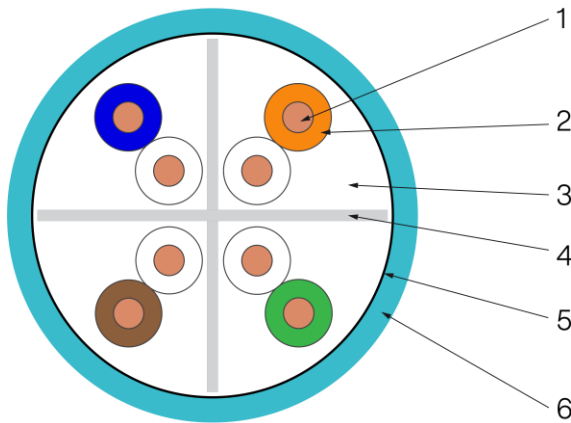


Installation cable Cat.6_A U/UTP 4PR LSFRZH CPR Class B2_{CA} 500 MHz



CONSTRUCTION	
1. Conductor	
Material	solid bare copper wire
Wire gauge	AWG 23 (0,56 mm)
2. Insulation	
Material	Polyethylene, Ø 1.18 mm nom
3. Twisting	
Pair	2, twisted insulated conductors
Number of pairs	4, all twisted together
4. Cross Separator	
5. Screen	Aluminum foil, no-continuity
6. Outer sheath	
Material	LSFRZH
Color	Turquoise (RAL 6027)

STANDARDS	SUPPORTED APPLICATIONS	ORDERING
ISO/IEC 11801	100BASE-T	XR1081048130 – Reel 500m
EN 50173	1000BASE-T	
IEC 61156-5	10GBaset-T	
EN 50288-6-1	Power over Ethernet (PoE/PoE+)	
IEC 60332-3-24		
IEC 60754-1/2		
IEC 61034-1/2		

MECHANICAL CHARACTERISTICS		
PARAMETER	VALUE	UNIT
Min bending radius without a load	4 x D	mm
Min bending radius with a load	8 x D	mm
Max. tensile force	100	N
Weight	64	kg/km
Copper content	24	kg/km
Outer diameter	7,8	mm
Wire diameter	23	AWG

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ELECTRICAL CHARACTERISTICS @ 20°C

PARAMETER	VALUE	UNIT
DC loop resistance	≤ 158	Ω /km
Resistance unbalance	≤ 2%	%
Insulation resistance @500 V	≥ 2000	MΩ *km
Capacitance @800 Hz	Nom. 43	nF/km
Capacitance unbalance (pair to ground)	≤ 1500	pF/km
Mean impedance 100 MHz	100 ± 5	Ω
Nominal velocity of propagation	Approx. 66	%
Nominal propagation delay	427	ns/100m
Nominal delay skew	12	ns/100m
Test voltage (DC, 1 min)	1000	1000 V
Segregation classification acc. EN 50174-2	c	
Min coupling attenuation	55	dB

ENVIRONMENTAL CHARACTERISTICS

PARAMETER	VALUE	UNIT
Temperature range during storage	-20 ÷ +70	°C
Temperature range during operation	-20 ÷ +70	°C
Temperature range during installation	0 ÷ +50	°C

FIRE REACTION

PARAMETER	VALUE	UNIT
Fire load	775	MJ/km
Jacket material	LSFRZH acc: IEC 60332-3-24, IEC 60754-1/2; IEC 61034-1/2	
CPR Euroclass	B2 _{CA} -s1a,d1,a1; DoP 0015P	

NOMINAL TRANSMISSION CHARACTERISTICS

FREQ.	ATT	NEXT	PS-NEXT	ACR	PS-ACR	ELFEXT	PS-ELFEXT	RL
[MHz]	[dB/100m]	[dB]	[dB]	[dB/100m]	[dB/100m]	[dB/100m]	[dB/100m]	[dB]
1	2,1	75,3	72,3	68,0	65,0	20,0	2,1	75,3
4	3,8	66,3	63,3	56,0	53,0	23,0	3,8	66,3
10	5,9	60,3	57,3	47,0	45,0	25,0	5,9	60,3
16	7,5	57,2	54,2	43,9	40,9	25,0	7,5	57,2
20	8,4	55,8	52,8	42,0	39,0	25,0	8,4	55,8
31.2	10,5	52,9	49,9	38,1	35,1	24,0	10,5	52,9
62.5	15,0	48,4	45,4	32,1	29,1	22,0	15,0	48,4
100	19,1	45,3	42,3	28,0	25,0	20,0	19,1	45,3
125	21,5	43,8	40,8	26,1	23,1	19,0	21,5	43,8
155.5	24,1	42,4	39,4	24,2	21,2	19,0	24,1	42,4
175	25,7	41,7	38,7	23,1	20,1	18,0	25,7	41,7
200	27,6	40,8	37,8	22,0	19,0	18,0	27,6	40,8
250	31,1	39,3	36,3	20,0	17,0	17,3	31,1	39,3
500	45,3	34,8	31,8	14,0	11,0	17,3	45,3	34,8

CABLE MARKING

FIBRAIN DATA CABLE CAT6A U/UTP 4PR 23 AWG 500MHZ NVP 66% LSFRZH CPR CLASS B2CA ISO/IEC11801 EN50173 ANSI/TIA/568.2-D JJJJ XR1081048130 OFRRRRRR . XXXXX M

Where
JJJJ: production year
OFRRRRRR: manufacturer order
XXXXX: length

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