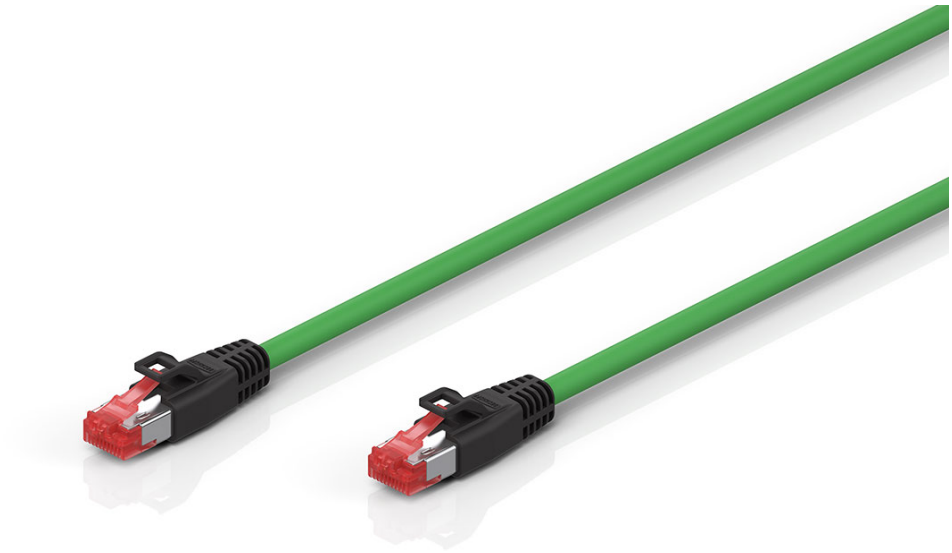
ZK1090-9191-3xxx | Industrial Ethernet/EtherCAT patch cable, Cat.5, PVC, 1 x 4 x AWG26, fixed installation

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

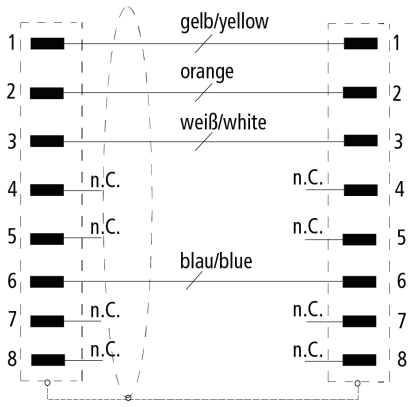
Cable

Electrical data	
Rated voltage	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 mm² (AWG26)
Outer cable diameter	4.9 mm ± 0.2 mm (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 %

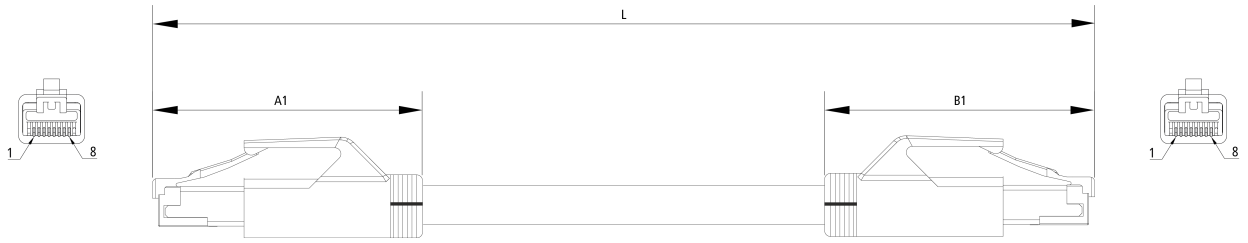
Use	fixed installation
Wall thickness of wire insulation (Ethernet)	0.25 mm
Jacket color	green
Material jacket	PVC (polyvinyl chloride)
Wire color code	yellow, orange, white, blue
Wire insulation material	PE (polyethylene)
Printing on the jacket	"sequential length in metres" Industrial Ethernet Cat5 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



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
ZK1090-9191-3002	0.20 m
ZK1090-9191-3003	0.30 m
ZK1090-9191-3005	0.50 m
ZK1090-9191-3010	1.00 m
ZK1090-9191-3020	2.00 m
ZK1090-9191-3030	3.00 m
ZK1090-9191-3050	5.00 m
ZK1090-9191-3060	6.00 m
ZK1090-9191-3070	7.00 m
ZK1090-9191-3080	8.00 m
ZK1090-9191-3100	10.00 m
ZK1090-9191-3150	15.00 m
ZK1090-9191-3160	16.00 m
ZK1090-9191-3200	20.00 m
ZK1090-9191-3250	25.00 m
ZK1090-9191-3300	30.00 m
ZK1090-9191-3400	40.00 m

ZK1090-9191-3500	50.00 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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