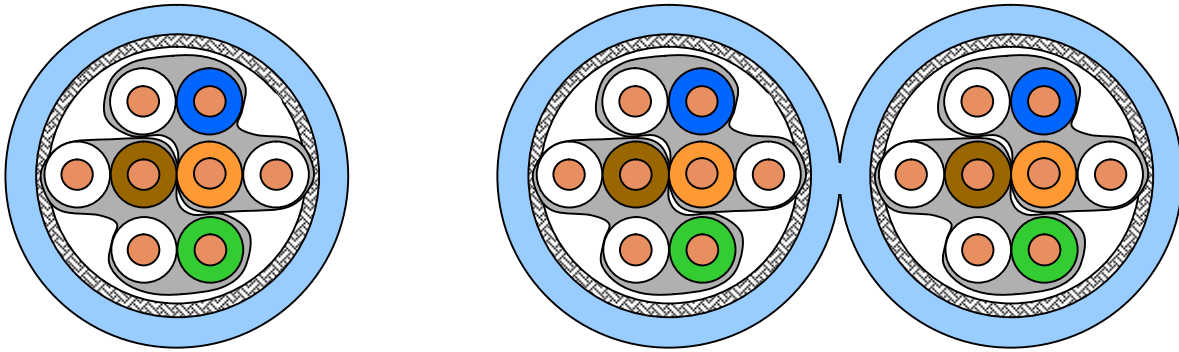


# UC500 HS23 Cat.6<sub>A</sub>

## S/FTP AWG23/1 Installation Cable



### 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

### Standards

EN 50173-1; EN 50288-5-1  
ISO/IEC 11801; IEC 61156-5  
TIA/EIA-568-B.2

### Flame resistance

PVC: IEC 60332-1  
LSHF(LSOH): IEC 60332-1; IEC 60754-2; IEC 61034  
LSHF-FR(LSFR0H): additionally IEC 60332-3-24

### Construction

Conductor	bare copper wire $\varnothing$ 0.56 mm (AWG23/1)
Insulation	Foamskin Polyethylene, $\varnothing$ 1.38 mm
Twisting	2 cores to the pair
Pair screen	<b>High Performance-FTP:</b> Al-laminated plastic foil, patented wrapping of two pairs each
Cable lay up	2x2 pairs to the core
Screen	Copper braid tinned
Sheath	PVC alt. FRNC, blue, RAL 5024

### Mechanical properties

Bending radius	without load	$\geq 40$ mm
	with load	$\geq 80$ mm
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		≤ 165 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	at 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		≥ 75 dB	<b>Type 2</b>
Segregation classification acc. EN 50174-2		"c"	

### 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)	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
400.0	38.3	87	84	48	45	64	61	23
500.0	43.0	86	83	43	40	61	58	22

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### Technical data

Product code	Cable type	Brand name	Outer diameter mm	Fire load		Weight kg/km	Copper content	Tensile force
				MJ/km	kWh/m			N
1020367	J-02YS(St)CH 4x2x0.56	UC500 HS23 Cat.6 <sub>A</sub> S/FTP 4P LSHF	6.9	517	0.144	49	34	160
1020368	J-02YS(St)CH 2x(4x2x0.56)	UC500 HS23 Cat.6 <sub>A</sub> S/FTP 2x4P LSHF	6.9/14.0	1034	0.288	98	68	320

### Product Code Table

Product Description	Product Code	PG Reference Code	PG Part Number
UC500 HS23 C6A S/FTP 4P LSHF	1020367	60015551	<b>60015551</b>
UC500 HS23 C6A S/FTP 4P LSHF 500DW	1020367-00500DW	60015551	<b>60015552</b>
UC500 HS23 C6A S/FTP 4P LSHF 1000DW	1020367-01000DW	60015551	<b>60015553</b>
UC500 HS23 C6A S/FTP 2x4P LSHF	1020368	60015322	<b>60015322</b>

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