

## UC300 24 Cat. 5e U/UTP LSHF C<sub>ca</sub>

### 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<sub>ca</sub> s1a d1 a1  
 LSHF-FR C<sub>ca</sub> (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

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### Electrical properties

at 20°C

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

acc. Cat.5e at 20°C

f (MHz)	Attenuation (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ACRF (dB/100m)	PS- ACRF (dB/100m)	Return loss (dB)
1	1,9	71	68	69,1	66,1	68	65	20
4	3,7	62	59	58,3	55,3	56	53	23
10	6	56	53	50	47,0	48	45	25
16	7,6	53	50	45,4	42,4	44	41	25
20	8,5	51	48	42,5	39,5	42	39	25
31,2	10,7	49	46	38,3	35,3	38	35	24
62,5	15,7	44	41	28,3	25,3	32	29	22
100	19,8	41	38	21,2	18,2	28	25	20
125	22,3	40	37	17,7	14,7	26	23	19
155,5	24,2	38	35	13,8	10,8	24	21	
175	25,7	37	34	11,3	8,3	23	20	
200	27,5	36	33	8,5	5,5	22	19	
250	29,2	35	32	5,8	2,8	20	17	
300	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 <sub>ca</sub> S1ad1a1	504	0.14	44	20.5	100

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