Category 6_A, 500 m



The Future Com[™] F/FTP 550/23 cable is tested up to 550 MHz and provides transmission performance meeting Category 6A specifications EN 50288, IEC 61156-5 and "Cat. 6 augmented" in compliance with TIA/EIA 568.

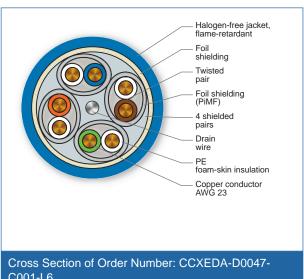
Outstanding system headroom of the complete cabling system in compliance with ISO/IEC 11801 Ed.2.2 and EN 50173. Outstanding performance for the transmission of digital data signals for future coming applications up to 10GbE in compliance with the current Class EA (ISO/IEC 11801 Ed.2.2) and IEEE 802.3an standard. Future Com™ cables are low skew products, i.e. the difference in propagation delay between the individual pairs is very low. This is increasingly being requested for Gigabit Ethernet. The suitability of the cable for high-bit-rate transmission systems ensures a high degree of future proofing. Additional features are the slim design and low weight of the cables. Each pair is individually shielded with foil (FTP). The twisted pairs are additionally enclosed an overall shielded foil (F/FTP) to provide superior shielding performance.

The cable thus exceeds the requirements for EN 55022 Class B emission and EN 55024 immunity, enabling networks to be built which are compliant with the standards on electromagnetic compatibility.

Features

- F/FTP 550/23 cable specified up to 550 MHz
- Fulfills the requirements of the standards IEC 61156-5
 Ed.2
- Outstanding electrical characteristics
- Each twisted pair is individually shielded with a metal foil (PIMF) and a common foil
- Low propagation delay and low delay skew between the pairs
- Halogen-free (LSZHTM)
- Flame retardant according to IEC 60332-3-24 and EN 50266-2-4 (FR), EN 13501-6, non-corrosive according to IEC 60754-2 (NC) and EN 50267
- Low smoke according to IEC 61034 and EN 50268







Category 6_A, 500 m



Standards

Approvals and Listings

Flame retardant according to IEC 60332-3-24 and EN

50266-2-4

Reaction to fire according

to EN 13501-6

Specifications

General Specifications	
Environment	Indoor
Cable type	F/FTP
Category	6 _A
Bandwidth	550 MHz
Halogen-free	Yes
Construction	Simplex, 4P
Product category	Core product / Fastship

Temperature Range	
Installation and assembly	0 °C to 50 °C
Operation	-20 °C to 60 °C

Cable Design	
No. of pairs	4
Outer jacket material	LSZHTM/FRNC
Outer jacket colour	Blue

Mechanical Characteristics	
Conductor Insulation	Halogen-free foam-skin material
Area/Range of Application	Dry and damp rooms
Min. Bend Radius Operation	≥ 3x Cable-Ø
Min. Bend Radius Installation	≥ 8x Cable-Ø
Maximum Tensile Strength	145 N
Nominal Outer Diameter	7.3 mm



Category 6_A, 500 m



Mechanical Characteristics	
Fire Load	0.62 MJ/m
Copper conductor	AWG 23

Electrical characteristics (at 20°C)	
Conductor resistance unbalance	1 %
Insulation Resistance	> 5000 MΩ x km
Impedance Z _o at 0.064 MHz	125 Ω +/- 20%
Impedance Z_{\circ} at 1-100 MHz	100 Ω +/- 15%
Surface transfer impedance	< 100 m Ω /m at 10 MHz
Propagation velocity at >10 MHz (NVP*c)	0.78 °C
Propagation delay ≥10 MHz	4.2 ns/m
Delay skew	4 ns/100 m
Coupling attenuation	> 70 dB
Max. loop resistance	165 Ω/km
Voltage rating	less than 75 V d.c max and less than 50 V a.c max

Electrical characteristics (at 20°C)										
Frequency [MHz]*	1	10	16	20	31.25	62.5	100	250	500	550
Attenuation according to Standard [dB/100 m]*	2.1	5.9	7.5	8.4	10.5	15.0	19.1	31.1	45.3	-
Typical attenuation [dB/100 m]*	1.8	5.3	6.8	7.6	9.6	13.6	17.3	27.7	41.9	42.6
NEXT according to Standard [dB/100 m]*	75.3	60.3	57.2	55.8	52.9	48.4	45.3	39.3	34.8	-
Typical NEXT Values [dB/100 m]*	>100	>100	>100	>100	>100	97.0	95.0	90.0	83.0	77.0
ACR-N according to Standard [dB/100 m]*	73.2	54.4	49.8	47.4	42.4	33.4	26.2	8.3	-10.4	-
Typical ACR-N Values [dB/100 m]*	98.2	94.7	93.2	92.4	90.4	83.4	77.7	62.3	41.1	34.4

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU



Category 6_A, 500 m



Ordering Information

Part Number	CCXEDA-D0047-C001-L6
Product Description	FutureCom [™] F/FTP 550/23, 500 m
EAN Code	4042673544432
Weight	49 kg/km
Length	500 m

Shipping Information

Packing type	Drum
Maximum delivery length	500 m



Corning Optical Communications GmbH & Co. KG · Leipziger Strasse 121 · 10117 Berlin, GERMANY 00 800 2676 4641 · FAX: +49 30 5303 2335 · www.corning.com/opcomm/emea

A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/emea/trademarks. Corning Optical Communications is ISO 9001 and ISO 14001 certified. © 2017 Corning Optical Communications. All rights reserved.

