

# Cat. 7 6x(4x2x23/1 AWG S/FTP) FR-LSZH

Part Number: 9928007129

**Applications:** Data-Centers/SANs, Data processing and information systems,

Fixed or portable installations, Indoor use, fixed installations,

Trunk Cable for Local Area Networks, High data rates

**General Construction:** The cable contains six non jacketed cores, each is made of; four

individually foil-shielded twisted pairs, cabled together with a tinned copper drain conductor, and overall braid-shielded. The 6 cores are cabled around a center filler and jacketed with

FR-LSZH compound.

The cable exceeds the transmission requirements of IEC 61156-5

Cat. 7, Cat. 6<sub>A</sub> Cat. 6, and Cat. 5e.

**Detailed Schematic:** 

Outer Jacket Material:FR-LSZHOuter Diameter:21.4 mm nom.Weight:395 kg/km



## Design & Materials

Conductor Material:	Annealed Bare Copper			
Conductor Size:	23 AWG			
<b>Conductor Construction:</b>	Solid			
Insulation Material:	Cellular PO			
Insulation O.D.:	1.35 mm nom.			
Conductor unit identification:	Solid/stripe			
Color Code:	Per TIA/EIA 568-B			
Ind. Shield Material:	Aluminum/Polyester Foil			
Ind. Shield Design:	100% Coverage			
Conductor unit lay-up:	Pairs			
Drain-wire 1 Material:	Annealed Tinned Copper			
Drain-wire 1 Construction:	Solid			
Drain-wire 1 size mm.:	0.41 mm			
Overall Braid Shield:	Yes			
Braid Coverage:	40 % nom.			
Total number of conductors:	48			
Outer Jacket Color:	Light Gray			
Marking:	Per request, Teldor Standard			

### **Standards**

Applicable Standards:	IEC 61156, ISO/IEC 11801-1, RoHS 3 2015/863/EU		
Flammability Rating:	IEC 60332-1		

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### **Electrical Properties:**

Cat. 7 Horizontal Cables\*

Freq. MHz	'		PS NEXT Loss dB		NEXT Loss dB		RL dB		PS ANEXT dB		PS ELFEXT dB		ELFEXT dB	
	Typical Value	Cat.	Typical Value	Cat. 7	Typical Value	Cat.	Typical Value	Cat. 7	Typical Value	Cat.	Typical Value	Cat. 7	Typical Value	Cat. 7
1	2.0	2.0	105.0	75.0	108.0	78.0	22.0	20.0	68.0	N/A	95.0	75.0	98.0	78.0
4	3.6	3.7	98.0	75.0	101.0	78.0	25.0	23.0	68.0	N/A	90.0	75.0	93.0	78.0
10	5.6	5.8	95.0	75.0	98.0	78.0	28.0	25.0	68.0	N/A	86.0	71.0	89.0	74.0
20	7.9	8.3	90.0	75.0	93.0	78.0	28.0	25.0	68.0	N/A	80.0	65.0	83.0	68.0
30	9.7	10.2	85.0	75.0	88.0	78.0	27.0	23.8	68.0	N/A	76.0	61.5	79.0	64.5
100	18.0	19.0	80.0	69.4	83.0	72.4	24.0	21.1	68.0	N/A	66.0	51.0	69.0	54.0
150	22.4	23.6	78.0	66.7	81.0	69.7	22.0	18.8	65.0	N/A	63.0	47.5	66.0	50.5
200	26.0	27.5	78.0	65.0	81.0	68.0	21.0	18.0	65.0	N/A	60.0	45.0	63.0	48.0
250	29.4	31.0	75.0	63.4	78.0	66.4	20.0	17.3	62.0	N/A	58.0	43.0	61.0	46.0
300	32.5	34.2	75.0	62.2	78.0	65.2	19.0	17.3	62.0	N/A	52.0	41.5	55.0	44.5
400	38.0	40.0	70.0	60.4	73.0	63.4	19.0	17.3	62.0	N/A	49.0	38.9	52.0	41.9
500	43.0	45.2	70.0	58.9	73.0	61.9	19.0	17.3	62.0	N/A	47.0	37.0	50.0	40.0
600	47.6	50.1	70.0	57.7	73.0	60.7	19.0	17.3	62.0	N/A	45.0	35.4	48.0	38.4

<sup>\*</sup>Supplied cables meet the minimum Cat. 7 transmission requirements as per IEC 61156-5 Ed. 2

### **Performance**

Frequency Range:	1 - 600 MHz			
Impedance:	100 Ω			
Coupling Attenuation:	Type I			
Max. DC Resistance :	73 Ω/km@20°C			
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:	200 mm			
Max. Operating Temperature:	+65 °C			
Min. Operating Temperature:	-40 °C			

Prepared By	Revised By	Version Num	Modified on
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