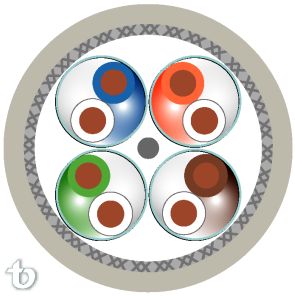
Cat.6 4x2x23/1 AWG S/FTP LSZH-SHF1
COMPUTER & LAN
P/N 9MG0544129

INDUSTRY

Applications

Offshore installations, Maritime Environment, Indoor/Outdoor use, fixed installations, High data rates, Telecom systems, Optimized for IEEE 802.3bt 4PPoE, Ships, High speed & Light craft



Outer Jacket Material	Outer diameter	Weight
FR-LSZH	7.9 mm nom.	70 kg/km

General Construction

4 individually aluminum-foil shielded twisted pairs, cabled together with a drain conductor and overall braid shielded and jacketed.

Design & Materials

Conductor Material	Annealed Bare Copper
Conductor Size (AWG)	23
Conductor Construction	Solid
Insulation Material	Cellular HDPE
Insulation O.D. (mm nom)	1.38
Conductor Unit Identification	Solid Color
Conductor Color Code	White/Blue, White/Oreange, White/Green, White/Brown
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 Shield Material	Tinned-copper 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 Jacket Color	Light Gray

TELDOR
Cables & Systems Ltd.

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Other Jacket Colors Available	Yes
Marking	Teldor Standard|Per request

Performance

Frequency Range (MHz)	1 - 250
Impedance (Ω)	100
Transfer Impedance Grade	Grade 1
Coupling Attenuation	Type I
DC Resistance (Ω/km nom)	73
Max. Resistance Unbalance (%)	2
Capacitance (pF/m)	50 (800 Hz)
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)	110V not to be used as LF main power supply
Max Pulling Tension (N)	13
Min. Bend Radius (mm)	60
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 60754-2
IEC 61034-1/2
EN 50575:2014 D_{ca}s1d1a1 (CPR)

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
RoHS 3 2015/863/EU

Electrical Properties

Freq. MHz	Attenuation dB/100m 20°C		PS NEXT Loss dB		NEXT Loss dB		RL dB		PS ELFEXT dB		ELFEXT dB	
	Typical Value	Cat. 6	Typical Value	Cat. 6	Typical Value	Cat. 6	Typical Value	Cat. 6	Typical Value	Cat. 6	Typical Value	Cat. 6
1	2.0	2.8	90.0	72.3	93.0	75.3	22.0	20.0	90.0	65.0	93.0	68.0
4	3.7	3.8	85.0	63.3	88.0	66.3	25.0	23.0	90.0	53.0	93.0	56.0
10	5.7	6.0	85.0	57.3	88.0	60.4	28.0	25.0	80.0	45.0	83.0	48.0
20	8.1	8.5	85.0	52.8	88.0	55.8	28.0	25.0	80.0	39.0	83.0	42.0
30	10.0	10.5	85.0	50.1	88.0	53.1	27.0	23.8	70.0	35.5	73.0	38.5
100	19.0	19.9	80.0	42.3	83.0	45.3	24.0	21.1	63.0	25.0	66.0	28.0

150	23.6	24.9	80.0	39.7	83.0	42.7	22.0	18.8	60.0	21.5	63.0	24.5
200	27.7	29.1	80.0	37.8	83.0	40.8	21.0	18.0	58.0	19.0	61.0	22.0
250	31.4	33.0	77.0	36.3	80.0	39.3	20.0	17.3	55.0	17.0	58.0	20.0

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

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