

FieldLink®

Profibus DP



Design

Wire

Stranded bare copper wire 19 X 0.16
Insulation of foamed Polyethylene (PE) with skin

∅ 0.8 mm (0,031 in)
∅ 2.56 mm (0,100 in)

Core

2 wires, RD and GN twisted to a pair
+ fillers
Alulaminat foil overlapped
Plastic tape conductiv
Shield braiding of tinned copper wires 0.15 mm dia
Coverage about 80%
Plastic tape, overlapped

∅ 6.0 mm (0,236 in)

Jacket

Polyurethane (PUR) VT
Wall thickness about 1.0 mm

∅ (8.0 ± 0.4) mm (0.315 ± 0.016 in)

Printing: "sequential length in metres" BizLink Special Cables Germany PROFIBUS * E1 19100 (UL) CMX 75°C (SHIELDED) AWG 22 * "internal lot number"
Textintervals about 1000 mm

Electrical data at 20°C

Loop resistance		≤	98	Ohm/km	
Screen resistance		≤	14	Ohm/km	
Insulation-Resistance		≥	16000	MOhm*km	
Characteristic Impedance	3 - 20	MHz	(150 ± 15)	Ohm	
	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	≤	3	dB/km
	9.6	kHz	≤	2.5	dB/km

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Surface transfer impedance 20 MHz	≤	480	mOhm/m
Capacitance unbalance to ground	≤	1500	pF/km
Capacitance 1 kHz		29	nF/km
Operating voltage (effective value)	≤	100	V
UL-Rating		300	V
rel. velocity of propagation	≈	85	%
Test voltage (DC 3 sec)	=	3600	V

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)
 Flame retardant acc. to IEC 60332-1-2

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Other characteristics

For 360° torsion

Torsional strength

- 5 million cycles at ± 180° on 1 meter
- not adapted for garland mounting

Sunlight resistant

Silicon free

Halogen free

Permissible temperature range

- Operating temperature - 25°C (- 13 °F) up to 75°C (167 °F)
- Transport and storage - 40°C (-40 °F) up to 80°C (176 °F)
- Installation - 25°C (- 13 °F) up to 75°C (167 °F)

Min. bending radius allowed : repeated 7,5X ø, single 4X ø

Tensile strength ≤ 100 N

Weight about : 66 Kg/km (44 lb/1000ft)

Designation of order

L45467-G18-C18

203376

02YS(ST)C11Y 1X2X0.8/2.56-150 LI FR VI

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.