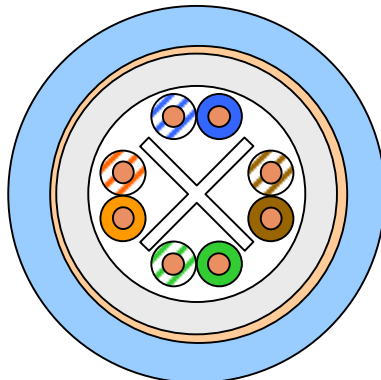




UC500 23 Cat.6a

U/UTP



Application

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 10GBase-T
IEEE 802.5 16 MB; ISDN; FDDI; ATM

Standards

EIA/TIA-568-B.2-10 Draft 5.0
ISO/IEC 11801 2nd ed.
EN 50173-1
IEC 61156-5 (46C/783/CDV)

Fire rating

LSHF: IEC 60332-1; IEC 60754-2; IEC 61034;

Construction

Conductor	Bare copper wire Ø 0.57 mm (AWG23)
Insulation	PE, Ø 1.1 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core separated with non metallic cross separator (spline)
Inner sheath	LSHF, naturally coloured Ø 7,3 mm
Binder	ZEBRA foil. Patented 10G-Foil
Outer Sheath	LSHF (LSOH) Ø 8,9 mm, blue RAL5024

Mechanical Properties

Bending radius	Without load	≥ 30 mm
	With load	≥ 60 mm
Temperature range	During operation	-20°C to + 60°C
	During installation	0°C to + 50°C
Maximum tensile load	During operation	-
	During installation	100 N

UC500 23 Cat.6a

Electrical Properties

at 20°C

Loop resistance		≤ 165 Ω/km
Resistance unbalance		≤ 2%
Insulation resistance	(500V)	≥ 5000 MΩkm
Mutal capacitance	At 800 Hz	Nom. 48 nF/km
Capacitance unbalance	Pair to ground	≤ 1500 pF/km
Characteristic impedance	1-100 MHz	(100 ± 15) Ω
	100-250 MHz	(100 ± 22) Ω
	250-500 MHz	(100 ± 25) Ω
Nominal velocity of propagation		Ca. 67% c
Propagation delay		≤ 535 ns/100m
Delay skew		≤ 45 ns/100m
Test voltage	DC, 1 min	1000 V

Transmission characteristics (nominal)

at 20°C

MHz	Attenuation dB/100m max.	RL DB Min.	NEXT dB min.	PSNEXT DB min.	ELFEXT *) dB/100m min.	PSELFEXT dB/100m min.	PSExNEXT DB min.	PSExELFEXT *) dB min.
1	2,1	20,0	75,3	72,3	68,0	65,0	67,0	67,0
4	3,8	23,0	66,3	63,3	56,0	53,0	67,0	66,2
10	5,9	25,0	60,3	57,3	48,0	45,0	67,0	58,2
16	7,5	25,0	57,2	54,2	43,9	41,9	67,0	54,1
20	8,4	25,0	55,8	52,8	42,0	39,0	67,0	52,2
31,25	10,5	23,6	52,9	49,9	38,1	35,1	67,0	48,3
62,5	15,0	21,5	48,4	45,4	32,1	29,1	67,0	42,3
100	19,1	20,1	45,3	42,3	28,0	25,0	65,6	38,2
125	21,5	19,4	43,8	40,8	26,1	23,1	61,0	36,3
155,5	24,1	18,8	42,4	39,4	24,2	21,2	59,6	34,4
175	25,7	18,4	41,7	38,7	23,1	20,1	58,9	33,3
200	27,6	18,0	40,8	37,8	22,0	19,0	58,0	32,2
250	31,1	17,3	39,3	36,3	20,0	17,0	56,5	30,2
300	34,3	16,8	38,1	35,1	18,5	15,5	55,3	28,7
500	45,3	15,2	34,8	31,8	14,0	11,0	52,0	24,2

*) No Measurement of ELFEXT and PSELFEXT is required when FEXT is above 70dB



UC500 23 Cat.6a

Technical Data

Product name	Type	Colour	Outer diameter mm	Fire load MJ/km	Weight kg/km	Delivery form	Material code		DCN no.	El. no
UC500 23 4P LSHF	U/UTP	Blue RAL5024	8,9	1075	73	D500	1001117	-00500DW	799531	1082611