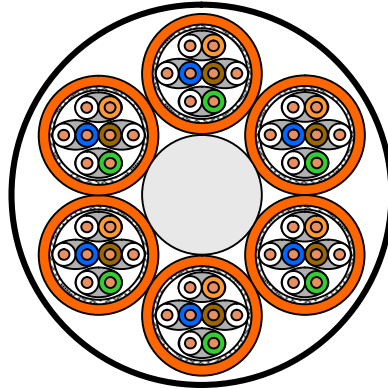


# UC<sup>FUTURE</sup> LOOMED23 Cat.7 S/FTP 6x4P LSHF

## S/FTP Data Centre Cable Cat. 7



### Application

IEEE 802.3: 10Base-T; 100Base-T; 10GBase-T, ISDN; xDSL  
IEEE 802.5 16 MB; ISDN; TPDDI; ATM155Mbit/s

The conductor diameter is smaller compared to the standard installation cables. This leads to an increased attenuation and therefore the operating distance is reduced (80 m instead of 90 m installation cable in standard permanent link).

### Standards

ISO/IEC 11801 2<sup>nd</sup> ed.  
EN 50173-5  
IEC 61156-5  
EN 50288-4-1

### Flame resistance

LSHF(FRNC): IEC 60332-1; IEC 60754-2; IEC 61034

### Construction

|              |  |
|--------------|--|
| Conductor    | bare copper wire, Ø 0.56 mm (AWG23)  |
| Insulation   | Foam skin Polyethylene, Ø 1.35 mm  |
| Twisting     | 2 cores to the pair  |
| Pair screen  | Al-laminated plastic foil  |
| Cable lay up | 4x pimf to the core  |
| Cable screen | Tinned copper braid, coverage approx. 35%  |
| Sheath       | LSHF, orange RAL 2003, number code for identification  |
| Printing     | DRAKA UC <sup>FUTURE</sup> LOOMED23 Cat.7 S/FTP 6x4P + batch number + meter marking - 1 - (on element 1)<br>number printing (on element 2-6) |
| Stranding    | 6 elements stranded to the cable loom, filler in the centre  |
| Wrapping     | adhesive tape  |

### Mechanical properties

|                   |                     |                    |
|-------------------|---------------------|--------------------|
| Bending radius    | Installation        | 8 x Outer diameter |
|                   | Installed           | 4 x Outer diameter |
| Temperature range | During operation    | -20°C to + 60°C*   |
|                   | During installation | 0°C to + 50°C      |

\* POE, reduce the temperature range

# UC<sup>FUTURE</sup> LOOMED23 Cat.7 S/FTP 6x4P LSHF

## Electrical properties

at 20°C ± 5°C

|  |  |                       |
|--|--|-----------------------|
| Loop resistance                            |  | ≤ 176 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 Ω ± 5 Ω           |
| Nominal velocity of propagation            |  | Ca. 79 %              |
| Propagation delay                          | Nominal                                | < 450 ns/100m         |
| Delay skew                                 | Nominal                                | < 15 ns/100m          |
| Test voltage                               | (DC, 1 min) core/ core and core/screen | 1000 V                |
| Coupling attenuation                       |  | ≥ 85 dB <b>Type 1</b> |
| Segregation classification acc. EN 50174-2 |  | „d“                   |

## Electrical data (nominal)

acc. to Cat.7 (at 20°C)

| F<br>(MHZ) | Attenuation<br>(dB/90m) | NEXT<br>(dB) | PS-NEXT<br>(dB) | ACR<br>(dB/100m) | PS-ACR<br>(dB/100m) | ACRF<br>(dB/100m) | PS-ACRF<br>(dB/100m) | Return loss<br>(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                  |
| 400.0      | 38.3                    | 87           | 84              | 48               | 45                  | 64                | 61                   | 23                  |
| 500.0      | 43.0                    | 86           | 83              | 43               | 40                  | 61                | 58                   | 22                  |
| 600.0      | 44.8                    | 85           | 82              | 40               | 37                  | 60                | 57                   | 22                  |

\* POE, reduce the temperature range

# UC<sup>FUTURE</sup> LOOMED23 Cat.7 S/FTP 6x4P LSHF

## Product order data

| Product code | Designation  | Type         | Outer diameter<br>mm | Fire load |       | Weight<br>kg/km | Copper content<br>kg/km | Tensile force<br>N |
|--------------|--------------|--------------|----------------------|-----------|-------|-----------------|-------------------------|--------------------|
|              |              |              |                      | MJ/km     | kWh/m |                 |                         |                    |
| 1016778      | J-02YS(St)CH | 6x(4x2x0.56) | 22.1                 | 3550      | 0,99  | 340             | 163                     | 800                |

## Product Code Table

| Product Description                                 | Product Code | PG Reference Code | PG Part Number  |
|---|--------------|-------------------|-----------------|
| UC <sup>FUTURE</sup> LOOMED23 Cat.7 S/FTP 6x4P LSHF | 1016778      | 60015688          | <b>60015688</b> |

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