



## VOKA-LAN XLAN 350 F/UTP AWG 24/1 FRNC Eca

Data cable

Category 6 and as class E up to 250 MHz

### APPLICATION

Data cable for analogue and digital signal transmission in the frequency range up to 350 MHz. It is designed for primary (campus), secondary (riser) and tertiary (horizontal) wiring. Suitable for applications up to class EA (250 MHz). Approved for usage acc. to euroclass classification Eca.

**Usage:** IEEE 802.3 : Ethernet 10Base-T ; Fast Ethernet 100Base-T ; Gigabit Ethernet 1000Base-T  
IEEE 802.5 : ISDN ; FDDI ; ATM ; Cable sharing

### STANDARDS

EN 50288-5-1 ; ISO/IEC 11801 2. edition ; IEC 61156-5 Ed. 3.0  
EN 50173 ; EN 50174-2 ; TIA/EIA-568-B.2-10

### CONSTRUCTION

**Conductor:** copper, solid, bare, AWG 24/1

**Core insulation:** SFS-PE

**Core diameter:** 1,08 ± 0,05 mm

**Core identification:** whbu-bu, whor-or, whgn-gn, whbn-bn (IEC 708-1)

**Screening:** plastic-laminated aluminium foil

**Sheath material:** halogen-free compound (FRNC)

**Sheath color:** orange, RAL 2003

### BEHAVIOR UNDER FIRE CONDITIONS

EN 60332-1-2 ; EN 50399 ; EN 50575 ; EN 61034 ;  
EN 50267 ; IEC 60754-2 ; IEC 61034  
EN 13501-6 class Eca

### CHEMICAL PROPERTIES

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

### ELECTRICAL CHARACTERISTICS

loop resistance max.	max. 180 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. 0,74 c
Signal delay	max. 480 ns/100m
Delay skew	< 25 ns/100m
Coupling attenuation	> 55 dB, Type 2
Coupling resistance	< 100 mΩ/m at 10MHz, Grade 2
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	100/200N
Fire load	0,145/0,290kWh/m

Dimension	Diameter appr.mm	Cable weight appr.kg/km	Copper index kg/km	Article number
AWG24/1	7.3	50	19	

Version: 11/2023

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

**Transmission characteristics**

The stated performance data are characteristic measurements.

<b>f</b> (MHz)	<b>Attenuation</b> (dB/100m)	<b>NEXT</b> (dB)	<b>ACR</b> (dB/100m)	<b>EL-FEXT</b> (dB/100m)	<b>RL</b> (dB)
	<b>NOM</b>	<b>NOM</b>	<b>NOM</b>	<b>NOM</b>	<b>NOM</b>
1	1,8	85	83	90	24
4	3,5	80	76	80	27
10	5,4	75	70	73	30
16	6,9	70	63	68	30
20	7,8	67	59	66	30
31,25	9,8	65	55	63	30
62,5	13,9	64	50	59	30
100	17,5	62	44	54	28
155	21,8	57	35	52	26
200	24,9	55	30	48	24
250	29,5	52	22	46	22
350	33	50	17	44	21



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