

# SureLAN® 6 F/UTP

## Cable Design *4x2x23/24awg F/UTP*

### Core

Conductor	Solid bare copper wire (23 or 24awg)
Insulation	Polyethylene (PE)

### Pair

2 cores twisted to a pair

### Assembly

Central element	X-Filler
No. of Pairs	4 pairs stranded
Pair identification	WHBU/BU - WHOG/OG - WHGN/GN - WHBN/BN
Drain Wire	Solid tinned copper
Screen	Aluminium/polyester tape

### Outer Jacket

	LSZH FireFighter® or PVC
Diameter	Ø 7,00 ± 0,50 mm
Colour	see table

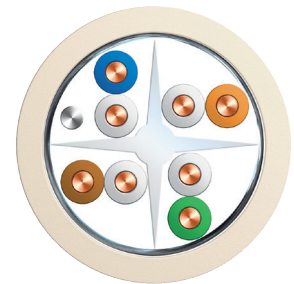
## Application

350 MHz overall screened data transmission cable for high quality requirements, backward compatible with current data-services as well as Gigabit-Ethernet. Installation is easy because of a central element (cross) no individual shield is required. Usable for: 10Base-T; 100Base-T; 1000Base-T; CDDI/TPDDI; ISDN; ATM 155 Mbit/s, TP-PMD 125 Mbit/s, Token Ring 4/16 Mbit/s, analogue telephony.

Acc. to ISO/IEC 110801 2nd.ed., EN 50173-1, TIA/EIA 568-B.2, EN 50288-5-1, IEC 61156-5.

## Specification

Part Number	AWG	Type	Colour	Calorific Potential <i>MJ/km</i>
5006	23	PVC	Ivory	445
5007	24	LSZH	Ivory	445
5007-08	24	LSZH	Orange	445
5007-09	23	LSZH	Violet	445



## Electrical Data at 20°C

Conductor Loop resistance	≤ 19 Ω/100m
Insulation Resistance	≥ 5 GΩ x km
Operating Capacitance (nom.)	50 nF/km
Capacitance unbalance (nom.)	≤ 150 pF/100m
Rel. Velocity of Propagation	76 %
Transfer Impedance at 10 MHz (nom.)	≤ 10 mΩ/m
Characteristic Impedance at 1-100 MHz	100 ± 15 Ω
Characteristic Impedance at 100-250 MHz	100 ± 22 Ω
Test Voltage	700 V - AC

Frequency (MHz)	Attenuation (dB/100m)		NEXT (dB)		ACR (dB/100m)	Return Loss (dB)	
	Nom.	Max. Cat 6	Nom.	Min. Cat 6	Nom.	Nom.	Min. Cat 6
<b>1</b>	1.8	[2.1]	95	66	93.2	24	[20.0]
<b>4</b>	3.4	3.8	90	65	86.6	27	23.1
<b>10</b>	5.4	6.0	85	60	79.6	30	25.0
<b>16</b>	6.9	7.6	78	56	71.1	30	25.0
<b>20</b>	7.8	8.5	75	55	67.2	30	25.0
<b>31.25</b>	9.8	10.8	72	52	62.2	30	23.6
<b>62.5</b>	13.8	15.5	68	47	54.2	30	21.5
<b>100</b>	17.5	19.9	64	44	46.5	28	20.1
<b>155</b>	21.8	25.3	60	41	38.2	26	18.8
<b>200</b>	24.9	29.2	57	40	32.1	25	18.0
<b>250</b>	27.5	33.0	55	38	27.5	24	17.3
<b>300</b>	29.5	-	53	-	23.5	23	-
<b>350</b>	33.0	-	50	-	22.0	22	-

The performance data given are typical measured values

## Mechanical & Thermal Characteristics

Bending radius	Dynamic (installation)	8 x Ø
	Static (installed)	4 x Ø
Temperature range	stationary	-20°C up to +60°C
	flexing	-0°C up to +50°C
Max. Pulling Tension		100 N
Weight		55 kg/km
Fire Behaviour (LSZH)		IEC60332-1   IEC61034   IEC60754-1 and 2