

# UC500 23 U/UTP Cat.6<sub>A</sub>

## 5.1. Cable

### Specification

Item	Description
<b>Conductor</b>	bare copper wire Ø 0.565 mm (AWG23)
<b>Insulation</b>	Solid Polyethylene, Ø 1.18 mm nom
<b>Twisting</b>	2 cores to the pair
<b>Cable lay up</b>	1x4 pairs to the core
<b>Overall screen</b>	Patented 10G-Folie Zebra tape no-continuity
<b>Sheath</b>	7.70mm - LSHF RAL 5024

### Performance

Item	Description
<b>Bending radius without load</b>	4 x OD
<b>Bending radius with load</b>	8 x OD
<b>Temperature range during operation</b>	-20°C to + 60°C
<b>Temperature range during installation</b>	0°C to + 50°C

<b>DC loop resistance</b>		≤ 158 Ω/km
<b>Resistance unbalance</b>		≤ 2%
<b>Insulation resistance</b>	(500 V)	≥ 2000 MΩxkm
<b>Capacitance</b>	at 800 Hz	Nom. 43 nF/km
<b>Capacitance unbalance</b>	(pair to ground)	≤ 1500 pF/km
<b>Nominal velocity of propagation</b>		approx. 66%
<b>Propagation delay</b>		≤ 427 ns/100 m
<b>Delay skew</b>		≤ 12 ns/100 m
<b>Test voltage</b>	(DC, 1 min) Core/Core and Core/Screen	1000 V
<b>Coupling attenuation</b>		
<b>Segregation classification acc. EN 50174-2</b>		≥ 40 dB

Frequency	Attenuation	NEXT	PS-NEXT	ELFEXT	PS-ELFEXT	Return loss
MHz	dB	dB	dB	dB	dB	dB
1.0	2.1	75.0	72.0	67.0	65.0	20.0
4.0	3.8	66.0	63.0	55.0	53.0	23.0
10.0	5.9	60.0	57.0	47.0	45.0	25.0
16.0	7.5	57.0	54.0	43.0	41.0	25.0
20.0	8.4	56.0	53.0	41.0	39.0	24.0
31.2	10.5	53.0	50.0	37.0	35.0	24.0
62.5	15.0	48.0	45.0	31.0	29.0	22.0
100.0	19.1	45.0	42.0	27.0	25.0	20.0
125.0	21.5	44.0	41.0	25.0	23.0	19.0
155.5	24.1	43.0	40.0	23.0	21.0	19.0
175.0	25.7	42.0	39.0	22.0	20.0	18.0
200.0	27.6	41.0	38.0	21.0	19.0	18.0
250.0	31.1	38.3	36.0	19.0	17.0	17.3
500.0	45.3	33.8	31.8	13.8	11.8	17.3

### Technical data

Product code	Product name	Description	Weight	Items per packaging unit
			g	
<b>60027810</b>	UC500 23 U/UTP Cat.6A Z1s LSHF	J-2Y(St)H 4x2x0.565 (AWG 23)	54	1

