

PROFIBUS

Trailing cable



Design

Wire:

Stranded bare copper wire 19 X 0.14 ø 0.64 mm (0.025 in)
 Insulation of foamed Polyethylene (PE) ø 2.56 mm (0,10 in)

Core:

2 wires, RD and GN twisted to a pair
 Plastic tape, overlapped
 Jacket: Polyvinylchloride (PVC) ø 5.4 mm (0,213 in)
 Plastic tape, overlapped
 Alulaminat foil overlapped
 Shield braiding of tinned copper wires 0.15 mm dia
 Coverage about 70% ø 6.3 mm (0,25 in)

Jacket:

Polyurethane (PUR) (PETROL)
 Wall thickness about 0.8 mm ø (8.0 ±0.4) mm (0,315 ±0,016 in)

Printing: LEONI L PROFIBUS L2/F.I.P. ES SCHLEPPFAEHIG L45467-G16-C98 * E119100 (UL)
 CMX 75°C (SHIELDED) AWG 24 * "internal lot number" + marking every meter
 (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/s²
- not adapted for garland mounting
- min. bending diameter allowed: single 5X ø

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Application / Special feature:

Mineral oil and fats resistance
 Sunlight resistant acc. to UL 1581 Sec.1200

Permissible temperature range : -40°C (-104°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
 02YY(ST)C11Y 1X2X0.65/2.56-150 LI KF40 FR PETROL
 1000 m (3281 ft) on non-returnable reel