

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

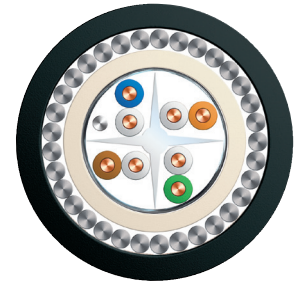
| | |
|----------|-------------------|
| | LSZH FireFighter® |
| Diameter | Ø 11.70 ± 0.40 mm |
| Colour | Black |

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