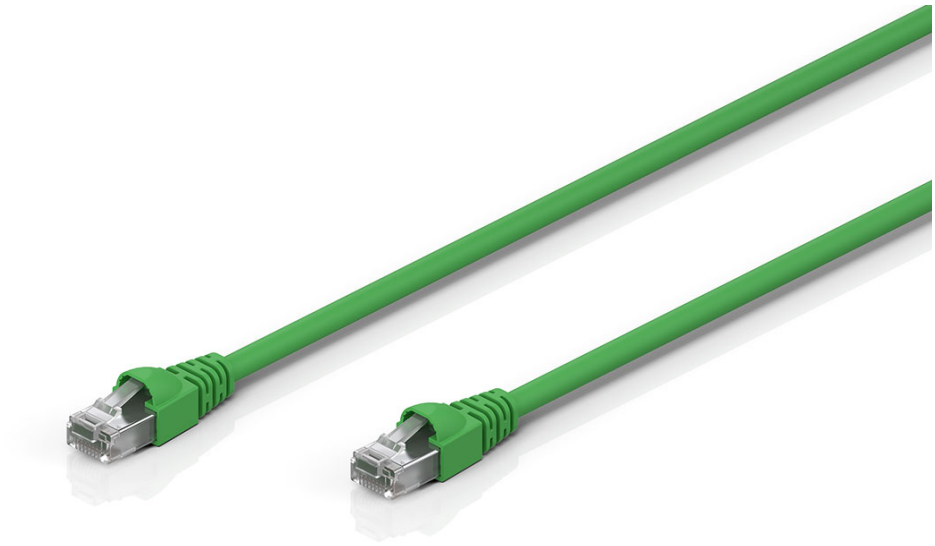
ZK1090-9191-0xxx | Industrial-Ethernet/EtherCAT patch cable, Cat.5, PUR, 4 x 2 x AWG26

RJ45, plug, straight, male, 8-pin – RJ45, plug, straight, male, 8-pin



Plugs

Electrical data	Head A	Head B
Rated voltage	160 V	160 V
Rated current	1 A at 50°C	1 A at 50°C
Shielding	yes	yes
Insulation resistance	≥ 10 GΩ (according to IEC 60512-2)	≥ 10 GΩ (according to IEC 60512-2)
Mechanical data		
Accessories type	Connectors/Cables	Connectors/Cables
Installation size	RJ45	RJ45
Connector type	plug	plug
Configuration	straight	straight
Contact type	male	male
Number of positions (face)	8-pin	8-pin
Mating cycles	≥ 750	≥ 750
Body color	green	green
Body material	PUR	PUR

Contact plating	Ni, Au gal.	Ni, Au gal.
Contact material	CuZn	CuZn
Environmental data		
Special features	UL94 V0	UL94 V0
UV resistance	according to IEC 60068-2-5	according to IEC 60068-2-5
RoHS compliant	yes	yes
Oil resistance	according to IEC 60811-2-1 or according to DIN VDE 0282 part 10	according to IEC 60811-2-1 or according to DIN VDE 0282 part 10
Ambient temperature (operation)	-40...+85°C, -40...+185°F	-40...+85°C, -40...+185°F
Protection rating	IP20	IP20

Cable

Electrical data	
Rated voltage	60 V (according to IEC 61076-2-104)
Insulation resistance	min. 5000 MΩ/km bei 20°C
Unbalanced capacitance to ground	1600 pF/km
Mutual capacitance	51 pF/m at 1 kHz
Characteristic impedance (Ethernet)	100 Ω ±15 Ω (100 MHz)
Loop resistance (Ethernet)	280 Ω/km
Unbalanced resistance (Ethernet)	max. 5 % Ω at 20 °C
Dielectric strength wire/wire (Ethernet)	1000 V DC
Dielectric strength wire/shield (Ethernet)	1500 V DC
Signal running time (Ethernet)	5.08 ns/m
Electrical parameters (Ethernet)	based on Cat.5
Test voltage	1000 V, 50 Hz, 1 min.
Mechanical data	
Cable structure	4 x 2 x AWG26
Cross-section (Ethernet)	0.14 mm² (AWG26)
Outer cable diameter	5.9 mm ± 0.2 mm (0.2323" ± 0.0079")
Min. bending radius, moved	10 x outer cable diameter
Min. bending radius, fixed installation	5 x outer cable diameter
Conductor material (Ethernet)	tinned copper
Shielding	braiding of tinned copper wires
Optical covering factor of shielding (Ethernet)	≥ 65 %
Use	fixed installation
Jacket color	green

Material jacket	PUR (polyurethane)
Wire color code	white/orange, orange, white/green, green, blue, white/blue, white/brown, brown
Wire insulation material	PE (polyethylene)
Printing color	black

Environmental data

Operation temperature range, fixed installation	-40…+80°C, -40…+176°F
Oil resistance	against mineral-oil and petrol
Acid, lye and solvent resistance	depends on medium, concentration, temperature and duration
Flame-retardant	according to IEC 60332-1 CMX
Halogen-free	according to IEC 60754-2

Attenuation

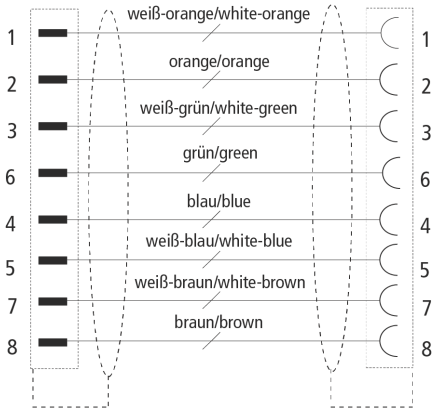
Max. insertion loss

Frequency [MHz]	**1**	**4**	**10**	**16**	**20**	**31.25**	**62.5**	**100**
[db/100 m]	2.4	4.9	7.8	9.8	11.1	14.0	20.4	22.4
[db/100 ft]	0.7	1.5	2.4	3	3.4	4.3	6.2	6.8

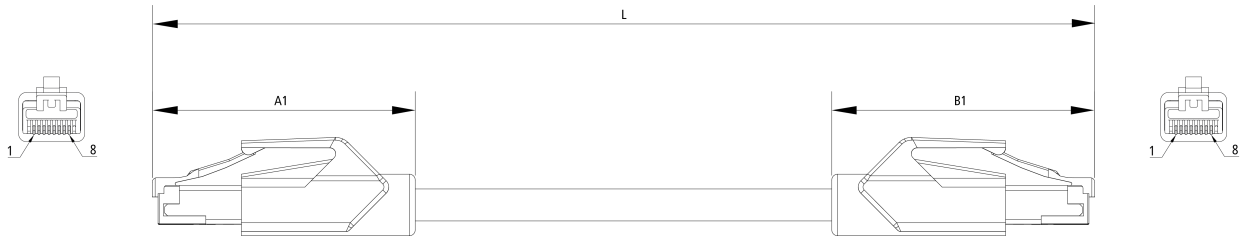
Min. near-end crosstalk attenuation

Frequency [MHz]	**1**	**4**	**10**	**16**	**20**	**31.25**	**62.5**	**100**
[db/100 m]	62.3	52.3	47.3	44.2	42.8	39.9	35.4	32.3
[db/100 ft]	19	15.9	14.4	13.5	13	12.2	10.8	9.8

Pin assignment



Dimensions



A1	37.00 mm
B1	37.00 mm

Notes

- Depending on the cable length (L), the following length tolerances apply:
...500 ±10 | ≥500 ±20 | ≥1500 ±25 | ≥2500 ±40 | ≥5000 ±60 | ≥8000 ±100 | ≥15000 ±200 | ≥20000 ±300 | ≥50000 ±500 | ≥100000 ±500
- Illustrations similar
- Further cable length on request. The last three digits of the ordering information is the cable length in decimeters, e.g. ZKxxxx-xxxx-x020 = cable length 2.00 m

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

Ordering information	Length
ZK1090-9191-0001	0.17 m
ZK1090-9191-0002	0.26 m
ZK1090-9191-0005	0.50 m
ZK1090-9191-0007	0.75 m
ZK1090-9191-0010	1.00 m
ZK1090-9191-0012	1.25 m
ZK1090-9191-0015	1.50 m
ZK1090-9191-0017	1.75 m
ZK1090-9191-0020	2.00 m
ZK1090-9191-0025	2.50 m
ZK1090-9191-0030	3.00 m
ZK1090-9191-0035	3.50 m
ZK1090-9191-0040	4.00 m
ZK1090-9191-0050	5.00 m
ZK1090-9191-0055	5.50 m
ZK1090-9191-0060	6.00 m

ZK1090-9191-0070	7.00 m
ZK1090-9191-0080	8.00 m
ZK1090-9191-0090	9.00 m
ZK1090-9191-0100	10.00 m
ZK1090-9191-0120	12.00 m
ZK1090-9191-0130	13.00 m
ZK1090-9191-0150	15.00 m
ZK1090-9191-0200	20.00 m
ZK1090-9191-0250	25.00 m
ZK1090-9191-0300	30.00 m
ZK1090-9191-0350	35.00 m
ZK1090-9191-0400	40.00 m
ZK1090-9191-0450	45.00 m
ZK1090-9191-0500	50.00 m
ZK1090-9191-5023	0.23 m
ZK1090-9191-5032	0.32 m
ZK1090-9191-5042	0.42 m

Further length on request

Accessories	
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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