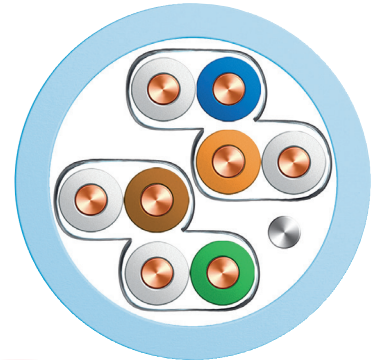




A brand of the
Prysmian
Group

UC500 Cat.6A

U/FTP AWG23/1



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
Power over Ethernet (PoE) / PoE+

Construction

Conductor	bare copper wire, Ø 0.56 mm (AWG23/1)
Insulation	Foamskin Polyethylene, Ø 1.35 mm
Twisting	2 cores to the pair
Pair screen	High Performance STP: Al-laminated plastic foil, patented wrapping of two pairs each, drain wire AWG26 tinned
Cable lay up	2x2 pairs to the core
Sheath	LSHF, blue RAL 5024

Standards

EIA/TIA-568-B.2-10 Draft 5.0
ISO/IEC 11801 2nd ed.; IEEE 802.3at
EN 50173-1
EN 50288-10 Draft
IEC 61156-5 (46C/783/CDV)

Flame resistance

LSHF(FRNC): IEC 60332-1; IEC 60754-2; IEC 61034





UC500 Cat.6A

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Mechanical properties

Temperature range	during operation	-20 to +60	°C
	during installation	0 to +50	°C
Min. bending radius	Installation	8	x Ø
	Installed	4	x Ø

Electrical Properties

Loop resistance		154	Ω/km
Resistance unbalance	≤	2	%
Insulation resistance (500 V)	≥	2000	MΩ*m
Mutual capacitance at 800 Hz	nom.	43	nF/km
Capacitance unbalance (pair to ground)	≤	1500	pF/m
Mean characteristic impedance 100 MHz		100±5	Ω
Nominal velocity of propagation	ca.	79	%
Propagation delay	nom.	427	ns/100m
Delay skew	nom.	12	ns/100m
Test voltage (DC, 1 min) Core/Core and Core/Screen		1000	V
Transfer impedance	at 1 MHz	≤	50 mΩ/m Grade 2
	at 10 MHz	≤	100 mΩ/m Grade 2
	at 30 MHz	≤	200 mΩ/m Grade 2
Coupling attenuation	≥	55	dB Type 2
Segregation classification acc. EN 50174-2		„C”	

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UC500 Cat.6A

U/FTP AWG23/1

Electrical Data acc. to Cat.6A (at 20°C)

Frequency	Attenuation	NEXT	PS-NEXT	ACR	PS-ACR	ACRF	PS-ACRF	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	-
4	3,4	100	97	97	94	105	102	27
10	5,4	100	97	95	92	97	94	30
16	6,8	100	97	93	90	93	90	30
20	7,7	100	97	92	89	91	88	30
31,2	9,6	100	97	90	87	87	84	30
62,5	13,7	100	97	86	83	81	78	30
100	17,4	100	97	83	80	77	74	30
125	19,5	95	92	75	72	75	72	26
155,5	21,9	94	91	72	69	73	70	26
175	23,3	93	90	70	67	72	69	25
200	25,0	92	89	67	64	71	68	25
250	28,1	90	87	62	59	69	66	24
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	Cable type	Brand name	Outer diameter	Fire load		Weight	Tensile force
				MJ/km	kWh/m		
			mm			kg/km	N
60011113	J-02YS(St)H 4x2x0.56	UC500 S23 Cat.6 A 4P LSHF	6,9	493	0,137	45	100