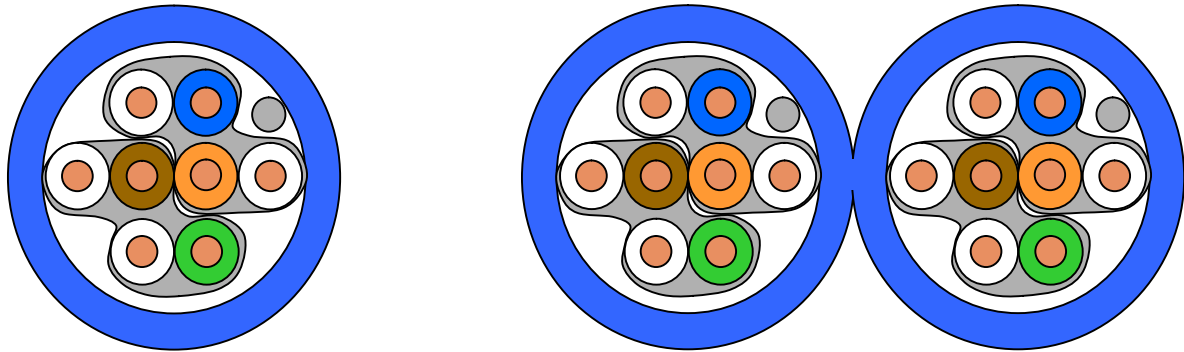


# UC400 S23 Cat.6

## U/FTP Installation Cable



### Application

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)  
 IEEE 802.3: 10Base-T; 100Base-T; 1000Base-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(FRNC): IEC 60332-1; IEC 60754-2; IEC 61034

### Construction

Conductor	bare copper wire, Ø 0.56 mm (AWG23)
Insulation	Foamskin Polyethylene, Ø 1.35 mm
Twisting	2 cores to the pair
Pair screen	<b>High Performance STP:</b> Al-laminated plastic foil, patented wrapping of two pairs each, drain wire AWG26 tinned
Cable lay up	2x2 pairs to the core
Sheath	PVC alt. LSHF, blue RAL 5012 Duplex sheath: two cables parallel, separable

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## Mechanical properties

Bending radius	without load	≥ 35 mm
	with load	≥ 70 mm
Temperature range	during operation	-20°C to + 60°C
	during installation	0°C to + 50°C

## Electrical properties

at 20°C± 5°C

Loop resistance		≤ 176 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
Characteristic impedance	(1-100 MHz)	(100 ± 15)
	(100 - 250) MHz	(100 ± 18) 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	at 1 MHz	≤ 50 mΩ /m
	at 10 MHz	≤ 100 mΩ /m
	at 30 MHz	≤ 200 mΩ /m
	at 100MHz	≤ 1000 mΩ /m
Coupling attenuation		≥ 55 dB

## 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)	ELFEXT (dB/100m)	PS-ELFEXT (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

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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
1000282	J-02YS(St)Y 4x2x0.56	UC400 S23 Cat.6 4P	6.5	542	0.151	41	24	100
1000647	J-02YS(St)H 4x2x0.56	UC400 S23 Cat.6 4P LSHF		501	0.139	44		
1000272	J-02YS(St)Y 2x(4x2x0.56)	UC400 S23Cat.6 2x4P	6.5/13.0	1084	0.302	82	48	200
1000922	J-02YS(St)H 2x(4x2x0.56)	UC400 S23 Cat.6 2x4P LSHF		1002	0.278	88		