



## Letronic Bus-Combi L2/FIP 7-wire 1x2x0,64Ø+3x1.0

### Application

Data cable with integrated power supply for the bus-logic of SIEMENS field-net Sinec L2 DP (acc. to DIN 19245 part 3 and EN 50170), for fieldbus system FIP (Factory Instrumentation Protocol) as well as for high performance data networks with 150 nominal impedance. The cable is designed for the system-defined transmission rates of 1.5 Mbit/s, 2.5 Mbit/s and 12 Mbit/s, the transmission characteristics conform to the system and guarantee a high operating security during data transmission. The cable is intended for limited flexible use and for permanent installation in dry and damp interiors. The double screening ensures a reliable transmission of data. It is suitable for installation in electromagnetically bonded areas.

Data pairs:	stranded conductor:	bare copper, 0.22 mm <sup>2</sup> (24AWG), 7 x 0.2
insulation:		PE, core diameter approx. 2.5 mm
coding:		cores red and green
stranding:		2 cores together with 2 fillers (core-filler-core-filler)
screening:		plastic laminated aluminium-foil, metal-side outwards,
braid of tinned copper		

Cores of power supply:	stranded conductor:	bare copper, 1.0 mm <sup>2</sup> (18AWG), 19 x 0.25
insulation:		PE, core diameter approx. 1.7 mm;
core colour:		green/yellow, black and blue.

Stranding: screened data pair with 3 cores twisted to power supply,  
wrapping: one layer of non woven tape.

Sheath: PVC, violet RAL 4001, Outer diameter approx. 9.8 mm

### Electrical characteristics at 20°C

Data transmissions pairs:	Loop resistance max.	0hm/km 186
Screen resistance:	max.	0hm/km 10
Insulation resistance:	min.	GOhm x km 5
Mutual capacitance at 800 Hz	nom.	nF/km 28
Impedance at 9.6 kHz		0hm 270 ± 27
at 30.25 kHz	0hm 185 ± 18.5	
at 3 to 20 kHz	0hm 150 ± 15	
Line attenuation at 9.6 kHz	max.	dB/100 m 0.3
at 38.4 kHz	max.	dB/100 m 0.4
at 4 kHz	max.	dB/100 m 2.5
at 16 MHz	max.	dB/100 m 4,9
Transfer impedance at 20 MHz	max.	mOhm/m 10
Nominal velocity of propagation	nom.	0,81c
Cores power supply Conductor resistance	max.	0hm/km 26
Insulation resistance	min.	MOhm x km 20
Cable core:		
Peak operation voltage	Ueff V	100
(not for purposes of power/high voltage current)		
Test voltage	Ueff V	1500

## Mechanical and thermal characteristics

Minimum bend radius	static mm 60
flexible mm 90	
Pulling force	min.N 100
Temperature range	static °C - 40 up to + 80
flexible °C - 5 up to + 50	
Burning load	kWh/m approx. 0,260
Flammability	flame retardant to VDE 0482, part 265-2-1 / IEC
60 332-1	

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- Further formats available on request
- All data and products subject to change