# FutureCom™ S/FTP 800/23 with Diffusion Barrier

## Category 7, black, 1000 m

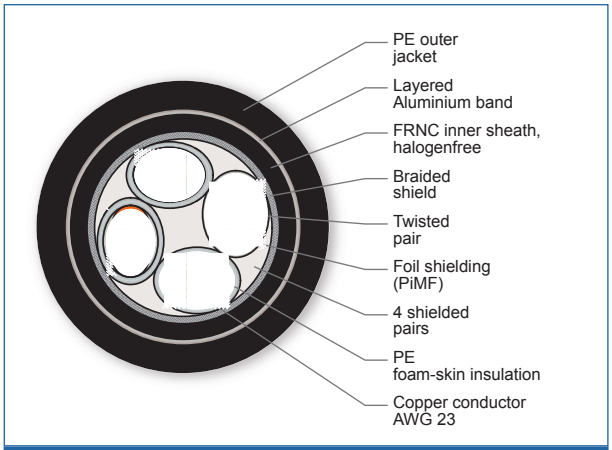
The FutureCom™ S/FTP 800/23 outdoor cable with diffusion barrier is designed for applications up to 1000 MHz and its transmission characteristics exceed Category 7 specifications according to EN 50288-4-1 and IEC 61156--5.

High system margins for the complete link according to ISO/IEC 11801 Ed.2.2 AMD:2 (2010) and EN 50173 (Series) will be achieved by using corresponding hardware together with this high-end copper cable.

Due to the very low delay skew between the pairs these FutureCom cables are especially suitable for Gigabit Ethernet and also for transmission of digital data for future applications up to 10 Gigabit Ethernet according to IEEE 802.3an.

Each pair is individually foil shielded. The twisted pairs (PiMF) are also sheathed with a braid shield (S/FTP), which guarantees outstanding shielding characteristics. The cable satisfies Class B interference radiation standards according to EN 55022, as well as immunity according to EN 55024, which enables the realisation of CE-compatible networks.

Part Number: CCXSDB-F0047-C001-L7




Cross Section of Order Number: CCXSDB-F0047-C001-L7

## Features

- S/FTP 800/23 outdoor cable specified up to 1000 MHz
- Outstanding electrical characteristics
- Each twisted pair is shielded with metal foil (PIMF)
- Full copper braid shield
- Includes a diffusion barrier (Aluminium band and PE sheath, UV resistant)
- Low skew between the pairs
- Halogen-free (LSZH™)
- Non-corrosive according to IEC 60754-2 (FRNC) and EN 50267
- Low smoke according to IEC 61034 and EN 50268
- Can be directly buried

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## Specifications

| General Specifications | |
|---|---|
| Environment | Outdoor |
| Cable type | S/FTP |
| Category | 7 |
| Bandwidth | 1000 MHz |
| Halogen-free | No |

| Temperature Range | |
|---|---|
| Installation and assembly | 0 °C to 50 °C |
| Operation | -20 °C to 60 °C |

| Cable Design | |
|---|---|
| No. of pairs | 4 |
| Outer jacket material | Polyethylene (PE) |
| Outer jacket colour | Black |

| Mechanical Characteristics | |
|---|---|
| Conductor Insulation | Halogen-free foam-skin material |
| Min. Bend Radius Operation | ≥ 35 mm |
| Min. Bend Radius Installation | ≥ 60 mm |
| Copper conductor | AWG 23 |
| Fire Load | 2.98 MJ/m |
| Maximum Tensile Strength | 400 N |
| Nominal Outer Diameter | 11.7 mm |

| Electrical characteristics (at 20°C) | |
|---|---|
| Conductor resistance unbalance | 1 % |
| Insulation Resistance | > 5000 MΩ x km |
| Surface transfer impedance | < 10 mΩ/m at 10 MHz |
| Propagation velocity at >10 MHz (NVP*c) | 0.79 * c |
| Propagation delay ≥10 MHz | 4.2 ns/m |
| Delay skew | 4 ns/100 m |

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| Electrical characteristics (at 20°C) | |
|---|---|
| Coupling attenuation | 88 dB |
| Max. loop resistance | 130 Ω/km |
| Voltage rating | less than 75 V d.c max and less than 50 V a.c max |

| Electrical characteristics (at 20°C) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Frequency [MHz]* | 1 | 4 | 10 | 100 | 300 | 600 | 800 | 1,000 |
| Attenuation according to Standard [dB/100 m]* | 2.0 | - | 5.7 | 18.5 | 33.3 | 48.9 | - | - |
| Typical attenuation [dB/100 m]* | 1.8 | 3.4 | 5 | 16.9 | 30.7 | 43.0 | 51.0 | 58 |
| NEXT according to Standard [dB/100 m]* | 80.0 | - | 80.0 | 72.4 | 65.3 | 60.8 | - | - |
| Typical NEXT Values [dB/100 m]* | 102 | 102 | 102 | 102.0 | 95.0 | 92.0 | 90.0 | 80 |
| ACR-N according to Standard [dB/100 m]* | 78.0 | - | 74.3 | 53.9 | 32.0 | 11.9 | - | - |
| Typical ACR-N Values [dB/100 m]* | 100.2 | 98.6 | 97 | 85.1 | 64.3 | 49.0 | 39.0 | 22 |

| Chemical Characteristics | |
|---|---|
| RoHS | Free of hazardous substances according to RoHS 2011/65/EU |

## Ordering Information

| | |
|---|---|
| Part Number | CCXSDB-F0047-C001-L7 |
| Product Description | FutureCom™ S/FTP 800/23 with Diffusion Barrier, black, 1000 m |
| EAN Code | 4042673117667 |
| Weight | 126 kg/km |
| Length | 1,000 m |

## Shipping Information

| | |
|---|---|
| Maximum delivery length | 1,000 m |
| Packing type | Drum |



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## *Notes*

RoHS COMPLIANT

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