

UC400 Cat.6 U/UTP HD LSHF B2_{ca} s1a d1 a1

U/UTP Installation cable



Application

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T;
IEEE 802.5 16 MB; ISDN; TPDDI; ATM
Power over Ethernet (PoE) / Type 1-4

Standards

EIA/TIA-568-C.2
ISO/IEC 11801 2nd ed; IEC 61156-5;
EN 50173-1, EN 50288-6-1
IEEE 802.3af / at / bt

Flame resistance

EN 50399: Class B2_{ca} s1a d1 a1
LSHF (FRNC): IEC 60332-1; 60754-2; IEC 61034;

Construction

Conductor	Bare copper wire: Nom. 0,54
Insulation	Polyethylene, Ø 0.95 mm nom
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core non-metallic cross separator (spline)
Sheath	LSHF: violet RAL4001

Mechanical properties

Minimum bending radius	Installation	8 x D
	Installed	4 x D
Temperature range	during operation	-20°C up to + 60°C
	during installation	0°C up to + 50°C

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Electrical properties

at 20°C

DC loop resistance	≤ 176 Ω /km
Resistance unbalance	≤ 2%
Insulation resistance (500 V)	≥ 5000 MΩ *km
Capacitance at 800 Hz	Nom. 48 nF/km
Capacitance unbalance (pair to ground)	≤ 1500 pF/km
Mean impedance 100 MHz	100 ± 5 Ω
Nominal velocity of propagation	Approx. 67 %
Propagation delay	Nominal 535 ns/100m
Delay skew	Nominal 20 ns/100m
Test voltage (DC, 1 min)	1000 V
Core/Core	

Electrical data (nominal)

acc. to Cat.6 (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)	
	max.	Nom.	min	nom.	min.	Nom.	Min.	Nom.	Min.	Nom.	min.	Nom.	min.	Nom.	min.	Nom.
1	2.1	1.9	74	78	72	75	72.0	76.1	70.0	73.1	68	82	65	80	20	22
4	3.8	3.8	65	69	63	66	61.2	65.2	59.2	62.2	56	70	53	68	23	25
10	6.0	6.0	59	63	57	60	53.0	57.0	51.0	54.0	48	62	45	60	25	27
16	7.6	7.6	56	60	54	57	48.4	52.3	46.4	49.3	44	58	41	56	25	27
20	8.5	8.5	55	59	53	56	46.5	50.0	44.5	47.0	42	56	39	54	25	27
31.2	10.7	10.7	52	56	50	53	41.3	45.0	39.3	42.0	38	52	35	50	23.6	26
62.5	15.5	15.1	47	51	45	48	31.5	36.0	29.5	33.0	32	46	29	44	21.5	24
100	19.9	19.1	44	48	42	45	24.1	28.9	22.1	25.9	28	42	25	40	20.1	23
125	22.5	21.3	43	47	41	44	20.5	25.2	18.5	22.2	26	40	23	38	19.5	22
155.5	25.4	23.8	42	45	40	42	16.6	21.3	14.6	18.3	24	38	21	36	18.8	21
175	27.1	25.3	41	44	39	41	13.9	19.1	11.9	16.1	23	37	20	35	18.4	21
200	29.2	27.0	40	44	38	41	10.8	16.5	8.8	13.5	22	36	19	34	18.0	20
250	33.0	32.0	38	42	36	39	5.0	10.0	2.0	7.0	20	34	17	32	17.3	19
300		36.1		41		38		4.8		1.8		32		30		19
400		41.7		39		36		-2.7		-5.7		30		28		18

Technical data

Product Reference Code	Productname	OD mm	Euro Class	Fire load		Weight kg/km	Copper index	Tensile force N
				MJ/km	kWh/m			
60113711	UC400 C6 U/UTP HD 4P LSHF B2 _{ca} VT 1000DW	5.6	B2 _{ca} s1a d1 a1	425	0,092	39	18.1	100
60113808	UC400 C6 U/UTP HD 4P LSHF B2 _{ca} VT 500DW	5.6		425	0,092	39	18.1	100
60113807	UC400 C6 U/UTP HD 4P LSHF B2 _{ca} VT 305DW	5.6		425	0,092	39	18.1	100