

PROFINET

Type C Industrial Ethernet Cat 5e ES Cable
for Torsional Stress Applications



Cable Design

Wire

Conductor	Stranded tinned copper wire (19x0,15mm) (22awg) Ø 0,75 mm
Insulation	Foamed Polyethylene (PE) with skin Ø 1,50 mm

Core

Central Element	Filler
1° Layer	4 wires twisted (WH-YE-BU-OG)
Tape	Plastic tape overlapped
Braid	Tinned copper wire braid, 85% coverage
Tape	Plastic tape overlapped Ø 4,50 mm

Outer Jacket	Polyurethane (PUR) Green Ø 6,5 ± 0,20 mm
Wall thickness	1,0 mm



Characteristics

- Flame retardant acc. to IEC 60332-1-2,
- Halogen free acc. to IEC 60754,
- UL-Style 21161

Specification

Part Number	Type
L45467-J17-B78	Industrial Ethernet Cat5e, PROFINET Type C flexible cable for torsional stress applications (FRNC), 2x2x22AWG 19, UL recognised: AWM

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Electrical Data @ 20 °C

Loop resistance	≤	120	Ohm/km
Signal run time	≤	4,8	ns/m
Insulation resistance	≥	500	MΩm * km
Characteristic Impedance		1-100 MHz	100±15 Ohm
Test Voltage (wire/wire/screen rms 50Hz min.)	=	700	V

Frequency (MHz)	1	4	10	16	20	31,25	62,5	100
Attenuation Max. (dB/100m)	2,9	5,0	8,1	10,4	11,9	15,5	26,5	41,0
ELFEXT ≤ (dB/100m)	63,8	51,8	43,8	39,7	37,8	33,9	24,0	20,0

The electrical requirements acc. to EN 50288-2-1.

Mechanical & Thermal Characteristics

Torsional Strength	1 million cycles at ± 180° on 1 metre (not adapted for garland mounting)		
Permissible temperature range	-40 ~ +80	°C	
Min. Bending radius allowed	single	5	x Ø
Weight (approx.)	54		kg/km

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