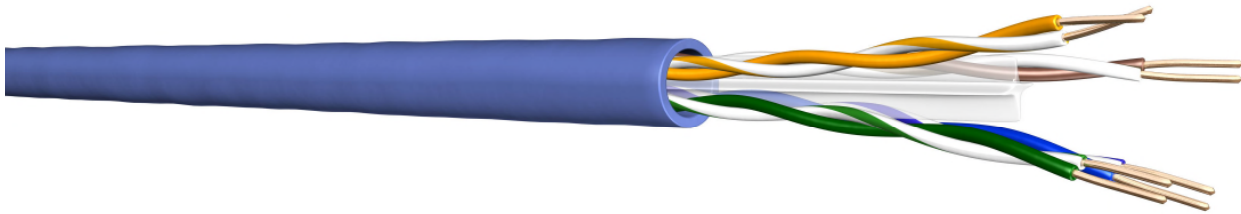


# UC400 Cat.6 U/UTP HD LSHF D<sub>ca</sub>

## U/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  
Power over Ethernet (PoE) / Type 1-4

## Standards

EIA/TIA-568-C.2  
ISO/IEC 11801 2nd ed; IEC 61156-5;  
EN 50173-1, EN 50288-6-1  
IEEE 802.3af / at / bt

## Flame resistance

EN 50399: Class D<sub>ca</sub>s2d2a1; Class E<sub>ca</sub>  
LSHF D<sub>ca</sub> (FRNC): IEC 60332-1; 60754-2; IEC 61034;

## Construction

Conductor	Bare copper wire: Nom. 0,54
Insulation	Polyethylene, Ø 0.95 mm nom
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core non-metallic cross separator (spline)
Sheath	LSHF-FR blue RAL 5012

## 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

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### Electrical properties

at 20°C

DC loop resistance	≤ 176 Ω /km
Resistance unbalance	≤ 2%
Insulation resistance (500 V)	≥ 5000 MΩ *km
Capacitance at 800 Hz	Nom. 48 nF/km
Capacitance unbalance (pair to ground)	≤ 1500 pF/km
Mean 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	

### Electrical data (nominal)

acc. to Cat.6 (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)	
	max.	Nom.	min	nom.	min.	Nom.	Min.	Nom.	Min.	Nom.	min.	Nom.	min.	Nom.	min.	Nom.
1	2.1	1.9	74	78	72	75	72.0	76.1	70.0	73.1	68	82	65	80	20	22
4	3.8	3.8	65	69	63	66	61.2	65.2	59.2	62.2	56	70	53	68	23	25
10	6.0	6.0	59	63	57	60	53.0	57.0	51.0	54.0	48	62	45	60	25	27
16	7.6	7.6	56	60	54	57	48.4	52.3	46.4	49.3	44	58	41	56	25	27
20	8.5	8.5	55	59	53	56	46.5	50.0	44.5	47.0	42	56	39	54	25	27
31.2	10.7	10.7	52	56	50	53	41.3	45.0	39.3	42.0	38	52	35	50	23.6	26
62.5	15.5	15.1	47	51	45	48	31.5	36.0	29.5	33.0	32	46	29	44	21.5	24
100	19.9	19.1	44	48	42	45	24.1	28.9	22.1	25.9	28	42	25	40	20.1	23
125	22.5	21.3	43	47	41	44	20.5	25.2	18.5	22.2	26	40	23	38	19.5	22
155.5	25.4	23.8	42	45	40	42	16.6	21.3	14.6	18.3	24	38	21	36	18.8	21
175	27.1	25.3	41	44	39	41	13.9	19.1	11.9	16.1	23	37	20	35	18.4	21
200	29.2	27.0	40	44	38	41	10.8	16.5	8.8	13.5	22	36	19	34	18.0	20
250	33.0	32.0	38	42	36	39	5.0	10.0	2.0	7.0	20	34	17	32	17.3	19
300		36.1		41		38		4.8		1.8		32		30		19
400		41.7		39		36		-2.7		-5.7		30		28		18

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### Technical data

Product Reference Code	Productname	Outer diameter mm	Euro Class	Fire load		Weight kg/km	Copper index	Tensile force N
				MJ/km	kWh/m			
60052641	UC400 C6 U/UTP HD LSHF Dca BU	5.4	D <sub>cas2d2a1</sub>	325	0,089	37	18.1	100
60052665	UC400 C6 U/UTP HD LSHF Dca BU 305BR	5.4	D <sub>cas2d2a1</sub>	325	0,089	37	18.1	100
60052646	UC400 C6 U/UTP HD LSHF Dca BU 500DW	5.4	D <sub>cas2d2a1</sub>	325	0,089	37	18.1	100