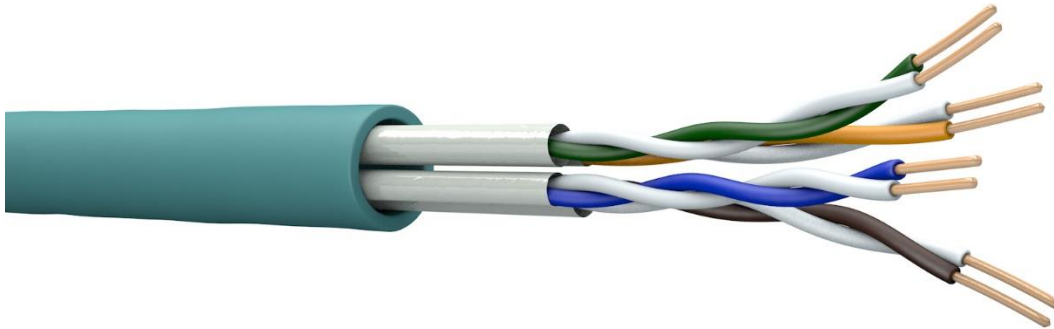


UC500 23 U/UTP Cat.6_A E2 LSHF-FR B2_{ca}



Application

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T ; 10000Base-T (10G)
IEEE 802.5 16 MB; ISDN; FDDI; ATM
Power over Ethernet (PoE) / Type 1-4

Standards

ISO/IEC 11801 2nd ed; IEC 61156-5
EN 50173; EN 50288-11-1
EN 50575
IEEE 802.3af / at / bt

Fire rating

EN 50575: Class B2_{ca} s1 d1 a1
LSHF-FR: IEC 60332-3; IEC 60332-1; IEC 60754-2; IEC 61034

Construction

Conductor	bare copper wire Ø AWG23
Insulation	Solid Polyethylene, Ø 1.35 mm nom
Twisting	2 cores to the pair
Pair wrapping	Encapsulated barrier, patented wrapping of two pairs each
Cable lay up	2x2 pairs to the core
Sheath	LSHF-FR compound

Mechanical Properties

Bending radius	without load	≥ 4 x OD
	with load	≥ 8 x OD
Temperature range	during operation	-20°C to + 70°C
	during installation	0°C to + 50°C

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Electrical Properties

at 20°C ± 5°C

Conductor loop resistance		153 Ω/km
Resistance unbalance		≤ 2%
Insulation resistance	(500 V)	≥ 2000 MΩxkm
Capacitance	at 800 Hz	Nom. 43 nF/km
Capacitance unbalance	(pair to ground)	≤ 1500 pF/km
Nominal velocity of propagation		approx. 76%
Delay skew		≤ 45 ns/100 m
Test voltage	(DC, 1 min) Core/Core and Core/Screen	1000 V
Segregation classification acc. EN 50174-2		„C“

Electrical data (nominal)

acc. to Cat.6_A (at 20°C)

F (MHZ)	Attenuation (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ACR-F (dB/100m)	PS-ACR-F (dB/100m)	Return loss (dB)
1.0	-	75.3	72.3	68.0	65.0	20.0
4.0	3.8	66.3	63.3	56.0	53.0	23.0
10.0	5.9	60.3	57.3	47.0	45.0	25.0
16.0	7.5	57.2	54.2	43.9	40.9	25.0
20.0	8.4	55.8	52.8	42.0	39.0	25.0
31.2	10.5	52.9	49.9	38.1	35.1	24.0
62.5	15.0	48.4	45.4	32.1	29.1	22.0
100.0	19.1	45.3	42.3	28.0	25.0	20.0
125.0	21.5	43.8	40.8	26.1	23.1	19.0
155.5	24.1	42.4	39.4	24.2	21.2	19.0
175.0	25.7	41.7	38.7	23.1	20.1	18.0
200.0	27.6	40.8	37.8	22.0	19.0	18.0
250.0	31.1	39.3	36.3	20.0	17.0	17.3
500.0	45.3	34.8	31.8	14.0	11.0	17.3

Product order data

Product code	Brand name	Outer diameter mm	Fire load		Weight kg/km	Copper content	Tensile force
			MJ/km	kWh/m			N
60111258	UC500 23 U/UTP Cat.6A E2 LSHF-FR B2 _{ca} 500DW	7.3	675	0,150	56	24	100

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