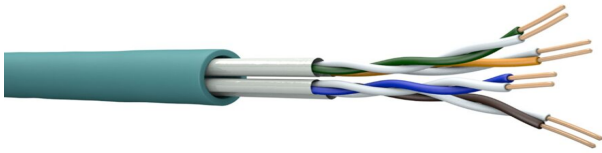


UC500 23 U/UTP Cat.6A E2 LSHF D_{ca}

Data horizontal cable Cat.6A U/UTP



CABLE FEATURES

Prysmian installation cable for indoor use UC500 23 U/UTP Cat.6A E2 LSHF D_{ca}

- Copper data cable of Cat.6A for structured cabling with a bandwidth of 500 MHz.
- the cable is unshielded with an encapsulated barrier, patented wrapping of two pairs each.
- The 4-pair simplex installation cable with 8 copper wires AWG23 is suitable for the connection of sockets, patch fields and modules, also with IDC technology, for installation in buildings, in ducts and flush mounting
- the product exceeds the requirements of EN50173-1; EN50288-11-1, ISO/IEC11801; IEC61156-5 and IEEE802.3af/at/bt.
- The jacket is made of halogen-free, flame-retardant material according to IEC60332-1; IEC60754-2; IEC61034; EN50399 and Euro fire class Dca s2 d2 a1.
- the product fulfills segregation class C according to EN50174 with a coupling attenuation of 55 dB.
- The cable is future-proof for all applications according to Class C, D, E and EA and suitable for the operation of PoE and PoE+ over a channel length of up to 100m. It is suitable for the following applications: Telephony, Ethernet, Fast Ethernet, Gigabit Ethernet and 10Gigabit Ethernet, 10BaseT, 100BaseT, 1000BaseT, 1GBase-T, 10GBaseT or up to 10,000 Mbit/s.

Latest version of this data sheet is available for download: [ProductFamily504777](#)

GENERAL INFO

Primary (Campus), Secondary (Riser), Tertiary (Horizontal); IEEE 802.3: 10Base-T, 100Base-T, 1000Base-T, 10GBase-T; IEEE802.5; ISDN, TPDDI, ATM, CATV, IP Cameras, Broadband Video, SOHO-Cabling; Power over Ethernet (PoE) / Type 1-4

CERTIFICATIONS AND DESIGN STANDARDS



ISO/IEC 11801
IEC 61156-5
EN 50173
EN 50288-11-1
IEEE 802.3 af/at/bt

Generic telecom cabling for customer premises
 Datacom cables
 Information technology - Generic cabling systems
 Datacom cables without shielding up to 500 Mhz
 Power over Ethernet (PoE) / Type 1-4 according to IEEE 802.3 af/at/bt

CABLE CONSTRUCTION

Conductor category	Class 1 = solid
Conductor material	Copper
Conductor surface	Bare
AWG size	23
Core insulation material	Polyethylene (PE)
Nominal diameter over insulation [mm]	1.4
Screen over stranding element	None
Number of stranding elements	4
Identification of stranding elements	Core colors: blue/white; orange/white; green/white; brown/white
Screen material	Not applicable
Screen over stranding	None
Material outer sheath	Halogenfree polymer
Cable shape	Round
Nominal outer diameter [mm]	7.3

APPLICATION PROPERTIES

Operation temperature (min) [°C]	-20	(max) [°C]	60
Installation temperature (min) [°C]	0	(max) [°C]	50
Bending radius (rule)	Installation: 8 x outer diameter; Installed: 4 x outer diameter		

FIRE PROPERTIES

Flame retardant	In accordance with EN/IEC 60332-1-2
Halogen free	acc. IEC/EN 60754-1/2
Low smoke	acc. IEC/EN 61034-2
Reaction-to-fire class (acc. EN 13501-6)	Dca
Smoke development class (acc. EN 13501-6)	s2
Euro class flaming droplets/particles (acc. EN 13501-6)	d2
Euro class acidity (acc. EN 13501-6)	a1
Fire load [MJ/km]	660
DOP number	1018578

ELECTRICAL PROPERTIES

Test voltage [kV]	1
Category	6A (IEC)
NVP value [%]	76
Propagation delay (max) [ns/100m]	535
Delay skew (max) [ns/100m]	20
Characteristic impedance [Ohm]	100
Nominal mutual capacitance [pF/m]	48
Loop resistance [Ohm]	154
Coupling attenuation [dB]	55
Insulation resistance [$M\Omega \cdot km$]	5,000
Transfer impedance at 10 MHz [mOhm/m]	
Segregation classification (acc. EN 50174-2)	c

CAT 6A TRANSMISSION CHARACTERISTICS (AT 20°C)

Frequency (MHz)	Attenuation (dB/100 m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100 m)	PS-ACR (dB/100 m)	ACRF (dB/100m)	PS-ACRF (dB)	ANEXT (dB)	PS-ANEXT (dB)	AFEXT (dB)	PS-AFEXT (dB)	Return Loss (dB)
1	2.1	75	72	73	70	67	64	70	67	70	67	20
4	3.8	66	63	62	59	55	52	70	67	69.2	66.2	23
10	5.9	60	57	54	51	47	44	70	67	61.2	58.2	25
16	7.5	57	54	50	47	43	40	70	67	57.1	54.1	25
20	8.4	56	53	48	45	41	38	70	67	55.2	52.2	25
31.2	10.5	53	50	42	39	37	34	70	67	51.3	48.3	24
62.5	15	48	45	33	30	31	28	68.6	65.6	45.3	42.3	22
100	19.1	45	42	26	23	27	24	65.5	62.5	41.2	38.2	20
125	21.5	44	41	22	19	25	22	64	61	39.3	36.3	19
155.5	24.1	42	39	18	15	23	20	62.6	59.6	37.4	34.4	19
175	25.7	42	39	16	13	22	19	61.9	58.9	36.3	33.3	18
200	27.6	41	38	13	10	21	18	61	58	35.2	32.2	18
250	31.1	38	35	7	4	19	16	59.5	56.5	33.2	30.2	17.3
500	45.3	34	31	-11	-14	13	10	55	52	27.2	24.2	17.3

PRODUCT ORDER DATA

Product name	Nominal outer diameter [mm]	Max. tensile strength during installation [kN]	Copper weight [kg/km]	SAP code	Packaging type	Standard packaging quantity	Gross weight
UC500 23 U/UTP Cat.6A E2 Dca	7.3	0.1	24	60107716	Drum	500	

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