

# VOKA-LAN XLAN 500

## U/UTP 4PR AWG 23/1

**Data cable**

**Category 6a • Class Ea • 500 MHz**



### APPLICATION

Data transmission cable for the frequency range up to 500 MHz. Unscreened data cable with good system reserves. For high quality requirements and all current data services as well as 10-gigabit Ethernet. Easy to install.

**Use:** IEEE 802.3: 10/100/1000/10GBase-T; FDDi, broadband, video, ISDN, ATM

### STANDARDS

ISO/IEC 11801 2nd edition; EN 50173-1; TIA/EIA 568; IEC 61156-5  
EN 50288-6-1; IEC 60332-1; IEC 60754-2; EN 61034; IEC 61034  
RoHS 2002/95/EC

### CONSTRUCTION

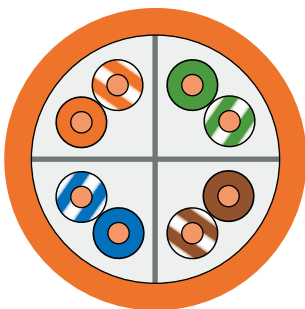
**Conductor:** copper, solid, bare, AWG 23/1

**Core insulation:** PE

**Core identification:** whbu-bu, whor-or, whgn-gn, whbn-bn

**Core stranding:** cores twinned to pairs; pairs layed up to cable core

**Sheath:** PVC or halogen-free compound (FRNC); colour: orange  
RAL 2003; imprint: VOKA-LAN XLAN 500 U/UTP 4PR AWG 23/1  
Cat.6A <00000m>



### ELECTRICAL CHARACTERISTICS

(Conductor) loop resistance max.	15 Ω/100 m
Insulation resistance min.	5 GΩ x km
Char. impedance 1 – 100 MHz	100 ±15 Ω
Char. impedance 100 – 250 MHz	100 ±22 Ω
Char. impedance 250 – 500 MHz	100 ±25 Ω
Mutual capacitance min.	50 nF/km
Coupling attenuation ≤ 1000 MHz min.	45 dB
Relative propagation velocity ca.	0,67 c
Test voltage	700V-AC

### THERMAL & MECHANICAL PROPERTIES

Temperature range during installation	0°C to +50°C
Temperature range stationary	-20°C to +60°C
Min. bending radius under tensile load	8 x diameter
Min. bending radius without tensile load	4 x diameter
Maximum traction	90N

dimension	sheath thickness appr. mm	diameter appr. mm	cable weight ca. kg/km	copper index kg/km	calorific potential MJ/km
4 x 2 x AWG23	0,60	6,5	52	20	420

We reserve changes which serve technical progress • Copper base 100,00 € / 100,00 kg  
Price upon quantity-specific request • Also available as duplex version

**Transmission characteristics**

The stated performance data are characteristic measurements.

f (MHz)	Attenuation (dB/100m)	NEXT (dB)	PSANEXT (dB)	ACR (dB/100m)	EL-FEXT (dB/100m)	RL (dB)
	NOM	NOM	NOM	NOM	NOM	NOM
1	1,8	87	67,0	85,2	85	24
4	3,5	76	67,0	72,5	72	27
10	5,6	72	67,0	66,4	63	30
16	7,0	70	67,0	63,0	60	30
20	7,9	68	67,0	60,1	58	30
31,25	9,9	66	67,0	56,1	54	30
100	18,2	63	62,5	44,8	43	30
155	22,9	60	59,6	37,1	40	28
200	26,0	57	58,0	31,0	38	27
300	32,3	55	55,3	22,7	36	25
400	35,7	54	53,5	18,3	35	23
500	39,8	53	52,0	13,2	34	22

**ACR Powersum (dB/100 m)**

