

# PRODUCT SPECIFICATION

CONNECT

IT

## EUROLAN Coppercable C7 S/FTP Dca



### Ordering information

| Part number      | E-number | Description                                               |
|------------------|----------|-----------------------------------------------------------|
| 19D-F7-23WT-R500 | 4903245  | Eurolan C7 4 pair S/FTP 1000 MHz LSZH White Dca 500m/reel |

### Physical characteristics

|                       |                                                                                                                      |
|-----------------------|----------------------------------------------------------------------------------------------------------------------|
| Conductor             | Individual shielded pair, Bare copper, AWG 23, 4 pairs                                                               |
| Insulation            | Individ. shielded pair, Dielectric, Foamed Polyethylene, Ø 1.45 mm                                                   |
| Color chart           | Pair 1 white/blue - blue                                                                                             |
|                       | Pair 2 white/orange - orange                                                                                         |
|                       | Pair 3 white/green - green                                                                                           |
|                       | Pair 4 white/brown - brown                                                                                           |
| Cabling               | 2 twisted insulated conductors with overall foil, 4 pairs all twisted together with tinned copper braid shield (30%) |
| Inner shield material | Individ. shielded pair, tape, alu/polyester 100% coverage Aluminium facing outside                                   |
| Outer shield material | Braid TC-tinned copper, min coverage 30%                                                                             |
| Outer jacket material | LSZH/FRNC, Ø 7,0± 0,3mm, nylon ripcord                                                                               |

### Construction and dimensions

|                                      |       |
|--------------------------------------|-------|
| Min elongation at breakof conductors | 10%   |
| Min elongation at breakof insulation | 100%  |
| Min elongation at breakof jacket     | 100%  |
| Min tensile strength of jacket       | 9 MPa |

### Electrical characteristics

|                                         |            |
|-----------------------------------------|------------|
| Max conductor DCR                       | 95 Ohm/km  |
| Max DCR unbalance between pairs (%)     | 4          |
| Max DCR unbalanced within pair (%)      | 2          |
| Max capacitance unbalanced pair to pair | 1,600 pF/m |
| Max mutual capacitance                  | 56 pF/m    |



- Application:**  
Horizontal and building back-bone cable. Support current and future Category 6A and 7 applications such as:  
10GBase-T (10 Gigabit Ethernet),  
1000Base-T (Gigabit Ethernet),  
100 Base-T, 10 Base-T, FDDI, ATM  
Power over Ethernet (PoE):  
4PPoE 100W
- Standards:**  
ANSI/TIA 568.2-D 2018  
ISO/IEC 11801 Ed 2.2:2002/  
A2:2010/C1:2011  
EN 50173-1 Ed 3:2011  
IEEE 802.3bt
- Fire rating:**  
**Dca-s2,d1,a1**  
**DoP number: ZMEU-200015**  
EN-50575:2014+A1:2016  
LSZH: EN 50267-1  
IEC 60754-1

# PRODUCT SPECIFICATION

CONNECT

IT

## EUROLAN Coppercable C7 S/FTP Dca

| Electrical characteristics            |                                                                                         |
|---------------------------------------|-----------------------------------------------------------------------------------------|
| Nominal characteristic impedance      | 100 Ohm                                                                                 |
| Max delay skew                        | 25 ns/100m                                                                              |
| Nominal velocity of propagation (NVP) | 78%                                                                                     |
| Coupling attenuation class            | Type Ib                                                                                 |
| Segregation class acc. EN50174-2      | d                                                                                       |
| Transfer impedance                    | 1MHz max 50 mOhm/m, 10 MHz max 100 mOhm/m, 30MHz max 200 mOhm/m, 100MHz max 1000 mOhm/m |
| Transfer impedance class              | Grade 2                                                                                 |
| Max recommended current               | 1,5 Amps per conductor                                                                  |
| Voltage rating                        | 72 V DC                                                                                 |

| High Frequency  |                           |               |                 |              |                |                 |                   |                      |              |                 |
|-----------------|---------------------------|---------------|-----------------|--------------|----------------|-----------------|-------------------|----------------------|--------------|-----------------|
| Frequency (MHz) | Max attenuation (dB/100m) | Min NEXT (dB) | Min PSNEXT (dB) | Min ACR (dB) | Min PSACR (dB) | Min ELFEXT (dB) | Min PSELFEXT (dB) | Min Return loss (dB) | Min TCL (dB) | Min ELTCTL (dB) |
| 1               | 2,0                       | 78,0          | 75,0            | 76,0         | 73,0           | 78,0            | 75,0              | 20,0                 | 40,0         | 35,0            |
| 4               | 3,7                       | 78,0          | 75,0            | 74,3         | 71,3           | 78,0            | 75,0              | 23,0                 | 34,0         | 23,0            |
| 10              | 5,9                       | 78,0          | 75,0            | 72,1         | 69,1           | 75,3            | 72,3              | 25,0                 | 30,0         | 15,0            |
| 16              | 7,4                       | 78,0          | 75,0            | 70,6         | 67,6           | 71,2            | 68,2              | 25,0                 | 28,0         | 10,9            |
| 31,25           | 10,4                      | 78,0          | 75,0            | 67,6         | 64,6           | 65,4            | 62,4              | 23,6                 | 25,1         | 5,1             |
| 62,5            | 14,9                      | 75,5          | 72,5            | 60,6         | 57,6           | 59,4            | 56,4              | 21,5                 | 22,0         |                 |
| 100             | 19,0                      | 72,4          | 69,4            | 53,4         | 50,4           | 55,3            | 52,3              | 20,1                 | 20,0         |                 |
| 125             | 21,4                      | 70,90         | 67,9            | 49,6         | 46,6           | 53,4            | 50,4              | 19,4                 | 19,0         |                 |
| 200             | 27,5                      | 67,9          | 64,9            | 40,4         | 37,4           | 49,3            | 46,3              | 18,0                 | 17,0         |                 |
| 250             | 31,0                      | 66,4          | 63,4            | 35,5         | 32,5           | 47,3            | 44,3              | 17,3                 | 16,0         |                 |
| 300             | 34,2                      | 65,2          | 62,2            | 31,1         | 28,1           | 45,8            | 42,8              | 17,3                 |              |                 |
| 600             | 50,1                      | 60,7          | 57,7            | 10,6         | 7,6            | 39,7            | 36,7              | 17,3                 |              |                 |
| 1000            | 66,9                      | 57,4          | 54,4            |              |                | 35,3            | 32,3              | 15,1                 |              |                 |

Table note: Limits below 4 MHz and at 1000 MHz are for information only. Reference standard ISO/IEC 61156-5 ed. 2.0 (2009)

# PRODUCT SPECIFICATION



## EUROLAN Coppercable C7 S/FTP Dca

| Temperature and mechanical characteristics |                                            |
|--------------------------------------------|--------------------------------------------|
| Installation temp range                    | 0°C to + 50°C                              |
| Operating temp range                       | -30°C to + 60°C                            |
| Bulk cable weight                          | 52 kg/km                                   |
| Max pull tension                           | 85 N                                       |
| Min bend radius installation               | 58 mm                                      |
| Min bend radius operation                  | 29 mm                                      |
| Standards                                  |                                            |
| ISO/IEC Compliance                         | ISO/IEC 11801 Ed. 2.2:2002/A2:2010/C1:2011 |
| CPR euroclass                              | Dca-s2,d1,a1                               |
| Cenelec compliance                         | EN 50173-1 ed 3:2011                       |
| Category                                   | 7                                          |
| ANSI compliance                            | ANSI/TIA 568.2-D (2018)                    |
| IEEE compliance                            | PoE IEEE 802.3bt Type 1-4                  |
| Environmental space                        | Indoor Euroclass Dca                       |
| RoHS compliance date                       | 2004-01-01                                 |
| IEC flammability                           | IEC 60332-1-2                              |
| Burning load                               | 500 kJ/m                                   |
| IEC 60754-1, EN50267-1 Halogen amount      | zero                                       |