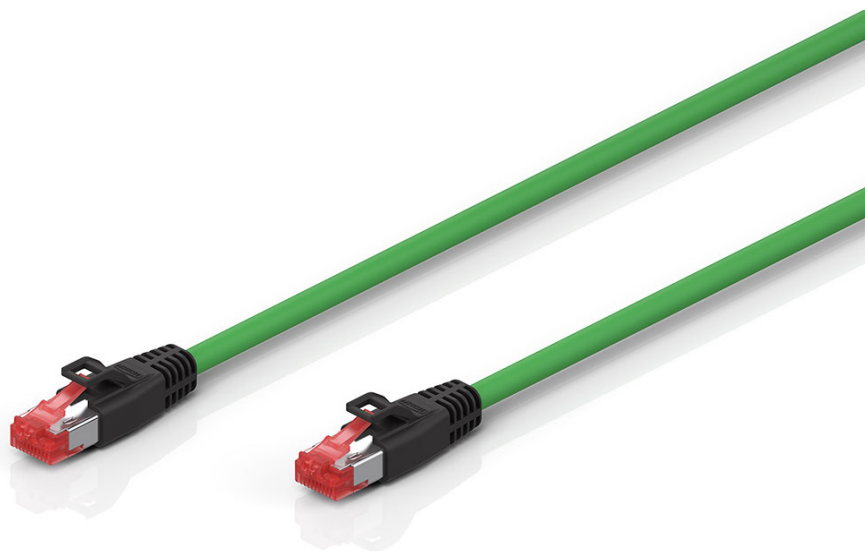


ZK1090-9191-6xxx | Industrial-Ethernet/EtherCAT patch cable, Cat.5, PUR, 1 x 4 x AWG26, drag-chain suitable



RJ45, plug, straight, male, 4-pin – RJ45, plug, straight, male, 4-pin



Plugs

Electrical data	Head A	Head B
Rated voltage	150 V	150 V
Rated current	1.5 A	1.5 A
Dielectric strength	1000 V AC/min.	1000 V AC/min.
Shielding	yes	yes
Insulation resistance	≥ 10 GΩ (according to IEC 60512-2)	≥ 10 GΩ (according to IEC 60512-2)
Mechanical data		
Installation size	RJ45	RJ45
Connector type	plug	plug
Configuration	straight	straight
Contact type	male	male
Number of positions (face)	4-pin	4-pin
Mating cycles	≥ 750	≥ 750
Body color	black	black

Body material	TPU, UL 94 HB	TPU, UL 94 HB
Contact carrier material	PC UL 94 V-0	PC UL 94 V-0
Contact plating	Ni, Au gal.	Ni, Au gal.
Contact material	CuZn	CuZn
Environmental data		
RoHS compliant	yes	yes
Ambient temperature (operation)	-40...+70°C, -40...+158°F	-40...+70°C, -40...+158°F
Protection rating	IP20	IP20

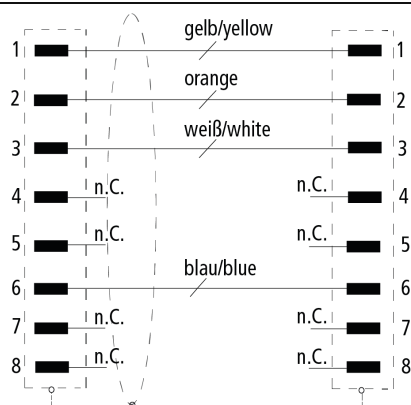
Cable

Electrical data	
Rated voltage	30 V (according to IEC 61076-2-101)
Attenuation of shielding	≥ 43 dB
Insulation resistance	≥ 150 MΩ/km
Unbalanced capacitance to ground	3400 pF/km
Mutual capacitance	51 pF/m at 1 kHz
Characteristic impedance (Ethernet)	100 Ω ±15 Ω (100 MHz)
Loop resistance (Ethernet)	250 Ω/km
Unbalanced resistance (Ethernet)	2 %
Dielectric strength wire/wire (Ethernet)	1000 V DC/700 V AC
Dielectric strength wire/shield (Ethernet)	1000 V DC/700 V AC
Signal running time (Ethernet)	5.55 ns/m
Electrical parameters (Ethernet)	based on Cat.5
Test voltage	700 V
Mechanical data	
Cable structure (Ethernet)	star quad
Conductor construction (Ethernet)	19 x 0.1 mm
Cross-section (Ethernet)	1 x 4 x 0.14 mm ² (AWG26)
Outer cable diameter	5.4 mm ± 0.3 mm (0.213" ±0.0118")
Min. bending radius, moved	20 x outer cable diameter
Min. bending radius, fixed installation	4 x outer cable diameter
Weight	40 kg/km (26.9 lb/1000 ft)
Conductor material (Ethernet)	tinned copper
Shielding	braiding of tinned copper wires
Optical covering factor of shielding (Ethernet)	90 %

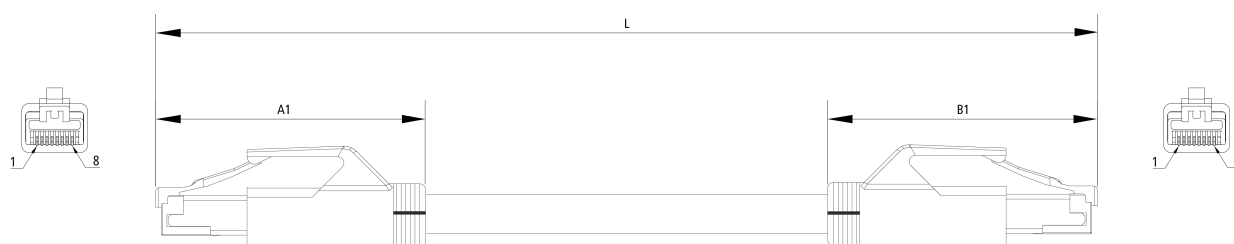
Use	drag-chain suitable
Max. acceleration	10 m/s ²
Max. speed	15 m/s
Max. number of cycles	20 million (5 million with 14 x D, v = 5 m/s and a = 15 m/s ² , min. 1 million with 9.5 x D, a = 1 m/s ² , travel distance = 1 m)
Wall thickness of wire insulation (Ethernet)	0.25 mm
Jacket color	green
Material jacket	PUR (polyurethane)
Wire color code	yellow, orange, white, blue
Wire insulation material	PP (polypropylene)
Printing on the jacket	"sequential length in meters" Industrial Ethernet Cat5 trailing * E130266 "UL Recognized" UL AWM 20963 80 °C 30V * ZB9032 "month/year" " internal order number"
Printing color	black
Environmental data	
Operation temperature range, moved	-40...+80°C, -40...+176°F
Oil resistance	according to DIN EN 60811-404 (7x24 h/90 °C)
Acid, lye and solvent resistance	depends on medium, concentration, temperature and duration
Flame-retardant	according to AWM Style 20963
CFC-free	yes
Halogen-free	according to IEC 60754-1 and -3
Silicone-free	yes
RoHS compliant	yes
CE	yes
UL	yes, UL E-file number: E130266
Approvals	UL-Style AWM 20963

Attenuation	
Max. insertion loss	
Frequency [MHz]	1 4 10 16 20 31.25 62.5 100
[db/100 m]	3.1 6.5 9.9 12.3 13.8 17.7 25.6 33.0
[db/100 ft]	0.9 2 3 3.7 4.2 5.4 7.8 10.1
Min. near-end crosstalk attenuation	
Frequency [MHz]	1 4 10 16 20 31.25 62.5 100
[db/100 m]	62 53.0 47.0 44.0 42.0 40.0 35.0 32.0
[db/100 ft]	18.9 16.2 14.3 13.4 12.8 12.2 10.7 9.8

Pin assignment	
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Dimensions



A1 43.80 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.

CE, UL

CE yes

UL yes, UL E-file number: E499669

Ordering information

Length

ZK1090-9191-6003	0.30 m
ZK1090-9191-6005	0.50 m
ZK1090-9191-6010	1.00 m
ZK1090-9191-6015	1.50 m
ZK1090-9191-6020	2.00 m
ZK1090-9191-6025	2.50 m
ZK1090-9191-6030	3.00 m

ZK1090-9191-6035	3.50 m
ZK1090-9191-6040	4.00 m
ZK1090-9191-6050	5.00 m
ZK1090-9191-6060	6.00 m
ZK1090-9191-6075	7.50 m
ZK1090-9191-6080	8.00 m
ZK1090-9191-6090	9.00 m
ZK1090-9191-6100	10.00 m
ZK1090-9191-6110	11.00 m
ZK1090-9191-6120	12.00 m
ZK1090-9191-6150	15.00 m
ZK1090-9191-6200	20.00 m
ZK1090-9191-6250	25.00 m
ZK1090-9191-6300	30.00 m
ZK1090-9191-6350	35.00 m
ZK1090-9191-6400	40.00 m
ZK1090-9191-6500	50.00 m

Further length on request

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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