



VOKA-LAN SLAN 500 S/FTP AWG 23/1 FRNC Dca

Data cable

Category 6A and as class Ea up to 500 MHz

APPLICATION

Data cable for analogue and digital signal transmission in the frequency range up to 500 MHz. It is designed for primary (campus), secondary (riser) and tertiary (horizontal) wiring. Suitable for applications up to class EA (500 MHz). Approved for usage acc. to euroclass classification Dca.

Usage: IEEE 802.3 : Ethernet 10Base-T ; Fast Ethernet 100Base-T ; Gigabit Ethernet 1000Base-T ; 10GBase-T
IEEE 802.5 : ISDN ; FDDI ; ATM ; Cable sharing
IEEE 802.3at : PoE / PoE+ suitable

STANDARDS

EN 50288-5-1 ; EN 50288-10-1 ; IEC 61156-5 ;
EN 50173 ; ISO/IEC 11801 2. edition

CONSTRUCTION

Conductor: copper, solid, bare, AWG 23/1

Core insulation: SFS-PE

Core diameter: 1,34 ± 0,05 mm

Core identification: wh-bu, wh-or, wh-gn, wh-bn
(IEC 708-1)

Pair screen: plastic-laminated aluminium foil

Screening: tinned copper wire braid

Sheath material: halogen-free compound (FRNC)

Sheath color: blue, RAL 5015

BEHAVIOR UNDER FIRE CONDITIONS

EN 60332-1-2 ; EN 60332-3-24 ; EN 50399 ; EN 50575
EN 61034 ; EN 50267 ; IEC 60754-2 ; IEC 61034
EN 13501-6 class Dca-s1 d2 a1

CHEMICAL PROPERTIES

RoHS 2011/65/EU ; IEC 60811-404 (IRM 902, 4h at 70°C)

ELECTRICAL CHARACTERISTICS

| | |
|----------------------------|--------------------------------|
| loop resistance max. | max. 160 Ω / km |
| Insulation resistance min. | min. 5 GΩ x km at +20°C |
| Operating capacity | nom. 45 nF / km |
| Impedance | 100 Ω ± 5 Ω |
| Test voltage | 700 V / AC |
| Nominal voltage U_0/U | 125 V |
| NVP | ca. 0,79 c |
| Signal delay | max. 425 ns/100m |
| Delay skew | < 15 ns/100m |
| Coupling attenuation | > 75 dB, Type 1B |
| Coupling resistance | < 10 mΩ/m at 10MHz, Grade 1 |
| Separation class | C |

THERMAL & MECHANICAL PROPERTIES

| | |
|--------------------------------|--------------------|
| Temperature range stationary | -20°C to +60°C |
| Temperature range during inst. | 0°C to +50°C |
| min. bending radius installed | 4 x outer diameter |
| min. bending radius moved | 8 x outer diameter |
| Maximum traction | 95/190N |

| Dimension | Diameter appr.mm | Cable weight appr.kg/km | Copper index kg/km | Article number |
|-----------|---------------------|----------------------------|-----------------------|----------------|
| AWG23/1 | 7.3 | 60 | 25.5 | |

Version: 11/2023

We reserve changes which serve technical progress • Price upon quantity-specific request

Transmission characteristics

The stated performance data are characteristic measurements.

| f (MHz) | Attenuation (dB/100m) NOM | NEXT (dB) NOM | ACR (dB/100m) NOM | EL-FEXT (dB/100m) NOM | RL (dB) NOM |
|------------|-------------------------------------|-------------------------|-----------------------------|---------------------------------|-----------------------|
| 1 | 1,9 | 105 | 103 | 95 | 25 |
| 4 | 3,4 | 105 | 102 | 93 | 28 |
| 10 | 5,5 | 104 | 98 | 92 | 30 |
| 16 | 6,9 | 104 | 97 | 90 | 30 |
| 20 | 7,7 | 103 | 95 | 89 | 30 |
| 31,25 | 9,7 | 103 | 93 | 85 | 30 |
| 62,5 | 14 | 100 | 86 | 81 | 30 |
| 100 | 17,6 | 98 | 80 | 76 | 30 |
| 155 | 23 | 96 | 73 | 72 | 30 |
| 200 | 25,3 | 94 | 69 | 70 | 29 |
| 300 | 31,2 | 91 | 60 | 67 | 27 |
| 400 | 36,3 | 89 | 53 | 63 | 26 |
| 500 | 40,4 | 87 | 47 | 60 | 24 |
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