

# FutureCom™ F/UTP 450/24, Category 6, LSZH™/FRNC, B2ca 4P, green



CORNING

**Part Number:**  
**UU009175389**

FutureCom™ F/UTP 450/24, LSZH Cable: twisted pair, surrounded by an overall metallic foil shield, spec. up to 450MHz, AWG 24, LSZH Jacket, Cat.6 acc. ISO/IEC11801, B2ca-s1a,d0,a1

## Features and Benefits

F/FTP 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 ISO/IEC 11801 Ed.2.2 (2011) and EN 50173-1 series (2011)

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Twisted pair, surrounded by an overall metallic foil shield

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LSZH Jacket, CPR B2ca-s1a,d0,a1

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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 (PoE / PoE+) according IEEE 802.3at

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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	B2ca, s1a, d0, a1
Legacy Part Number	VOL6FL4500

### Cable Design

Conductor	Copper Wire, AWG 24
Conductor insulation	Solid PE
Twisting	2 cores to a pair
Outer jacket material	LSZH™
Outer jacket colour	Green

### Mechanical Characteristics

Fire load	690 MJ/m
Nominal outer diameter	7.3 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	45 ns/100 m
Max. loop resistance	190 MΩ*km
Propagation delay	545 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	100 mΩ
Propagation velocity at >10 MHz (NVP*c)	69 %
Coupling attenuation	55 dB

Ordering Information	
Product Number	UU009175389
Length	500 m
Weight	53 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 802.3at IEEE 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

Electrical Characteristics									
Frequency [MHz]	4	10	20	63	100	250	300	450	

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Electrical Characteristics								
Attenuation according to Standard [db/100m]	3.83	6.0	8.53	15.48	19.92	3.02		46.22
Typical attenuation [db/100m]	3.6	5.7	8.3	14.8	19.0	31.0	34.0	43.0
NEXT according to Standard [db/100m]	66.27	60.3	55.78	48.36	45.3	39.33		35.5
Typical NEXT Values [db/100m]	71.0	65.0	61.0	53.0	50.0	44.0	43.0	40.0
ACR-N according to Standard [db/100m]	55.96	48.0	41.98	32.08	28.0	20.04		14.94
Typical ACR-N Values [db/100m]	67.5	59.3	52.7	38.2	31.0	13.0	9.0	



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