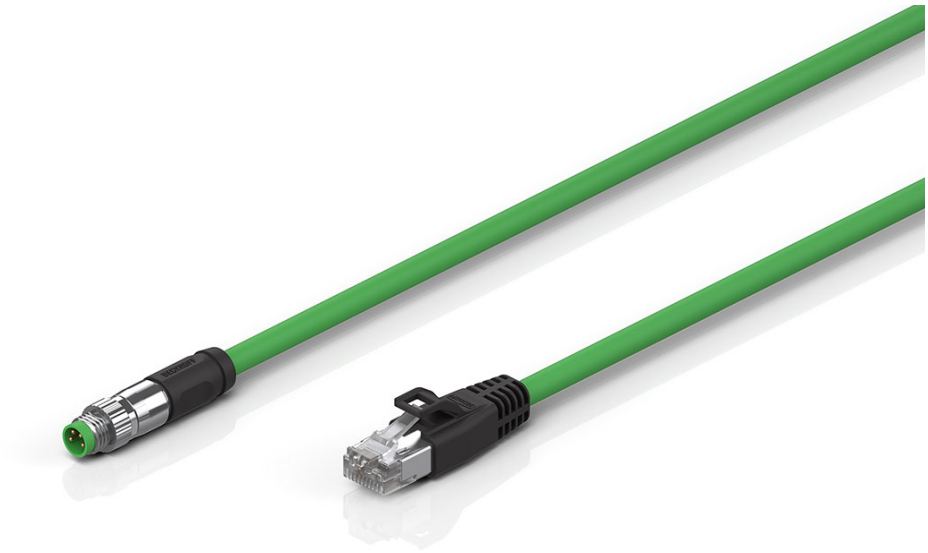
ZK1090-3191-Exxx | EtherCAT cable, PVC, AWG22, fixed installation, CMG, CSA, PLTC

M8, plug, straight, male, 4-pin, A-coded – RJ45, plug, straight, male, 4-pin



Plugs

Electrical data	Head A	Head B
Rated voltage	50 V AC/60 V DC (according to IEC 61076-2-104)	150 V
Rated current	4 A at 40°C (according to IEC 61076-2-104)	1.5 A
Shielding	yes	yes
Insulation resistance	≥ 100 GΩ (according to IEC 60512)	≥ 10 GΩ (according to IEC 60512-2)
Mechanical data		
Installation size	M8	RJ45
Connector type	plug	plug
Configuration	straight	straight
Contact type	male	male
Number of positions (face)	4-pin	4-pin
Coding	A-coded	-
Recommended torque, nut	0.4 Nm	-
Mating cycles	≥ 100	≥ 750

Way of locking	screw	-
Weight	0.028 kg (0.0617 lb)	-
Body color	black	black
Body material	TPU, UL94	TPU, UL 94 HB
Coupling nut material	GD-Zn, Ni	-
Seal	FPM	-
Contact carrier color	green	-
Contact carrier material	PA 6, UL 94 V0	PC UL 94 V-0
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...+70°C, -40...+158°F
Protection rating	IP65/67 in screwed condition (according to IEC 60529)	IP20
Pollution level	3/2 (according to IEC 60664-1)	-

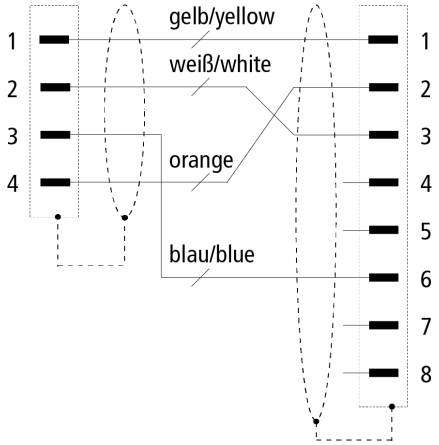
Cable

Electrical data	
Rated voltage	600 V
Operating voltage	≤ 125 V (peak value, not for high voltage purposes)
Insulation resistance	≥ 0.5 GΩ/km
Mutual capacitance	48 nF/km
Wire resistance (Ethernet)	≤ 58.0 Ω/km (20°C)
Characteristic impedance (Ethernet)	100 Ω ±15 Ω (100 MHz)
Signal running time (Ethernet)	5.3 ns/m
Electrical parameters (Ethernet)	based on Cat.5
Test voltage	≥ 2000 V
Mechanical data	
Cable structure (Ethernet)	twisted shielded pair
Conductor construction (Ethernet)	7-strand
Cross-section (Ethernet)	2 x 2 x 0.34 mm² (AWG22)
Outer cable diameter	6.5 mm ± 0.2 mm (0.2559" ± 0.0079")
Min. bending radius, moved	10 x outer cable diameter

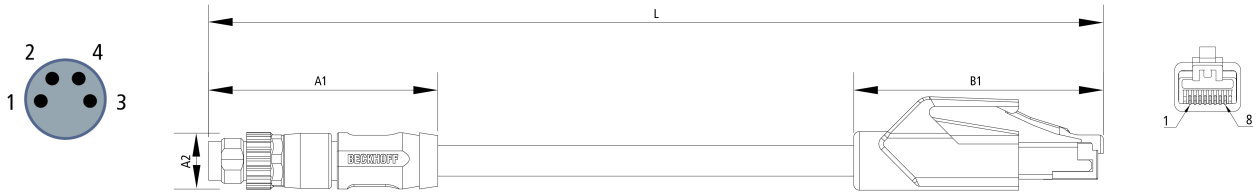
Min. bending radius, fixed installation	5 x outer cable diameter
Weight	67 kg/km (45.0 lb/1000 ft)
Shielding	braiding of tinned copper wires
Optical covering factor of shielding (Ethernet)	90 %
Use	fixed installation
Jacket color	green
Material jacket	PVC (polyvinyl chloride)
Wire color code	yellow, orange, white, blue
Printing color	black
Environmental data	
Operation temperature range, moved	-20...+60°C, -4...+140°F
Operation temperature range, fixed installation	-40...+80°C, -40...+176°F
Flame-retardant	according to DIN VDE 0482-332-3 / DIN EN 60332-3 / IEC60332-3
Halogen-free	no
Approvals	CMG, CSA, PLTC

Attenuation								
Max. insertion loss								
Frequency [MHz]	**1**	**4**	**10**	**16**	**20**	**31.25**	**62.5**	**100**
[db/100 m]	1.6	3.2	5.2	6.9	7.8	10.5	15.0	19.5
[db/100 ft]	0.5	1	1.6	2.1	2.4	3.2	4.6	5.9
Min. near-end crosstalk attenuation								
Frequency [MHz]	**1**	**4**	**10**	**16**	**20**	**31.25**	**62.5**	**100**
[db/100 m]	80	75.0	70.0	65.0	63.0	60.0	55.0	50.0
[db/100 ft]	24.4	22.9	21.3	19.8	19.2	18.3	16.8	15.2

Pin assignment	



Dimensions



A1	41.00 mm
A2	Ø 10.1 mm
B1	43.80 mm

Notes

- Depending on the cable length (L), the following length tolerances apply:
  0 m...<0.2 m: ± 10 mm | 0.2...4.0 m: + 40 mm | ≥ 4.0 m: + 1%
- Illustrations similar
- Further cable length on request.

Ordering information	Length
ZK1090-3191-E020	2.00 m

Further length on request

Accessories	
ZB8801-0000	torque wrench for hexagonal plugs, adjustable
ZB8801-0001	torque cable key, M8/wrench size 9, for ZB8801-0000
ZB8803-0001	Flange/Panel feed-through for M8 pre-assembled, for fixing the connector, plastic, including screws, washers and lock nuts

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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