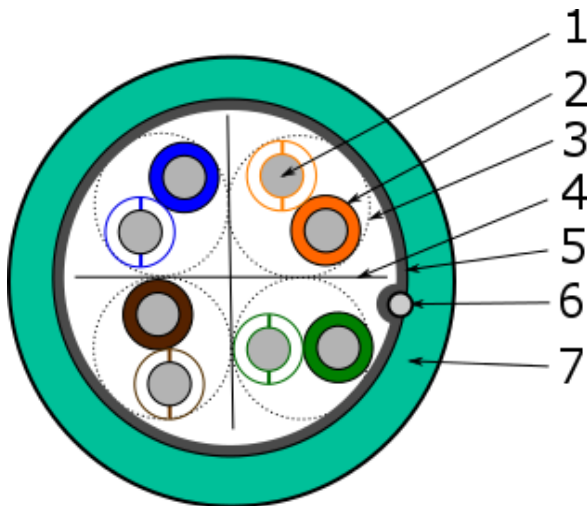


Type:	Installation cable	14.07.2017
	F/UTP Cat.6A 4PR LSZH 500 MHz	REV: 0
Ref:	XR100.116 XR100.117	G

Installation cable Cat.6A F/UTP 4PR LSZH CPR Class D_{CA} 500 MHz



CONSTRUCTION:

- 1 – Conductor**
Material: solid bare annealed copper.
Nominal diameter: 23 AWG.
- 2 – Insulation**
Material: polyolefin.
Nominal diameter: 1.1 mm.
- 3 – stranded wires**
Pair: 2, twisted insulated conductors.
Number of pairs: 4, all twisted together.
- 4 – Cross separator**
- 5 – Drain wire:** solid tinned annealed copper.
- 6 – Screen:** aluminum / polyester tape.
- 7 – Outer sheath**
Material: LSZH.
Color: turquoise (RAL 6027)



STANDARDS

ISO/IEC 11801
EN 50173
IEC 61156-5
EN 50288-2-1
IEC 60332-1-2
IEC 60754-1/2
IEC 61034-1/2

SUPPORTED APPLICATIONS

10BASE-T (IEEE 802.3)
100BASE-T (IEEE 802.3)
1000BASE-T (Gigabit Ethernet)
10GBASE-T (10Gigabit Ethernet)
100 Mbps TP-PMD (ANSI X3T9.5)
4/16 Mbps TOKEN RING (IEEE 802.5)
55/155 Mbps ATM

ORDERING

XR100.116 – Reel 500m
XR100.117 – Reel 1000m

MECHANICAL CHARACTERISTICS

Min. bending radius in operation	35	mm
Min. bending radius during installation	65	mm
Max. pulling tension	90	N
Nominal weight	52.6	kg/km
Nom. outer diameter	7.6	mm
Nom. wire diameter	23	AWG

ELECTRICAL CHARACTERISTICS @ 20°C

Max. DC Resistance:	95.0	Ω/km
Nom. Mutual Capacity @1kHz	56	nF/km
NVP:	72	%
Mean input Impedance:	100 ± 5 @ 100MHz	Ω
Propagation delay @10MHz:	max. 518	ns
Delay Skew:	max. 40	ns/100m
Segregation class	c	-
Max.operating voltage (V dc):	80	V DC
Max. DC intensity per conductor	3.3	A/mm ²

TEMPERATURE CHARACTERISTICS

Storage Temperature	-20 to +70	°C
Operating Temperature	-20 to +70	°C
During installation	-5° to +50	°C

ENVIRONMENTAL CHARACTERISTICS

Jacket material	LSZH
Flammability	Acc. to IEC 60332-1-2; IEC 60754-1/2; IEC 61034-1/2 EN50575; D_{CA}-s2,d2,a1 ; DoP 0008
Calorific value	0.717 MJ/m

Important notice

Buyer and/or user of this product has to make sure before using this product that it is suitable for the intended use. All questions of liability relating to this product are subject – in accordance with the prevailing – to the Term of Sale of the selling Fibrain subsidiary.

TRANSMISSION CHARACTERISTICS

Frequency	Attenuation	NEXT	PS-NEXT	ELFEXT ACR-F	PS-ELFEXT PSACR-F	ACR	PS-ACR	RL
MHz	dB/100m (max.)	dB (min.)	dB (min.)	dB/100m (min.)	dB/100m (min.)	dB/100m (min.)	dB/100m (min.)	dB/100m (min.)
1*	2.1	75.3	72.3	68.0	65.0	73.2	70.2	20.0
4	3.8	66.3	63.3	56.0	53.0	62.5	59.5	23.0
8	5.3	61.8	58.8	69.9	46.9	56.4	53.4	24.5
10	5.9	60.3	57.3	48.0	45.0	54.4	51.4	25.0
16	7.5	57.2	54.2	43.9	40.9	49.8	46.8	25.0
25	9.4	54.3	51.3	40.0	37.0	45.0	42.0	24.3
31.25	10.5	52.9	49.9	38.1	35.1	42.4	39.4	23.6
62.5	15.0	48.4	45.4	32.1	29.1	33.4	30.4	21.5
100	19.0	45.3	42.3	28.0	25.0	26.2	23.2	20.1
155	24.1	42.4	39.4	24.2	21.2	18.4	15.4	18.8
200	27.6	40.8	37.8	22.0	19.0	13.2	10.2	18.0
250	31.1	39.3	36.3	20.0	17.0	8.3	5.3	17.3
300	34.3	38.1	35.1	18.5	15.5	3.9	0.9	17.3
350	37.2	37.1	34.1	17.1	14.1	---	---	17.3
400	40.1	36.3	33.3	16.0	---	---	---	17.3
500	45.3	34.8	31.8	14.0	---	---	---	17.3

* For information only

CABLE MARKING

FIBRAIN DATA CABLE CAT6A F/UTP 4PR 23 AWG 500MHZ NVP 72% LSZH CPR CLASS Dca ISO/IEC11801 EN50173 ANSI/TIA/568-C.2 JJJJ XR100.11P OFRRRRRR . XXXXX M

Where

JJJJ: production year
P: 6 for 500m reel, 7 for 1000 reel
OFRRRRRR: manufacturer order
XXXXX: length

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