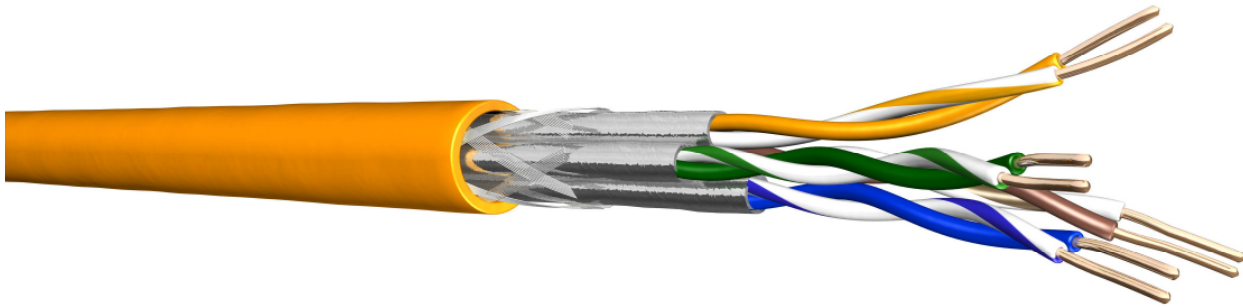


## UC900 HS23 Cat.7 D<sub>ca</sub>

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 D<sub>cas</sub>2d2a1  
LSHF (LSOH): 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	LSHF D <sub>ca</sub> , orange

### 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

## UC900 HS23 Cat.7 D<sub>ca</sub>

### 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 %	
Propagation delay		≤ 427 ns/100m	
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

## UC900 HS23 Cat.7 D<sub>ca</sub>

### 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			
60060183	J-02YSCH 4x2x0.56 PiMF	UC900 HS23 Cat.7 S/FTP 4P LSHF Dca	7.3	D <sub>ca</sub> s2d2a1	590	0.170	54.5	26	110
60060185		UC900 HS23 C7 S/FTP 4P LSHF Dca 500DW							
60060184		UC900 HS23 C7 S/FTP 4P LSHF Dca 1000DW							
60060189	J-02YSCH 2x(4x2x0.56) PiMF	UC900 HS23 Cat.7 S/FTP 2x4P LSHF Dca	7,3/14,6		1180	0.340	109	52	220