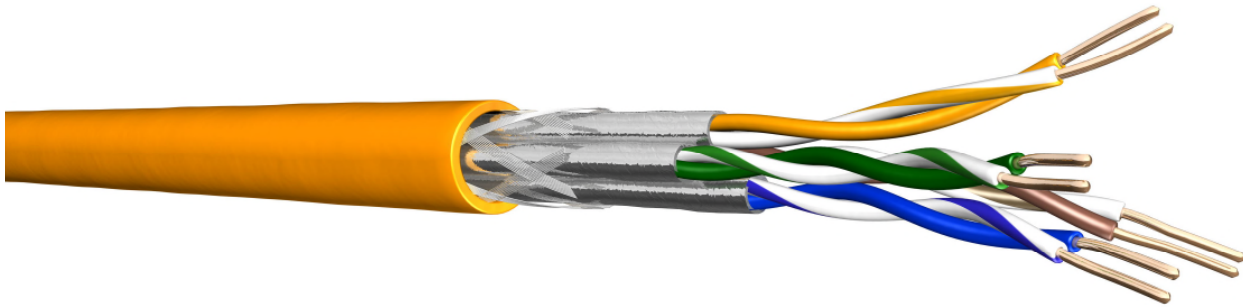


# UC900 HS23 Cat.7 LSHF-FR C<sub>ca</sub>

**S/FTP AWG23/1**



## 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 802.3at

## Flame resistance

EN 50399: Class C<sub>ca</sub>s1d1a1  
LSHF-FR (LSOH): IEC 60332-3-24; IEC 60332-1; IEC 60754-2; IEC 61034

## Construction

Conductor	bare copper wire, Ø 0.56 mm (AWG 23)	
Insulation	Foamskin PE, Ø 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	HFFR according to EN50290-2-27, orange	
Duplex	Two cables parallel, separable	

## Mechanical properties

Bending radius	without load	4 x D
	with load	8 x D
Temperature range	during operation	-20°C to + 60°C
	during installation	0°C to + 50°C

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### Electrical properties

at 20°C ± 5°C

Loop resistance		154 Ω/km	
Resistance unbalance		≤ 2%	
Insulation resistance	(500 V)	≥ 2000 MΩ*km	
Mutual capacitance	at 800 Hz	Nom. 43 nF/km	
Capacitance unbalance	(pair/ground)	≤ 1500 pF/km	
Mean characteristic impedance	100 MHz	100 ± 5 Ω	
Nominal velocity of propagation		ca. 79 %	
Delay skew		≤ 12 ns/100m	
Test voltage	(DC, 1 min) core/core and core/screen	1000 V	
Transfer impedance	bei 1 MHz	≤ 12 mΩ /m	<b>Grade 2</b>
	bei 10 MHz	≤ 10 mΩ /m	
	bei 30 MHz	≤ 30 mΩ /m	
Coupling attenuation		≥ 80 dB	<b>Type 2</b>
Segregation classification acc. EN 50174-2			„D”

### Electrical data (nominal)

acc. to Cat.7 (at 20°C)

F (MHZ)	Attenuation (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ACRF (dB/100m)	PS-ACRF (dB/100m)	Return loss (dB)
1,0	1,8	100	97	98	95	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
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	58	55	20
1000,0	63,1	80	77	17	14	57	54	20

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### Product order data

Product code	Cable type	Brand name	Outer diameter mm	Euro class	Fire load		Weight kg/km	Copper content	Tensile force N
					MJ/km	kWh/m			
60062507	J-02YSCH (4x2x0.56) PiMF	UC900 HS23 Cat.7 S/FTP 4P LSHF-FR C <sub>ca</sub>	7.5	Ccas1d1a1	640	0.184	59.9	26	110