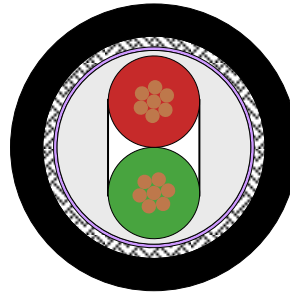


## FieldLink® PROFIBUS



### Design

#### Wire

Stranded bare copper wire 7 X 0.4  
Insulation of foamed Polyethylene (PE) with skin

∅ 1.2 mm (0.047 in)  
∅ 2.55 mm (0,100 in)

#### Core

2 wires, RD and GN twisted to a pair  
Plastic tape, overlapped  
Inner-Jacket Thermoplastic copolymer (FRNC)  
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

Thermoplastic copolymer (FRNC) BK  
Wall thickness about 0.9 mm

∅ (8.0 ±0.2) mm (0.315 ±0.008 in)

Printing: "sequential length in metres" BizLink Special Cables Germany PROFIBUS PA ES \* 18AWG  
(SHIELDED) (UL) E119100 CM 75°C \* "internal lot number"  
Textintervals about 1000 mm

### Electrical data at 20°C

Conductor resistance	≤	22	Ohm/km
Screen resistance	≤	9	Ohm/km
Insulation resistance	≥	10	MOhm*km
Capacitance (1 kHz)	≈	54	nF/km
Operating voltage (peak)	≤	100	V
UL-Rating		300	V
Test voltage (wire/wire rms 50Hz 1min)	=	1000	V
Test voltage (wire/screen rms 50Hz 1min)	=	800	V
Characteristic Impedance (31.25 KHz)		(100 ±20)	Ohm
Attenuation (39 KHz)	≤	3	dB/km
Capacitance unbalance e	≤	2	nF/km
Surface transfer impedance (20 MHz)	≤	5	mOhm/m
rel. velocity of propagation	≈	72	%

### **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 EN 50290-2-27 (HD 624.7)

Flame retardant acc. to IEC 60332-3-24 (Cat. C)

UL-File E119100 Vol.1 Sec.16 Page 5

### **Other characteristics**

RoHS compliant (Directive 2011/65/EU & 2015/863/EU RoHS 3))

Corrosivity of fire gases acc. to IEC 60754-2

Smoke-density acc. to IEC 61034

Sunlight resistant acc. to UL 1581 Sec.1200

Halogen free

Permissible temperature range : -25 °C (-13 °F) up to 80 °C (176 °F)

Min. bending radius allowed : repeated 10X  $\varnothing$  , single 5X  $\varnothing$

Weight about : 95 Kg/km (64 lb/1000ft)

### **Designation of order**

L45467-J20-C6

205113

02YSH(ST)CH 1X2X1.2/2.55-100 LI FRNC

1000 m (3281 ft) on non-returnable reel

Product has not been tested and classified according to the CPR (EU/305/2011).  
The product shall not be permanently installed in buildings in the EU.