

VOKA-LAN XLAN 500

U/FTP 4PR AWG 23/1

Data cable

Category 6a • Class Ea • 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.

Einatz: in LANs: IEEE 802.3: 10/100/1000/10GBase-T; FDDI, broadband, video, ISDN, ATM, PoE

STANDARDS

EN 50288-5-1; IEC 61156-5; EN 50173-1; ISO/IEC 11801 2nd edition
IEC 60332-1; IEC 60332-3-24; IEC 60754-2; EN 61034; IEC 61034
RoHS 2002/95/EC

CONSTRUCTION

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

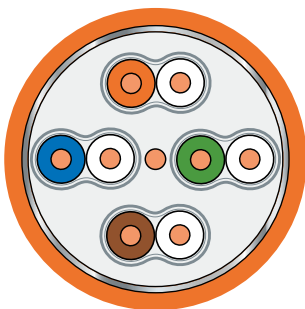
Core insulation: SFS-PE

Core identification: wh-bu, wh-or, wh-gn, wh-bn

Core stranding: cores twisted to layers

Screen: pair screen (PIMF) (plastic-laminated aluminium foil); drain wire

Sheath: PVC or halogen-free compound (FRNC); colour: orange
RAL 2003; imprint: VOKA-LAN XLAN 500 U/FTP 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
Transfer impedance max. (10 MHz)	30 mΩ/m
Mutual capacitance nom.	45 nF/km
Relative propagation velocity ca.	0,78 c
Screen attenuation ≤ 500 MHz min.	60 dB
Test voltage	700 V-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	100 N

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	7,3	54	22	510

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)	ACR (dB/100m)	EL-FEXT (dB/100m)	RL (dB)
	NOM	NOM	NOM	NOM	NOM
1	1,9	100	98,1	103	24
4	3,5	100	96,5	103	28
10	5,6	100	94,4	98	30
16	7,0	100	93,0	96	30
20	7,9	100	92,1	95	30
31,25	9,8	100	90,2	91	30
62,5	14,2	100	85,8	87	30
100	17,8	98	80,2	80	30
155	22,1	95	72,9	78	29
200	25,1	93	67,9	72	28
300	31,0	88	57,0	70	26
400	36,4	85	48,6	68	24
500	41,8	83	41,2	62	23

ACR Powersum (dB/100 m)

