PRODUCT SPECIFICATION

EUROLAN Copper cable

C7 S/FTP In/out Water resistant

Ordering information		
Part number	**E-number**	**Description**
19C-F7-37BL-R500		Eurolan C7 S/FTP In/Outdoor Eca Water resistant

Construction	
Conductor	Solid bare copper wire Ø 0,55 mm (AWG23)
Insulation	Foamskin PE Ø 1,45 mm
Twisting	2 cores to the pair, WBC filled
Pair screen	Al-laminated plastic foil
Cable lay up	4 pairs t(PIMF) to the core, swelling yarn and tape
Cable core filling	Special Waterproofing/compound to prevent moisture migration*). To prevent water penetration and to ensure electrical properties even in continuous wet conditions.
Screen	Copper braid, tinned
Sheath outer Ø	8,5 mm LSZF Black, UV stabilized
Weight Kg/km	73

Mechanical Properties		
Bending radius	During operation	≥ 4 x OD
	During installation	≥ 8 x OD
Temperature range	During operation	-40°C to +60°C
	During installation	-10°C to +50°C
Maximum tensile load	During operation	-
	During installation	100N

√ **Application:**
Indoor and Outdoor installations, Filled with compound to prevent water penetration. Primary (campus), Secondary (riser), Tertiary (horizontal)
IEEE 802.3:
10/100/1000/10000/10GB BaseT
IEEE 802.5
16MB; ISDN; TPDDI; ATM Power over Ethernet (PoE)/ PoE+

√ **Verified** for high-speed applications up to 900 MHz (10Gbit Ethernet)

√ **Standards:**
EN 50173-1; EN 50288-4-1
ISO/IEC 11801; IEC 61156-5

√ **Fire rating:**
Flame retardant and Halogen free; IEC 60754-2; EN 50399;
Euro class Eca.

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Electrical Properties at 20°C ± 5°C		
Loop resistance		≤ 165 Ω/km
Restistance unbalance		≤ 2%
Insulation resistance	(500 V)	≥ 2000 MΩ* km
Mutual capacitance	At 800 Hz	Nom. 43 nF/km
Capacitance unbalance	(pair/ground)	≤ 1500 pF/km
Mean characteristic impedance	100 MHz	100 ± 5Ω
Nominal velocity propagation (NVP)		79%
Propagation delay		≤ 550 ns/100m
Delay skew		≤ 10 ns/100m
Test voltage	(DC, 1 min) core/core and core/screen	1000V
Transfer impedance	At 1 MHz	≤ 10 mΩ/m
	At 10 MHz	≤ 10 mΩ/m
	At 30 MHz	≤ 30 mΩ/m
	At 100 MHz	≤ 100 mΩ/m
Coupling attenuation		≥ 85 dB
Segregation classification	Acc. To EN50174-2	”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