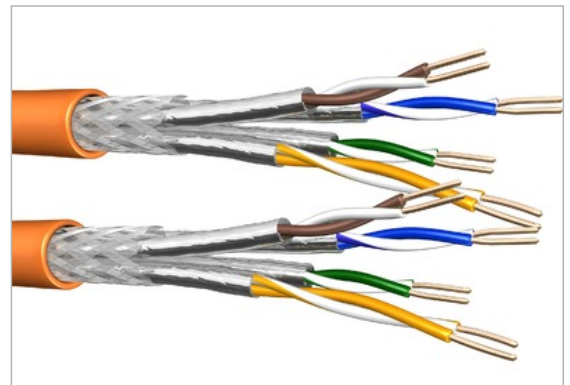


Description

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; 10GBase-T
 IEEE 802.5 16 MB; ISDN; TPDDI; ATM
 Power over Ethernet (PoE) / PoE+

Standards

EN 50173-1; EN 50288-4-1
 ISO/IEC 11801; IEC 61156-5
 IEEE 802.3af

Flame resistance

LSHF (LSOH): IEC 60332-1; IEC 60754-2; IEC 61034; Class Class B_{2ca}s1d1a1
 LSHF-FR (LSFROH): IEC 60332-1; IEC 60332-3-24; IEC 60754-2; IEC 61034; EN 50399; Class Class B_{2ca}s1d1a1

Technical Data

Construction

Conductor	bare copper wire, \varnothing 0.56 mm (AWG 23/1)	
Insulation	foamskin PE, \varnothing 1.38 mm	
Twisting	2 cores to the pair	
Pair screen	Al-laminated plastic foil	
Cable lay up	4 pairs (PiMF) to the core	
Screen	copper braid, tinned	
Sheath	LSHF orange RAL 2003	

Mechanical properties

Minimum bending radius	Without load	\geq 30 mm
	With load	\geq 60 mm
Temperature range	During operation	-20°C up to +60°C
	During installation	0°C up to +50°C

Draka - UC900 SS23 Cat.7 S/FTP 2x4P LSHF-(FR)

Electrical properties at 20°C

Loop resistance		≤ 154 Ω/km
Resistance unbalance		≤ 2%
Insulation resistance	(500 V)	≥ 5000 MΩ*km
Mutual capacitance	at 800 Hz	Nom. 43 nF/km
Capacitance unbalance	(pair/ground)	≤ 1500 pF/km
Characteristic impedance	100 MHz	(100 ± 5) Ω
Nominal velocity of propagation		ca. 79%
Propagation delay		≤ 425 ns/100m
Delay skew		≤ 9 ns/100m
Test voltage	(DC, 1 min) core/core and core/screen	1000 V
Transfer impedance	at 1 MHz	5 mΩ/m
	at 10 MHz	5 mΩ/m
	at 30 MHz	10 mΩ/m
Coupling attenuation		85 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/10m	dB	dB	dB/100m	dB/100m	dB/100m	dB/100m	dB
1.0	1.8	104	101	102	99	105	105	-
4.0	3.4	100	97	97	94	105	102	27
10.0	5.4	100	97	95	92	97	94	30
16.0	6.8	100	97	93	90	93	90	30
20.0	7.7	100	97	92	89	91	88	30
31.2	9.6	100	97	90	87	87	84	30
62.5	13.7	100	97	86	83	81	78	30
100.0	17.4	100	97	83	80	77	74	30
125.0	19.5	95	92	75	72	75	72	26
155.5	21.9	94	91	72	69	73	70	26
175.0	23.3	93	90	70	67	72	69	25
200.0	25.0	92	89	67	64	71	68	25
250.0	28.1	90	87	62	59	69	66	24
300.0	30.9	89	86	58	55	67	64	24

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450.0	38,3	87	84	48	45	64	61	23
600.0	44,8	85	82	40	37	61	58	22
750.0	52,0	83	80	31	28	59	56	21
900.0	59,4	82	79	23	20	59	55	20
1000.0	63,1	80	77	17	14	57	54	20

Outerdiameter	7.5/15.0 mm
Fire load	1170 MJ/km
	0.326 kWh/m
Weight	150 kg/km
Copper content	76
Tensile force	300 N

Art.-No.	Description
UC900-SS23-2x4P	Draka - UC900 SS23 Cat.7 S/FTP 2x4P LSHF-(FR)