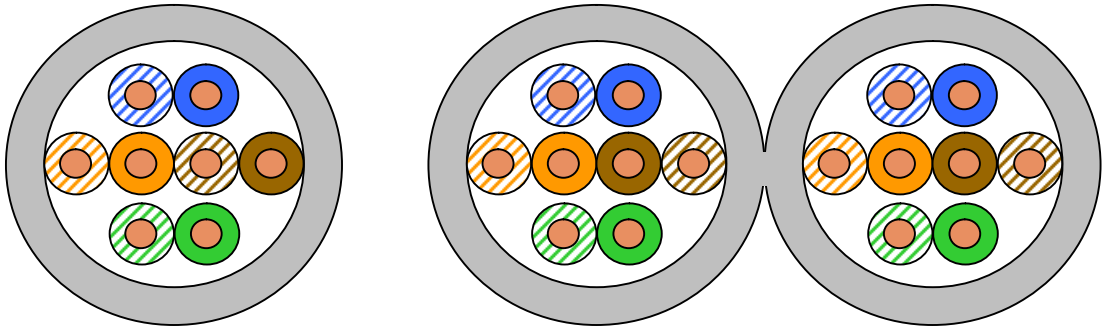
UC300 24 Cat.5e

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

Standards

EIA/TIA 568A;
ISO/IEC 11801 2nd ed.; IEC 61156-5
EN 50173; EN 50288-3-1

Flame resistance

PVC: IEC 60332-1
LSHF IEC 60332-1; IEC 60754-2; IEC 61034

Construction

Conductor	bare copper wire Ø 0.5 mm (AWG24)
Insulation	Polyethylene, Ø 0.9 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core
Sheath	PVC alt. LSHF (FRNC, LSOH), grey RAL 7035 Duplex sheath: two cables parallel, separable

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Mechanical properties

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

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) Core/Core	1000 V
Coupling attenuation	≥ 40 dB

Nominal transmission characteristics

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	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	

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Technical data

Product code	Designation	Product name	Outer diameter	Fire load		Weight	Copper content	Max tensile force during installation
			Mm	MJ/km	kWh/m	kg/km	kg/km	N
1000182	J-2YY 4x2x0.5	UC300 24 Cat.5e U/UTP 4P PVC	5.0	365	0.101	35	17.5	100N
1000008	J-2YH 4x2x0.5	UC300 24 Cat.5e U/UTP 4P LSHF		336	0.093	36		
1000249	J-2YY 2x(4x2x0.5)	UC300 24 Cat.5e U/UTP 2x4P PVC	5.0/10.0	730	0.202	70	35	100N
1000353	J-2YH 2x(4x2x0.5)	UC300 24 Cat.5e U/UTP 2x4P LSHF		672	0.186	72		