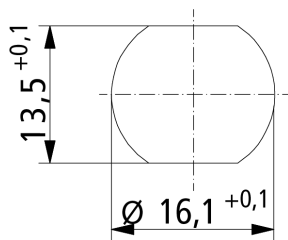
Notes

- Depending on the cable length (L), the following length tolerances apply:
0 m...3.0 m: + 100 mm | 3.0...10.0 m: ± 100 mm | ≥ 10.0 m: ± 2%
- Illustrations similar
- Further cable length on request. The last three digits of the ordering information is the cable length in decimeters, e.g.
ZKxxxx-xxx-x020 = cable length 2.00 m
- The design of the pre-assembled cable shown here may differ from the products supplied, despite technically identical specifications.

CE, UL

CE	yes
UL	yes, UL E-file number: E499669

Installation dimensions



Ordering information	Length
ZK1090-6292-3005	0.50 m
ZK1090-6292-3007	0.70 m
ZK1090-6292-3008	0.80 m
ZK1090-6292-3010	1.00 m
ZK1090-6292-3020	2.00 m

Further length on request

Accessories	
ZB8801-0000	torque wrench for hexagonal plugs, adjustable
ZB8801-0002	torque cable key, M12/wrench size 13, for ZB8801-0000
ZK1096-9696-0000	RJ45, socket, straight, female, 8-pin – RJ45, socket, straight, female, 8-pin



Products marked with a crossed-out wheeled bin shall not be discarded with the normal waste stream. The device is considered as waste electrical and electronic equipment. The national regulations for the disposal of waste electrical and electronic equipment must be observed.

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