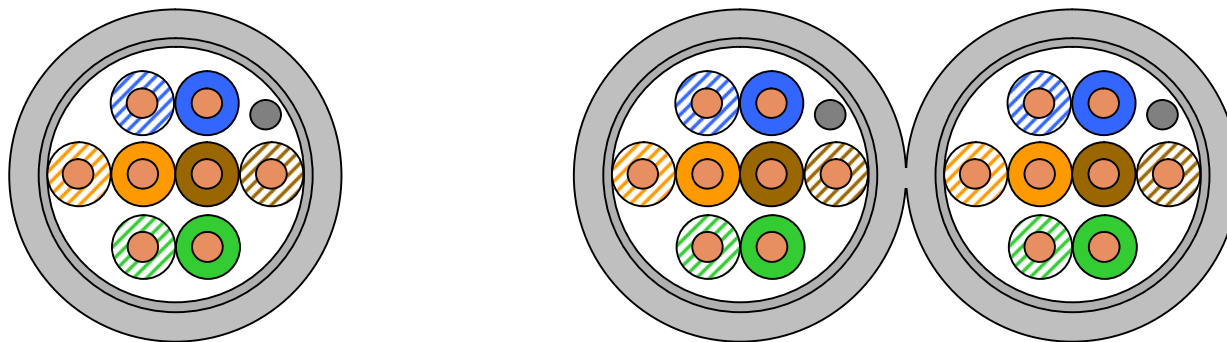




UC300 S24 Cat.5e

F/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, Drain wire AWG26 tinned
Sheath	PVC alt. LSHF(LSOH), grey RAL 7035 Duplex sheath: two cables parallel, separable



UC300 S24 Cat.5e

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	≤ 50 mΩ /m
	at 10 MHz	≤ 100 mΩ /m
	at 30 MHz	≤ 200 mΩ /m
Coupling attenuation		≥ 55 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 S24 Cat.5e

Technical data

Product code	Cable type	Brand name	Outer diameter	Fire load		Weight	Copper content	Tensile force
			mm	MJ/km	kWh/m			
1000195	J-2Y(St)Y 4x2x0.51	UC300 S24 Cat.5e F/UTP 4P	5.9	430	0.119	36	19.8	80
1000056	J-2Y(St)H 4x2x0.51	UC300 S24 Cat.5e F/UTP 4P LSHF		396	0.110	37		
1000491	J-2Y(St)H 4x2x0.51	UC300 S24 Cat.5e F/UTP 4P LSHF-FR		860	0.238	72		
1000251	J-2Y(St)Y 2x(4x2x0.51)	UC300 S24 Cat.5e F/UTP 2x4P	5.9/11.8	792	0.220	74	39.6	160
1000473	J-2Y(St)H 2x(4x2x0.51)	UC300 S24 Cat.5e F/UTP 2x4P LSHF						
1000477	J-2Y(St)H 2x(4x2x0.51)	UC300 S24 Cat.5e F F/UTP 2x4P LSHF-FR						