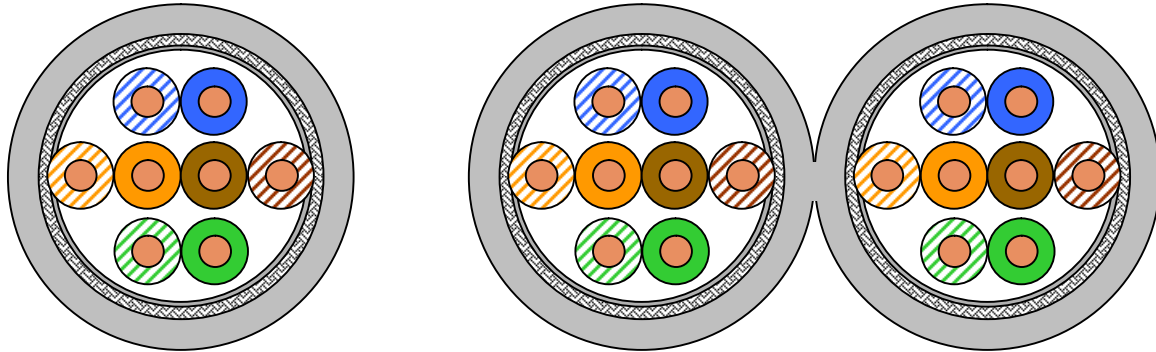




UC300 HS24 Cat.5e

SF/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

EN 50173-1; EN 50288-2-1
ISO/IEC 11801; IEC 61156-5
TIA/EIA-568-B.2

Flame resistance

PVC: IEC 60332-1
LSHF(LSOH): IEC 60332-1; IEC 60754-2; IEC 61034
LSHF-FR(LSFROH): additionally IEC 60332-3-24

Construction

Conductor	bare copper wire, Ø 0.51 mm (AWG24)
Insulation	PE, Ø 1.1 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core
Screen	Al-laminated plastic foil and Copper braid, tinned
Sheath	PVC alt. LSHF, grey RAL 7035 Duplex sheath: two cables parallel, separable



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Mechanical properties

Bending radius	without load	≥ 25 mm
	with load	≥ 50 mm
Temperature range	during operation	-20°C to + 60°C
	during installation	0°C to + 50°C

Electrical properties

at 20°C ± 5°C

Loop resistance		≤ 190 Ω/km
Resistance unbalance		≤ 2%
Insulation resistance	(500 V)	≥ 2000 MΩxkm
Mutual capacitance	at 800 Hz	Nom. 48 nF/km
Capacitance unbalance	(pair/ground)	≤ 1500 pF/km
Characteristic impedance	(1-100 MHz)	(100 ± 15) Ω
Nominal velocity of propagation		ca. 67%
Propagation delay		≤ 535 ns/100 m
Delay skew		≤ 20 ns/100 m
Test voltage	(DC, 1 min) core/core and core/screen	1000 V
Transfer impedance	at 1 MHz	≤ 20 mΩ /m
	at 10 MHz	≤ 20 mΩ /m
	at 30 MHz	≤ 30 mΩ /m
	at 100MHz	≤ 60 mΩ /m
Coupling attenuation		≥ 75 dB

Electrical data (nominal)

acc. to Cat.5e (at 20°C)

F (MHZ)	Attenuation (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	Return loss (dB)
1.0	1.9	71	68	69.1	66.1	68	65	20
4.0	3.7	62	59	58.3	55.3	56	53	23
10.0	6.0	56	53	50.0	47.0	48	45	25
16.0	7.6	53	50	45.4	42.4	44	41	25
20.0	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
100.0	19.8	41	38	21.2	18.2	28	25	20
125.0	22.3	40	37	17.7	14.7	26	23	19
155.5	24.2	38	35	13.8	10.8	24	21	
175.0	25.7	37	34	11.3	8.3	23	20	
200.0	27.5	36	33	8.5	5.5	22	19	
250.0	29.2	35	32	5.8	2.8	20	17	
300.0	32.0	34	31	2.0	-1.0	16	13	



UC300 HS24 Cat.5e

Technical data

Product code	Cable type	Brand name	Outer diameter	Fire load		Weight	Copper content	Tensile force
				MJ/km	kWh/m			
			mm			kg/km		N
1000227	J-2Y(St)CY 4x2x0.51	UC300 HS24 Cat.5e SF/UTP 4P	6.4	474	0.132	46	27	120
1000536	J-2Y(St)CH 4x2x0.51	UC300 HS24 Cat.5e SF/UTP 4P LSHF		433	0.120	47		
1000546	J-2Y(St)CH 4x2x0.51	UC300 HS24 Cat.5e SF/UTP 4P LSHF-FR						
1000245	J-2Y(St)CY 2x(4x2x0.51)	UC300 HS24 Cat.5e SF/UTP 2x4P	6.5/13.0	948	0.264	92	54	240
1000493	J-2Y(St)CH 2x(4x2x0.51)	UC300 HS24 Cat.5e SF/UTP 2x4P LSHF		866	0.240	94		
1000499	J-2Y(St)CH 2x(4x2x0.51)	UC300 HS24 Cat.5e SF/UTP 2x4P LSHF-FR						