

Cat. 6_A 4x2x23/1 AWG U/FTP FR-LSZH

COMPUTER & LAN

P/N 83G0204139

TELECOM

Applications

Indoor use, fixed installations, High bandwidth digital applications with low BER, High data rates, Data processing and information systems, Interconnections in digital multiplex equipment



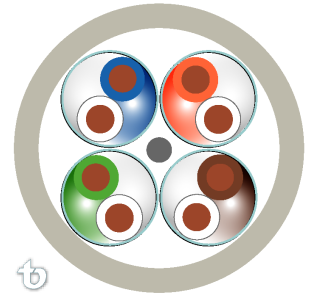
Outer Jacket Material
FR-LSZH



Outer diameter
7.4 mm nom.



Weight
55 kg/km



General Construction

The cable contains 4 aluminum-foil shielded twisted pairs cabled together with a drain wire and jacketed with FR-LSZH compound.

The cable performance and characteristics exceeds the IEC 61156-5 requirements for Cat. 6_A cables.

Design & Materials

Conductor Material	Annealed Bare Copper
Conductor Size (AWG)	23
Conductor Construction	Solid
Insulation Material	Cellular PO
Insulation O.D. (mm nom)	1.38
Conductor Unit Identification	Solid Color
Color Code	Per TIA/EIA 568-B
Ind. Shield Material	Aluminum/Polyester Foil
Ind. Shield Design	100% Coverage
Conductor Unit Lay-Up	Pairs
Overall Drain-wire Material	Annealed Tinned Copper
Overall Drain-wire size (mm)	0.41
Overall Drain-wire Construction	Solid
Total Number Of Conductors	8
Outer Jacket Color	Gray RAL 7035
Other Jacket Colors Available	Yes
Marking	Teldor Standard Per request

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Performance

Frequency Range (MHz)	1 - 500
Impedance (Ω)	100
Coupling Attenuation	Type II
Max. DC Resistance (Ω /km@20°C)	73
Max. Resistance Unbalance (%)	2
Capacitance (pF/m)	50
Capacitance Unbalance (pF/m max)	1.2
Velocity of Propagation (% nom)	78
Propagation Delay Skew (ns/100m max)	25
Dielectric Strength (V/minute)	700
Dielectric Strength to Shield (V/minute)	700
Min. Insulation Resistance ($G\Omega \cdot km$)	5
Voltage Rating (V)	300
Max. Installation Tensile Load (N max.)	130
Min. Bend Radius (mm)	60 (30 permanent)
Min. Operating Temperature (°C)	-35
Max. Operating Temperature (°C)	+65

Standards

Flammability Rating

IEC 60332-1

UL CMX

UL CMG

Applicable Standards

IEC 61156

IEEE 802.3an 10GBASE-T 10 Gigabit Ethernet

ISO/IEC 11801-1

RoHS 3 2015/863/EU



Electrical Properties

Cat. 6A Screened-pair Horizontal Cables*

Freq. MHz	Attenuation dB/100m 20°C		PS NEXT Loss dB		NEXT Loss dB		RL dB		PS ANEXT dB		PS ELFEXT dB		ELFEXT dB	
	Typical Value	Cat. 6A	Typical Value	Cat. 6A	Typical Value	Cat. 6A	Typical Value	Cat. 6A	Typical Value	Cat. 6A	Typical Value	Cat. 6A	Typical Value	Cat. 6A
1	2.0	2.0	95.0	72.3	98.0	75.3	22.0	20.0	70.0	67.0	85.0	65.0	88.0	68.0
4	3.7	3.8	95.0	63.3	98.0	66.3	25.0	23.0	70.0	67.0	73.0	53.0	76.0	56.0
10	5.6	5.9	95.0	57.3	98.0	60.3	28.0	25.0	70.0	67.0	65.0	45.0	68.0	48.0
20	7.9	8.4	90.0	52.8	93.0	55.8	28.0	25.0	70.0	67.0	59.0	39.0	62.0	42.0
30	9.7	10.3	85.0	50.1	88.0	53.1	27.0	23.8	70.0	67.0	55.4	35.4	58.4	38.4
100	18.0	19.1	80.0	42.3	83.0	45.3	24.0	21.1	67.0	62.5	45.0	25.0	48.0	28.0
150	22.4	23.6	78.0	39.7	81.0	42.7	22.0	18.8	66.0	59.8	41.5	21.5	44.5	24.5
200	26.0	27.6	78.0	37.8	81.0	40.8	21.0	18.0	65.0	58.0	49.0	19.0	52.0	22.0
250	29.4	31.0	75.0	36.3	78.0	39.3	20.0	17.3	63.0	56.5	37.0	17.0	40.0	20.0
300	32.5	34.3	75.0	35.1	78.0	38.1	19.0	17.3	62.0	55.3	35.5	15.5	38.5	18.5

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400	38.0	40.0	70.0	33.3	73.0	36.3	19.0	17.3	61.0	53.4	33.0	13.0	36.0	16.0
500	43.0	45.2	70.0	31.8	73.0	34.8	19.0	17.3	59.0	52.0	31.0	11.0	34.0	14.0

Transfer impedance: Grade II per IEC 61156-5

*Supplied cables meet the minimum Cat. 6_A transmission requirements as per IEC 61156-5 Ed. 2

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