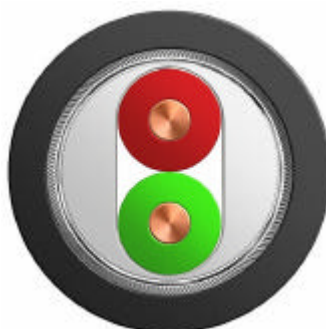


PROFIBUS



Design

Wire:

Bare copper wire ø 1.05 mm (0,041 in)
 Insulation of foamed Polyethylene (PE) with skin ø 2.55 mm (0,100 in)

Core:

2 wires, RD and GN twisted to a pair
 Plastic tape, overlapped
 Inner-jacket: Polyvinylchloride (PVC) ø 5.4 mm (0,213 in)
 Alulaminat foil overlapped, applied longitudinally
 Shield braiding of tinned copper wires 0.15 mm dia ø 6.2 mm (0.244 in)
 Coverage about 90%

Jacket:

Polyvinylchloride (PVC) BK
 Wall thickness about 0.9mm ø (8.0 ±0.4) mm (0.315 ±0.016 in)

Printing: LEONI L PROFIBUS FMS ES L45467-J20-C105 * 18AWG (SHIELDED) (UL) E119100
 CMG 75°C or CL3 or AWM20201 600V FT4 SUN RES OIL RES I + marking every meter
 Textintervals about 1000 mm

Electrical data at 20°C

Conductor resistance	≤	22	Ohm/km
Insulation resistance	≥	10	MOhm*km
Capacitance (1 kHz wire/wire)	≈	50	nF/km
Capacitance (1 kHz wire/screen)	≈	92	nF/km
Operating voltage		100	V
UL-Rating		600	V
Test voltage (wire/wire/screen rms 50Hz 1min)		2000	V

Characteristic Impedance (31.25 KHz)	(100 ±20)	Ohm
Attenuation (39 KHz)	≤ 3	dB/km
Capacitance unbalance e	≤ 2	nF/km
Inductance (31.25 KHz)	650	μH/km
Surface transfer impedance (20 MHz)	≤ 5	mOhm/m
rel. velocity of propagation	≈ 81	%

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 VDE 0207, compoundtype YM5
 Oil resistant acc. to UL 758 Sec. 15 (60°C)
 Flame retardant acc. to UL 1685 (CSA FT 4)
 Sunlight resistant acc. to UL 1581 Sec.1200

File E119100 Vol.1 Sec.16 Page 6 (CMG)
 File E116441 Vol.1 Sec.6 Page 6 (PLTC)
 UL STYLE 20201

Application / Special feature:

Flame retardant acc. to IEC 60332-1-2

Permissible temperature range : -20 °C (-4 °F) up to 80 °C (176 °F)

Min. bending radius allowed : repeated 10X Ø , single 5X Ø

Tensile strength ≤ 150 N

PVC weight with Phthalate : 47.5 Kg/km
 PVC weight without Phthalate : 0.0 Kg/km
 Weight about : 103 Kg/km (69 lb/1000ft)

Designation of order:

L45467-J20-C105
 202581
 02YSY(ST)CY 1X2X1.0/2.55-100 OE FR
 1000 m (3281 ft) on non-returnable reel