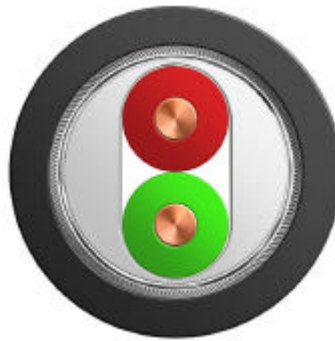




<b>DATA SHEET</b>	2170334
<b>UNITRONIC® BUS PA FC (BU) UL/CSA (CMX)</b>	Valid from: 14.11.2003



## Design

### **Wire:**

Bare copper wire  
Insulation of foamed Polyethylene (PE) with skin

∅ 1.05 mm (0,041 in)  
∅ 2.55 mm (0,100 in)

### **Core:**

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

∅ 5.4 mm (0,213 in)  
∅ 6.1 mm (0,240 in)

### **Jacket:**

Polyvinylchloride (PVC) blue (BU)  
Wall thickness approx. 0.9 mm

∅ (8.0 ±0.4) mm (0.315 ±0.016 in)

Marking: LAPP KABEL STUTTGART **UNITRONIC® BUS PA FC UL/CSA (CMX)**  
1 x 2 x 1.0 \* (UL) CMX AWG18 (SHIELDED) E119100 \* ART. 2170334

### **Electrical data at 20°C**

Conductor resistance	≤	22	Ohm/km
Insulation resistance	≥	10	MOhm*km
Capacitance (1 kHz core/core)	≈	50	nF/km
Capacitance (1 kHz core/screen)	≈	92	nF/km
Operating voltage (peak)	≤	100	V
UL-Rating		300	V
Test voltage (DC 3 sec)	=	3600	V
Characteristic Impedance (at 31.25 KHz)		(100 ±20)	Ohm



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Attenuation (at 39 kHz)	≤	3	dB/km
Capacitance unbalanced	≤	2	nF/km
Inductance (at 31.25 kHz)		650	μH/km
Surface transfer impedance (at 20 MHz)	≤	5	mOhm/m
rel. velocity of propagation	≈	81	%

#### Mechanical and thermal characteristic

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, compound type YM5  
Oil resistant acc. to VDE 0472 T. 803  
Flame test acc. to IEC 60332-1

#### Application / Special feature:

The jacket is UV-resistant

Permissible temperature range : -20°C (-68°F) up to +60°C (+140°F)  
Min. bending radius allowed : repeated 10X ø, single 5X ø  
Tensile strength ≤ 150 N

PVC weight with Phthalate : 51.8 kg/km  
PVC weight without Phthalate : 0.0 kg/km  
Weight approx. : 103 kg/km