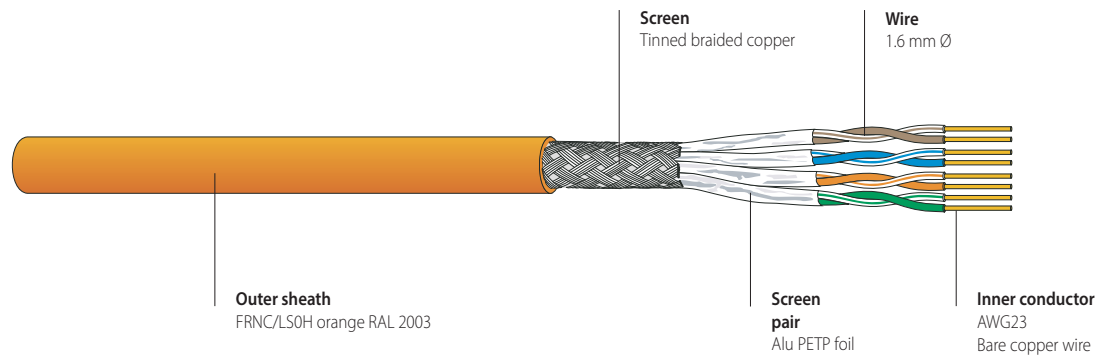




## PRODUCT INFORMATION



### FEATURES

Electrically and mechanically high-quality Category 8.2 data cable – exceeds the requirements of ISO/IEC 11801, IEC 61156-5, EN 50173-1, EN 50288-9-1 and IEC 46C/1001/CD (draft). Excellent shielding effect due to individually screened pairs and overall copper braid. Compact cable design. Compatible with all current connecting hardware in accordance with EN 50173 and ISO/IEC 11801.

### APPLICATIONS

High-end data cable for data centres. Developed particularly for 40 GBase-T transmission with maximum channel length of 30 metres in End of Row or Top of Rack (EoR / ToR) applications in data centres. For the transmission of digital and analogue voice, video and data signals. Suitable for all ICT network applications up to 2000 MHz. Applicable for Power over Ethernet (PoE / PoE+).

### VERSIONS

| Article No. | Dimension<br>n x n x mm (AWG) | Sheath                  | Sheath Ø<br>mm | Weight<br>kg/km | Cu weight<br>kg/km | Fire load |       | PU          |
|-------------|-------------------------------|-------------------------|----------------|-----------------|--------------------|-----------|-------|-------------|
| 192009      | 4 x 2 x 0,59 (AWG23)          | FRNC/LS0H <sup>1)</sup> | 8.1            | 67.3            | 33.2               | 0.18      | 0.649 | 1000 m drum |

<sup>1)</sup> FRNC/LS0H = Flame Retardant Non Corrosive / Low Smoke Zero Halogen

Copper

Fibre Optics

Cabinets &amp; Racks

Data Centre

Wireless

Multimedia

General Information

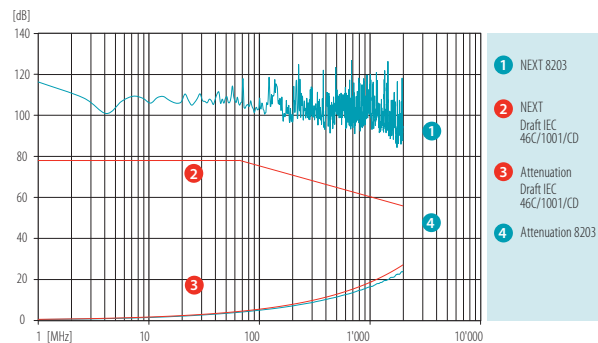
CU 8203 4P 0814/e

## ELECTRICAL CHARACTERISTICS

| CATEGORY             |      |      |     |     |     |                |      |      |                |      |      |
|----------------------|------|------|-----|-----|-----|----------------|------|------|----------------|------|------|
|                      | 1    | 4    | 10  | 5e  | 6   | 6 <sub>A</sub> | 7    | CATV | 7 <sub>A</sub> |      | 8.2  |
| Frequency [MHz]      | 1    | 4    | 10  | 100 | 250 | 500            | 600  | 862  | 1000           | 1600 | 2000 |
| Attenuation [dB/30m] | 0.54 | 0.95 | 1.5 | 5.0 | 8.0 | 11.3           | 12.5 | 15.6 | 16.3           | 21.0 | 23.5 |
| NEXT [dB]            | 103  | 103  | 103 | 103 | 97  | 95             | 94   | 92   | 90             | 85   | 80   |
| PS NEXT [dB]         | 100  | 100  | 100 | 100 | 94  | 92             | 91   | 89   | 77             | 82   | 77   |
| ACR-N [dB]           | 102  | 102  | 101 | 98  | 89  | 84             | 80   | 77   | 74             | 64   | 56   |
| PS-ACR-N [dB]        | 99   | 99   | 99  | 95  | 86  | 81             | 77   | 74   | 71             | 61   | 53   |
| ACR-F [dB]           | 100  | 100  | 100 | 95  | 92  | 89             | 87   | 80   | 78             | 72   | 70   |
| PS-ACR-F [dB]        | 97   | 97   | 97  | 92  | 89  | 86             | 84   | 77   | 75             | 69   | 67   |
| Return loss [dB]     | 28   | 30   | 30  | 30  | 28  | 26             | 25   | 24   | 23             | 20   | 18   |

These performance data are typical measured values.

Loop resistance at 20° C: 135 Ω/km  
 Mutual capacitance: 44 pF/m  
 Impedance at 100 MHz: 100 Ω ±5 Ω  
 Transfer impedance at 1/10/30 MHz: < 8/10/40 mΩ/m  
 Coupling attenuation (limit curve of critical state - IEC 61156): > 75 dB  
 Near end unbalance attenuation LCL at 1-600 MHz : > 20 dB  
 Delay skew: 10 ns/100 m  
 NVP: 75 %



## MECHANICAL CHARACTERISTICS

Bending radius (flat side)

during draw-in: ≥ 64 mm  
 permanently installed: ≥ 32 mm  
 ≤ 110 N  
 ≥ 1000 N/10 cm  
 ≥ 3 impacts  
 during installation: 0 °C to +50 °C  
 in operation: -20 °C to +60 °C

## GENERAL CHARACTERISTICS

Wire colour code

white-blue / blue  
 white-orange / orange  
 white-green / green  
 white-brown / brown  
 according to IEC 60189 and IEC 60708

Imprint

DATWYLER «cable type» «additional text» «batch number» «meter marks»

- Zero halogen,
- non corrosive gases
- Flame propagation
- Flame spread
- Smoke density
- Power over Ethernet plus
- EMC
- Cat.

IEC 60754-1/-2, EN 50267-2-1/-2-2 (VDE 0482-267-2-1/-2-2)  
 IEC 60332-1-2, EN 60332-1-2 (VDE 0482-332-1-2)  
 IEC 60332-3-24, EN 60332-3-24  
 IEC 61034-1/-2, EN 61034-1/-2 (VDE 0482-1034-1/-2)  
 IEEE 802.3at  
 shielded  
 Cat.8.2  
 (IEC 46C/1001/CD, draft, for channel length of 30 m)