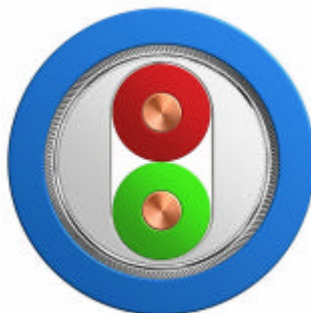


## PROFIBUS



### Design

#### Wire:

Bare copper wire

∅ 1.05 mm (0,041 in)

Insulation of foamed Polyethylene (PE) with skin

∅ 2.55 mm (0,100 in)

#### Core:

2 wires, RD and GN twisted to a pair

Plastic tape, overlapped

Inner-jacket: Polyvinylchloride (PVC)

∅ 5.4 mm (0,213 in)

Alulaminat foil overlapped, applied longitudinally

Shield braiding of tinned copper wires 0.15 mm dia

Coverage about 90%

∅ 6.2 mm (0,244 in)

#### Jacket:

Polyvinylchloride (PVC) BU

Wall thickness about 0.9mm

∅ (8.0 ±0.4) mm (0.315 ±0.016 in)

Printing: LEONI L PROFIBUS FMS ES L45467-J20-C95 \* 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-C95  
 202580  
 02YSY(ST)CY 1X2X1.0/2.55-100 BL OE FR  
 1000 m (3281 ft) on non-returnable reel