



01

Cable 900 MHz LSZH sheath
S/FTP Category 7

Structural Cabling FIBRAIN DATA Ultra Series, fully satisfies the requirements of cat. 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. Specified cables are with upgraded characteristic up to 900 Mhz.

Electrical and constructional parameters:

| Parameter: | | |
|--|----------------|-----------------|
| Impedance 10 to 900 MHz (Ohm) | | 100±5 |
| Nominal velocity of propagation NVP (% speed of light) | | 78 |
| Attenuation: | | |
| Value for: | -30 - 100 MHz | >80 dB |
| | 100 - 1000 MHz | 80-20log(f/100) |
| Delay skew (max) (ns/100 m) | | 25 |
| Dielectric strength during 1 minute (V c.c.) | | 700 |
| Insulation strength (MΩm/km) | | >5000 |
| Nominal/maximum operating voltage (V) | | 125/200 |
| Maximum operating current (A) | | 0,25 |
| DC resistance in C.C (Ωm/k) | | 164 |
| Diameter (mm) | | 7,1 |
| Weight (kg/km) | | 60 |
| Flame resistance | | NFC 32070 C2 |
| Temperature while operation (°C) | | -40/+65 |

Construction:

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

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:

- LSZH: EN 61034, EN 50267-2-1
- EN 60332-1, EN 60332-3-24
- ISO/IEC 11801, EN 50173

Cable marking:

Below information is printed on each meter of the cable:

- **Supplier:** FIBRAIN DATA
- **Cable Type:** S/FTP 4PR 23AWG CAT.7 900 MHZ
- **Jacket type:** LSZH
- **Norms:** IEC 61156-5 ISO/IEC 11801 EN 50173
- **Year of production:** XXXX
- **ID number:** XXXXXX
- **Length marking in meters**



| Frequency MHz: | Tłumienie Max dB/100m | | NEXT | | PS-NEXT | | ACR-F | | PS-ACR-F | | Return Loss | |
|----------------|-----------------------|------|-------|------|------------------------|------|-------|------|----------|------|-------------|------|
| | | | | | Typical Value Cat. 7 | | | | | | | |
| 1 | 2,0 | 2,0 | 108,0 | 78,0 | 105,0 | 75,0 | 98,0 | 78,0 | 95,0 | 75,0 | 22,0 | 20,0 |
| 4 | 3,6 | 3,7 | 101,0 | 78,0 | 98,0 | 75,0 | 93,0 | 78,0 | 90,0 | 75,0 | 25,0 | 23,0 |
| 10 | 5,6 | 5,8 | 98,0 | 78,0 | 95,0 | 75,0 | 89,0 | 74,0 | 86,0 | 71,0 | 28,0 | 25,0 |
| 20 | 7,9 | 8,3 | 93,0 | 78,0 | 90,0 | 75,0 | 83,0 | 68,0 | 80,0 | 65,0 | 28,0 | 25,0 |
| 30 | 9,7 | 10,2 | 88,0 | 78,0 | 85,0 | 75,0 | 79,0 | 64,5 | 76,0 | 61,5 | 27,0 | 23,8 |
| 100 | 18,0 | 19,0 | 83,0 | 72,4 | 80,0 | 69,4 | 69,0 | 54,0 | 66,0 | 51,0 | 24,0 | 21,1 |
| 150 | 22,4 | 23,6 | 81,0 | 69,7 | 78,0 | 66,7 | 66,0 | 50,5 | 63,0 | 47,5 | 22,0 | 18,8 |
| 200 | 26,0 | 27,5 | 81,0 | 68,0 | 78,0 | 65,0 | 63,0 | 48,0 | 60,0 | 45,0 | 21,0 | 18,0 |
| 250 | 29,4 | 31,0 | 78,0 | 66,4 | 75,0 | 63,4 | 61,0 | 46,0 | 58,0 | 43,0 | 20,0 | 17,3 |
| 300 | 32,5 | 34,2 | 78,0 | 65,2 | 75,0 | 62,2 | 55,0 | 44,5 | 52,0 | 41,5 | 19,0 | 17,3 |
| 400 | 38,0 | 40,0 | 73,0 | 63,4 | 70,0 | 60,4 | 52,0 | 41,9 | 49,0 | 38,9 | 19,0 | 17,3 |
| 500 | 43,0 | 45,2 | 73,0 | 61,9 | 70,0 | 58,9 | 50,0 | 40,0 | 47,0 | 37,0 | 19,0 | 17,3 |
| 600 | 47,6 | 50,1 | 73,0 | 60,7 | 70,0 | 57,7 | 48,0 | 38,4 | 45,0 | 35,4 | 19,0 | 17,3 |

X9U100.146 FIBRAIN DATA Ultra S/FTP Kat.7 900 MHz drum 500 m LSZH jacket orange colour

X9U100.147 drum1000 m