

FieldLink®

INDUSTRIAL ETHERNET Cat 5e ES



Design

Wire

Stranded tinned copper wire (22 AWG)
Insulation of Polyethylene (PE)

ø 0.75 mm (0.030 in dia)
ø 1.5 mm (0.059 in dia)

Core

Filler as central element
4 wires WH-YE-BU-OG
Plastic tape overlapped
Inner-Jacket Polyvinylchloride (PVC)
Alulaminat foil overlapped. applied longitudinally
Shield braiding of tinned copper wires
Coverage about 85%

ø 3.9 mm (0.154 in dia)
ø 4.7 mm (0.185 in dia)

Jacket

Polyvinylchloride (PVC) GN

ø (6.5 ±0.2) mm (0.256 ±0.008 in dia)

Printing: "sequential length in metres" BizLink Special Cables Germany INDUSTRIAL ETHERNET FLEXIBLE
CABLE * GREEN PROFINET Type B ES CAT5 PLUS * 22AWG (SHIELDED) "internal lot number"

Electrical data at 20°C

Loop resistance		≤	120	Ohm/km
Signal run time		≤	5.3	ns/m
Insulation resistance		≥	500	MOhm*km
Characteristic impedance	100 MHz		(100 ±5)	Ohm
UL-Rating			600	V
Surface transfer impedance	10 MHz	≤	20	mOhm/m
Test voltage (wire/wire/screen rms 50Hz 1min)		=	2000	V

Near-end crosstalk attenuation

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
typ. value (dB - 100m)	80	76	70	65	63	60	55	50

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Attenuation

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
typ. value (dB/100m) (dB/100ft)	2.1 (0.6)	4 (1.2)	6.3 (1.9)	8 (2.4)	9 (2.7)	11.4 (3.5)	16.5 (5.0)	21.3 (6.5)

The electrical requirements similar to EN 50288-2-1

Mechanical and thermal characteristics

Insulating material acc. to DIN EN 50290-2-23 (VDE 0819). table L/MD (HD 624.3) (2Y)
 Jacket material acc. to DIN EN 50290-2-22 (VDE 0819). compoundtype TM52 (HD 624.2)
 Oil resistant acc. to IEC 60811-2-1 (4 hours / 70°C)
 Flame retardant acc. to UL 2556, Sec. 9.4 (old UL 1581, Sec. 1080) VW-1
 Flame retardant acc. to IEC 60332-1-2

Other characteristics

RoHS compliant (Directive 2011/65/EU & 2015/863/EU RoHS 3)
 Cable for flexible installation

Permissible temperature range : -40°C up to +80°C
 During laying : -20°C up to +60°C
 Transport temperature range : -50°C up to +80°C

Min. bending radius allowed : repeated 7X ø. single 3X ø
 Weight about : 67 kg/km (45 lb/1000ft)

Designation

L45467-J17-B395
 241643
 2YY(ST)CY 2X2X0.75/1.5 LI VZN GN
 1000 m (3281 ft) on non-returnable reel

Product has not been tested and classified according to the CPR (EU/305/2011).
 The product shall not be permanently installed in buildings in the EU.

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