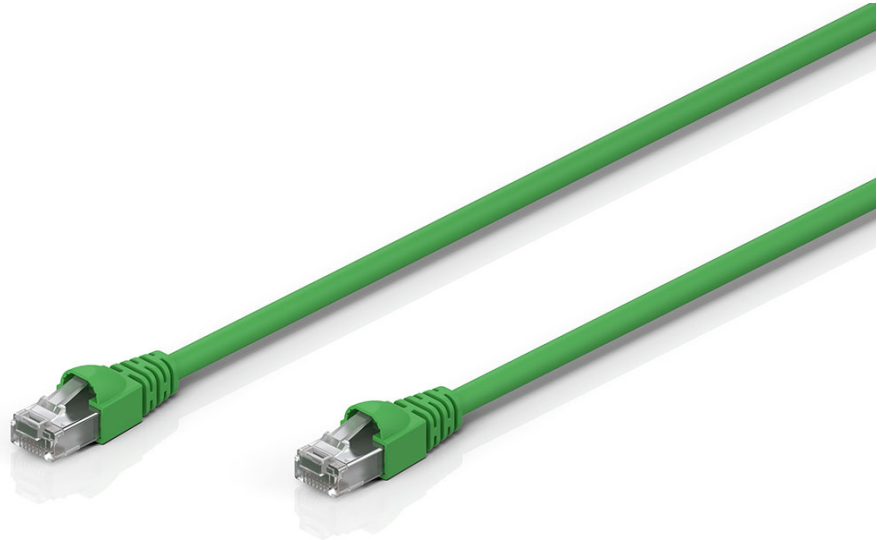


# ZK1090-9191-0xxx | Industrial-Ethernet/EtherCAT patch cable, Cat.5, PUR, 4 x 2 x AWG26



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
<b>Environmental data</b>		
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

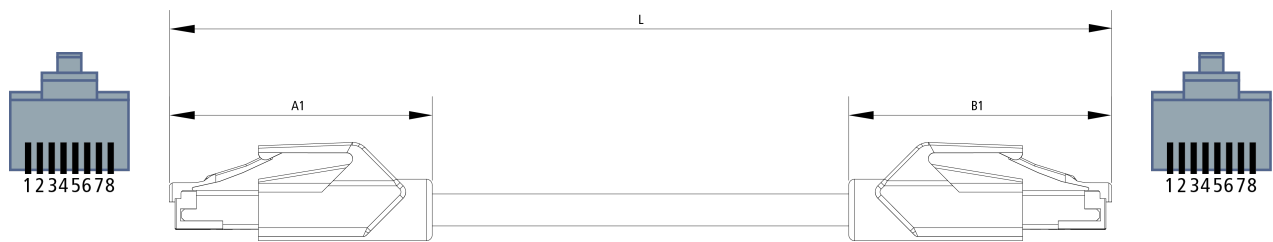
<b>Electrical data</b>		
Rated voltage	60 V (according to IEC 61076-2-104)	
Insulation resistance	min. 5000 MΩ/km bei 20 °C	
Unbalanced capacitance to ground	1600 pF/km	
Mutual capacitance	51 pF/m at 1 kHz	
Characteristic impedance (Ethernet)	100 Ω ±15 Ω (100 MHz)	
Loop resistance (Ethernet)	280 Ω/km	
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.	
<b>Mechanical data</b>		
Cable structure	4 x 2 x AWG26	
Cross-section (Ethernet)	0.14 mm <sup>2</sup> (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)	copper, tinned	
Shielding	braiding of tinned copper wires	
Optical covering factor of shielding (Ethernet)	90 %	
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
<b>Environmental data</b>	
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

<b>Attenuation</b>	
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

<b>Contact assembly</b>	
<p>1      1 2      2 3      3 6      6 4      4 5      5 7      7 8      8</p> <p>weiß-orange/white-orange orange/orange weiß-grün/white-green grün/green blau/blue weiß-blau/white-blue weiß-braun/white-brown braun/brown</p>	

<b>Dimensions</b>
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A1	37.00 mm
B1	37.00 mm

## Notes

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

### CE, UL

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

### Ordering information

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

### Accessories

ZK1096-9696-0000	RJ45, socket, straight, female, 8-pin – RJ45, socket, straight, female, 8-pin
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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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