

# FutureCom™ F/UTP 450/24, Category 6, LSZH™/FRNC, Dca 4P, Green



CORNING

**Part Number:**  
**XE004802288**

FutureCom™ F/UTP 450/24, LSZH Cable: twisted pair, surrounded by an overall metallic foil shield, spec. up to 450MHz, AWG 24, LSZH acc. to IEC60332-1, Cat.6 acc. ISO/IEC11801, Dca-s2,d2,a1

## Features and Benefits

F/UTP 450/24 copper cable specified up to 450 MHz

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Fulfills all requirements of category 6 according to EN 50288-5-1 and IEC 61156-5

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Ensures high system margins according to ISO/IEC 11801 Ed.1.0 (2017) and EN 50173-1 series (2018)

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Twisted pair, surrounded by an overall metallic foil shield

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Low smoke according to IEC 61034-2

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

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Supports Power over Ethernet (4PPoE) according IEEE 802.3bt.

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## Specifications

### Environmental Conditions

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

### General Specifications

Environment	Indoor
Category	6
Cable Type	F/UTP
Bandwidth	250 MHz
Halogen-free	Yes
Construction	Simplex, 4P
Reaction to fire	Dca, s2, d2, a1
Legacy Part Number	VOL6FL4500

### Cable Design

Conductor	Copper Wire, AWG 24
Conductor Insulation	Halogen-free foam-skin material
Twisting	2 cores to a pair
Outer Jacket Material	LSZH™
Outer Jacket Color	Green

### Mechanical Specifications

Fire Load	540 MJ/m
Nominal Outer Diameter	6.6 mm
Min. Bend Radius Installation	8x Cable-Ø (over flat side)
Maximum Tensile Strength	80 N

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## Electrical Characteristics

Conductor resistance unbalance	2 %
Delay skew	40 ns/100 m
Max. loop resistance	190 MΩ*km
Propagation delay	520 ns/100 m
Voltage rating	Less than 75 V d.c max and less than 50 V a.c max
Insulation Resistance	5000 MΩ*km
Surface transfer impedance	40 mΩ
Propagation Velocity at >10 MHz (NVP*c)	78 %
Coupling Attenuation	55 dB

## Ordering Information

Product Number	XE004802288
Length	500 m
Weight	42 kg
Packing Type	Drum

## Standards

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
Approvals and Listings	IEC 61156-5; EN 50288-5-1, ISO/IEC 11801 Ed. 2.2; EN 50173-1, ANSI/TIA -568-C-2; IEC60304
Design and Test Criteria	Compliant with PoE / PoE++ IEEE 802.3af, IEEE 802.3atIEEE 802.3 an 1000 Base-T
Flame propagation test	Flame retardant according to IEC 60332-1-2 (single cable)
Smoke density	Low Smoke to IEC 61034
Halogen content test	Zero Halogen to IEC 60754-1
Level of corrosion	Non-corrosive according to IEC 60754-2

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Electrical Characteristics							
Frequency [MHz]	4	10	20	63	100	250	450
Attenuation according to Standard [db/100m]	3.8	6.0	8.5	15.4	19.8	32.8	46.22
Typical attenuation [db/100m]	3.6	5.7	8.3	15.0	19.0	31.0	43.0
NEXT according to Standard [db/100m]	65.3	59.3	54.8	47.4	44.3	38.3	35.5
Typical NEXT Values [db/100m]	71.0	65.0	61.0	53.0	50.0	44.0	40.0
ACR-N according to Standard [db/100m]	61.5	53.3	46.3	32.0	24.5	5.5	14.94
Typical ACR-N Values [db/100m]	67.4	59.0	53.0	38.0	31.0	13.0	



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