

EUROLAN Copper cable

C7 S/FTP



Ordering information

Part number	E-number	Description
19D-F7-23WT-R500	4903245	Eurolan Cat7 4pair S/FTP 900 mhz Dca LSZH 500m/reel

Construction

Conductor	Bare copper wire Ø 0,56 mm (AWG23)
Insulation	Foamskin Polyethylene, Ø 1.38 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 7,5 mm LSZH
Fire load	608 MJ/km; 0,185 kWh/m
Weight kg/km	58,6
Copper content	29
Tensile force N	110

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-100014
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 16MB; ISDN; TPDDI; ATM
Power over Ethernet (PoE)/ PoE+

✓ **Standards:**
EIA/TIA 568-C.2
ISO/IEC 11801 2nd ed; IEC 61156-5
EN 50173-1; EN 50288-4-1
IEEE 802.3af

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

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Electrical Properties (at 20°C +/- 5°C)		
Loop resistance		≤ 154 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. 79%
Mean impedance 100MHz	100 MHz	100+/- 5Ω
Propagation delay	Nominal	≤ 427 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	≤ 10 mΩ/m
	At 10 MHz	≤ 8 mΩ/m
	At 30 MHz	≤ 10 mΩ/m
Coupling attenuation		80dB
Segregation classification acc. EN 50174-2		„D“

Electrical Data (nominal) acc. to C7 (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	105	-
4,0	3,4	100	97	97	94	105	102	27
10,0	5,4	100	97	95	92	97	94	30
16,0	6,8	100	97	93	90	93	90	30
20,0	7,7	100	97	92	89	91	88	30
31,2	9,6	100	97	90	87	87	84	30
62,5	13,7	100	97	86	83	81	78	30
100,0	17,4	100	97	83	80	77	74	30
125,0	19,5	95	92	75	72	75	72	26
155,5	21,9	94	91	72	69	73	70	26
175,0	23,3	93	90	70	67	72	69	25
200,0	25,0	92	89	67	64	71	68	25
250,0	28,1	90	87	62	59	69	66	24
300,0	30,9	89	86	58	55	67	64	24
450,0	38,3	87	84	48	45	64	61	23
600,0	44,8	85	82	40	37	61	58	22
750,0	52,0	83	80	31	28	59	56	21
900,0	59,4	82	79	23	20	58	55	20
1000,0	63,1	80	77	17	14	57	54	20