

UC400 S23 Cat.6

U/FTP Installation Cable



3.1. Cable

Construction

Conductor	bare copper wire Ø 0.57 mm (AWG23)
Insulation	Foamskin Polyethylene, Ø 1.35 mm
Twisting	2 cores to the pair
Pair screen	High Performance STP: 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

Mechanical properties

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

Electrical properties at 20°C

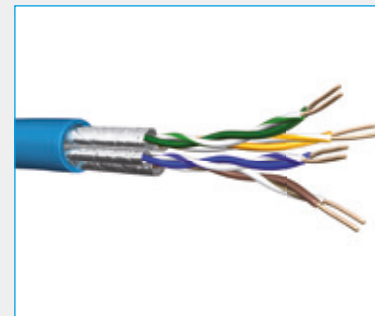
DC loop resistance	≤ 176 Ω /km
Resistance unbalance	≤ 2%
Insulation resistance (500 V)	≥ 2000 MΩ *km
Capacitance at 800 Hz	nom. 43 nF/km
Capacitance unbalance (pair to ground)	≤ 1500 pF/km
Characteristic impedance (1-100 MHz)	(100 ± 15) Ω
Characteristic impedance (100 - 250 MHz)	(100 ± 18) Ω
Nominal velocity of propagation	approx. 79 %
Propagation delay	≤ 427 ns/100m
Delay skew	≤ 12 ns/100m
Test voltage (DC, 1 min) Core/Core	1000 V
Coupling attenuation	≥ 55 dB

Nominal transmission characteristics at 20°C

f	Attenuation	NEXT	PS-NEXT	ACR	PS-ACR	ELFEXT	PS-ELFEXT	Return loss
MHz	dB/100m	dB	dB	dB/100m	dB/100m	dB/100m	dB/100m	dB
1	1.8	100	97	98	95	105	105	-
10	5.4	100	97	95	92	97	94	30
100	17.4	100	97	83	80	77	74	30
200	25.0	92	89	67	64	71	68	25
300	30.9	89	86	58	55	67	64	24
400	38.3	87	84	48	45	64	61	23

Technical data

Product code	Product name	Outer diameter	Fire load		Weight	Copper content	Max. tensile force during installation
			MJ/km	kWh/m			
		Mm			kg/km	kg/km	N
60026453	UC400 S23 Cat.6 4P	6.5	542	0.151	41	24	100
60011510	UC400 S23 Cat.6 4P LSHF	6.5	501	0.139	44	24	100



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