

BiTLAN F/FTP cat.6A LSOH B2ca

500 MHz

Halogen-free, data transmission cable,
screened



RoHS 2011/65/EU



LVD 2014/35/EU



CPR 305/2011

internal
application

EN 60332-1

halogen-free
EN 60754low smoke emission
EN 61034

data transmission



B2ca-s1a,d1,a1

Technical data:

Temperature range:

Operating temperature: -30°C to +70°C

Min. installation temp: -10°C

Bending radius:

during operation: $\geq 6 \times O.D.$

during installation: $\geq 8 \times O.D.$

Conductor diameter: $0,57 \pm 0,015 \text{ mm}$

Insulated core diameter: $1,3 \pm 0,05 \text{ mm}$

DC loop resistance at 20°C (max): $145 \Omega/\text{km}$

Insulation resistance (min): $2 \text{ G}\Omega/\text{km}$

Resistance unbalance within a pair: $\leq 2\%$

Mutual capacitance at 1 kHz: $45 \pm 5 \text{ nF}/\text{km}$

Capacitance unbalance pair to ground

at 1 kHz (max): $1600 \text{ pF}/\text{km}$

Nominal voltage: 150V

Test voltage - 1min:

AC 50 Hz: 700V

DC: 1000V

Characteristic impedance at 100MHz:

$100 \pm 5 \Omega$

NVP value: 77%

Return loss dB (min):

$f = 4\text{--}10 \text{ MHz}$: $20 + 5 \times \log_{10}(f)$

$f = 10\text{--}20 \text{ MHz}$: 25

$f = 20\text{--}500 \text{ MHz}$: $25 - 7 \times \log_{10}(f/20)$

Coupling attenuation within the range

of 30+100 MHz (min.): 55dB

Transfer impedance at 10 MHz (max):

$50 \text{ m}\Omega/\text{m}$

Construction:

Conductors: solid round copper conductors

Insulation: special foam-skin polyolefin compound

Core identification: wh/bu, wh/or, wh/gn, wh/bn

Core arrangement: cores twisted in pairs, individually screened pairs twisted together

Screen 1: aluminium backed polyester tape on every pair

Screen 2: aluminium backed polyester tape, tinned copper drain wire

Outer sheath: special LSOH compound

Outer sheath colour: orange RAL 2003, other colours available on customer's request

Marking: BITNER BiTLAN F/FTP 4x2x23AWG cat.6A 500MHz LSOH B2ca

EN 50173-1 ISO/IEC 11801 ANSI/TIA 568-C.2 ID no. CE RoHS

www.bitner.com.pl/meters

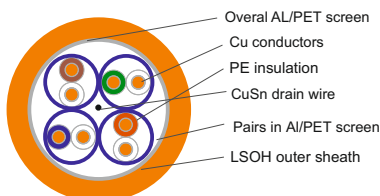
Application:

BiTLAN F/FTP cat.6A LSOH B2ca cables are applicable to computer networks with operating frequency band up to 500MHz. Suitable for transmission of data, audio and video signals, with bitrate up to 10Gb/s. Additional individual and collective Al/Pet screens with CuSn drain wire act as a protection against external electromagnetic interferences. Dedicated for fixed installations within indoor structured cabling systems as per EN 50173-1, ISO/IEC 11801, ANSI/TIA 568-C.2 standards, as well as within industrial networks exposed to external electromagnetic interferences.

Cables with flame retardant LSOH outer sheath ensuring low smoke emission acc. to EN 50268, IEC 61034-1(2) and limited emission of corrosive gases acc. to EN 50267, IEC 60754-2, should be installed in places with increased fire safety requirements.

Cables classified according to **EN 50575 (CPR)**.

Packaging:

Spool/Coil
500mSpool/drum
1000m

Cat. no.	Construction	Cu wire	O.D. [mm]	CPR classification EN 50575	Cu [kg/km]	Cable weight [kg/km]	Bandwidth [MHz]
TI0118	F/FTP cat.6A LSOH B2ca	23AWG	8,0	B2ca-s1a,d1,a1	22	64	500

Cable Factory BITNER reserves the right to modify the specifications without prior notice

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Requirements of teletransmission data:

Frequency MHz	1	4	10	16	20	31,25	62,5	100	125	155	175	200	250	300	500
Attenuation ≤ dB/100m	2,1	3,8	5,9	7,5	8,4	10,5	15,0	19,1	21,5	24,1	25,7	27,6	31,1	34,3	45,3
NEXT ≥ dB	75,3	66,3	60,3	57,2	55,8	52,9	48,4	45,3	43,8	42,4	41,7	40,8	39,3	38,1	34,8
PS NEXT ≥ dB	72,3	63,3	57,3	54,2	52,8	49,9	45,4	42,3	40,8	39,4	38,7	37,8	36,3	35,1	31,8
ELFEXT ≥ dB/100m	68,0	56,0	48,0	43,9	42,0	38,1	32,1	28,0	26,1	24,2	23,1	22,0	20,0	18,5	14,0
PS ELFEXT ≥ dB/100m	65,0	53,0	45,0	41,9	39,0	35,1	29,1	25,0	23,1	21,2	20,1	19,0	17,0	15,5	11,0
RL ≥ dB	20,0	23,0	25,0	25,0	25,0	23,6	21,5	20,1	19,4	18,8	18,4	18,0	17,3	17,3	17,3

Transmission parameters graphs - examples of measurement results

