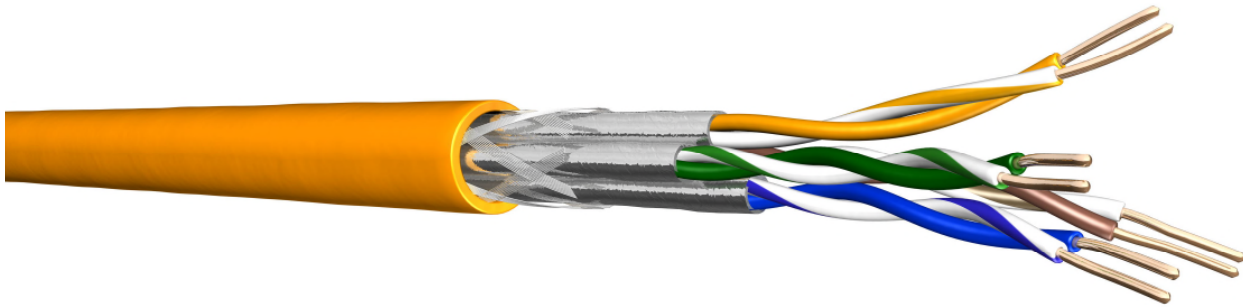


# UC900 HS23 Cat.7

**S/FTP AWG23/1**



## Application

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)  
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 10GBase-T  
IEEE 802.5 16 MB; ISDN; TPDDI; ATM  
Power over Ethernet (PoE) / PoE+

## Standards

EN 50173-1; EN 50288-4-1  
ISO/IEC 11801; IEC 61156-5  
IEEE 802.3at

## Flame resistance

LSHF (LSOH): IEC 60332-1; IEC 60754-2; IEC 61034; Class Eca

## Construction

|              |                                      |  |
|--------------|--------------------------------------|--|
| Conductor    | bare copper wire, Ø 0.56 mm (AWG 23) |  |
| Insulation   | Foamskin PE, Ø 1.38 mm               |  |
| Twisting     | 2 cores to the pair                  |  |
| Pair screen  | Al-laminated plastic foil            |  |
| Cable lay up | 4 pairs (PiMF) to the core           |  |
| Screen       | copper braid, tinned                 |  |
| Sheath       | LSHF, orange                         |  |

## Mechanical properties

|                   |                     |                 |
|-------------------|---------------------|-----------------|
| Bending radius    | without load        | 4 x D           |
|                   | with load           | 8 x D           |
| Temperature range | during operation    | -20°C to + 60°C |
|                   | during installation | 0°C to + 50°C   |

## UC900 HS23 Cat.7

### Electrical properties

at 20°C ± 5°C

|  |                                       |               |                |
|--|---------------------------------------|---------------|----------------|
| Loop resistance                            |                                       | 154 Ω/km      |                |
| Resistance unbalance                       |                                       | ≤ 2%          |                |
| Insulation resistance                      | (500 V)                               | ≥ 2000 MΩ*km  |                |
| Mutual capacitance                         | at 800 Hz                             | Nom. 43 nF/km |                |
| Capacitance unbalance                      | (pair/ground)                         | ≤ 1500 pF/km  |                |
| Mean characteristic impedance              | 100 MHz                               | 100 ± 5 Ω     |                |
| Nominal velocity of propagation            |                                       | ca. 79 %      |                |
| Propagation delay                          |                                       | ≤ 427 ns/100m |                |
| Delay skew                                 |                                       | ≤ 12 ns/100m  |                |
| Test voltage                               | (DC, 1 min) core/core and core/screen | 1000 V        |                |
| Transfer impedance                         | bei 1 MHz                             | ≤ 12 mΩ /m    | <b>Grade 2</b> |
|  | bei 10 MHz                            | ≤ 10 mΩ /m    |                |
|  | bei 30 MHz                            | ≤ 30 mΩ /m    |                |
| Coupling attenuation                       |                                       | ≥ 80 dB       | <b>Type 2</b>  |
| Segregation classification acc. EN 50174-2 |                                       |               | <b>„D“</b>     |

### Electrical data (nominal)

acc. to Cat.7 (at 20°C)

| F (MHZ) | Attenuation (dB/100m) | NEXT (dB) | PS-NEXT (dB) | ACR (dB/100m) | PS-ACR (dB/100m) | ACRF (dB/100m) | PS-ACRF (dB/100m) | Return loss (dB) |
|---------|-----------------------|-----------|--------------|---------------|------------------|----------------|-------------------|------------------|
| 1,0     | 1,8                   | 100       | 97           | 98            | 95               | 105            | 105               | -                |
| 4,0     | 3,4                   | 100       | 97           | 97            | 94               | 105            | 102               | 27               |
| 10,0    | 5,4                   | 100       | 97           | 95            | 92               | 97             | 94                | 30               |
| 16,0    | 6,8                   | 100       | 97           | 93            | 90               | 93             | 90                | 30               |
| 20,0    | 7,7                   | 100       | 97           | 92            | 89               | 91             | 88                | 30               |
| 31,2    | 9,6                   | 100       | 97           | 90            | 87               | 87             | 84                | 30               |
| 62,5    | 13,7                  | 100       | 97           | 86            | 83               | 81             | 78                | 30               |
| 100,0   | 17,4                  | 100       | 97           | 83            | 80               | 77             | 74                | 30               |
| 125,0   | 19,5                  | 95        | 92           | 75            | 72               | 75             | 72                | 26               |
| 155,5   | 21,9                  | 94        | 91           | 72            | 69               | 73             | 70                | 26               |
| 175,0   | 23,3                  | 93        | 90           | 70            | 67               | 72             | 69                | 25               |
| 200,0   | 25,0                  | 92        | 89           | 67            | 64               | 71             | 68                | 25               |
| 250,0   | 28,1                  | 90        | 87           | 62            | 59               | 69             | 66                | 24               |
| 300,0   | 30,9                  | 89        | 86           | 58            | 55               | 67             | 64                | 24               |
| 450,0   | 38,3                  | 87        | 84           | 48            | 45               | 64             | 61                | 23               |
| 600,0   | 44,8                  | 85        | 82           | 40            | 37               | 61             | 58                | 22               |
| 750,0   | 52,0                  | 83        | 80           | 31            | 28               | 59             | 56                | 21               |
| 900,0   | 59,4                  | 82        | 79           | 23            | 20               | 58             | 55                | 20               |
| 1000,0  | 63,1                  | 80        | 77           | 17            | 14               | 57             | 54                | 20               |

## UC900 HS23 Cat.7

### Product order data

| Product code | Cable type                       | Brand name                          | Outer diameter<br>mm | Euro class      | Fire load |       | Weight<br>kg/km | Copper content | Tensile force<br>N |
|--------------|----------------------------------|-------------------------------------|----------------------|-----------------|-----------|-------|-----------------|----------------|--------------------|
|              |                                  |                                     |                      |                 | MJ/km     | kWh/m |                 |                |                    |
| 60011263     | J-02YSCH<br>4x2x0.56 PiMF        | UC900 HS23 Cat.7 S/FTP 4P<br>LSHF   | 7.3                  | E <sub>ca</sub> | 590       | 0.170 | 54.5            | 26             | 110                |
| 60015444     | J-02YSCH<br>2x(4x2x0.56)<br>PiMF | UC900 HS23 Cat.7 S/FTP<br>2x4P LSHF | 7.2/15.0             | E <sub>ca</sub> | 1190      | 0.345 | 109.2           | 52             | 220                |

### Produkt Code Tabelle

| Produkt Beschreibung                 | PG Referenz Code | PG Artikel Nummer |
|--------------------------------------|------------------|-------------------|
| UC900 HS23 C7 S/FTP 4P LSHF          | 60011263         | 60011263          |
| UC900 HS23 C7 S/FTP 4P LSHF 50RW     | 60011263         | 60015558          |
| UC900 HS23 C7 S/FTP 4P LSHF 100RW    | 60011263         | 60011605          |
| UC900 HS23 C7 S/FTP 4P LSHF 250DW    | 60011263         | 60015556          |
| UC900 HS23 C7 S/FTP 4P LSHF 500DW    | 60011263         | 60011603          |
| UC900 HS23 C7 S/FTP 4P LSHF 500DP    | 60011263         | 60013208          |
| UC900 HS23 C7 S/FTP 4P LSHF 1000DW   | 60011263         | 60011604          |
| UC900 HS23 C7 S/FTP 2x4P LSHF        | 60015444         | 60015444          |
| UC900 HS23 C7 S/FTP 2x4P LSHF 100DW  | 60015444         | 60013181          |
| UC900 HS23 C7 S/FTP 2x4P LSHF 500DW  | 60015444         | 60013180          |
| UC900 HS23 C7 S/FTP 2x4P LSHF 1000DW | 60015444         | 60015449          |

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