

Cat.7_A 4x2x23/1 S/FTP LSZH-SHF1

Part Number: 9MG0524129

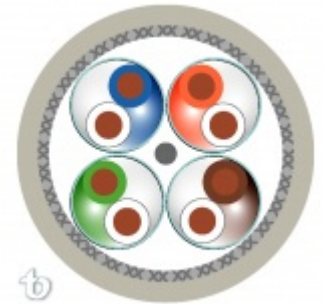
Applications: Offshore installations, Maritime Environment, Indoor use, fixed installations, High data rates, Ships, High speed & Light craft

General Construction: Four individually foil-shielded twisted pairs with solid conductors, cabled together, overall braid-shield and jacketed.

Outer Jacket Material: FR-LSZH

Outer Diameter: 8.0 mm nom.

Weight: 78 kg/km



Design & Materials

Conductor Material:	Annealed Bare Copper
Conductor Size:	23 AWG
Conductor Construction:	Solid
Insulation Material:	Cellular PO
Insulation O.D.:	1.38 mm nom.
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:	35 % nom.
Overall Drain-wire Material:	Annealed Tinned Copper
Overall Drain-wire size:	0.41 mm
Overall Drain-wire Construction:	Solid
Total number of conductors:	8
Outer Jacket Color:	Light Gray
Marking:	Per request, Teldor Standard

Standards

Applicable Standards:	DNV-GL certified, ABS certified, LLOYDS certified, RMRS certified, IEC 60092-360, IEC 61156-5, IEEE 802.3an 10GBASE-T 10 Gigabit Ethernet, IEEE 802.3af (PoE), IEEE 802.3at (PoE+), IEEE 802.3bt (4PPoE), ISO/IEC 11801-1, ANSI/TIA-568-C.2, RoHS 3 2015/863/EU
Flammability Rating:	IEC 60332-1, IEC 60332-3-22, IEC 60332-3, IEC 60754-1/2, IEC 61034-1/2, UL 1581 VW-1

Electrical Properties:

Cat. 7_A Horizontal Cables*

Freq. MHz	Attenuation dB/100m 20°C	NEXT Loss dB		PS-NEXT Loss dB		RL dB		PS ANEXT dB		PS ELFEXT dB		ELFEXT dB	
	Cat. 7 _A	Typical Value	Cat. 7 _A	Typical Value	Cat. 7 _A	Typical Value	Cat. 7 _A	Typical Value	Cat. 7 _A	Typical Value	Cat. 7 _A	Typical Value	Cat. 7 _A
1	2.0	103.0	78.0	100.0	75.0	31.0	20.0	100.0	67.0	108.0	75.0	110.0	78.0
4	3.8	103.0	78.0	100.0	75.0	31.0	23.0	100.0	67.0	105.0	75.0	108.0	78.0
10	5.8	103.0	78.0	100.0	75.0	31.0	25.0	100.0	67.0	100.0	71.0	103.0	74.0
20	8.2	103.0	78.0	100.0	75.0	31.0	25.0	100.0	67.0	90.0	65.0	93.0	68.0
30	10.1	103.0	78.0	100.0	75.0	31.0	23.8	100.0	67.0	90.0	61.5	93.0	64.5
100	18.5	103.0	78.0	100.0	75.0	31.0	21.1	100.0	62.5	85.0	51.0	88.0	54.0
150	22.8	103.0	78.0	100.0	75.0	26.0	18.8	95.0	59.8	84.0	47.5	87.0	50.5
200	26.5	98.0	76.8	95.0	73.8	26.0	18.0	95.0	58.0	80.0	45.0	83.0	48.0
250	29.7	96.0	75.4	93.0	72.4	25.0	17.3	92.0	56.5	78.0	43.0	81.0	46.0
300	32.7	95.0	74.2	92.0	71.2	25.0	17.3	92.0	55.3	75.0	41.5	78.0	44.5
400	38.0	94.0	72.3	91.0	69.3	23.0	17.3	92.0	53.4	70.0	38.9	73.0	41.9
500	42.7	93.0	70.9	90.0	67.9	23.0	17.3	90.0	52.0	69.0	37.0	72.0	40.0
600	47.1	92.0	69.7	89.0	66.7	23.0	17.3	90.0	50.8	68.0	35.4	71.0	38.4
1000	62.0	88.0	66.4	85.0	63.4	21.0	17.3	90.0	47.5	67.0	31.0	70.0	34.0

*Supplied cables meet the minimum Cat. 7_A transmission requirements as per IEC 61156-5

Performance

Frequency Range:	1 - 1200 MHz
Impedance:	100 Ω
Transfer Impedance:	Grade 1
Coupling Attenuation:	Type I
DC Resistance:	73 Ω/km nom.
Max. Resistance Unbalance:	2 %
Capacitance Unbalance:	1.2 pF/m max.
Velocity of Propagation:	78 % nom.
Propagation Delay Skew:	25 ns/100m max.
Dielectric Strength:	700 V/minute
Dielectric Strength to Shield:	700 V/minute
Min. Insulation Resistance :	5 GΩ•km
Min. Bend Radius:	80 mm
Max. Operating Temperature:	+ 85 °C
Min. Operating Temperature:	- 40 °C
UV Resistance:	Yes

Prepared By	Revised By	Version Num	Modified on
Ofer Solter	Ofer Solter	1.1	17-11-2021

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