

Cat. 6_A 4x2x23/1 AWG U/FTP FR-LSZH/FR-LSZH
P/N 83G0234101

Applications

Data-Centers/SANs, Trunk Cable for Local Area Networks, Indoor/Outdoor use, fixed installations, High bandwidth digital applications with low BER, High data rates, Data processing and information systems, Telecom systems, Interconnections in digital multiplex equipment



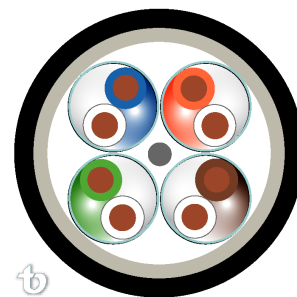
Outer Jacket Material
FR-LSZH



Outer diameter
9.2 mm nom.



Weight
95 kg/km



General Construction

The cable contains 4 aluminum-foil shielded twisted pairs cabled together with a drain wire and overall double jacketed.

Design & Materials

Conductor Material	Annealed Bare Copper
Conductor Size (AWG)	23
Conductor Construction	Solid
Insulation Material	PO
Insulation O.D. (mm nom)	1.38
Conductor Unit Identification	Solid Color
Color Code	Per TIA/EIA 568-B
Ind. Shield Design	Helically applied aluminum foil, 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
Inner Jacket Material	FR-LSZH
Inner Jacket Diameter (mm nom)	7.4
Inner Jacket Color	Gray
Total Number Of Conductors	8
Outer Diameter (mm nom)	9.2
Outer Jacket Color	Black
Other Jacket Colors Available	Yes

Marking

Teldor Standard|Per request

Performance

Frequency Range (MHz)	1 - 500
Impedance (Ω)	100
Transfer Impedance Grade	Grade 2
Coupling Attenuation	Type II
Max. Resistance Unbalance (%)	2
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 (GΩ·km)	5
Max. Installation Tensile Load (N max.)	130
Min. Bend Radius (mm)	8xD
Min. Operating Temperature (°C)	-35
Max. Operating Temperature (°C)	+65
UV Resistance	Yes

Standards

Flammability Rating
IEC 60332-3
IEC 60754-1/2
IEC 61034-1/2
UL 1581 VW-1
UL 444
EN 50575:2014 D_{Ca}s1d1a1 (CPR)

Applicable Standards
IEC 61156-5
IEEE 802.3af (PoE)
IEEE 802.3at (PoE+)
ISO/IEC 11801-1
ANSI/TIA-568-C.2
RoHS 3 2015/863/EU



Electrical Properties

Cat. 6_A 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. 6 _A	Typical Value	Cat. 6 _A	Typical Value	Cat. 6 _A	Typical Value	Cat. 6 _A	Typical Value	Cat. 6 _A	Typical Value	Cat. 6 _A	Typical Value	Cat. 6 _A
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
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