

FieldLink®

Profibus DP



Design

Wire:

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

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

Core:

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

ø 6.0 mm (0,236 in)

Jacket:

Polyurethane (PUR) VT
 Wall thickness about 1.0 mm

ø (8.0 ± 0.4) mm (0.315 ± 0.016 in)

Printing: "sequential length in metres" LEONI PROFIBUS * E119100 (UL) CMX 75 °C (SHIELDED) AWG 22
 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

LEONI Special Cables GmbH

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Attenuation

16 MHz	≤	49 dB/km
4 MHz	≤	25 dB/km
38.4 kHz	≤	3 dB/km
9.6 kHz	≤	2.5 dB/km
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 $\pm 180^\circ$ on 1 meter
- not adapted for garland mounting

Sunlight resistant

Silicon 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 \varnothing , single 4X \varnothing

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