

data cable - category 6_A - U/FTP - 500 MHz - FRNC Dca

- category 6 augmented - acc. to IEC 61156-5
- U/FTP (foil shielded twisted pairs)
- 4x 2x 0.57 mm (AWG 23/1) - 100 Ohm
- CPR class Dca - s2, d2, a1 acc. to EN50575

FRNC

Dca

Data cable for analogue and digital signal transmission in the frequency range up to 500 MHz. It is designed for primary (campus), secondary (riser) and tertiary (horizontal) wiring. Suitable for IEEE 802.3 10/100/1000/10GBase-T, FDDI, broadband, video, ISDN, ATM, PoE.

construction

conductor	solid bare copper wire, Ø 0.57 mm (AWG 23/1)
core insulation	Foam-Skin PE
core stranding	2 cores twisted to a pair
twisting	4 pairs twisted
pair shielding	AL/PET foil
overall diameter	7.3 mm

electric

conductor resistance	< 75 Ω/km
insulation resistance	> 5 GΩ x km
mutual capacitance	45 nF/km
characteristic impedance	100 Ω ± 15%
signal speed	0.78 c
coupling attenuation	> 60 dB, type II
transfer impedance	< 100 mΩ/m at 10 MHz

properties

min. bending radius	8x overall diameter
installation	4x overall diameter
operation	
temperature range	
installation	-20°C / +60°C
operation	±0°C / +50°C
flame retardancy	acc. to IEC 60332-1-2 und IEC 60332-3-24
halogen-free	acc. to IEC 60754-1/2
smoke density	acc. to IEC 61034-2

Frequency [MHz]	attenuation [dB/100m]		Next [dB]		ACR-N [dB] @ 100 m		ACR-F [dB] @ 100 m		RL [dB]	
	typical	CAT6 _A MAX	typical	CAT6 _A MIN	typical	CAT6 _A MIN	typical	CAT6 _A MIN	typical	CAT6 _A MIN
1	1.9	2.1	100	75.3	98	73.2	103	68	24	-
10	5.6	5.9	100	60.3	94	54.4	98	48	30	25.0
100	17.8	19.1	98	45.3	80	26.2	80	28	30	20.1
200	25.1	27.6	93	40.8	68	13.2	72	22	28	18.0
250	28.9	31.1	90	39.3	60	8.3	71	20	27	17.3
300	31.0	34.3	88	38.1	57	3.9	70	18.5	26	17.3
500	41.8	45.3	83	34.8	41	- 10.4	62	14	23	17.3

order code	type	outer jacket	color	weight kg/m	standard lengths m
C6AUFEH-D	U/FTP	FRNC	orange	0.05	100 / 300 / 500

technical specifications are subject to change