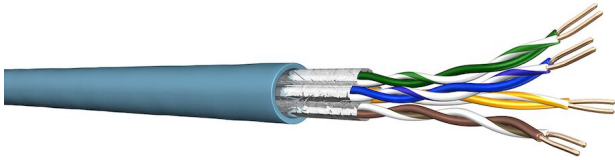


# UC500 S23 Cat.6A U/FTP 4P LSHF D<sub>ca</sub>

Data horizontal cable Cat.6A U/FTP



## CABLE FEATURES

Prysmian installation cable for indoor use UC500 S23 Cat.6A U/FTP 4P LSHF Dca

- Copper data cable of Cat.6A for structured cabling with a bandwidth of 500 MHz.
- With foil pair shielding without an overall shield, the cable is single-shielded.
- 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; EN50288-10-1, 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: [ProductFamily238835](#)

## 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**  
**EN 50173**  
**EN 50288-10-1**  
**IEC 61156-5**

Generic telecom cabling for customer premises  
 Information technology - Generic cabling systems  
 Datacom cables without shielding up to 500 Mhz  
 Datacom cables

## CABLE CONSTRUCTION

Conductor category	Class 1 = solid
Conductor material	Copper
Conductor surface	Bare
AWG size	23
Core insulation material	Foam-skin-PE
Nominal diameter over insulation [mm]	1.4
Screen over stranding element	Foil
Number of stranding elements	4
Identification of stranding elements	Core colors: blue/white; orange/white; green/white; brown/white
Screen material	Aluminium
Screen over stranding	None
Material outer sheath	Halogenfree polymer
Cable shape	Round
Nominal outer diameter [mm]	6.8

## 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]	495
DOP number	1008476

## ELECTRICAL PROPERTIES

Test voltage [kV]	1
Category	6A (IEC)
NVP value [%]	79
Propagation delay (max) [ns/100m]	427
Delay skew (max) [ns/100m]	12
Characteristic impedance [Ohm]	100
Nominal mutual capacitance [pF/m]	43
Loop resistance [Ohm]	154
Coupling attenuation [dB]	55
Insulation resistance [ $M\Omega \cdot km$ ]	5,000
Transfer impedance at 10 MHz [mOhm/m]	100
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)	Return Loss (dB)
1	1.8	100	97	98	95	105	102	-
4	3.3	100	97	97	94	105	102	27
10	5.1	100	97	95	92	97	94	30
16	6.5	100	97	94	91	93	90	30
20	7.2	100	97	93	90	91	88	30
31.2	9.1	100	97	91	88	87	84	30
62.5	13.2	100	97	87	84	81	78	30
100	17	100	97	83	80	77	74	30
125	19.2	95	92	76	73	75	72	26
155.5	21.7	93	90	71	68	73	70	26
175	23.1	93	90	70	67	72	69	25
200	25	92	89	67	64	71	68	25
250	28.3	90	87	62	59	69	66	24
300	31.5	89	86	58	55	67	64	24
400	37.2	87	84	50	47	65	62	23
500	42.5	86	83	44	41	63	60	22

## 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 S23 Cat.6A U/FTP 4P LSHF WH Dca	6.8	0.1	24	60075804	Drum	1,000	51.5
UC500 S23 Cat.6A U/FTP 4P LSHF Dca	6.8	0.1	24	60015537	Drum	1	51.6
UC500 S23 Cat.6A U/FTP 4P LSHF Dca	6.8	0.1	24	60011113	Carton box	305	14.8
UC500 S23 Cat.6A U/FTP 4P LSHF Dca	6.8	0.1	24	60013266	Drum	500	51.5
UC500 S23 Cat.6A U/FTP 4P LSHF Dca	6.8	0.1	24	60011412	Drum	500	26.2
UC500 S23 Cat.6A U/FTP 4P LSHF Dca	6.8	0.1	24	60011413	Drum	1,000	51.6

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