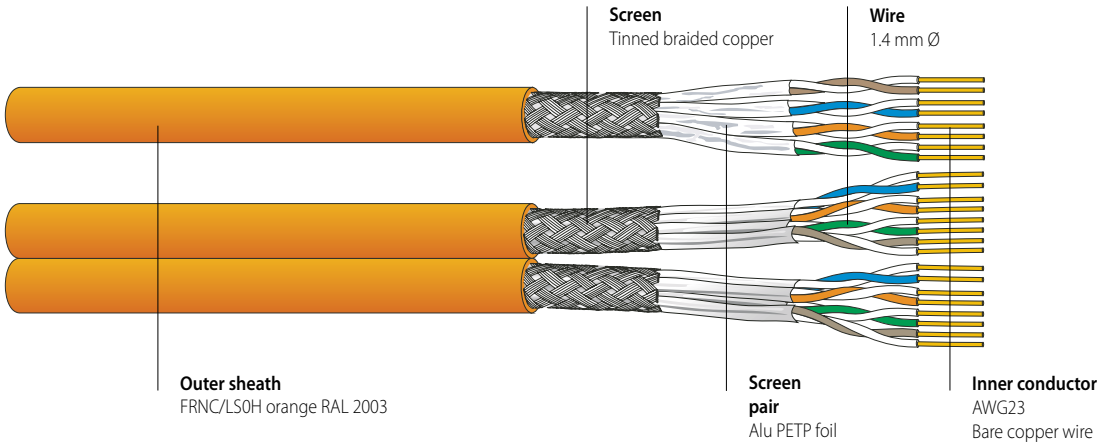
# Data cable S/FTP Cat.7 AWG23

**CU 7002 4P / 2x4P F8**




## PRODUCT INFORMATION

**FEATURES**

Electrically and mechanically high-quality Cat.7 data cable - exceeds the requirements of ISO/IEC 11801, IEC 61156-5, EN 50173-1 and EN 50288-4-1.
Excellent shielding effect due to individually screened pairs and overall copper braid.
Compatible with all current connecting hardware in accordance with EN 50173 and ISO/IEC 11801.

**APPLICATIONS**

Data cable for structured premises cabling.
For the transmission of digital and analogue voice, video and data signals.
Suitable for all ICT network applications up to class F applications (600 MHz) in accordance with EN 50173-1 and ISO/IEC 11801 and for the transmission of broadband signals (such as cable TV) in accordance with IEC 15018.
Applicable for Power over Ethernet (PoE) / PoE+.

**VERSIONS**

| Article No. | Dimension n x n x mm (AWG) | Sheath | Sheath Ø mm | Weight kg/km | Cu weight kg/km | Fire load kWh/m | Fire load MJ/m | PU |
|---|---|---|---|---|---|---|---|---|
| 177388 | 4 x 2 x 0.57 (AWG23) | FRNC/LS0H [1] | 7.4 | 60 | 31.1 | 0.16 | 0.57 | 1000 m drum |
| 177398 | 2 x (4 x 2 x 0.57 (AWG23)) | FRNC/LS0H [1] | 7.4 x 15.6 | 120 | 62.2 | 0.32 | 1.14 | 500 m drum |

[1] FRNC/LS0H = Flame Retardant Non Corrosive/Low Smoke Zero Halogen

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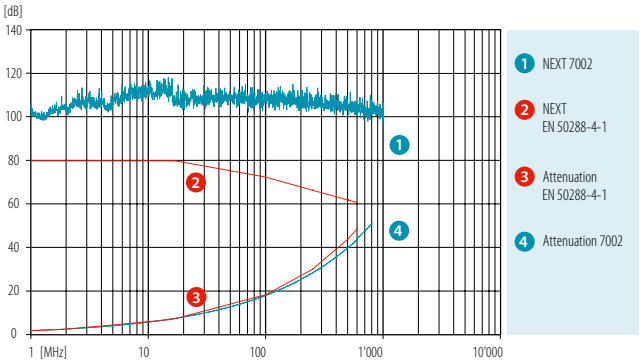
## ELECTRICAL CHARACTERISTICS

| CATEGORY | | | | 5e | 6 | $6_A$ | 7 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Frequency [MHz] | 1 | 4 | 10 | 100 | 250 | 500 | 600 | 800 | 862 | 1000 |
| Attenuation [dB/100m] | 1.9 | 3.6 | 5.6 | 17.9 | 28 | 41 | 46 | 52 | 54 | 57 |
| NEXT [dB] | 100 | 100 | 100 | 100 | 100 | 92 | 90 | 84 | 83 | 80 |
| PS NEXT [dB] | 97 | 97 | 97 | 97 | 97 | 89 | 87 | 81 | 80 | 77 |
| ACR-N [dB] | 98 | 96 | 94 | 82 | 72 | 58 | 44 | 32 | 29 | 23 |
| PS-ACR-N [dB] | 95 | 93 | 91 | 79 | 69 | 55 | 41 | 29 | 26 | 20 |
| ACR-F [dB] | 98 | 98 | 98 | 78 | 69 | 56 | 45 | 39 | 37 | 33 |
| PS-ACR-F [dB] | 95 | 95 | 95 | 75 | 66 | 53 | 42 | 36 | 34 | 30 |
| Return loss [dB] | 26 | 30 | 33 | 33 | 28 | 26 | 25 | 23 | 22 | 20 |

These performance data are typical measured values.

| | |
|---|---|
| Loop resistance at 20° C: | 140 Ω/km |
| Mutual capacitance: | 42 pF/m |
| Impedance at 100 MHz: | 100 Ω ±5 Ω |
| Transfer impedance at 1/10/30 MHz: | < 6/6/10 mΩ/m |
| Coupling attenuation (limit curve of critical state - IEC 61156): | ≥ 85 dB |
| Near end unbalance att. LCL at 1-600 MHz: | > 40 dB |
| Delay Skew: | 4 ns/100 m |
| NVP: | 81% |




## MECHANICAL CHARACTERISTICS

| | | CU 7002 4P | CU 7002 2x4P F8 |
|---|---|---|---|
| Bending radius (flat side) | during draw-in: | ≥ 60 mm | ≥ 60 mm |
| | permanently installed: | ≥ 30 mm | ≥ 30 mm |
| Tensile strength: | | ≤ 110 N | ≤ 220 N |
| Crush resistance: | | ≥ 1000 N/10 cm | ≥ 1000 N/10 cm |
| Impact: | | ≥ 10 impacts | ≥ 10 impacts |
| Temperature range | during installation: | 0° C to + 50° C | 0° C to + 50° C |
| | in operation: | -20° C to + 60° C | -20° C to + 60° C |

## GENERAL CHARACTERISTICS

| | |
|---|---|
| Wire colour code | white/blue<br>white/orange<br>white/green<br>white/brown<br>in accordance with IEC 60189 and IEC 60708 |
| Imprint | DATWYLER «cable type» «additional text» «batch number» «meter marks» |
| Zero halogen, non corrosive gases | IEC 60754-1/-2, EN 50267-2-1/-2-2 (VDE 0482-267-2-1/-2-2) |
| Flame propagation | IEC 60332-1-2, EN 60332-1-2 (VDE 0482-332-1-2) |
| Flame spread | IEC 60332-3-24, EN 60332-3-24 |
| Smoke density | IEC 61034-1/-2, EN 61034-1/-2 (VDE 0482-1034-1/-2) |
| Power over Ethernet plus | IEEE 802.3at |
| EMC | shielded |
| Cat./Class | better than Cat.7 / Class F |