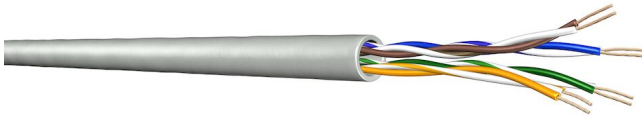


## UC500 S27 Cat.6A U/FTPp 4P LSHF

Data patch cable Cat.6A U/FTP



### CABLE FEATURES

Prysmian patch cable for indoor use UC500 S27 Cat.6A U/FTPp 4P LSHF

- The cable is single-shielded with a high-quality foil shield.
- The 4-pair patch cable with 8 stranded copper conductors AWG27 is suitable for plug termination and connection to sockets, which can accommodate stranded conductors, for laying in buildings, in ducts and flush-mounted
- The product exceeds the requirements of EN50173-1; EN50288-2-2, ISO/IEC11801; IEC61156-6 and IEEE802.3af/at/bt.
- The jacket is made of halogen-free, flame-retardant material according to IEC60332-1; IEC60754-2; IEC61034; EN50399 and Euro fire class Eca.
- The product fulfills segregation class C according to EN50174 with a coupling attenuation of 55 dB.
- The cable is future-proof for all applications according to Class C, D, E and EA and suitable for the operation of PoE and PoE+ over a channel length of up to 60m. It is suitable for the following applications: Telephony, Ethernet, Fast Ethernet, Gigabit Ethernet and 10Gigabit Ethernet, 10BaseT, 100BaseT, 1000BaseT, 1GBase-T, 10GBaseT or up to 10,000 Mbit/s.

Latest version of this data sheet is available for download: [ProductFamily238915](#)

### GENERAL INFO

Work area and patch cord cable IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 10GBase-T IEEE 802.5 16 MB; ISDN; TPDDI; ATM

### CERTIFICATIONS AND DESIGN STANDARDS

# RoHS



**EN 50288-2-2**  
**ISO/IEC 11801**  
**EN 50173**  
**IEC 60332-1-2**  
**IEC 60754-2**  
**IEC 61034-2**  
**IEC 61156-6**

Data communications patch cable shielded up to 100MHz  
Generic telecom cabling for customer premises  
Information technology - Generic cabling systems  
Single wire fire test  
Weighted Values of pH and Conductivity  
Smoke Density  
Datacom patch cables

## CABLE CONSTRUCTION

|                                       |   |
|---------------------------------------|---|
| Conductor category                    | Class 2 = stranded  |
| Conductor material                    | Copper  |
| Conductor surface                     | Bare  |
| AWG size                              | 27  |
| Core insulation material              | Polyethylene (PE)   |
| Nominal diameter over insulation [mm] | 1   |
| Screen over stranding element         | Foil  |
| Number of stranding elements          | 4   |
| Identification of stranding elements  | Core colors: blue/white; orange/white; green/white; brown/white |
| Screen material                       | Aluminium   |
| Screen over stranding                 | None  |
| Material outer sheath                 | Halogenfree polymer   |
| Cable shape                           | Round   |
| Nominal outer diameter [mm]           | 5.6   |

## APPLICATION PROPERTIES

|                                     |   |            |    |
|-------------------------------------|---|------------|----|
| Operation temperature (min) [°C]    | -20   | (max) [°C] | 60 |
| Installation temperature (min) [°C] | 0   | (max) [°C] | 50 |
| Bending radius (rule)               | Installation: 8 x outer diameter; Installed: 4 x outer diameter |            |    |

## FIRE PROPERTIES

|   |                                     |
|---|-------------------------------------|
| Flame retardant   | In accordance with EN/IEC 60332-1-2 |
| Halogen free  | acc. IEC/EN 60754-1/2               |
| Low smoke   | acc. IEC/EN 61034-2                 |
| Reaction-to-fire class (acc. EN 13501-6)                | Eca                                 |
| Smoke development class (acc. EN 13501-6)               | Not applicable                      |
| Euro class flaming droplets/particles (acc. EN 13501-6) | Not applicable                      |
| Euro class acidity (acc. EN 13501-6)                    | Not applicable                      |
| Fire load [MJ/km]                                       | 342                                 |
| DOP number  | 1005782                             |

## MECHANICAL PROPERTIES

|  |     |
|--|-----|
| Cable weight [kg/km]                           | 0   |
| Copper weight [kg/km]                          | 12  |
| Max. tensile strength during installation [kN] | 0.1 |
| Nominal outer diameter [mm]                    | 5.6 |

## ELECTRICAL PROPERTIES

|  |          |
|--|----------|
| Test voltage [kV]                            | 1        |
| Category                                     | 6A (IEC) |
| NVP value [%]                                | 79       |
| Propagation delay (max) [ns/100m]            | 427      |
| Delay skew (max) [ns/100m]                   | 12       |
| Characteristic impedance [Ohm]               | 100      |
| Nominal mutual capacitance [pF/m]            | 43       |
| Loop resistance [Ohm]                        | 340      |
| Coupling attenuation [dB]                    | 55       |
| Insulation resistance [MΩ·km]                | 5,000    |
| Transfer impedance at 10 MHz [mOhm/m]        | 100      |
| Segregation classification (acc. EN 50174-2) | c        |

## CAT 6A TRANSMISSION CHARACTERISTICS (AT 20°C)

| Frequency (MHz) | Attenuation (dB/10 m) | NEXT (dB) | PS-NEXT (dB) | ACR (dB/100 m) | PS-ACR (dB/100 m) | ACRF (dB/100m) | PS-ACRF (dB/100m) | Return Loss (dB) |
|-----------------|-----------------------|-----------|--------------|----------------|-------------------|----------------|-------------------|------------------|
| 1               | 0.4                   | 87        | 84           | 87             | 84                | 75             | 72                | 23               |
| 4               | 0.7                   | 78        | 75           | 77             | 74                | 75             | 72                | 23               |
| 10              | 1                     | 72        | 69           | 71             | 68                | 75             | 72                | 23               |
| 16              | 1.3                   | 69        | 66           | 68             | 65                | 71             | 68                | 23               |
| 20              | 1.5                   | 68        | 65           | 66             | 63                | 69             | 66                | 23               |
| 31.2            | 1.8                   | 65        | 62           | 63             | 60                | 65             | 62                | 23               |
| 62.5            | 2.6                   | 60        | 57           | 57             | 54                | 59             | 56                | 23               |
| 100             | 3.3                   | 57        | 54           | 54             | 51                | 55             | 52                | 23               |
| 125             | 3.6                   | 56        | 53           | 52             | 49                | 53             | 50                | 21               |
| 155.5           | 4.1                   | 54        | 51           | 50             | 47                | 51             | 48                | 21               |
| 175             | 4.3                   | 54        | 51           | 50             | 47                | 50             | 47                | 21               |
| 200             | 4.6                   | 53        | 50           | 48             | 45                | 49             | 46                | 21               |
| 250             | 5.2                   | 51        | 48           | 46             | 43                | 47             | 44                | 20               |
| 300             | 5.7                   | 50        | 47           | 44             | 41                | 45             | 42                | 20               |
| 400             | 6.6                   | 48        | 45           | 41             | 38                | 43             | 40                | 18               |
| 500             | 7.4                   | 47        | 44           | 40             | 37                | 41             | 38                | 18               |

## PRODUCT ORDER DATA

| Product name                       | Colour outer sheath | SAP code | Packaging type | Standard packaging quantity | Gross weight |
|------------------------------------|---------------------|----------|----------------|-----------------------------|--------------|
| UC500 S27 Cat.6A U/FTPp 4P LSHF BU | Blue                | 60015512 | Drum           | 500                         | 18           |
| UC500 S27 Cat.6A U/FTPp 4P LSHF YE | Yellow              | 60015526 | Drum           | 500                         | 18           |
| UC500 S27 Cat.6A U/FTPp 4P LSHF GY | Grey                | 60015516 | Drum           | 500                         | 36.4         |
| UC500 S27 Cat.6A U/FTPp 4P LSHF GY | Grey                | 60015518 | Drum           | 1,000                       | 34.4         |
| UC500 S27 Cat.6A U/FTPp 4P LSHF RD | Red                 | 60015506 | Drum           | 500                         | 18           |

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