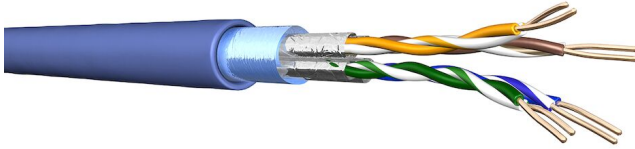


UC500 AS23 Cat.6A F/FTP 4P B_{2ca} s1a d1 a1

Data horizontal cable Cat.6A F/FTP 5F



B_{2ca}
CPR

CABLE FEATURES

Prysmian installation cable for indoor use UC500 AS23 Cat.6A F/FTP 4P B_{2ca} s1a d1 a1

- Copper data cable of Cat.6A for structured cabling with a bandwidth of 500 MHz.
- With foil pair shielding and with overall foil shielding, the cable is double-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 LSA 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; IEC60332-3-24; IEC60754-2; IEC61034, EN50399 especially for use in public buildings with high personal risk, in the Euro fire class B_{2ca} s1a d1 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: [ProductFamily238764](#)

GENERAL INFO

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) / Type 1-4

CERTIFICATIONS AND DESIGN STANDARDS



ISO/IEC 11801

IEC 61156-5

IEEE 802.3 af/at/bt

EN 50399 Class B_{2ca}-s1a-d1-a1

Generic telecom cabling for customer premises

Datcom cables

Power over Ethernet (PoE) / Type 1-4 according to IEEE 802.3 af/at/bt

Common test methods for cables under fire conditions

CABLE CONSTRUCTION

Conductor material	Copper
Conductor surface	Bare
Core insulation material	Foam-skin-PE
Drain wire	Yes
Screen over stranding element	Foil
Screen construction	Metallised foil
Screen material	Aluminium
Screen over stranding	Foil
Material outer sheath	Halogenfree polymer
Cable shape	Round

APPLICATION PROPERTIES

Max. conductor temperature [°C]	60
Operation temperature (min) [°C]	-20
Operation temperature (max) [°C]	60
Installation temperature (min) [°C]	0
Installation temperature (max) [°C]	50
Underground installation	Yes
Bending radius (rule)	Installation: 8 x outer diameter Installed: 4 x outer diameter

FIRE PROPERTIES

Flame retardant	In accordance with EN/IEC 60332-3-24
Halogen free	Yes
Low smoke	acc. IEC/EN 61034-2
Reaction-to-fire class (acc. EN 13501-6)	B2ca
Smoke development class (acc. EN 13501-6)	s1a
Euro class flaming droplets/particles (acc. EN 13501-6)	d1
Euro class acidity (acc. EN 13501-6)	a1
Fire load [MJ/km]	585
DOP number	1014737

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]	156
Coupling attenuation [dB]	55
Insulation resistance [MΩ·km]	2,000
Transfer impedance at 10 MHz [mOhm/m]	50
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 AS23 Cat.6A F/FTP B2ca sl ^a d1a1 500DW	7.5	0.12	24	60096426	Drum	500	55.24
UC500 AS23 Cat.6A F/FTP B2ca sl ^a d1a1 1000DW	7.5	0.12	24	60096427	Drum	500	55.24

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