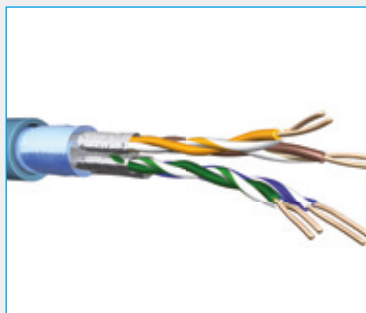


4.1. Cable

**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

EN 50173-1; EN 50288-5-1

ISO/IEC 11801; IEC 61156-5

TIA/EIA-568-B.2

Flame resistance

LSHF(LSOH):

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

LSHF-FR(LSFROH): additionally IEC

60332-3-24

UC500 AS23 Cat.6_A

F/FTP

**Construction**

Conductor	bare copper wire, Ø 0.56 mm (AWG23)
Insulation	Foamskin Polyethylene, Ø 1.35 mm
Twisting	2 cores to the pair
Pair screen	High Performance FTP: Al-laminated plastic foil, patented wrapping of two pairs each
Cable lay up	4x2 pairs to the core
Sheath	LSHF, blue RAL 5024 Duplex sheath: two cables parallel, separable

Mechanical properties

Minimum bending radius without load	≥ 35 mm
Minimum bending radius with load	≥ 70 mm
Temperature range during operation	-20°C up to + 60°C
Temperature range during installation	0°C up to + 50°C

Electrical properties at 20°C

DC loop resistance	≤ 176 Ω /km
Resistance unbalance	≤ 2%
Insulation resistance (500 V)	≥ 2000 MΩ *km
Capacitance at 800 Hz	nom. 43 nF/km
Capacitance unbalance (pair to ground)	≤ 1500 pF/km
Characteristic impedance (1-100 MHz)	(100 ± 15) Ω
Characteristic impedance (100 - 250 MHz)	(100 ± 18) Ω
Nominal velocity of propagation	approx. 79 %
Propagation delay	≤ 427 ns/100m
Delay skew	≤ 12 ns/100m
Test voltage (DC, 1 min) Core/Core	1000 V
Coupling attenuation	≥ 55 dB

Nominal transmission characteristics at 20°C

f	Attenuation	NEXT	PS-NEXT	ACR	PS-ACR	ELFEXT	PS-ELFEXT	Return loss
MHz	dB/100m	dB	dB	dB/100m	dB/100m	dB/100m	dB/100m	dB
1	1.8	100	97	98	95	105	105	-
10	5.4	100	97	95	92	97	94	30
100	17.4	100	97	83	80	77	74	30
300	30.9	89	86	58	55	67	64	24
400	38.3	87	84	48	45	64	61	23
500	44.8	85	82	40	37	61	58	22

Technical data

Product code	Product name	Outer diameter	Fire load		Weight	Copper content	Max. tensile force during installation
		Mm	MJ/km	kWh/m	kg/km	kg/km	N
60011268	UC500 AS23 Cat.6 _A F/FTP 4P LSHF	7.1	501	0.139	47	24	100
60015721	UC500 AS23 Cat.6 _A F/FTP 2x4P LSHF	7.1/14.3	1002	0.278	94	48	200