

# Cat.6 450 F/UTP LSZH Dca

NEX C6 450 F/UTP LSZH DCA 4P 305 RIB IVOIRY

**Aginode Ref:** 10272113

- Complies to latest Cat 6 standard version
- Supports Class E applications
- Cable tested up to 450 MHz
- Flame retardant according to EN50575:2014+A1:2016 and IEC 60332-1
- Global screen for EMC performance
- Compatible POE, POE+ and UPOE
- RoHS EC Directive compliant
- Compliant with European Reach regulation
- N'Roll and MOBIWAY™ compatible

## Application

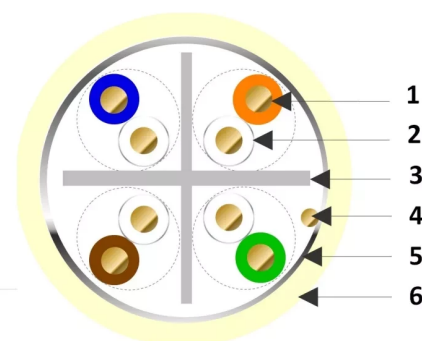
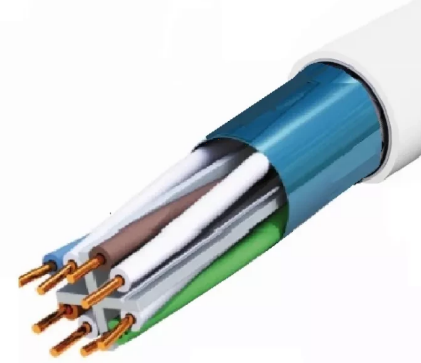
Les câbles à paires symétriques F/UTP de Catégorie 6 composent l'offre d'entrée de gamme de Nexans. Cette construction, fabriquée selon les exigences des normes IEC 61156-5, représente un composant de choix pour les applications Classe E, telles que : Ethernet, Fast Ethernet, Gigabit Ethernet ... Les câbles F/UTP Cat 6 de Nexans sont idéaux pour les applications VDI jusqu'à 250MHz. Les câbles Nexans Cat.6, associés avec une connectique de même performances, sont idéaux pour les applications VDI selon les normes ISO/IEC 11801, EN 50173 et TIA/EIA 568.

## Construction

1. Ame conductrice : Cuivre nu massif
2. Isolation : Polyéthylène (EN 50290-2-23) - Deux fils isolés torsadés en paires
3. Jonc étoile - 4 paires assemblées
4. Fil de continuité cuivre étamé
5. Ecran : Ruban Alu/Pet. Alu à l'intérieur
6. Gaine : LSZH - Dca

## Environnement

Conçus pour minimiser l'impact sur l'environnement, les câbles Nexans sont conformes à la Directive RoHS 2011/65 et à la réglementation Reach 1907/2006/EC. La gaine extérieure en matériau sans halogène (IEC 60754-1 / EN 50267-2-1) réduit les



## STANDARDS

EN 50173  
EN 50288  
EN 50575  
IEC 60332-1  
IEC 61156-5  
ISO/IEC 11801

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Aginode is indicative only and shall not be binding on Aginode or be treated as constituting a representation on the part of Aginode.

émissions de fumées (IEC 61034-1/2 / EN 50268-1/2) et ne produit pas d'émissions de gaz acide en cas de feu (IEC 60754-2 / EN 50267-2-2).

Nexans mesure l'impact environnemental de chacun de ses produits. Sur demande, l'Eco Material Declaration ou l'Ecopassport peuvent être fournis.

## Cat 6 450 F-UTP TRANSMISSION CHARACTERISTICS

### CAT.6 450 F/UTP TRANSMISSION CHARACTERISTICS

Values at 20°C

| Frequency (MHz)            | S/T      | 4    | 10   | 16   | 20   | 100  | 200  | 250  | 350  | 450  |
|----------------------------|----------|------|------|------|------|------|------|------|------|------|
| Attenuation max. (dB/100m) | Standard | 3.8  | 6.0  | 7.6  | 8.5  | 19.9 | 29.1 | 33.0 | -    | -    |
|                            | Typical  | 3.6  | 5.5  | 6.9  | 7.7  | 17.6 | 25.4 | 28.6 | 34.4 | 39.5 |
| NEXT min. (dB)             | Standard | 66.3 | 60.3 | 57.2 | 55.8 | 45.3 | 40.8 | 39.3 | -    | -    |
|                            | Typical  | 80.5 | 72.7 | 68.8 | 66.9 | 53.3 | 47.4 | 45.5 | 42.7 | 40.5 |
| PSNEXT min. (dB)           | Standard | 63.3 | 57.3 | 54.2 | 52.8 | 42.3 | 37.8 | 36.3 | -    | -    |
|                            | Typical  | 77.5 | 69.7 | 65.8 | 63.9 | 50.3 | 44.4 | 42.5 | 39.7 | 37.5 |
| ACRF min. (dB)             | Standard | 56.0 | 48.0 | 43.9 | 42.0 | 28.0 | 22.0 | 20.0 | -    | -    |
|                            | Typical  | 85.5 | 76.3 | 71.5 | 69.3 | 53.1 | 46.1 | 43.9 | 40.5 | 38.0 |
| PSACRF min. (dB)           | Standard | 53.0 | 45.0 | 40.9 | 39.0 | 25.0 | 19.0 | 17.0 | -    | -    |
|                            | Typical  | 82.5 | 73.3 | 68.5 | 66.3 | 50.1 | 43.1 | 40.9 | 37.5 | 35.0 |
| Return Loss min. (dB)      | Standard | 23.0 | 25.0 | 25.0 | 25.0 | 20.1 | 18.0 | 17.3 | -    | -    |
|                            | Typical  | 27.0 | 29.0 | 29.0 | 29.0 | 24.5 | 22.5 | 21.9 | 20.9 | 20.2 |

# NEX C6 450 F/UTP LSZH Dca 4P 305 RIB IVOIRY

## Characteristics

### Construction characteristics

|                      |                          |
|----------------------|--------------------------|
| Outer sheath         | LSZH                     |
| Sheath colour        | Ivory                    |
| Halogen free         | Yes                      |
| Higher heating value | 821 MJ/km                |
| Type of cable        | F/UTP                    |
| Overall screen       | Aluminium/polyester tape |

### Dimensional characteristics

|                                     |                |
|-------------------------------------|----------------|
| Approximate weight                  | 49 kg/km       |
| Number of pairs                     | 4              |
| Conductor cross-section (AWG/KCMIL) | 24             |
| Diameter over insulation            | 1.13 mm        |
| Nominal outer diameter (mm)         | 7.1 mm         |
| External dimensions                 | Not applicable |

### Electrical characteristics

|   |           |
|---|-----------|
| Mutual capacitance                          | 50 nF/km  |
| Max. DC resistance of the conductor at 20°C | 95 Ohm/km |
| Characteristic impedance at 100 MHz         | 100 Ohm   |

### Mechanical characteristics

|                              |      |
|------------------------------|------|
| Maximum installation tension | 80 N |
|------------------------------|------|

### Transmission characteristics

|                                       |       |
|---------------------------------------|-------|
| Nominal Velocity of Propagation (NVP) | 70 %  |
| Coupling attenuation at 30 MHz        | >50dB |

### Usage characteristics

|                      |                     |
|----------------------|---------------------|
| Field of application | Fixed installations |
| Category             | Cat. 6              |
| Flame retardant      | IEC 60332-1         |
| Smoke density        | Low                 |

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Aginode is indicative only and shall not be binding on Aginode or be treated as constituting a representation on the part of Aginode.

| Packaging                                   | Reel in a box |
|---|---------------|
| Ambient installation temperature, range     | 0...50 °C     |
| Bending factor when laying                  | 8 (xD)        |
| Bending factor when installed               | 4 (xD)        |
| Ambient static operating temperature, range | -20...70 °C   |

## Declaration of Performance

NEX C6 450 F/UTP LSZH Dca 4P 305 RIB IVOIRY pdf — 116.86 KB [Download](#) ↓