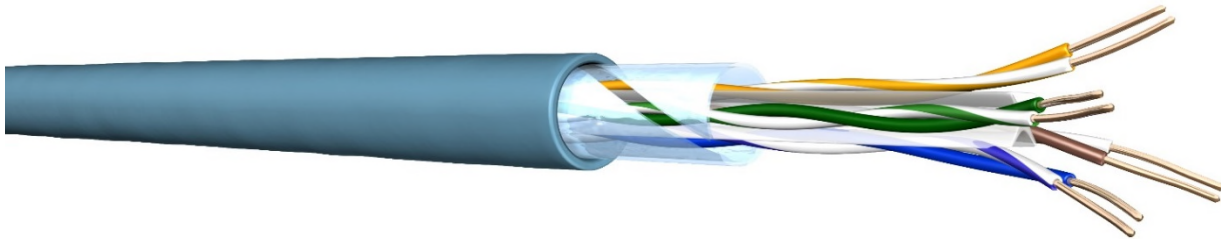


# UC500 23 U/UTP Cat.6A Z1s LSHF-FR



## 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

EIA/TIA 568-C.1  
ISO/IEC 11801 2nd ed; IEC 61156-5  
EN 50173; EN 50288-11-1  
IEEE 802.3af / at / bt

## Fire rating

EN 50399: Class Dca s2 d2 a1  
LSZH: IEC 60332-1and IEC 60332-3-25; IEC 60754-2; IEC 61034

## Construction

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

## 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

DC loop resistance		≤ 158 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
Return Loss	(100 MHz)	20.1dB
	(250 MHz)	8.47dB
Nominal velocity of propagation		approx. 66%
Propagation delay		≤ 427 ns/100 m
Delay skew		≤ 12 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.6A (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	2.1	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	45.3	34.8	31.8	14.0	11.0	17.3

### Product order data

Product code	Brand name	Euroclass	Outer diameter mm	Fire load		Weight kg/km	Copper content	Tensile force
				MJ/km	kWh/m			N
60049103	UC500 23 U/UTP Cat.6A Z1s LSHF-FR Dca	D <sub>ca</sub> s2 d2 a1	7.7	585	0,163	60	24	100

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