



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

Flame resistance

LSHF(LSOH): IEC 60332-1; IEC 60754-2; IEC 61034

Construction

Conductor	bare copper wire, \varnothing 0.5 mm (AWG24)
Insulation	Polyethylene, \varnothing 0.9 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core
Sheath	LSHF (LSOH), grey RAL 7035

Mechanical properties

Minimum bending radius

Temperature range

Installation	8 x D
Installed	4 x D
during operation	-20°C upto + 60°C
during installation	0°C upto + 50°C

KELine[®]
Cable**U/UTP 4x2x0.5(AWG24) CAT.5E LSOH**
100Ω Data Cable ISO/IEC 11801 CAT.5e**U/UTP**

Electrical properties

at 20°C

DC loop resistance	≤ 190Ω/km
Resistance unbalance	≤ 2%
Insulation resistance (500 V)	≥ 2000 MΩxkm
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/100 m
Delay skew	Nominal ≤ 20 ns/100 m
Test voltage (DC, 1 min) Core/Core	1000 V

Nominal transmission characteristics

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	

Technical data

Product code	Designation	Brand name	Colour	Outer diameter mm	Fire load		Weight netto kg/km	Copper content	Tensile force
					MJ/km	kWh/m			
KE300U24LSOH	U/UTP 4x2x0.5AWG24	KELine	grey	5.0	336	0.093	36	17.5	100N

Printing: KELine Giga UTP 4x2xAWG24 Cat.5E LSOH – 3P Verified to ISO/IEC 11801, EN 50173-1:2007, ANSI/TIA 568-C.2 – KE300U24LSOH + length marking in m