



GIGALAN F/UTP 23AWGX4P CAT.6A LSZH-22A EUROCLASS Dca

| Description | Shielded data cable GigaLan Category 6A for indoor applications | | | | | | | | | | | | | | | | | |
|---------------------------------|--|---------------|---------------|---------------|---|-------|------|---|-------|--------|---|-------|-------|---|-------|-------|--|--|
| Application | It supports: 10GIGABIT ETHERNET, IEEE 802.3an; GIGABIT ETHERNET, IEEE 802.3z; 100BASE-TX, IEEE 802.3u; 100BASE-T4, IEEE 802.3u; 100vg-AnyLAN, IEEE802.12; ATM-155 (UTP), AF-PHY-OO15.000 and AF-PHY-0018.000; TP-PMD, ANSI X3T9.5; 10BASE-T, IEEE802.3; TOKEN RING, IEEE802.5; 3X-AS400, IBM; POE+ technology (in accordance to IEEE 802.3at and TSB-184). | | | | | | | | | | | | | | | | | |
| Category | CAT.6A | | | | | | | | | | | | | | | | | |
| Installation Environment | Internal | | | | | | | | | | | | | | | | | |
| Operation Environment | Non heavy | | | | | | | | | | | | | | | | | |
| Compatibility | FCS products | | | | | | | | | | | | | | | | | |
| Conductor | Solid bare copper | | | | | | | | | | | | | | | | | |
| Conductor Gauge | 23AWG | | | | | | | | | | | | | | | | | |
| Insulation | High density Polyethylene nominal diameter 1.1 mm | | | | | | | | | | | | | | | | | |
| Pair | All pairs are twisted in such way to reduce Crosstalk effects. Each conductor is identified according with the following color sequence. | | | | | | | | | | | | | | | | | |
| Number of Pairs | 4 | | | | | | | | | | | | | | | | | |
| Integrated Pair Divider | Yes | | | | | | | | | | | | | | | | | |
| Cabling | All pairs are assembled, making the core cable. It has a central element (cross web) made of a thermoplastic material to separate all 4 pairs. | | | | | | | | | | | | | | | | | |
| Construction | F/UTP | | | | | | | | | | | | | | | | | |
| Color code | <table border="1"> <thead> <tr> <th>Pair</th> <th>Conductor "A"</th> <th>Conductor "B"</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>White</td> <td>Blue</td> </tr> <tr> <td>2</td> <td>White</td> <td>Orange</td> </tr> <tr> <td>3</td> <td>White</td> <td>Green</td> </tr> <tr> <td>4</td> <td>White</td> <td>Brown</td> </tr> </tbody> </table> | Pair | Conductor "A" | Conductor "B" | 1 | White | Blue | 2 | White | Orange | 3 | White | Green | 4 | White | Brown | | |
| Pair | Conductor "A" | Conductor "B" | | | | | | | | | | | | | | | | |
| 1 | White | Blue | | | | | | | | | | | | | | | | |
| 2 | White | Orange | | | | | | | | | | | | | | | | |
| 3 | White | Green | | | | | | | | | | | | | | | | |
| 4 | White | Brown | | | | | | | | | | | | | | | | |

| | |
|--|---|
| Shield | Shielded |
| Drain Wire | 26 AWG wire in contact with the foil. |
| Ripcord | With ripcord |
| Sheath | LSZH compound, flame retardant, suitable to meet the cable flame rating class |
| Color | Gray Other colors on request |
| Cable Flammability Rating | LSZH: IEC60332-1, IEC60332-3-22A |
| Nominal Diameter | 7.3mm |
| Operation Temperature | -20° up to 60°C |
| Storage Temperature | -20° up to 60°C |
| Installation Temperature | 0°C up to 50°C |
| Pulling Tension | > 400 N |
| Insulation Resistance | 10000 MΩ.km |
| Maximum Unbalance Resistance | 4% |
| Conductor Max. DC Resistance @ 20 °C | 93.8 Ω/km |
| Maximum Mutual Capacitance @ 1 kHz | 56 pF/m |
| Max. Unbalance Capacitance Pair x Ground @ 1 kHz | 3.3 pF/m |
| Dielectric strength | Between conductors |
| | 2500 VDC/3s |
| | Between each conductor and shield |
| | 2500 VDC/2s |
| Characteristic Impedance | 100±15% Ω |
| | 545ns/100m |

Maximum Propagation Delay

Maximum Delay Skew 45ns/100m

NVP 68%

Transmission Performance

| Freq (MHz) | IL (dB/100m) | | NEXT (dB) | | PSNEXT (dB) | | ACRF (dB) | |
|---------------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|---------|
| | TIA/EIA Max. | Typical | TIA/EIA Min. | Typical | TIA/EIA Min. | Typical | TIA/EIA Min. | Typical |
| 1 | 2.1 | 1.6 | 74.3 | 104.6 | 72.3 | 91.4 | 67.8 | 100.8 |
| 4 | 3.8 | 3.2 | 65.3 | 93.8 | 63.3 | 80.2 | 55.8 | 95.6 |
| 8 | 5.3 | 4.8 | 60.8 | 91.3 | 58.8 | 78 | 49.7 | 89.4 |
| 10 | 5.9 | 5.3 | 59.3 | 95.6 | 57.3 | 73.8 | 47.8 | 87.4 |
| 16 | 7.5 | 6.7 | 56.2 | 79.9 | 54.2 | 72.6 | 43.7 | 80.8 |
| 20 | 8.4 | 7.7 | 54.8 | 82.1 | 52.8 | 71.8 | 41.8 | 77.9 |
| 25 | 9.4 | 8.7 | 53.3 | 85.9 | 51.3 | 72.8 | 39.8 | 76.6 |
| 31.25 | 10.5 | 9.6 | 51.9 | 75.3 | 49.9 | 69.4 | 37.9 | 74.6 |
| 62.5 | 15 | 13.8 | 47.4 | 68.6 | 45.4 | 60.8 | 31.9 | 64 |
| 100 | 19.1 | 17.6 | 44.3 | 66.5 | 42.3 | 61 | 27.8 | 60.3 |
| 200 | 27.6 | 25.2 | 39.8 | 63.3 | 37.8 | 56.2 | 21.8 | 57.5 |
| 250 | 31.1 | 28.4 | 38.3 | 59.5 | 36.3 | 53.8 | 19.8 | 50.5 |
| 300 | 34.3 | 31.1 | 37.1 | 59.2 | 35.1 | 51.9 | 18.3 | 49.8 |
| 400 | 40.1 | 36.3 | 35.3 | 57.6 | 33.3 | 49.6 | 15.8 | 49.7 |
| 500 | 45.3 | 40.7 | 33.8 | 54.4 | 31.8 | 48.6 | 13.8 | 43.2 |
| 550 | - | 41.0 | - | 42.2 | - | 40.2 | - | 36.3 |
| 600 | - | 42.5 | - | 34.0 | - | 33.2 | - | 35.5 |
| 700 | - | 46.3 | - | 32.0 | - | 30.0 | - | 31.6 |

| Freq (MHz) | PSACRF (dB) | | RL (dB) | | PSANEXT (dB) | | PSAACRF (dB) | |
|---------------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|---------|
| | TIA/EIA Min. | Typical | TIA/EIA Min. | Typical | TIA/EIA Min. | Typical | TIA/EIA Min. | Typical |
| 1 | 64.8 | 93.8 | 20 | 35.4 | 67 | 90 | 67 | 88 |
| 4 | 52.8 | 88.4 | 23 | 37.2 | 67 | 90.8 | 66.2 | 87.3 |
| 8 | 46.7 | 81.8 | 24.5 | 42.3 | 67 | 92.8 | 60.1 | 87 |
| 10 | 44.8 | 77.7 | 25 | 36.9 | 67 | 92.4 | 58. | 87.1 |
| 16 | 40.7 | 71.3 | 25 | 40.5 | 67 | 91.9 | 54.1 | 84.7 |
| 20 | 38.8 | 69.6 | 25 | 39.9 | 67 | 85.3 | 52.2 | 79.3 |
| 25 | 36.8 | 67.4 | 24.3 | 38.2 | 67 | 86.5 | 50.2 | 77.8 |
| 31.25 | 34.9 | 65.8 | 23.6 | 39.5 | 67 | 86.2 | 50.2 | 76.9 |
| 62.5 | 28.8 | 58.4 | 21.5 | 31.3 | 65.6 | 85.6 | 42.3 | 72.3 |
| 100 | 24.8 | 53.7 | 20.1 | 31.2 | 62.5 | 86.6 | 38.2 | 68.9 |
| 200 | 18.8 | 50.8 | 18 | 30.2 | 58 | 83.6 | 32.2 | 60.5 |

| | | | | | | | | |
|-----|------|------|------|------|------|------|------|------|
| 250 | 16.8 | 44.8 | 17.3 | 26.2 | 56.5 | 83.9 | 30.2 | 56.9 |
| 300 | 15.3 | 44.2 | 16.8 | 29.5 | 55.3 | 81.8 | 28.7 | 52.8 |
| 400 | 12.8 | 42.3 | 15.9 | 26.5 | 53.5 | 79.7 | 26.2 | 46.8 |
| 500 | 10.8 | 35.4 | 15.2 | 21.8 | 52 | 76.7 | 24.2 | 38.6 |
| 550 | - | 34.6 | - | 20.4 | - | 74.0 | - | 33.0 |
| 600 | - | 34.0 | - | 17.4 | - | 72.9 | - | 30.8 |
| 700 | - | 30.1 | - | 15.6 | - | 70.9 | - | 26.9 |

Cable Measurements are made at 20 °C in 100 meters cables, pulled out of their packages and released on a non-conductive surface as described in ANSI/TIA-568.2-D. Alien Crosstalk measurement made at 20 °C in seven 100 meters samples (Six around one configuration) according to ANSI/TIA-568.2-D.

| | | |
|----------------|---|-------------------|
| Standard | ANSI/TIA-568.2-D ISO/IEC 11801 IEC 61156-5 IEC 60332-1, IEC 60332-3-22A (Flame) IEC 60754-2 (Acidity of smoke) IEC 61034-2 (smoke density) CENELEC/EN 50288-10-1 EN 50173 | |
| Certifications | ETL Verified | 3130563 |
| | ETL 4 connections | 101795378CRT-001a |
| | CPR | Dca (s2,d2,a1) |
| Warranty | 12 months | |
| Marking | FURUKAWA GIGALAN CAT 6A F/UTP 23AWGX4P LSZH 75°C PoE++ EN 50399 Euroclass Dca-s2,d2,a1 - ETL VERIFIED TO TIA-568.2-D CAT 6A YAAMMDDHHmm {1}m Where: YAAMMDDHHmm - Y: Traceability, AA: Year, MM: Month, DD: Day, HH: Hour, mm: minute {1} - Sequential length marking in meters | |
| Cable Weight | 52 kg/km | |
| Package | 305m: plywood reel 1000m: wooden reel | |

[Part Numbers](#)