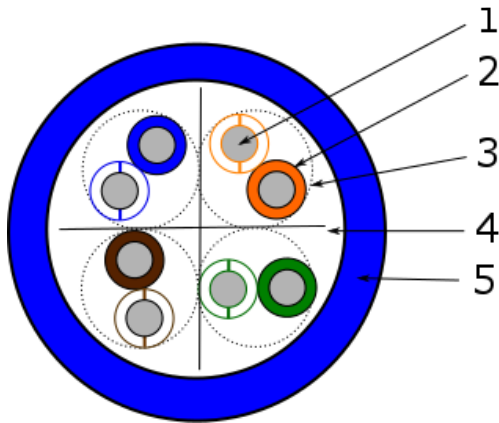


Type:	Installation cable	14.07.2017
	U/UTP Cat.6 4PR LSZH 500 MHz	REV: 0
Ref:	XQ100.105 XQ100.106 XQ100.107	G

Installation cable Cat.6 U/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: 1.0 mm.
- 3 – stranded wires**
Pair: 2, twisted insulated conductors.
Number of pairs: 4, all twisted together.
- 4 – Cross separator**
- 5 – Outer sheath**
Material: LSZH.
Color: blue (RAL 5015)

STANDARDS

ISO/IEC 11801
EN 50173
TIA 568 C.2
IEC 61156-5
EN 50288-3-1
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)
100BASE-VG-AnyLAN
100 Mbps TP-PMD (ANSI X3T9.5)
4/16 Mbps TOKEN RING (IEEE 802.5)
PoE/PoE+

ORDERING

XQ100.105 – Box 305m
XQ100.106 – Reel 500m
XQ100.107 – Reel 1000m

MECHANICAL CHARACTERISTICS

Min. bending radius in operation	25	mm
Min. bending radius during installation	45	mm
Max. pulling tension	95	N
Nominal weight	35.7	kg/km
Nom. outer diameter	5.4	mm
Nom. wire diameter	23	AWG

ELECTRICAL CHARACTERISTICS @ 20°C

Max. DC Resistance:	93.8	Ω/km
Nom. Mutual Capacity @1kHz	56	nF/km
NVP:	68	%
Mean input Impedance:	100 ± 5 @ 100MHz	Ω
Propagation delay @10MHz:	max. 518	ns
Delay Skew:	max. 40	ns/100m
Segregation class	b	-
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 0006
Calorific value	0,450 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. 1

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	U/UTP Cat.6 4PR LSZH 500 MHz	REV: 0
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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	2.0	75.3	72.3	68.0	65.0	73.2	70.2	20.0
4	3.8	66.3	63.3	58.0	55.0	62.5	59.5	23.0
8	5.2	61.8	58.8	51.9	48.9	56.5	53.5	24.5
10	5.9	60.3	57.3	50.0	47.0	54.4	51.4	25.0
16	7.4	57.2	54.2	45.9	42.9	49.9	46.9	25.0
25	9.2	54.3	51.3	42.0	39.0	45.0	42.0	24.3
31.25	10.3	52.9	49.9	40.1	37.1	42.6	39.6	23.6
62.5	14.5	48.4	45.4	34.1	31.1	33.8	30.8	21.5
100	18.4	45.3	42.3	30.0	27.0	26.9	23.9	20.1
155	22.9	42.4	39.4	26.2	23.2	19.5	16.5	18.8
200	26.1	40.8	37.8	24.0	21.0	14.7	11.7	18.0
250	29.2	39.3	36.3	22.0	19.0	10.1	7.1	17.3
300*	32.0	38.1	35.1	20.5	17.5	6.1	3.1	17.3
350*	34.7	37.1	34.1	19.1	16.1	2.5	1.0	17.3
500*	48.9	34.8	31.8	16.0	13.0	0.0	---	15.0

* For information only

CABLE MARKING

FIBRAIN DATA CABLE CAT6 U/UTP 4PR 23 AWG 500MHZ NVP 68% LSZH CPR CLASS Dca ISO/IEC11801 EN50173 ANSI/TIA/568-C.2 JJJJ XQ100.10P OFRRRRRR . XXXXX M

Where

JJJJ: production year
P: 5 for 305m box, 6 for 500m reel, 7 for 1000m reel
OFRRRRRR: manufacturer order
XXXXX: length

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