# Excel Category 6A Cable U/FTP S-Foil Dca LS0H 305m Box - Ice Blue <br> Item Code: 100-191-305M 



## $\lambda$ "S" foil screen

## $\lambda$ Specified to 500 MHz

## Choice of reel size

## Sequential metre markings

## Suitable for 10 Gigabit Ethernet applications

## $\lambda$ Euroclass Dca-s2-d2-a1

## Product Overview

Excel Category 6A Screened (U/FTP) Cable takes the performance capabilities of copper infrastructure to new levels. The cable has been designed to exceed the ISO/IEC, TIA and CENELEC for Category 6A/Augmented Category 6 component requirements. This delivers Class EA/ Augmented Category 6 link performance over distances of up 90 metres which supports the applications including 10GBASE-T, 10 Gigabit Ethemet.

Each cable consists of two sets of two pairs are wrapped together in an "S" configuration with high quality, strong, aluminium/polyester foil tape providing screening for each pair. The ""S"" Foil configuration ensures separation of the pairs that ensures the performance. The individual pairs are set to different lay lengths to ensure optimum performance.

The print legend on the cable now includes information regarding the DOP number, Test and Classification of the cable for traceability.

Product Specifications

| Feature | Values |
| :--- | :--- |
| Category | 6 (IEC) |
| Overall screening | None |
| Conductor screening | Foil |
| Outer sheath colour | Ice Blue |
| Reaction-to-fire class according to EN 13501-6 | Dca |
| Smoke development class according to EN 13501-6 | s2 |
| Euro class flaming droplets/particles according to EN | d2 |


| 13501-6 |  |
| :--- | :--- |
| Euro class acidity according to EN 13501-6 | al |
| AWG-size | 23 |
| Specification core insulation | PE |
| Core identification | Colour |
| Outer sheath material | Copolymer |
| Flame retardant | In accordance with EN 60332-1-2 and EN 50399 |
| Outer diameter approx. | 6.7 mm |
| Installation Temperature Range | $0 . . .60^{\circ} \mathrm{C}$ |
| Operating Temperature Range | $-20 \ldots . .60^{\circ} \mathrm{C}$ |
| NVP value | $78 \%$ |
| Conductor category | Class $1=$ solid |
| Total number of cores | 8 |
| Stranding element | Pairs |
| Conductor surface | Bare |

Cross-section diagram


## Cable specifications

| Features | Values |
| :--- | :--- |
| Dielectric strength | 2.5 kV for 2 s |
| Maximum Pulling Load | $60 \mathrm{~N} / 6.1 \mathrm{KgF}$ |
| MBR during installation | $8 \times$ cable OD |
| MBR installed | $4 \times$ cable OD |

## Excel Category 6A Cable U/FTP S-Foil Dca LSOH 305m Box - Ice Blue <br> Item Code: 100-191-305M

| Impedance ( $\Omega$ ) | $100 \pm 15$ |
| :--- | :--- |
| Conductor resistance $(\Omega / 100 \mathrm{~m})$ | $\leq 9.5$ |
| DC resistance unbalance (\%) | $\leq 4$ |
| Pair-to-ground capacitance unbalance $(\mathrm{pF} / \mathrm{km})$ | $\leq 1600$ |
| Insulation resistance | $>5000$ |

## Performance parameters

| Freq. (MHz) | Ins. Loss | RL (dB) | NEXT | ACR-F | $\begin{aligned} & \text { PS } \\ & \text { NEXT } \end{aligned}$ | $\begin{aligned} & \text { PS } \\ & \text { ACR-F } \end{aligned}$ | Delay Skew | Prop. Delay |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (dB/ 100m) Max. | Min. | $\begin{aligned} & (\mathrm{dB} / \\ & 100 \mathrm{~m}) \\ & \text { Min. } \end{aligned}$ | $\begin{aligned} & \text { (dB / } \\ & 100 \mathrm{~m}) \\ & \text { Min. } \end{aligned}$ | $\begin{aligned} & \text { (dB / } \\ & 100 \mathrm{~m}) \\ & \text { Min. } \end{aligned}$ | $\begin{aligned} & \text { (dB / } \\ & \text { 100m) } \\ & \text { Min. } \end{aligned}$ | $\begin{aligned} & \text { (ns / } \\ & \text { 100m) } \\ & \text { Max. } \end{aligned}$ | $\begin{aligned} & \text { (ns / } \\ & \text { 100m) } \\ & \text { Max. } \end{aligned}$ |
| 1 | - | 20 | - | - | - | - | - | - |
| 4 | 3.8 | 23 | 66.3 | 56 | 63.3 | 53 | 45 | 552 |
| 10 | 5.9 | 25 | 60.3 | 48 | 57.3 | 45 | 45 | 545.4 |
| 16 | 7.5 | 25 | 57.2 | 43.9 | 54.2 | 40.9 | 45 | 543 |
| 20 | 8.4 | 25 | 55.8 | 42 | 52.8 | 39 | 45 | 542 |
| 31.25 | 10.5 | 24.3 | 52.9 | 38.1 | 49.9 | 35.1 | 45 | 540.4 |
| 62.5 | 15 | 23.6 | 48.4 | 32.1 | 45.4 | 29.1 | 45 | 538.6 |
| 100 | 19.1 | 21.5 | 45.3 | 28 | 42.3 | 25 | 45 | 537.6 |
| 200 | 27.6 | 18 | 40.8 | 22.2 | 37.8 | 19 | 45 | 536.5 |
| 250 | 31.1 | 17.3 | 39.3 | 20 | 36.6 | 17 | 45 | 536.3 |
| 300 | 34.3 | 17.3 | 38.1 | 18.5 | 35.1 | 15.5 | 45 | 536.1 |
| 400 | 40.1 | 17.3 | 36.3 | 16 | 33.3 | 13 | 45 | 535.8 |
| 500 | 45.3 | 17.3 | 34.8 | 14 | 31.8 | 11 | 45 | 535.6 |

# Excel Category 6A Cable U/FTP S-Foil Dca LSOH 305m Box - Ice Blue <br> Item Code: 100-191-305M 

## Standards

## Applicable standard

ISO/IEC 11801-1:2017

IEC 61156-5:2009+AMD1:2012 CSV

EN 50173-1:2011

EN 50173-2:2007 + A1:2010

BS EN 50288-6-1:2013

EN 50399:2011+A1:2016

IEC 60332-1-1:2004

IEC 60332-1-2:2004

ANSITIA 568-2.D

IEC 60754-2:2011

IEC 61034-1:2005

IEC 61034-2:2005+A1:2013

EN 50575:2014 + A1:2016

RoHS

## Subject

Information technology - Generic cabling for customer premises: Part 1 General Requirements

Multicore and symmetrical pair/quad cables for digital communications - Part 5: Symmetrical pair/quad cables with transmission characteristics up to 1000 MHz Horizontal floor wiring - Sectional specification

Information technology. Generic cabling systems General requirements

Information technology. Generic cabling systems - Office premises

Multi-element metallic cables used in analogue and digital communication and control. Sectional specification for unscreened cables characterised up to 250 MHz

Common test methods for cables under fire conditions. Heat release and smoke production measurement on cables during flame spread test. Test apparatus, procedures, results

Tests on electric and optical fibre cables under fire conditions - Part 1-1: Test for vertical flame propagation for a single insulated wire or cable - Apparatus

Tests on electric and optical fibre cables under fire conditions. Test for vertical flame propagation for a single insulated wire or cable. Procedure for 1 kW pre-mixed flame

Balanced Twisted-Pair Telecommunications Cabling and Components Standards

Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH measurement) and conductivity

Measurement of smoke density of cables burning under defined conditions - Part 1: Test apparatus

Measurement of smoke density of cables burning under defined conditions - Part 2: Test procedure and requirements

Power, control and communication cables - Cables for general applications in construction works subject to reaction to fire requirements

Restriction of Hazardous Substances - Compliant

## Part Number Table

Part Number
100-191-305M

## Description

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