



**Cable 600 MHz FR-LSZH sheath**  
F/FTP Category 7

Structural Cabling FIBRAIN DATA Ultra Series, fully satisfies the requirements of ca.t 7 (class F) in accordance with standard ISO/IEC 11801 2nd Ed. as well as EN 50173-1. Moreover all components of the transmission line complete ROHS 2002/95/WE Directive.

**Application:**

- Supports full and half duplex application
- Digital and analogue video transmission
- 100 BASE-T (IEEE 802.3)
- 1000 BASE-T (Gigabit Ethernet)
- 155/622 Mbps ATM
- 1.2 Gbps ATM
- 10G BASE-T(10 Gigabit Ethernet)
- Broadband CATV

**Norms:**

- FR-LSZH: PN-EN 61034, PN-EN 60332-1-2,
- PN-EN 50267-2-1, PN-EN 60332-3, IEC 60754-1
- ISO/IEC 11801, EN 50173

**Cable marking:**

Below information is printed on each meter of the cable:

- **Supplier:** FIBRAIN DATA
- **Cable Type:** F/FTP 4PR 23AWG CAT.7 600 MHz
- **Jacket type:** FR-LSZH
- **Norms:** IEC 61156–5 ISO/IEC 11801 EN 50173
- **Year of production:** XXXX
- **ID number:** XXXX
- **Length marking in meters**

Electrical and constructional parameters:		
Parameter:		
Impedance 10 to 600 MHz (Ohm)		100±5
Nominal velocity of propagation NVP (% speed of light)		74
Attenuation:		
Value for:	-30 - 100 MHz	>80 dB
	100 - 1000 MHz	80-20log(f/100)
Delay skew (max) (ns/100 m)		<40
Dielectric strength during 1 minute (V c.c.)		1000
Insulation strength (MOhm/km)		>5000
Nominal/maximum operating voltage (V)		125/200
Maximum operating current (A)		0,25
DC resistance in C.C (Ohm/k)		164
Diameter (mm)		7,5
Weight (kg/km)		60
Flame resistance		NFC 32070 C2
Temperature while installation (°C)		-10/+50
Temperature while operation (°C)		0/+50

**Construction:**

- **Conductor:** 23 AWG (0,574 mm)
- **Insulation:** polyolefine
- **Number of wires:** 4 pairs twisted together
- **Orange jacket FR-LSZH** according to IEC 60322-1
- **Shield:** aluminum foil/polyester around each pair
- **Shield:** aluminum foil/polyester around all pairs
- **Grounding:** cooper, galvanized drainage wire  $\phi$  0,4 mm



Frequency Mhz:	Attenuation Max dB/100 m:	NEXT	PS-NEXT	ACR-F	PS-ACR-F	Return Loss
				dB/100 m(min):		
1	2,0	78,0	75,0	78,0	75,0	20,0
10	5,9	78,0	75,0	74,0	71,0	25,0
16	7,4	78,0	75,0	69,9	66,9	25,0
31,25	10,4	78,0	75,0	64,1	61,1	23,6
62,5	14,9	75,5	72,5	58,1	55,1	21,5
100	19,0	72,4	69,4	54,0	51,0	20,1
155	24,0	69,5	66,5	50,2	47,2	18,8
200	27,5	67,9	64,9	48,0	45,0	18,0
300	34,2	65,2	62,2	44,5	41,5	17,3
600	50,1	60,1	57,7	38,4	35,4	17,3

X6U 100F136 FIBRAIN DATA Ultra F/FTP Cat. 7 600 MHz drum 500 m LSZH jacket orange colour