

EUROLAN Copper cable

C7_A S/FTP



Ordering information

Part number	E-number	Description
19D-F7A-23WT-R500	4903255	Eurolan Cat7A 4pair S/FTP 1200 mhz Dca LSZH 500m/reel

Construction

Conductor	Bare copper wire Ø 0,58 mm (AWG23)
Insulation	Foamskin Polyethylene, Ø 1.4 mm nom
Twisting	2 cores to the pair
Pair screen	Al-laminated plastic foil
Cable lay up	4 pairs (PiMF) to the core
Screen	Copper braid, tinned
Sheath	Ø 7,8 mm LSZH
Fire load	589 MJ/km
Weight kg/km	68
Copper content	39
Tensile force N	340

Mechanical Properties

Bending radius	Installation	8 x OD
	Installed	4 x OD
Temperature range	During operation	-20°C to + 60°C
	During installation	0°C to + 50°C

DoP

Documentno	ZMEU-100016
Certification date	2017-07-24
AVCP	System 3
Notified body	3P Third Party Testing, Denmark
Declared performance	Reaction to Fire: Dca-s2,d2,a2 according to EN-50575:2014+A1:2016

✓ Verified for high-speed applications up to 500 MHz (10Gbit Ethernet)

✓ **Application:**
Primary (campus), Secondary (riser), Tertiary (horizontal)
IEEE 802.3:
10/100/1000/10000/10GBaseT
IEEE 802.5 ISDN; TPDDI; ATM; CATV;
Broadband video. Power over Ethernet (PoE)/ PoE+

✓ **Standards:**
EIA/TIA 568-C.2
ISO/IEC 11801 2nd ed; IEC 61156-5
EN 50173-1; EN 50288-9-1
IEEE 802.3at

✓ **Fire rating:**
EN 50399: Class Dca s2 d2 a2
LSZH: IEC 60332-3-24; IEC 60332-1;
IEC 60754-2; IEC 61034

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Electrical Properties (at 20°C +/- 5°C)

Loop resistance		≤ 135 Ω/km
Resistance unbalance		≤ 2%
Insulation resistance	(500 V)	≥ 5000 MΩxkm
Capacitance	At 800 Hz	Nom. 43 nF/km
Capacitance unbalance	(pair to ground)	≤ 1500 pF/km
Nominal velocity propagation (NVP)		Approx. 76%
Mean impedance 100MHz	100 MHz	100+/- 5Ω
Propagation delay	Nominal	≤ 439 ns/100 m
Delay skew	Nominal	≤ 12 ns/100 m
Test voltage	(DC, 1 min) Core/Core and Core/Screen	1000 V
Transfer impedance	At 1 MHz	≤ 5 mΩ/m
	At 10 MHz	≤ 5 mΩ/m
	At 30 MHz	≤ 10 mΩ/m
Coupling attenuation		85dB
Segregation classification acc. EN 50174-2		„D“

Electrical Data (nominal) acc. to C7A (at 20°C)

F	Attenuation	NEXT	PS-NEXT	ACR	PS-ACR	ELFEXT	PS-ELFEXT	Return loss
(MHz)	(dB/100m)	(dB)	(dB)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB)
1,0	1,8	100	97	98	95	105	103	22
4,0	3,4	100	97	97	94	93	91	25
10,0	5,4	100	97	95	92	85	83	27
16,0	6,8	100	97	93	90	81	79	27
20,0	7,7	100	97	92	89	79	77	27
31,2	9,6	100	97	90	87	75	73	26
62,5	13,7	100	97	86	83	69	67	24
100,0	17,4	100	97	83	80	65	63	22
125,0	18,6	95	92	76	73	63	61	21
155,5	19,5	95	92	75	69	61	59	21
175,0	22,1	92	89	70	67	60	58	20
200,0	25,0	92	89	67	64	59	57	20
250,0	28,1	90	87	62	59	57	55	19
300,0	30,9	89	86	58	55	55	53	19
450,0	37,4	87	84	50	47	52	50	19
600,0	44,8	85	82	40	37	49	47	19
750,0	50,5	83	80	32	29	59	56	19
900,0	55,9	82	79	26	23	58	55	19
1000,0	58,5	82	79	24	21	57	54	19
1200,0	63,4	81	78	19	16	52	49	17