



# GIGALAN AUGMENTED F/UTP 23AWGX4P CAT.6A LSZH EUROCLASS Dca



<b>Description</b>	Shielded data cable GigaLan Augmented Category 6A for indoor applications																	
<b>Application</b>	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).																	
<b>Category</b>	CAT.6A																	
<b>Installation Environment</b>	Internal																	
<b>Operation Environment</b>	Non heavy																	
<b>Compatibility</b>	FCS products																	
<b>Conductor</b>	Solid bare copper																	
<b>Conductor Gauge</b>	23AWG																	
<b>Insulation</b>	High density Polyethylene nominal diameter 1.1 mm																	
<b>Pair</b>	All pairs are twisted in such way to reduce Crosstalk effects. Each conductor is identified according with the following color sequence.																	
<b>Number of Pairs</b>	4																	
<b>Integrated Pair Divider</b>	Yes																	
<b>Cabling</b>	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.																	
<b>Construction</b>	F/UTP																	
<b>Color code</b>	<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-1 - According to IEC 60332-1	
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	Between each conductor and shield
	2500 VDC/3s	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.

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

[Part Numbers](#)