

Design

Wire

Bare copper wire ø 0.65 mm
 Insulation of foamed Polyethylene (PE) with skin ø 2.55 mm

Core:

2 wires RD and GN twisted to a pair
 Plastic tape, overlapped
 Inner-Jacket Polyvinylchloride (PVC) ø 5.4 mm
 Alulaminat foil overlapped, applied longitudinally
 Coverage 100%
 Shield braiding of tinned copper wires 0.15 mm dia
 Coverage about 55% ø 6.2 mm

Jacket:

Polyvinylchloride (PVC) VT
 Wall thickness about 0.9 mm ø (8.0 ±0.4) mm

| Printing: "sequential length in metres" LEONI L PROFIBUS L2/F.I.P. ES L45467-G16-C185 * 22AWG
 (SHIELDED) (UL) E119100 CMG 75 °C or CL3 or AWM 20201 600V FT4 SUN RES
 Textintervals about 1000 mm

Electrical data at 20°C

Loop resistance		≤	110	Ohm/km
Screen resistance		≤	9,5	Ohm/km
Insulation resistance		≥	16	GOhm*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	≤	42	dB/km
4 MHz	≤	22	dB/km
38.4 kHz	≤	4	dB/km
9.6 kHz	≤	2.5	dB/km

Inductance (31,25 KHz)	≈	1000	µH/km
Capacitance (1 KHz)	≈	28,5	nF/km
Unbalance to ground	≤	1500	pF/km
Operating voltage (effective value)	≤	100	V
UL-Rating		600	V
rel. velocity of propagation	≈	81	%
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. to DIN EN 50290-2-22 (VDE 0819), compoundtype TM52 (HD 624.2)
Cold bend test acc. DIN VDE 0473 part 811-1-4 ; after 16 hour storage at -40° Grad
Flame retardant acc. to IEC 60332-3-24 (Cat. C)
Flame retardant acc. to UL 1685 (CSA FT 4)

FILE E119100 Vol.1 Sec.16 Page 7
FILE E116441 Vol.1 Sec.6 Page 7

Other characteristics:

Sunlight resistant acc. to UL 1581 Sec.1200

Permissible temperature range: - 40°C up to + 80°C
Bending diameter \geq 150 mm
Pulling force with \leq 100 N

PVC weight with Phthalate : 47.6 Kg/km
PVC weight without Phthalate : 0.0 Kg/km
Weight about : 75 Kg/km (50,3 lb/1000ft)

Designation of order:

L45467-G16-C185
202226
02YSY(ST)CY 1X2X0.64/2.55-150 VI KF40 FR
1000 m on non-returnable reel

