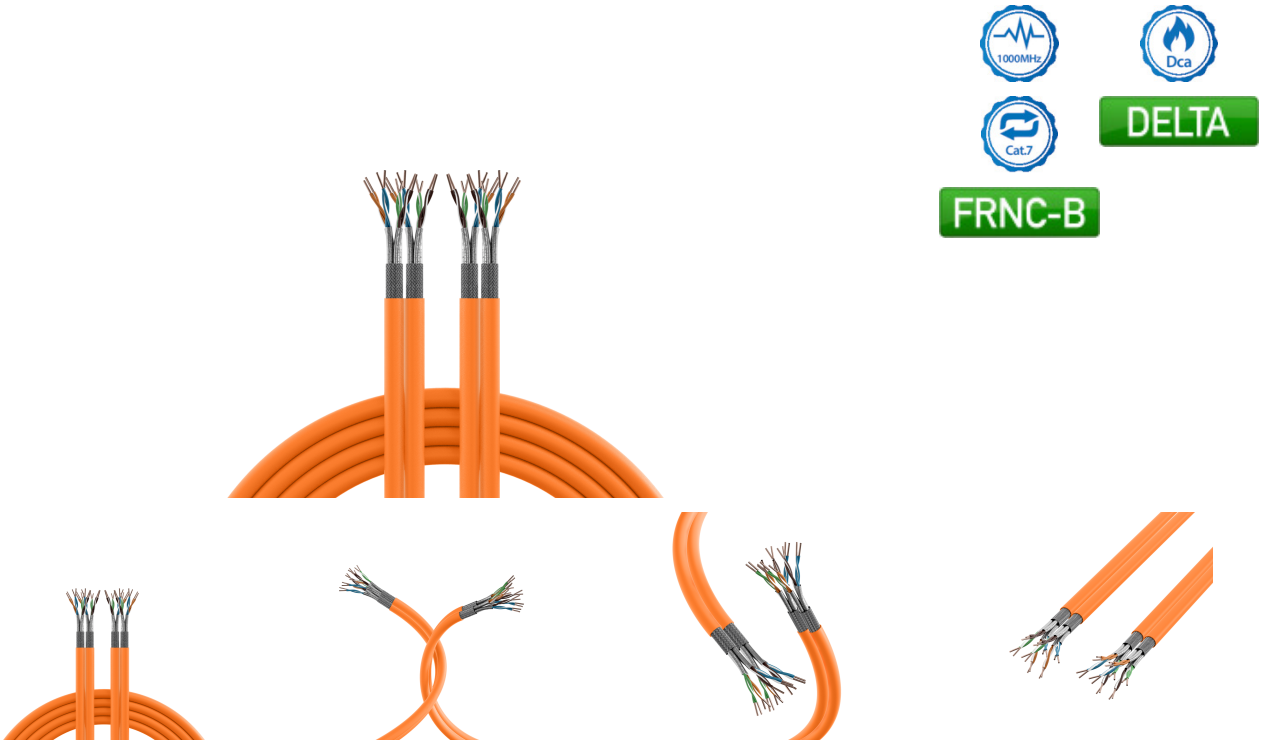
# DATASHEET

## Duplex LAN Cat.7 1000 AWG23 S/FTP,4P, CPR Dca, orange, 500m




### General data

The Cat.7 Duplex LAN Installation Cable 1000MHz AWG23 FRNC-B from EFB-Elektronik is designed for high-performance network cabling. The S/FTP design with FRNC-B sheath supports stable data connections up to 1000 MHz and is therefore suitable for modern installations with high bandwidth. The orange version in RAL 2003 facilitates assignment in the infrastructure and complements the cable with a clearly recognizable marking.

• 1000 MHz Cat.7 bandwidth – Supports transmission standards from IEEE 802.3 10Mbit to 10Gbit and creates scope for high-performance networks.
• S/FTP design with braid shielding – Reduces interference and supports stable signal quality in demanding cabling.
• FRNC-B jacket in orange with RAL 2003 and Euroclass Dca – Is halogen-free according to EN 60754, complies with RoHS 2011/65/UE and complements the installation with a contemporary choice of materials.

The cable is implemented as a duplex version with 23/1 conductors and 2x8 wires. The dynamic bending radius of 60 mm facilitates installation. The braided shielding supports decoupling from external influences and the structure is intended for PoE according to IEEE802.3af, PoE+ according to IEEE802.3at and 4PPoE according to IEEE802.3bt. The version without reinforcement is aimed at installation in structured network environments.

Technical details
• Brand: EFB-Elektronik

**This datasheet was created automatically on 23-11-2026 . Technical changes reserved.**

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- Category: Cat.7
- Transmission standards: IEEE 802.3 10Mbit to 10Gbit
- Max. frequency: 1000 MHz
- Cable construction: S/FTP
- PoE: after IEEE802.3af PoE, after IEEE802.3at PoE+, after IEEE802.3bt 4PPoE
- AWG cross-section/number of wires: 23/1
- Number of cores: 2x8
- Type: duplex
- Sheath material: FRNC-B
- Sheath colour: orange
- RAL colour: RAL 2003
- Armour: without
- Bend radius (dynamic): 60 mm
- Directive/Regulation: RoHS 2011/65/UE
- Euroclass: Dca
- Halogen-free: according to EN 60754
- Shield over stranding: braid

| **Technical properties** | |
|---|---|
| AWG-size | 23/1 |
| Armour | none |
| Bending radius (dynamic) | 60 mm |
| Cable | IEC 61156-6 |
| Cable silicone free | True |
| Cable structure | S/FTP |
| Cable type | EFB Cat.7 S/FTP 1000 AWG23 Eca |
| Cabling standards | ISO/IEC 11801 |
| Category | 7 |
| Characteristic impedance | 100 ± 5 Ohm |
| Conductor category | Class 1 = solid |
| Conductor material | Copper, tinned |
| Core identification | Colour |
| Core insulation | Foam-Skin-PE |
| Coupling attenuation | ≥ 80 dB |
| Diameter conductor | 0.56 mm |
| Directive/Regulation | RoHS 2011/65/UE |
| Euro class | Dca |
| Flame retardant | acc. to EN 60332-1 |
| Halogen free | acc. to EN 60754 |
| Harmonised Standard | EN 50575 |

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| | |
|---|---|
| Installation standard | EN 50174 |
| Insulation resistance (500V) | ≥ 2000 MOhm/km |
| Loop resistance | 191.2 Ohm/km |
| Low smoke | acc. to EN 61034 |
| Material outer sheath | FRNC-B |
| Max. Freuqency | MHz MHz |
| NVP value | 76 % |
| Operating capacity | 43 pF/km |
| Operating temperature, fix | -20 – 60 °C |
| Operating temperature, flexible | 0 – 50 °C |
| Operating temperature, storage | -20 – 60 °C |
| PoE | acc. to IEEE802.3af PoE |
| Resistance unbalance | < 3 % |
| Screen over stranding | braiding |
| Screen over stranding element | Foil |
| Separation class acc. EN50174-2 | D |
| Stranding element | Pairs |
| Test voltage DC, 1 min | 1000 V |
| Transmission standards | IEEE 802.3 10Mbit bis 10Gbit |
| UV resistant | no |

**Available variants**

| ArtNr. | Bezeichnung | Colour outer sheath | Length | Number of cores | RAL colour | Type | Copper weight | Weight | Max. tractive force | Outer diameter approx. | Fire load |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MK7101DX.100-CPR | Duplex LAN Cat.7 1000 AWG23 S/FTP,4P, CPR Dca, orange, 100m | orange | 100.0 m | 2x8 | RAL 2003 | duplex | 44 kg/km | 116 kg/km | 100 N | 7.4 x 15.0 mm | 1180 MJ/km |
| MK7101DX.500-CPR | Duplex LAN Cat.7 1000 AWG23 S/FTP,4P, CPR Dca, orange, 500m | orange | 500.0 m | 2x8 | RAL 2003 | duplex | 44 kg/km | 116 kg/km | 100 N | 7.4 x 15.0 mm | 1180 MJ/km |

**Note on Intended Use**

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This data sheet is intended solely to describe the technical characteristics of the product. It does not replace an assessment of the product's suitability for a specific application. The user is responsible for ensuring that the product is used in accordance with its technical specifications and applicable legal and regulatory requirements.

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