

UC300 24 Cat. 5e U/UTP LSHF Vt Cca

U/UTP AWG24/1 Installation Cable



Application

Primär (Campus), Sekundär (Riser), Tertiär (Horizontal)
 IEEE 802.3: 10 Base-T; 100 Base-T; 1000 Base-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.; IEC 61156-5
 EN 50173-1, EN 50288-3-1
 IEEE 802.3af / at / bt

Flame resistance

EN 50399: Class C_{ca} s1a d1 a1
 LSHF-FR Cca (FRNC-C): IEC60332-3-24; IEC 60332-1; 60754-2; IEC 61034 (>80%);

Construction

Conductor	bare copper wire Ø 0.5 mm (AWG24/1)
Insulation	Polyethylene, Ø 0.9 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core non metallic cross separator (spline)
Sheath	LSHF (FRNC, LSOH), violet RAL 4001

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

Electrical properties

at 20°C

DC loop resistance	≤ 190 Ω /km
Resistance unbalance	≤ 2%

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Insulation resistance (500 V)	≥ 2000 MΩ *km
Capacitance at 800 Hz	nom. 48 nF/km
Capacitance unbalance (pair to ground)	≤ 1500 pF/km
Characteristic impedance (1-100 MHz)	(100 ± 15) 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	

Nominal transmission characteristics

at 20°C

Attenuation	NEXT	PS-NEXT	ACR	PS-ACR	ELFEXT	PS-ELFEXT	Return loss
(dB/100m)	(dB)	(dB)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB)
1,9	71	68	69,1	66,1	68	65	20
3,7	62	59	58,3	55,3	56	53	23
6	56	53	50	47,0	48	45	25
7,6	53	50	45,4	42,4	44	41	25
8,5	51	48	42,5	39,5	42	39	25
10,7	49	46	38,3	35,3	38	35	24
15,7	44	41	28,3	25,3	32	29	22
19,8	41	38	21,2	18,2	28	25	20
22,3	40	37	17,7	14,7	26	23	19
24,2	38	35	13,8	10,8	24	21	
25,7	37	34	11,3	8,3	23	20	
27,5	36	33	8,5	5,5	22	19	
29,2	35	32	5,8	2,8	20	17	
32,0	34	31	2,0	-1,0	16	13	

Product order data

Product code	Designation	Product name	Outer diameter mm	Euro Class	Fire load		Weight kg/km	Copper content kg/km	Tensile force N
					MJ/km	kWh/m			
60083321	J-2YH 2x4x2x0.50	UC300 24 C5e U/UTP 4P LSHF Cca Vt 305BR	5.3	C _{ca} s1ad1a1	504	0.14	44	20.5	100

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