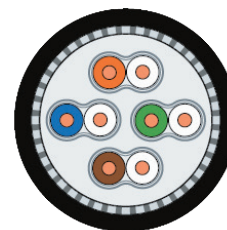


DATA-LINE S/FTP, Kat. 7_A - 1000 MHz PE, 4P AWG 23/1



Anwendung

Datenkabel zur Übertragung analoger und digitaler Signale im Frequenzbereich bis 1000 MHz. Es ist konzipiert für die Verkabelung im **Industrie- bzw. Außenbereich**. LANs wie IEEE 802.3; 10/100/1000/10GBase-T; FDDI, Breitband Video ISDN, ATM, Multimedia, PoE.

Normen

EN 50288-4-1; IEC 61156-5; EN 50173-1; ISO/IEC 11801 2. Ausgabe RoHS 2002/95/EG

Aufbau

| | |
|-------------------|--|
| Leiter Ø | Kupfer, massiv, blank, AWG 23/1 |
| Aderisolation | SFS-PE geschäumt |
| Aderkennzeichnung | ws/bl, ws/or, ws/gn, ws/br |
| Verseilung | 4 Paare verseilt |
| Schirmung | Al-Folie, CU-Geflecht verzinkt |
| Mantel | PE, schwarz |
| Außendurchmesser | 9,5 mm |
| Mantelwanddicke | 1,5 mm |
| Aufdruck | DATA-LINE 1000 MHz Kat.7A S/FTP 4P AWG23/1 PE <m> |

Elektrische Eigenschaften

| | |
|-----------------------------|-----------------------|
| Schleifenwiderstand | max. 14,5 Ohm/100 m |
| Isolationswiderstand | nom. 5 GOhm*km @ 20°C |
| Wellenwiderst. 1-100 MHz | 100 ±15 Ω |
| Wellenwiderst. 100-250 MHz | 100 ±22 Ω |
| Wellenwiderst. 250-1200 MHz | 100 ±25 Ω |
| Kopplungswiderst. (10 MHz) | 10 mΩ / m |
| Betriebskapazität nom. | nom. 45 nF/km |
| Signalgeschwindigkeit (NVP) | ca. 0,78 c (78 %) |
| Schirmdämpfung | 85 dB |
| Prüfspannung | 700 V/AC |

Thermische & Mechanische Eigenschaften

| | |
|---------------------------|-----------------|
| Temperaturbereich bewegt | -20°C ... +50°C |
| Temperaturbereich verlegt | -20°C ... +70°C |
| Biegeradius mehrmals | 10xD |
| Biegeradius einmalig | 5xD |
| Max. Zugkraft | 180 N |

Application

Data cable for the transmission of analog and digital signals with frequencies up to 1000 MHz. It is designed for the wiring in the **industry and outdoor sector**. Usage in LANs such as IEEE 802.3; 10/100/1000/10GBase-T, FDDI, ISDN Broadband video, ATM, multimedia, PoE

Standards

EN 50288-4-1; IEC 61156-5; EN 50173-1; ISO/IEC 11801 2. Edition RoHS 2002/95/EG

Construction

| | |
|------------------|--|
| Conductor Ø | Copper, solid, bare, AWG 23/1 |
| Core insulation | SFS-PE foamed |
| Core ID | wh/bl, wh/or, wh/gn, wh/br |
| Stranding | 4 Pairs stranded |
| Shield | Al-foil, tinned copper braid |
| Sheath | PE, black |
| Outer diameter | 9,5 mm |
| Sheath thickness | 1,5 mm |
| Print | DATA-LINE 1000 MHz Kat.7A S/FTP 4P AWG23/1 PE <m> |

Electrical Properties

| | |
|------------------------------|-----------------------|
| Loop resistance | max. 14,5 Ohm/100 m |
| Insulation resistance | nom. 5 GOhm*km @ 20°C |
| Loop resist. 1-100 MHz | 100 ±15 Ω |
| Loop resist. 100-250 MHz | 100 ±22 Ω |
| Loop resist. 250-1200 MHz | 100 ±25 Ω |
| Coupling resistance (10 MHz) | 10 mΩ / m |
| Operating capacity nom. | nom. 45 nF/km |
| Signal speed (NVP) | ca. 0,78 c (78 %) |
| Screening attenuation | 85 dB |
| Test voltage | 700 V/AC |

Thermal & Mechanical Properties

| | |
|--------------------------|-----------------|
| Moving temperature range | -20°C ... +50°C |
| Temperature range moved | -20°C ... +70°C |
| Bending radius often | 10xD |
| Bending radius one time | 5xD |
| Max. tensile strength | 180 N |

DATA-LINE S/FTP, Kat. 7_A - 1000 MHz PE, 4P AWG 23/1

Übertragungseigenschaften

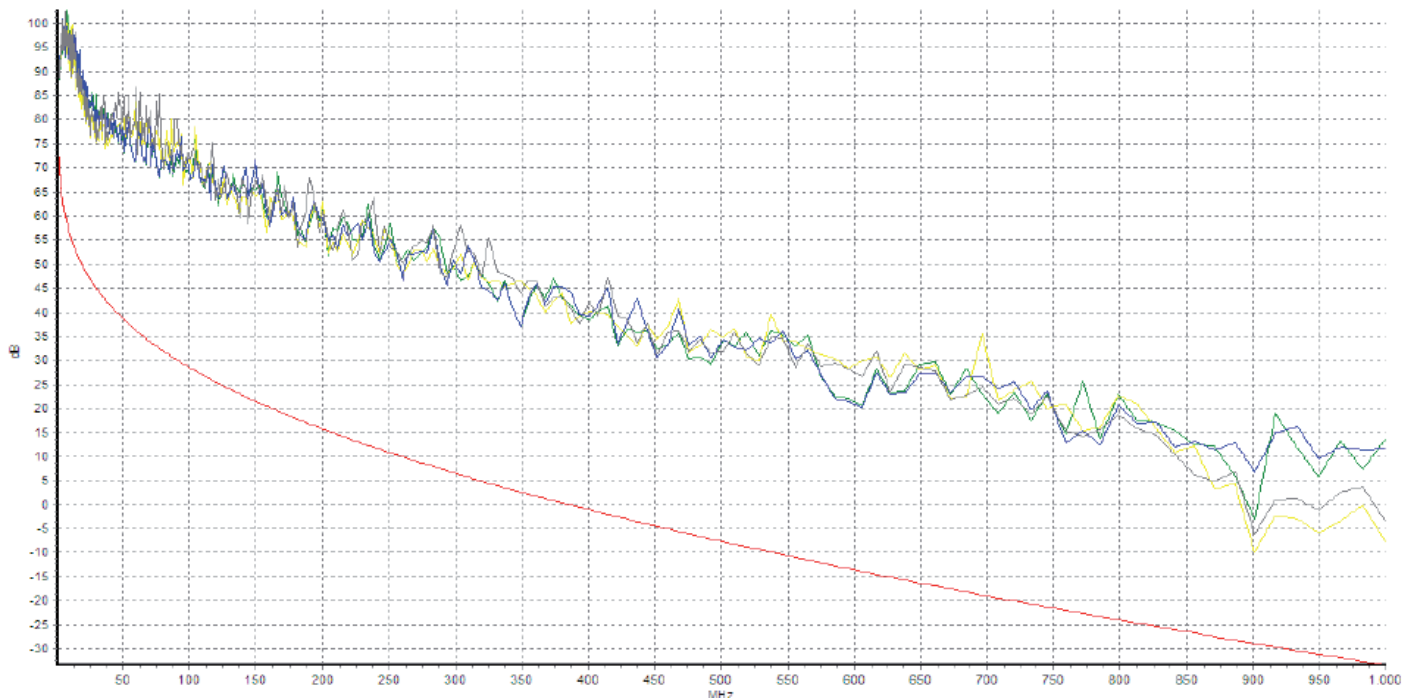
Transmission Properties

| FREQUENCY [MHz] | ATTENUATION [dB/100 m] | NEXT [dB] | ACR [dB/100 m] | RL [dB] | EL-FEXT [dB/100 m] |
|-----------------|------------------------|-----------|----------------|---------|--------------------|
| 1 | 1,7 | 105 | 103 | 25 | 95 |
| 4 | 3,2 | 105 | 102 | 28 | 93 |
| 10 | 5,2 | 105 | 100 | 30 | 92 |
| 16 | 6,5 | 105 | 98 | 32 | 91 |
| 20 | 7,3 | 105 | 98 | 34 | 90 |
| 31,25 | 9,4 | 105 | 96 | 35 | 86 |
| 62,5 | 13,6 | 103 | 89 | 34 | 82 |
| 100 | 17,0 | 100 | 83 | 33 | 77 |
| 155 | 22,2 | 98 | 76 | 30 | 73 |
| 200 | 24,3 | 95 | 71 | 29 | 70 |
| 300 | 30,2 | 93 | 73 | 27 | 67 |
| 400 | 35,2 | 90 | 55 | 26 | 64 |
| 500 | 39,1 | 87 | 48 | 24 | 62 |
| 600 | 43,5 | 85 | 41 | 23 | 60 |
| 800 | 50,0 | 83 | 33 | 22 | 56 |
| 900 | 55,2 | 81 | 26 | 21 | 53 |
| 1000 | 58,1 | 80 | 22 | 20 | 50 |

Die angegebenen Leistungsdaten sind typische Meßwerte. / The performance data are typical measured values.

ACR Powersum [dB/100 m]

ACR Powersum [dB/100 m]



Bestellinformation

Order Information

| Art. Nr. | Ausführung / Type | Lieferform / Packaging | Gewicht / Weight | CU-Zahl | Brandlast / fire load |
|----------|-------------------|------------------------|------------------|---------|-----------------------|
| 02216001 | 4x2xAWG23/1 PE | 1000 m | 85 kg | 34 | k. A. |