

#### Part Number: DE010024342

FutureCom™ U/UTP 450/24, 4P, LSOH Cable: twisted pair, covered by a LSZH jacket, spec. up to 450MHz, AWG 24, LSZH acc. to IEC60332-1, Cat.6 acc. ISO/IEC11801, Dca-s2.d2.a1

#### Features and Benefits

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

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

Ensures high system margins according ISO/IEC 11801 Ed.2.2 (2011) and EN 50173-1 series (2011)

Twisted pair, covered by a LSOH Jacket, CPR Dcas2,d2,a1

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

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



#### **Specifications**

<b>Environmental Conditions</b>	
Temperature range, installation	0 °C to 50 °C
Temperature range, operation	-20 °C to 60 °C

General Specifications	
Environment	Indoor
Category	6
Cable type	U/UTP
Bandwidth	250 MHz
Halogen-free	Yes
Construction	Simplex, 4P
Reaction to fire	Dca, s2, d2, a1
Legacy Part Number	VOL6UL4305

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 colour	Green

Mechanical Characteristics	
Fire load	553 MJ/m
Nominal outer diameter	5.4 mm
Min. bend radius installation	8x Cable-Ø (over flat side)
Maximum tensile strength	100 N



Electrical Characteristics	
Conductor resistance unbalance	2 %
Delay skew	40 ns/100 m
Max. loop resistance	190 MΩ*km
Propagation delay	52 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
Propagation velocity at >10 MHz (NVP*c)	67 %
Coupling attenuation	40 dB

Ordering Information	
Product Number	DE010024342
Length	305 m
Weight	32.41 kg
Packing type	Reelex Box

Standards				
RoHS	Free of hazardous substances according to RoHS 2011/65/EU			
Approvals and Listings	IEC 61156-5; EN 50288-6-1, ISO/IEC 11801 Ed. 2.2; EN 50173-1, ANSI/TIA-568-C-2; IEC 60304			
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			

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



Electrical Characteristics								
Attenuation according to Standard [db/ 100m]	3.83	6.0	8.53	15.48	19.92	33.02		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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