

SureLAN® 6 F/UTP DataGuard® (SWA)

Cable Design *4x2x23/1awg F/UTP*

Core

Conductor	Solid bare copper wire (23/1awg)
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
Armour	DataGuard® Steel Wire Armour (DSWA)

Outer Jacket

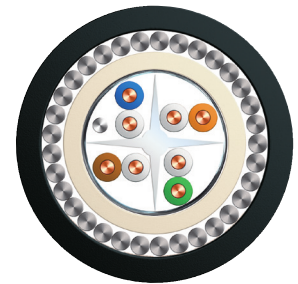
	LSZH FireFighter®
Diameter	Ø 11.70 ± 0.40 mm
Colour	Black

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
145007	DataGuard® (SWA)	Black	445
145007-02	DataGuard® (SWA)	Blue	445
145007-03	DataGuard® (SWA)	Green	445
145007-05	DataGuard® (SWA)	Grey	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
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

Fire Performance

Flame Retardant acc. to IEC 60332-1-2

Smoke Density acc. to IEC 61034

Halogen Free acc. to IEC60754-1 and 2