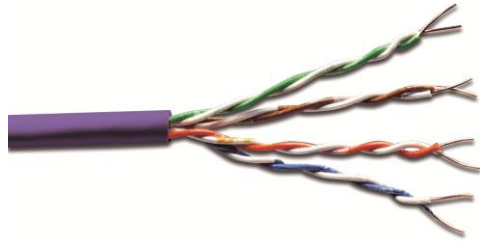


## DIGITUS® CAT 6, Class E, U-UTP Twisted Pair Installation Cable



### Abstract

DIGITUS® CAT 6, Class E, U-UTP Twisted Pair Installation Cable, LSZH-1, simplex

### Application areas:

Primary (Campus), Secondary (Riser), Tertiary (Horizontally)  
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T  
IEEE 802.5: 16 MB; ISDN; ATM

### Norms:

ANSI/TIA-568-C  
ISO/IEC 11801 2<sup>nd</sup> Ed.  
EN 50173; EN 50288-5-1

### FRNC (Flame retardancy):

IEC 60332-1; IEC 60754; IEC 61034

### Physical Description:

Basic conductor	Solid AWG 23/1; bare annealed copper, diameter 0.55 mm nominal
Insulation	HD-PE (High Density Polyethylene)
Total number of insulated conductors	8, twisted in 4 pairs
Color code	Blue-white, orange-white, green-white, brown-white
Individual pair shielding	None
Overall shielding	None
Outer jacket	halogen free (FRNC-B/LSZH-1)
Outer jacketed diameter	0.6 mm nominal
Color	Purple (RAL 4005)

### Mechanical Properties:

Tensile loading	150 N max.
Dynamic bending radius	8x AD mm min.
Static bending radius	4x AD mm min.
Shipping- and storage temperature range	-20 °C up to +60 °C
Operating temperature range	-20 °C up to +75 °C
Installation temperature range	0 °C up to +50 °C
Overall diameter	6.2 mm nominal
Flame retardancy	IEC 60332-1
Halogen free & smoke-proof	IEC 60754-2 & IEC 61034
Fire load	320 Mj/km

**Electrical Properties:**

DC loop resistance	< 148.6 Ω/km
Resistance unbalance	< 2%
Insulation resistance	2000MΩ *km
Capacitance	nominal 48 nF/km @ 800 Hz
Capacitance unbalance to ground	1500 pF/km
Characteristic impedance (1-100 MHz)	(100±15) Ω
Nominal velocity of propagation	0.67%
Propagation delay	nominal < 535 ns/100 m
Delay skew	nominal ≤ 45 ns/100 m
Test voltage (DC, 1 min) core to core	1000 V
Voltage resistance	72 Vdc max.
Coupling attenuation	> 40 dB
NVP	69%

**Transmission Properties:**

FREQ.	RL	ATT	NEXT	DELAY	PSNEXT	ELFEXT	PSELFEXT
MHz	> dB	< dB	> dB	< ns	> dB	> dB	> dB
10	25.0	5.9	59.3	545.4	57.3	48.0	45.0
20	25.0	8.4	54.8	542.1	52.8	42.0	39.0
62.5	21.5	15.0	57.4	538.6	45.4	32.1	29.1
100	20.1	19.1	44.3	537.6	42.3	28.0	25.0
200	18.0	27.6	39.3	536.5	37.8	22.0	19.0
250	17.3	32.85	38.3	536.3	36.3	20.0	17.0

**Product Number Information**

DK-1613-VH-1	DIGITUS <sup>®</sup> CAT 6 U-UTP installation cable, length 100 m, paper box, AWG23/1, LSZH-1, simplex, color purple
DK-1613-VH-305	DIGITUS <sup>®</sup> CAT 6 U-UTP installation cable, length 305 m, paper box, AWG23/1, LSZH-1, simplex, color purple
DK-1613-VH-5	DIGITUS <sup>®</sup> CAT 6 U-UTP installation cable, length 500 m, drum, AWG23/1, LSZH-1, simplex, color purple (available on request)