


U.I. Lapp GmbH	DATA SHEET/ Datenblatt	 LAPP GROUP
	UNITRONIC® BUS PB 7-W A 1x2x0,64	DB 2170824 valid from/ gültig ab: 01.07.2010

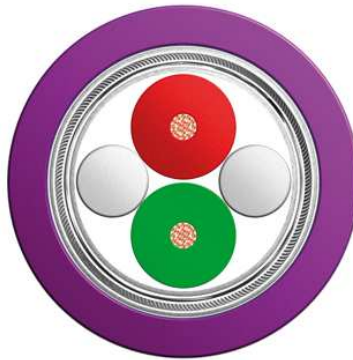
Application

Data cable for fieldbus system PROFIBUS DP and PROFIBUS FMS (Siemens SIMATIC NET) acc. to DIN 19245, part 3 and EN 50 170 cable type A, and for fieldbus system FIP (Factory Instrumentation Protocol) as well as for high performance data networks with 150 Ω nominal impedance. The cable is designed for the system defined transmission rates of 9.6 Kbit/s up to 12 Mbit/s, the transmission characteristics conform to the system and guarantee a high operating security during the data transmission

This cable is intended for fixed installation and partial flexible use in dry and damp interiors.


Approbation: UL/CSA type CMG acc. UL 444 und CSA C22.2 No. 214-02

Layout



Conductor	stranded bare copper 7 x 0,2 (24AWG)	Ø 0.63 mm
Insulation	Foam-Skin Polyethylen (O2YS) , cores in red an green	Ø 2.5 mm
Stranding	2 cores twisted in pair, 2 fillers	
Screening	1 layer plastic laminated aluminum foil, metal side outwards.(No Drain) Braid of tinned copper wire (optical coverage about 60%)	Ø 5.9 mm
Outer sheath	PVC, thickness about 1.05 mm Violet, similar RAL 4001	Ø 8mm

Product Management www.lappautomation.com	Document: 2170824EN.doc	1 / 2
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Electrical properties at 20°C

Resistance (loop)		max. Ω/km	175,2
Screen resistance		max. Ω/km	14
Insulation resistance		min. GΩ x km	5
Mutual capacitance at 800 Hz		max. nF/km	30
Characteristic Impedance at	9,6 kHz	Ω	270± 27
	38,4 kHz	Ω	185 ± 18.5
	3...20 MHz	Ω	135...165
Line attenuation	9,6 kHz	max. dB/100 m	0.3
	38,4 kHz	max. dB/100 m	0.5
	200 kHz	max. dB/100 m	0.9
	4 MHz	max. dB/100 m	2.5
	16 MHz	max. dB/100 m	4.9
Operating voltage (not for power purposes)		peak V	250
Test voltage core/core, core/screen		U _{eff.} V	1500

Mechanical and thermal properties

UL Communications Cable Type CMG (UL 444), rated 75°C
UV – resistance acc. UL 1581 Sec. 1200

Permissible temperature range	fixed installation	°C	- 40 bis + 80
Permissible temperature range	flexible installation	°C	- 10 bis + 75
Minimum bending radius	for flexible use	mm	8 x Ø
Minimum bending radius	for static use	mm	8 x Ø
Flame retardant			acc. IEC 60332-3-25 category D acc. UL 1685,FT4

General requirements

RoHS directive This cable is conform to **RoHS** directive (2002/95/EG)

Product Management www.lappautomation.com	Document: 2170824EN.doc	2 / 2
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