

**CAT7 data cable****AWG 22/1 - S/FTP - 1200 MHz - FRNC Dca**

- 4 x 2 x AWG 22/1 - 100 Ohm
- S/FTP (overall braid shield + foil shielded twisted pairs)
- category 7 augmented - acc. IEC 61156-5
- flame retardant and non corrosive (FRNC)
- CPR class Dca - s1, d2, a1 acc. to EN50575

FRNC

Dca

Data cable for analogue and digital signal transmission in the frequency range up to 1200 MHz. It is designed for secondary (riser) and tertiary (horizontal) wiring. Suitable for Ethernet standard IEEE 802.3 10/100/1000/10GBase-T, video, Multimedia, PoE.

**design**

conductor	solid bare copper wire, AWG 22/1
core insulation	Foam-Skin PE
core stranding	2 cores twisted to a pair
twisting	4 pairs twisted
pair shielding	AL/PET foil
overall shield	tinned copper braid
outer jacket	FRNC
overall diameter	8.0 mm

**electric**

conductor resistance	< 65 Ω/km
insulation resistance	5 GΩ x km
mutual capacitance	45 nF/km
characteristic impedance	100 Ω ± 5%
signal speed	0.79 c

**properties**

min. bending radius	
installation	10x overall diameter
operation	5x overall diameter
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

**maximum transmission range (device-to-device)**

100Base-T (100 Mbit Ethernet)	100 m
1000Base-T (Gbit Ethernet)	100 m
10GBase-T (10 Gbit Ethernet)	100 m

frequency [MHz]	attenuation [dB/100m]		Next [dB]		ACR-N [dB] @ 100 m		ACR-F [dB] @ 100 m		RL [dB]	
	typical	CAT7 <sub>A</sub> MAX	typical	CAT7 <sub>A</sub> MIN	typical	CAT7 <sub>A</sub> MIN	typical	CAT7 <sub>A</sub> MIN	typical	CAT7 <sub>A</sub> MIN
1	1.7	2.1	110	78	108	75.9	105	78	25	20
4	3.2	3.7	110	78	107	74.3	103	78	28	23
10	5.1	5.8	110	78	105	72.2	100	75.3	30	25
100	16.5	18.5	105	75.4	88	56.9	85	55.3	30	20.1
155	21.5	23.2	103	72.5	81	49.3	82	51.5	29	18.8
200	23.5	26.5	100	70.9	76	44.4	78	49.3	28	18
300	29.1	32.7	99	68.2	70	35.6	70	45.8	27	17.3
500	37.0	42.8	96	64.9	59	22.2	63	41.3	26	17.3
600	41.5	47.1	92	63.7	50	16.6	60	39.7	25	17.3
1000	54.9	61.9	85	60.4	30	-1.5	52	35.3	22	15.1
1200	58.8	-	85	-	26	-	42	-	21	-

  

order code	type	outer jacket	cable color	weight kg/m	standard lengths m
C7A12EH-D	S/FTP	FRNC	yellow	0.07	100 / 300 / 500

technical specifications are subject to change