FutureCom™ S/FTP 550/23, blue Category 6A, 500 m

CORNING

Part Number:
CCXEDB-D0047-C001-L6

The FutureCom™ S/FTP 550/23 cable is designed for applications up to 550 MHz and its transmission characteristics exceed Category 6A specifications according to EN 50288-10-1 and IEC 61156-5.

High system margins for the complete link according to ISO/IEC 11801 (Edition 2.2: 2011) and EN 50173 (Series) will be achieved by using corresponding hardware together with this high-end copper cable.

Due to the very low delay skew between the pairs these FutureCom cables are especially suitable for Gigabit Ethernet and also for transmission of digital data for future applications up to 10 Gigabit Ethernet according to IEEE 802.3an. The cable has a streamlined construction and low weight.

Each pair is individually foil shielded. The twisted pairs (PiMF) are also sheathed with a braid shield (S/FTP), which guarantees outstanding shielding characteristics. The cable satisfies Class B interference radiation standards according to EN 55022, as well as immunity according to EN 55024, which enables the realization of CE-compatible networks.

Features and Benefits

S/FTP 550/23 cable specified up to 550 MHz

Fulfils all requirements of category 6A according to standards EN 50288-4-1 and IEC 61156-5

Ensures high system margins according ISO/IEC 11801 Ed.2.2 (2011) and EN 50173 series (2011)

Suitable for 10 Gigabit Ethernet according to IEEE 802.3an

Each twisted pair is individually shielded with a Al-laminated foil around each pair (PIMF) and a Copper braid, tinned

Flame retardant according to IEC 60332-1 and IEC 60332-3, EN 13501-6 and EN 50575 as well as non-corrosive according to IEC 60754-2 (NC)

Low smoke according to IEC 61034 and EN 50268; halogen-free (ZH/0H), no development of toxic gases in case of fire

Satisfies Class B interference radiation as well as immunity standards (EN 55022 and EN 55024)

Supports Power over Ethernet (PoE / PoE+/ PoE++) according IEEE 802.3bt

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Specifications

General Specifications	
Environment	Indoor
Category	6A
Bandwidth	550 MHz
Halogen-free	Yes
Product Category	Core Product
Reaction to fire	Dca - s1, d1, a1
Cable Type	S/FTP

Cable Design	
Conductor	Copper Wire, AWG 23
Conductor Insulation	Halogen-free foam-skin material
Twisting	2 cores to a pair
Pair screen	Al-laminated foil around each pair
Overall screen	Copper braid, tinned
Outer Jacket Material	LSZH™/FRNC
Outer Jacket Color	Blue

Mechanical Specifications	
Fire Load	0.57 MJ/m
Nominal Outer Diameter	7.2 mm
Min. Bend Radius Installation	8x Cable-Ø (over flat side)

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Mechanical Specifications

Maximum Tensile Strength	132 N

Electrical Characteristics

Conductor resistance unbalance	1 %
Delay skew	9 ns/100 m
Max. loop resistance	165 Ω/km
Propagation delay ≥10 MHz	4.25 ns/m
Propagation Velocity at >10 MHz (NVP*c)	79 %
Coupling Attenuation	85 dB
Insulation Resistance	5000 MΩ*km
Surface transfer impedance	5 mΩ

Ordering Information

Weight	53 kg/km
Packing Type	Drum

Standards

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
Flame Test Method	Flame retardant according to IEC 60332-1-2 (single cable), IEC 60332-3-24 (bunch of cables) Reaction to fire according to EN 50575 and EN 13501-6
Level of corrosion	Non-corrosive according to IEC 60754-2

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Environmental Conditions

Temperature Range, Installation	0 °C - 50 °C (32 °F - 122 °F)
Temperature Range, Operation	-20 °C - 60 °C (-4 °F - 140 °F)

Electrical Characteristics

Frequency [MHz]	1	10	16	20	31	62	100	250	500	550
Attenuation according to Standard [db/100m]	2.1	5.9	7.5	8.4	10.5	15.0	19.1	31.1	45.3	
Typical attenuation [db/100m]	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/100m]	75.3	60.3	57.2	55.8	52.9	48.4	45.3	39.3	34.8	
Typical NEXT Values						97.0	95.0	90.0	83.0	77.0
ACR-N according to Standard [db/100m]	73.2	54.4	49.8	47.4	42.4	33.4	26.2	8.3	-10.4	
Typical ACR-N Values [db/100m]	98.2	94.7	93.2	92.4	90.4	83.4	77.7	62.3	41.1	34.4

RoHS
COMPLIANT