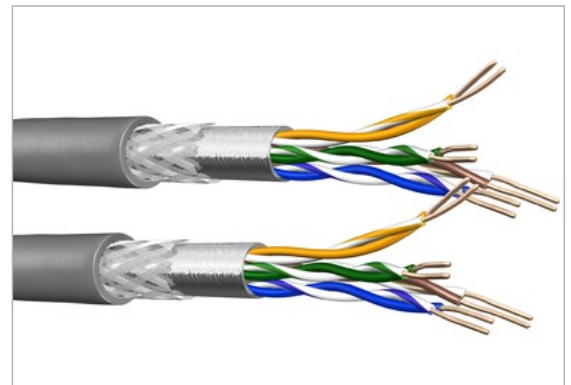


# Draka - UC300 HS24 Cat.5e SF/UTP 2x4P (LSHF)

## Description

Symmetrical 100 Ω data transmission cables from Universal Cable line UC.. acc. to ISO/IEC 11801, EN 50173 and EIA/TIA 568A are used for high speed data transmission, mainly in secondary and horizontal cabling in standardised, manufacturer-independent local networks (LAN), ranging from Token Ring, Ethernet, ISDN, TPDDI, Fast-Ethernet 100Base-TX to ATM and Gigabit-Ethernet 1000Base-T and CATV. All shielded cables of line UC400 and up are ready for 10 Gigabit Ethernet (IEEE802.3: 10GBase-T).



### 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) / PoE+

### Standards

EN 50173-1; EN 50288-2-1  
 ISO/IEC 11801; IEC 61156-5  
 TIA/EIA-568-C.2  
 IEEE 802.3at

### Flame resistance

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

## Technical Data

### Construction

Conductor	bare copper wire, Ø 0.51 mm (AWG24/1)	
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	LSHF (FRNC, LSOH), grey RAL 7035 Duplex sheath: two cables parallel, separable	

### Mechanical properties

Minimum bending radius	Without load	≥ 25 mm
	With load	≥ 50 mm
Temperature range	During operation	-20°C up to +60°C
	During installation	0°C up to +50°C

## Draka - UC300 HS24 Cat.5e SF/UTP 2x4P (LSHF)

### Electrical properties at 20°C

Loop resistance		≤ 190 Ω/km
Resistance unbalance		≤ 2%
Insulation resistance	(500 V)	≥ 2000 MΩ*km
Mutual capacitance	at 800 Hz	Nom. 48 nF/km
Capacitance unbalance	(pair/ground)	≤ 1500 pF/km
Mean characteristic impedance	100 MHz	100 ± 5 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	12 mΩ /m
	at 10 MHz	10 mΩ /m
	at 30 MHz	30 mΩ /m
Coupling attenuation		80 dB
Segregation classification acc. EN 50174-2		"d"

### Electrical Data (nominal) acc. to Cat.7 (at 20°C)

F	Attenuation	NEXT	PS-NEXT	ACR	PS-ACR	ELFEXT	PS-ELFEXT	Return loss
MHZ	dB/100m	dB	dB	dB/100m	dB/100m	dB/100m	dB/100m	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	42.5	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	

## Draka - UC300 HS24 Cat.5e SF/UTP 2x4P (LSHF)

Outer diameter	6.5/13.0 mm
Fire load	866 MJ/km
	0.240 kWh/m
Weight	94 kg/km
Copper content	54
Tensile force	240 N

Art.-No.	Description
UC300-HS24-2x4P	Draka - UC300 HS24 Cat.5e SF/UTP 2x4P (LSHF)