

**VOKA-LONWORK F/UTP 1 x 2 x AWG 22/1 FRNC****VOKA-LONWORK F/UTP 2 x 2 x AWG 22/1 FRNC****LON BUS****APPLICATION**

Data cable for analogue and digital signal transmission in LON networks and for building automation.

**STANDARDS**

EN 50288-5-1; EN 50173; ISO/IEC 11801 2nd edition; IEC 61156-5  
EN 60332-1-2; EN 61034; EN 50267; IEC 60754-2; IEC 61034

**CONSTRUCTION**

**Conductor:** copper, solid, bare, AWG 22/1

**Core insulation:** PE

**Core identification:** colour code acc. to IEC 708-1;

1PR: whbu-bu; 2PR: whbu-bu, whor-or

**Core stranding:** 2 cores twinned to pairs

**Screen:** plastic-laminated aluminium foil, drain wire (AWG 26, tinned)

**Sheath:** halogen-free compound (FRNC); colour: white  
RAL 9010

**CHEMICAL PROPERTIES**

IEC 60811-2-1 (IRM 902, 4h at 70°C)

RoHS 2002/95/EC

**ELECTRICAL CHARACTERISTICS**

Loop resistance max. (VDE 0812)	110 Ω/km
Resistance unbalance max.	5 %
Insulation resistance min. (20 °C)	5 GΩ x km
Characteristic impedance (0,772 MHz)	102 Ω ± 15 %
Characteristic impedance (1–20 MHz)	100 Ω ± 15 %
Mutual capacitance nom.	48 nF/km

Attenuation max. at	0,772 MHz	1,46 dB/100 m
	1 MHz	1,79 dB/100 m
	4 MHz	3,67 dB/100 m
	8 MHz	4,87 dB/100 m
	10 MHz	5,52 dB/100 m
	16 MHz	7,14 dB/100 m
NEXT (2PR)	20 MHz	7,80 dB/100 m
	0,772 MHz	85 dB/100 m
	1 MHz	80 dB/100 m
	4 MHz	78 dB/100 m
	8 MHz	75 dB/100 m
	10 MHz	73 dB/100 m
Relative propagation velocity	16 MHz	70 dB/100 m
	20 MHz	67 dB/100 m
	ca. 0,67 c	
	Test voltage	

**THERMAL & MECHANICAL PROPERTIES**

Temperature range stationary	-20°C to +75°C
Temperature range during installation	0°C to +50°C
Core diameter 1PR	1,62 ± 0,02 mm
Core diameter 2PR	1,39 ± 0,02 mm
Cable diameter 1PR	4,6 ± 0,2 mm
Cable diameter 2PR	6,5 ± 0,2 mm
Min. bending radius stationary	5 x diameter
Min. bending radius during installation	10 x diameter
Maximum traction	80 N

We reserve changes which serve technical progress • Copper base 150,00 € / 100,00 kg  
Price upon quantity-specific request