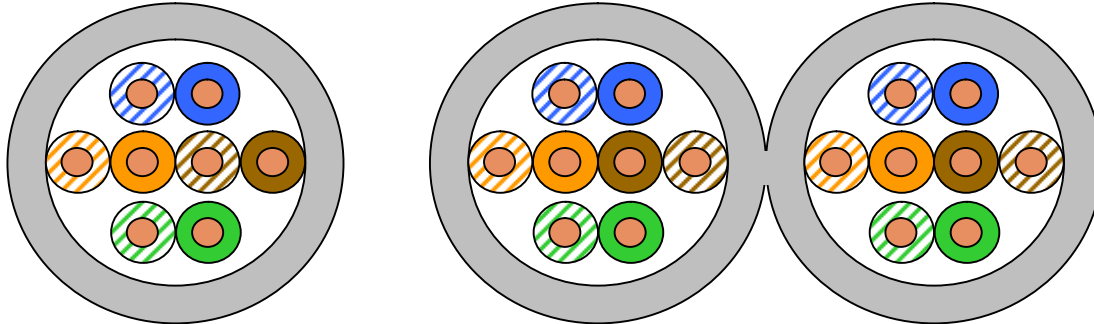


UC300 24 Cat.5e

U/UTP AWG23/1 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) / PoE+.

Standards

EIA/TIA 568A;
ISO/IEC 11801 2nd ed.; IEC 61156-5
EN 50173; EN 50288-3-1
IEEE 802.3at

Flame resistance

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

Construction

Conductor	bare copper wire Ø 0.5 mm (AWG24/1)
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

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

UC300 24 Cat.5e

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
Mean characteristic 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	
Coupling attenuation	≥ 40 dB

Nominal transmission characteristics

acc. Cat.5e at 20°C

f	Attenuation	NEXT	PS-NEXT	ACR	PS-ACR	ACRF	PS-ACRF	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	

UC300 24 Cat.5e

Product order 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		

Product Code Table

Product Description	Product Code	PG Reference Code	PG Part Number
UC300 24 C5e U/UTP 4P PVC	1000182	60011254	60011254
UC300 24 C5e U/UTP 4P PVC 100RW	1000182-00100RW	60011254	60016130
UC300 24 C5e U/UTP 4P PVC 305BR	1000182-00305BR	60011254	60011062
UC300 24 C5e U/UTP 4P PVC 500DW	1000182-00500DW	60011254	60011253
UC300 24 C5e U/UTP 4P PVC 1000DW	1000182-01000DW	60011254	60011255
UC300 24 C5e U/UTP 4P PVC 500DP	1000182-00500DP	60011254	60017476
UC300 24 C5e U/UTP 4P PVC 1000DP	1000182-01000DP	60011254	60017477
UC300 24 C5e U/UTP 4P PVC 2000DP	1000182-02000DP	60011254	60017478
UC300 24 C5e U/UTP 4P PVC 5000DW	1000182-05000DW	60011254	60016135
UC300 24 C5E U/UTP LSHF	1000008	60026275	60026275
UC300 24 C5e U/UTP LSHF 305BR	1000008-00305BR	60026275	60011512
UC300 24 C5e U/UTP LSHF 500DW	1000008-00500DW	60026275	60011514
UC300 24 C5e U/UTP LSHF 500DP	1000008-00500DP	60026275	60017464
UC300 24 C5e U/UTP LSHF 1000DW	1000008-01000DW	60026275	60011513
UC300 24 C5e U/UTP LSHF 1000DP	1000008-01000DP	60011515	60017465
UC300 24 C5e U/UTP LSHF BU 305BR	1029767-00305BR	60011703	60011703
UC300 24 C5e U/UTP 2x4P PVC	1000249	60017480	60017480
UC300 24 C5e U/UTP 2x4P PVC 500DP	1000249-00500DP	60017480	60017481
UC300 24 C5e U/UTP 2x4P PVC 500DW	1000249-00500DW	60017480	60017482
UC300 24 C5e U/UTP 2x4P LSHF 500DP	1000353-00500DP	60017487	60017487

© PRYSMIAN GROUP 2008, 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.