

## Cat.6<sub>A</sub> 4x2x23/7 AWG S/FTP LSZH-SHF2

### COMPUTER & LAN

P/N 9MG0022109

#### INDUSTRY

### Applications

Offshore installations, Maritime Environment, Direct-tab connection of independent peripheral equipment, Indoor/Outdoor use, fixed installations, High bandwidth digital applications with low BER, High data rates, Optimized for IEEE 802.3bt 4PPoE, Compliance with low voltage safety earth-connection and grounding regulations, Ships, High speed & Light craft



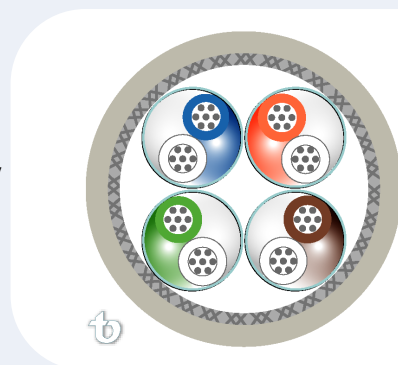
Outer Jacket Material  
XL-HFFR



Outer diameter  
8.5 mm nom.



Weight  
80 kg/km



### General Construction

Category 6<sub>A</sub>, S/FTP, SHF2, marine type cable constructed with 4 individually foil-shielded twisted pairs with stranded conductors, cabled together, overall braid-shield and jacket.

### Design & Materials

Conductor Material	Annealed Tinned Copper
Conductor Size (AWG)	23/7
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 Shield Material	Tinned-copper braid
Overall Braid Shield	Yes
Overall Braid Material	Annealed Tinned Copper
Braid Coverage (% nom)	70
Total Number Of Conductors	8
Outer Jacket Color	Gray
Marking	Teldor Standard Per request

## Cat.6<sub>A</sub> 4x2x23/7 AWG S/FTP LSZH-SHF2

P/N 9MG0022109

### INDUSTRY

#### 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
Max. Screen Resistance (Ω/Km @20°C)	15
Capacitance Unbalance (pF/m max)	1.6
Velocity of Propagation (% nom)	68
Propagation Delay Skew (ns/100m max)	30
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)	115
Cold Bend	per CSA C22.2 No. 38-95 per UL 44
Min. Operating Temperature (°C)	- 40
Max. Operating Temperature (°C)	+ 85
UV Resistance	Yes

#### Electrical Properties

Cat. 6<sub>A</sub> Work Area 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 <sub>A</sub>	Typical Value	Cat. 6 <sub>A</sub>	Typical Value	Cat. 6 <sub>A</sub>	Typical Value	Cat. 6 <sub>A</sub>	Typical Value	Cat. 6 <sub>A</sub>	Typical Value	Cat. 6 <sub>A</sub>
1	2.0	87.0	72.3	90.0	75.3	22.0	20.0	70.0	67.0	85.0	65.0	88.0	68.0
4	3.5	87.0	63.3	90.0	66.3	25.0	23.0	70.0	67.0	73.0	53.0	76.0	56.0
10	5.4	87.0	57.3	90.0	60.3	30.0	25.0	70.0	67.0	65.0	45.0	68.0	48.0
20	7.6	87.0	52.8	90.0	55.8	30.0	25.0	70.0	67.0	59.0	39.0	62.0	42.0
30	9.6	87.0	50.1	90.0	53.1	27.0	23.8	70.0	67.0	55.4	35.4	58.4	38.4
100	17.8	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	22.2	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	25.4	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	28.6	75.0	36.3	78.0	39.3	20.0	17.3	63.0	56.5	37.0	17.0	40.0	20.0

#### Standards

Flammability Rating  
 IEC 60332-1  
 IEC 60332-3-22  
 IEC 60754-1/2  
 IEC 61034-1/2

Applicable Standards  
 DNV certified  
 ABS certified  
 LLOYDS certified  
 RMRS certified  
 IEC 60092-350  
 IEC 60092-359  
 IEC 60811-2-1  
 IEC 61156-6  
 IEEE 802.3at (PoE+)  
 ISO/IEC 11801-1  
 RoHS 3 2015/863/EU



## Cat.6<sub>A</sub> 4x2x23/7 AWG S/FTP LSZH-SHF2

P/N 9MG0022109

### INDUSTRY

300	31.4	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	37.1	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	42.1	70.0	31.8	73.0	34.8	19.0	17.3	61.0	52.0	31.0	11.0	34.0	14.0

Teldor Cables & Systems Ltd. ("Teldor") reserves the right to make changes to the products described in this catalog without prior notice. Teldor does not assume any liability which may occur due to the use of the products described herein. Drawings may not be to scale and are provided for general and informational purposes only. The information contained in this catalog is the proprietary property of Teldor, and may not be used, reproduced or disclosed to others, in whole or in part, without the written authorization of Teldor.

Version 1.2 | Last update: 2020-10-14