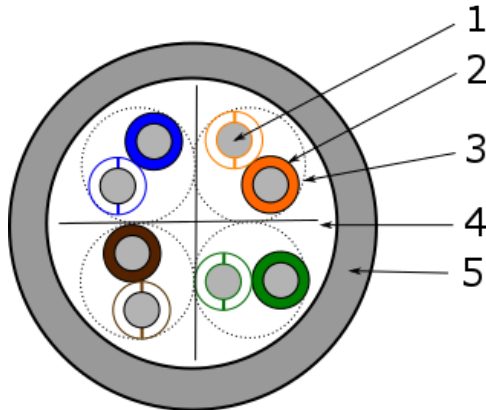


Type:	Installation cable	14.07.2017
	U/UTP Cat.6 4PR PVC 500 MHz	REV: 0
Ref:	XQ100.101 XQ100.102 XQ100.103	G

## Installation cable Cat.6 U/UTP 4PR PVC CPR Class E<sub>CA</sub> 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: PVC.  
Color: grey (RAL 7035)

### STANDARDS

ISO/IEC 11801  
EN 50173  
TIA 568 C.2  
IEC 61156-5  
EN 50288-3-1  
IEC 60332-1-2

### 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)  
55/155 Mbps ATM

### ORDERING

**XQ100.101** – Box 305m  
**XQ100.102** – Reel 500m  
**XQ100.103** – 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	36.3	kg/km
Nom. outer diameter	5.4	mm
Nom. wire diameter	24	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 <sup>2</sup>

### TEMPERATURE CHARACTERISTICS

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

### ENVIRONMENTAL CHARACTERISTICS

Jacket material	PVC	
Flammability	Acc. to IEC 60332-1-2 EN50575; E <sub>CA</sub> DWU 0005	
Calorific value	0,52	MJ/m

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Type:	Installation cable	14.07.2017
	U/UTP Cat.6 4PR PVC 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

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

Where

**JJJJ:** production year  
**P:** 1 for 305m box, 2 for 500m reel, 3 for 1000m reel  
**OFRRRRRR:** manufacturer order  
**XXXXX:** length