

SureLAN® 6 F/UTP Upjacketed Duct Grade

Cable Design 4x2x24awg F/UTP

Core

Conductor	Solid bare copper wire (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
Inner Jacket	LSZH FireFighter® Ø 7,00 ± 0,50 mm

Outer Jacket

	High Density Polyethylene (HDPE)
Diameter	Ø 9,00 ± 0,50 mm
Colour	Black

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	Type	Colour	Calorific Potential MJ/km
25007	Duct Grade	Black	445



Electrical Data at 20°C

Conductor Loop resistance	$\leq 19 \Omega/100\text{m}$
Insulation Resistance	$\geq 5 \text{ G}\Omega \times \text{km}$
Operating Capacitance (nom.)	50 nF/km
Capacitance unbalance (nom.)	$\leq 150 \text{ pF}/100\text{m}$
Rel. Velocity of Propagation	76 %
Transfer Impedance at 10 MHz (nom.)	$\leq 10 \text{ m}\Omega/\text{m}$
Characteristic Impedance at 1-100 MHz	$100 \pm 15 \Omega$
Characteristic Impedance at 100-250 MHz	$100 \pm 22 \Omega$
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
1	1.8	[2.1]	95	66	93.2	24	[20.0]
4	3.4	3.8	90	65	86.6	27	23.1
10	5.4	6.0	85	60	79.6	30	25.0
16	6.9	7.6	78	56	71.1	30	25.0
20	7.8	8.5	75	55	67.2	30	25.0
31.25	9.8	10.8	72	52	62.2	30	23.6
62.5	13.8	15.5	68	47	54.2	30	21.5
100	17.5	19.9	64	44	46.5	28	20.1
155	21.8	25.3	60	41	38.2	26	18.8
200	24.9	29.2	57	40	32.1	25	18.0
250	27.5	33.0	55	38	27.5	24	17.3
300	29.5	-	53	-	23.5	23	-
350	33.0	-	50	-	22.0	22	-

The performance data given are typical measured values