Design

Wire
Stranded bare copper wire 19 X 0.26 (18 AWG) Ø 1.24 mm (0.049 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 Ø 5.4 mm (0.213 in)
Plastic tape, overlapped Ø 6.0 mm (0.236 in)
Innen-Jacket: Polyvinylchloride (PVC) (filling compound)
Shield braiding of tinned copper wires 0.15 mm dia Coverage about 85%

Jacket:
Polyvinylchloride (PVC) BU Wall thickness about 1.0 mm Ø (8.0 ±0.3) mm (0.315 ±0.012 in)

Printing:*sequential length in metres* LEONI L PROFIBUS FMS ES L45467-J21-C35 * AWM 2905 80 ºC
Textintervals about 1000 mm

Electrical data at 20°C

Loop resistance ≤ 40 Ohm/km
Insulation resistance ≥ 10 GOhm*km
Capacitance 1 kHz ≈ 52 nF/km
(100 ±20) Ohm
Characteristic impedance 31.25 kHz
Attenuation 39 kHz 39 kHz
≤ 0.3 dB/100m
100 kHz nom. 0.4 dB/100m
1 MHz nom. 1.3 dB/100m
Relative velocity of propagation \( \approx 75 \% \)
Surface transfer impedance of screen (10 MHz) \( \leq 250 \text{ mOhm/m} \)
Operating voltage (peak) \( \leq 250 \text{ V} \)
Test voltage (wire/wire/screen rms 50Hz 1min) \( 1500 \text{ V} \)

**Mechanical and thermal characteristics**
Conductor material acc. to DIN EN 13602 Cu-ETP-A...
Screen material acc. to DIN EN 13602 Cu-ETP-A...
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)
Leakage test according to EN 60079-14 annex E
Flame retardant acc. to IEC 60332-1
UL-Style 2905

**Other characteristics:**
Permissible temperature range: \(-40 \, ^\circ\text{C} (-40 \, ^\circ\text{F}) \text{ up to } 80 \, ^\circ\text{C} (176 \, ^\circ\text{F})\)
Min. bending radius allowed: repeated 10X Ø, single 5X Ø

PVC weight with Phthalate: 53.7 Kg/km
PVC weight without Phthalate: 0.0 Kg/km
Weight about: 100 Kg/km (67 lb/1000ft)

**Designation of order:**
L45467-J21-C35
206229
02YSYC 1X2X1.3/2.55-100 LI BL FR KF40
1000 m (3281 ft) on non-returnable reel