

# FieldLink® PROFIBUS

Trailing cable



## Design

### Wire

Stranded bare copper wire 19 X 0.14  
Insulation of foamed Polyethylene (PE)

∅ 0.64 mm (0.025 in)  
∅ 2.56 mm (0,10 in)

### Core

2 wires, RD and GN twisted to a pair  
Plastic tape, overlapped  
Jacket: Polyvinylchloride (PVC)  
Plastic tape, overlapped  
Alulaminat foil overlapped  
Shield braiding of tinned copper wires 0.15 mm dia  
Coverage about 70%

∅ 5.4 mm (0,213 in)

∅ 6.3 mm (0,25 in)

### Jacket

Polyurethane (PUR) (PETROL)  
Wall thickness about 0.8 mm

∅ (8.0 ±0.4) mm (0,315 ±0,016 in)

Printing: "sequential length in metres" BizLink Special Cables Germany PROFIBUS L2/F.I.P. ES  
SCHLEPPFAEHIG L45467-G16-C98 \* E119100 (UL) CMX 75°C (SHIELDED) AWG 23 \*  
"internal lot number"

(The gap between the text is filled out with lengthways line "-----").  
Textintervals about 1000 mm

### Electrical data at 20°C

Loop resistance		≤	133	Ohm/km
Screen resistance		≤	15	Ohm/km
Insulation resistance		≥	16000	MOhm*km
Characteristic Impedance				
	3 - 20	MHz	(150 ± 15)	Ohm
	31.25 - 38.4	kHz	(185 ± 18.5)	Ohm
	9.6	kHz	(270 ± 27)	Ohm

## Attenuation

	16 MHz	≤	49 dB/km
	4 MHz	≤	25 dB/km
	38.4 kHz	≤	4 dB/km
	9.6 kHz	≤	3 dB/km
Inductance	31.25 kHz	≈	1000 μH/km
Capacitance	1 kHz		28 nF/km
Capacitance unbalance to ground		≤	1500 pF/km
Operating voltage (effective value)		≤	100 V
rel. velocity of propagation		≈	81 %
Test voltage			3600 V DC 3 sec

## Mechanical and thermal characteristics

Conductor material acc. to DIN EN 13602 Cu-ETP-A...

Screen material acc. to DIN EN 13602 Cu-ETP-A...-B

Insulating material acc. to DIN EN 50290-2-23 (VDE 0819), table 2/A (HD 624.3)

Jacket material acc. F45052-F5100 (similar to DIN VDE 0282)

Cold bend test acc. DIN IEC 60811-1-4 -40° C

Flame retardant acc. to IEC 60332-1-2

Trailing cable for following requirements

- 3 million bending cycles
- bending radius 15x max. diameter
- acceleration 5 m/s<sup>2</sup>
- not adapted for garland mounting
- min. bending diameter allowed: single 5X ø

FILE E119100 Vol.1 Sec.8 Page 1

## Application / Special feature

Mineral oil and fats resistance

Sunlight resistant acc. to UL 1581 Sec.1200

Permissible temperature range

Transport, installation and operating: -40 °C (-40 °F) up to 80 °C (176 °F)

Tensile strength	: ≤ 100 N
PVC weight with Phthalate	: 22,7 Kg/km
PVC weight without Phthalate	: 0.0 Kg/km
Weight about	: 77 Kg/km (51,6 lb/1000ft)

## Designation of order

L45467-G16-C98 / 202225 / 1000 m (3281 ft) on non-returnable reel

L45467-G16-C98-L6 / 219798 / 500 m (1640 ft) on non-returnable reel

BCA0181

02YY(ST)C11Y 1X2X0.65/2.56-150 LI KF40 FR PETROL

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.