

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 Cca 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%

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

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	CcaS1ad1a1	504	0.14	44	20.5	100

© PRYSMIAN GROUP 2012, All Rights Reserved

All sizes and values without tolerances are reference values. Specifications are for product as supplied by Prysmian Group: any modification or alteration afterwards of product may give different result.

The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of Prysmian Group. The information is believed to be correct at the time of issue. Prysmian Group reserves the right to amend this specification without prior notice. This specification is not contractually valid unless specifically authorised by Prysmian Group.