

Cat.6_A 4x2x23/1 S/FTP LSZH-SHF1

COMPUTER & LAN

P/N 9MG0545109

INDUSTRY

Applications

Offshore installations, Maritime Environment, Indoor/Outdoor use, fixed installations, High data rates, Ships, High speed & Light craft



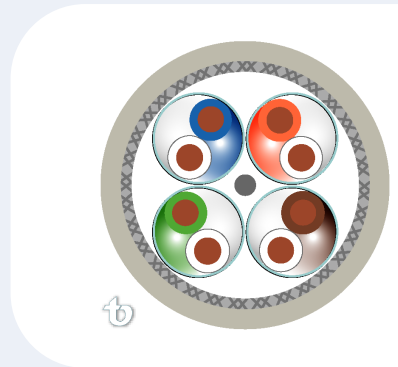
Outer Jacket Material
FR-LSZH



Outer diameter
8.0 mm nom.



Weight
72 kg/km



General Construction

4 individually foil-shielded twisted pairs with solid conductors, cabled together, overall braid-shield and jacketed.

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	Helically applied aluminum foil, 100% coverage
Conductor Unit Lay-Up	Pairs
Overall Shield Design	Braid
Overall Braid Material	Annealed Tinned Copper
Braid Coverage (% nom)	55
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 Diameter (mm nom)	8.0
Outer Jacket Color	Gray

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Other Jacket Colors Available	Yes
Marking	Teldor Standard Per request
Outer Jacket Material	FR-LSZH

Performance

Frequency Range (MHz)	1 - 500
Impedance (Ω)	100
Transfer Impedance Grade	Grade 1
Coupling Attenuation	Type I
DC Resistance (Ω/km nom)	73
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
Voltage Rating (V)	300
Max. Installation Tensile Load (N max.)	130
Min. Bend Radius (mm)	80
Min. Operating Temperature (°C)	- 40
Max. Operating Temperature (°C)	+ 85
UV Resistance	Yes

Standards

Flammability Rating
 IEC 60332-1
 IEC 60332-3
 IEC 60332-3-22
 IEC 60332-3-24
 IEC 60754-1/2
 IEC 60754-2
 IEC 61034-1/2
 UL 1581 VW-1

Applicable Standards

DNV certified
 ABS certified
 LLOYDS certified
 RMRS certified
 IEC 60092-360
 IEC 61156-5
 IEEE 802.3af (PoE)
 IEEE 802.3at (PoE+)
 IEEE 802.3bt (4PPoE)
 ISO/IEC 11801-1
 ASTM G154
 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

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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

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

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