


U.I. Lapp GmbH	DATA SHEET/ Datenblatt	 LAPP GROUP
	UNITRONIC® BUS SAFETY FD P 3x0,75	DB 2170885 valid from/ gültig ab: 27.12.2010

Application

High flexible Fieldbus cable for SafetyBUS p® field network, also for bus systems with nominal impedance of 120 Ω. The transmission characteristics of the cable are conform to the SafetyBUS p® system and guarantee a high operating security during data transmission. The cable is intended for high flexible use in drag chains. The materials of the cable are halogen-free

Design

Conductor	Bare copper wire, acc. to VDE 0295, class 6	0.75 mm ²
Insulation	Foam-skin Polyethylene Core colours: white, brown, green	Ø 2.65 mm
Stranding	3 cores with fillers stranded	
Wrapping	1 layer fleece	
Screen	Braid of tinned copper wires, coverage: nom. 85%	Ø 7.05 mm
Mantel	Polyurethane halogen-free, flame retardant Colour: yellow, RAL 1003	Ø 7.8 mm

Electrical properties at 20°C

DC resistance (loop)		max. Ω/km	52
Insulation resistance		min. GΩ x km	5
Mutual capacitance at	800 Hz	nom. nF/km	40
Characteristic impedance	> 1 MHz	Ω	100 bis 120
Attenuation at	1,0 MHz	max. dB/100 m	1.6
	5,0 MHz	max. dB/100 m	3.4
	10,0 MHz	max. dB/100 m	5.6
	16,0 MHz	max. dB/100 m	7.5
Signal delay at	16,0 MHz	ns/m	4.5 ± 0.2
Transfer impedance up to	30 MHz	max. mΩ/m	250
Operating voltage (not for power purposes)		peak value V	250
Test voltage c/c, c/s		U _{rms} . V	1500

Mechanical and thermal characteristics

Permissible temperature range	flexible use	°C	- 30 up to + 80
	fixed installation	°C	- 40 up to + 80
Minimum bending radius	flexible use	mm	8xØ
	fixed installation	mm	8xØ
Flame retardant			acc. to IEC 60332-1-2

General requirements

RoHS directive: This cable is conform to **RoHS** directive (2002/95/EG9)
Free of LBS: All materials used and during manufacturing are free of LBS
LBS = substances destructive to lacquer-coatings

Product Management www.lappautomation.com	Document: 2170885DE.doc	1 / 1
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