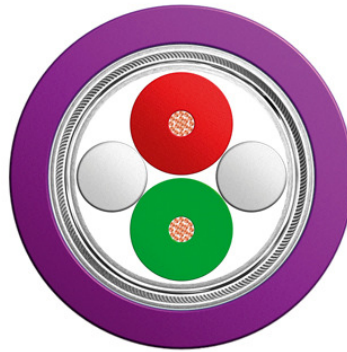


# FieldLink<sup>®</sup>

## 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" LEONI LA PROFIBUS (SHIELDED) AWG 22 \* E130266-LA   
AWM STYLE 20233 \* AWM I/II A/B 80°C 300V FT1 "year/internal order 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
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
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  
 UL-Style 20233 (80°C/300V)

**Other characteristics:**

For 360° torsion  
 Torsional strength  
 - 5 million cycles at ± 180° on 1 meter (must be tested)  
 - 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-C1  
 381532  
 02YS(ST)C11Y 1X2X0.8/2.56-150 LI FR VI  
 1000 m (3281 ft) on non-returnable reel

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