

**Design**

**Wire:**

Bare copper wire ø 0.65 mm (0,026 in)  
 Insulation of foamed Polyethylen (PE) with skin ø 2.55 mm (0,100 in)  
 Wall thickness about 0.95 mm

**Core:**

2 wires, RD and GN twisted to a pair  
 Plastic tape, overlapped  
 Inner jacket: Polyvinylchloride (PVC) NF ø 5.4 mm (0.213 in)  
 Alulaminat foil overlapped, applied longitudinally  
 Shield braiding of tinned copper wires 0.15 mm dia  
 Coverage about 60% ø 6.2 mm (0,244 in)

**Jacket:**

Polyurethane (PUR) VT ø (8 ±0.4) mm (0.315 ±0.016 in)  
 Wall thickness about 0.9 mm

Printing: LEONI PROFIBUS PUR ES \* E119100 (UL) CMX 75 °C (SHIELDED) AWG 22  
 + marking every meter  
 Textintervals about 1000 mm

**Electrical data at 20°C**

|                          |   |              |         |
|--------------------------|---|--------------|---------|
| Loop resistance          | ≤ | 110          | Ohm/km  |
| Screen resistance        | ≤ | 9.5          | 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   | ≤ | 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      |
| Capacitance unbalance to ground     |           | ≤ | 1500 | pF/km      |
| Surface transfer impedance (20 MHz) |           | ≤ | 5    | mOhm/m     |
| Operating voltage (effective value) |           | ≤ | 100  | V          |
| UL-Rating                           |           |   | 300  | V          |
| rel. velocity of propagation        |           | ≈ | 81   | %          |
| Test voltage                        |           |   | 3600 | V DC 3 sec |

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Technisches Datenblatt – Technical Data Sheet – Technisches Datenblatt – Technical Data Sheet – Technisches Datenblatt – Technical Data Sheet

**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 test acc. to IEC 60332-1

UL-FILE E119100 VOL.1, SEC.8 PAGE1

**Application / Special feature:**

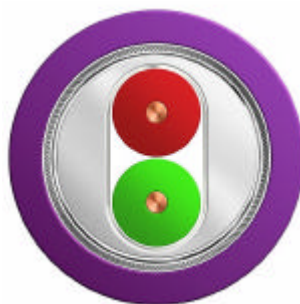
UV-resistant  
Mineral oil and fat resistance

Permissible temperature range : -40 °C (-40 °F) up to 60 °C (140 °F)  
Bending Diameter : ≥ 150 mm  
Pulling force with : ≤ 100 N

PVC weight with Phthalate : 22.7 Kg/km  
PVC weight without Phthalate : 0.0 Kg/km  
Weight about : 71 Kg/km (48 lb/1000ft)

**Designation of order:**

L45467-G16-C118  
203373  
02YSY(ST)C11Y 1X2X0.64/2.55-150 VI KF40 FR  
1000 m (3281 ft) on non-returnable reel



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