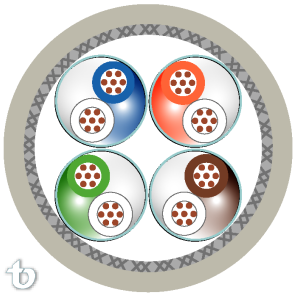
Cat.7 4x2x23/7 S/FTP LSZH-SHF1
COMPUTER & LAN
P/N 9MG0539101

INDUSTRY

Applications

Offshore installations, Maritime Environment, High bandwidth digital applications with low BER, High data rates, Optimized for IEEE 802.3bt 4PPoE, Ships, High speed & Light craft, Indoor & Outdoor Use, Fixed or Portable Installation



Outer Jacket Material	Outer diameter	Weight
FR-LSZH	8.6 mm nom.	87 kg/km

General Construction

The cable constructed with 4 individually foil-shielded twisted pairs with stranded conductors, cabled together, overall braid-shield and jacketed.

Design & Materials

Conductor Material	Annealed Tinned Copper
Conductor Size (AWG)	23
Conductor Construction	Stranded
Insulation Material	Cellular PO
Insulation O.D. (mm nom)	1.48
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)	70
Overall Drain-wire Material	Annealed Tinned Copper
Total Number Of Conductors	8
Outer Diameter (mm nom)	8.6
Outer Jacket Thickness (mm nom)	0.9
Outer Jacket Color	Black
Other Jacket Colors Available	Yes

TELDOR
Cables & Systems Ltd.

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INDUSTRY

Marking	Teldor Standard|Per request
Outer Jacket Material	FR-LSZH

Performance

Frequency Range (MHz)	1 - 600
Impedance (Ω)	100
Transfer Impedance Grade	Grade 1
Coupling Attenuation	Type I
DC Resistance (Ω/km nom)	73
Max. Resistance Unbalance (%)	2
Max. Screen Resistance (Ω/Km @20°C)	5 (cable level) typical value
Capacitance (pF/m)	42
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. 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 61034-1/2
UL 1581 VW-1
UL CMR

Applicable Standards
DNV certified
ABS certified
LLOYDS certified
RMRS certified
IEC 60092-350
IEC 60092-360
IEC 60092-379
IEC 61156
IEC 61156-5
IEEE 802.3af (PoE)
IEEE 802.3at (PoE+)
IEEE 802.3bt (4PPoE)
ISO/IEC 11801-1
ANSI/TIA-568.2-D
RoHS 3 2015/863/EU
EN 50288

Electrical Properties

Attenuation dB/100m 20°C	PS NEXT Loss dB	NEXT Loss dB	RL dB	PS ANEXT dB	PS ELFEXT dB	ELFEXT dB	
Typical Value	Typical Value	Typical Value	Typical Value	Typical Value	Typical Value	Typical Value	
1	2.0	87.0	90.0	22.0	70.0	95.0	98.0
4	3.5	87.0	90.0	25.0	70.0	90.0	93.0
10	5.4	87.0	90.0	30.0	70.0	86.0	89.0
20	7.6	87.0	90.0	30.0	70.0	80.0	83.0

30	9.6	87.0	90.0	27.0	70.0	76.4	79.0
100	17.8	80.0	83.0	24.0	67.0	66.0	69.0
150	22.2	78.0	81.0	22.0	66.0	63.0	66.0
200	25.4	78.0	81.0	21.0	65.0	60.0	63.0
250	28.6	75.0	78.0	20.0	63.0	58.0	61.0
300	31.4	75.0	78.0	19.0	62.0	52.5	55.0
400	37.1	70.0	73.0	19.0	61.0	49.0	52.0
500	42.1	70.0	73.0	19.0	61.0	47.0	50.0
600	47.6	70.0	72.0	19.0	61.0	45.0	48.0

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