

## Cat. 7 24x2x26/1 AWG S/FTP FR-LSZH

**Part Number:** 9928013101

**Applications:** Data-Centers/SANs, Work area cabling, Indoor use, fixed or portable installations, High bandwidth digital applications with low BER, Indoor Backbone

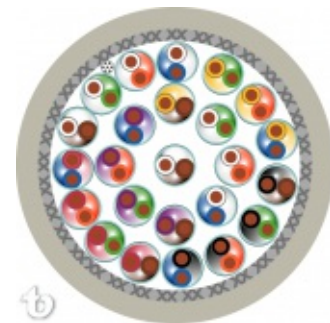
**General Construction:** 24 FTP pairs cabled together, overall shield with braid copper, and jacketed with FR-LSZH compound. The cable design and structure makes it suitable for Cat. 7 and Cat. 6A applications (up to 60 m)

**Detailed Schematic:**

**Outer Jacket Material:** FR-LSZH

**Outer Diameter:** 14 mm nom.

**Weight:** 206 kg/km



## Design & Materials

### Detailed Construction:

Cable core:

24 aluminum-foil shielded pairs, cabled together.

Overall shield: tinned copper braid.

Pairs:

Pair type: twisted pair

Shield: aluminum foil 100% coverage (overlap), metal face out.

<b>Conductor Material:</b>	Annealed Bare Copper
<b>Conductor Size:</b>	26 AWG
<b>Conductor Construction:</b>	Solid
<b>Insulation Material:</b>	Cellular PE
<b>Insulation O.D.:</b>	1.0 mm nom.
<b>Conductor unit identification:</b>	Solid Color

		<u>No.</u>	<u>Color Code</u>	<u>No.</u>	<u>Color Code</u>
		1	White x Blue	13	Yellow x Blue
		2	White x Orange	14	Yellow x Orange
		3	White x Green	15	Yellow x Green
		4	White x Brown	16	Yellow x Brown
		5	Red x Blue	17	Purple x Blue
<b>Conductor Color Code:</b>		6	Red x Orange	18	Purple x Orange
		7	Red x Green	19	Purple x Green
		8	Red x Brown	20	Purple x Brown
		9	Black x Blue	21	Grey x Blue
		10	Black x Orange	22	Grey x Orange
		11	Black x Green	23	Grey x Green
		12	Black x Brown	24	Grey x Brown
<b>Ind. Shield Material:</b>		Aluminum/Polyester Foil			
<b>Ind. Shield Design:</b>		Aluminum face outwards			
<b>Overall Shield Material:</b>		Tinned-copper braid			

<b>Overall Foil Shield:</b>	Yes
<b>Overall Braid Material:</b>	Annealed Tinned Copper
<b>Braid Coverage:</b>	85 % nom.
<b>Overall Drain-wire Construction:</b>	Stranded
<b>Total number of conductors:</b>	48
<b>Outer Jacket Color:</b>	Black
<b>Marking:</b>	Per request, Teldor Standard

## Standards

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

## Electrical Properties:

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. 7	Typical Value	Cat. 7	Typical Value	Cat. 7	Typical Value	Cat. 7	Typical Value	Cat. 7	Typical Value	Cat. 7	Typical Value	Cat. 7
1	2.9	3.0	105.0	99.4	108.0	102.4	22.0	20.0	68.0	N/A	95.0	75.0	98.0	78.0
4	5.4	5.6	98.0	90.4	101.0	93.4	25.0	23.0	68.0	N/A	90.0	75.0	93.0	78.0
10	8.5	8.8	95.0	84.4	98.0	87.4	28.0	25.0	68.0	N/A	86.0	71.0	89.0	74.0
20	12.1	12.4	90.0	80.0	93.0	83.0	28.0	25.0	68.0	N/A	80.0	65.0	83.0	68.0
30	14.8	15.3	85.0	77.2	88.0	80.2	27.0	23.8	68.0	N/A	76.0	61.5	79.0	64.5
100	27.7	28.5	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	34.3	35.3	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	40.0	41.2	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	45.1	46.5	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	49.7	51.3	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	58.2	60.0	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	65.8	67.9	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	72.9	75.1	70.0	57.7	73.0	60.7	19.0	17.3	62.0	N/A	45.0	35.4	48.0	38.4

\*Supplied cables meet the minimum Cat. 7 transmission requirements as per **IEC 61156-6 Ed. 2**

## Performance

<b>Frequency Range:</b>	1 - 600 MHz
<b>Impedance:</b>	100 Ω
<b>Coupling Attenuation:</b>	Type I
<b>Max. DC Resistance :</b>	145 Ω/km@20°C
<b>Max. Resistance Unbalance:</b>	2 %
<b>Capacitance Unbalance:</b>	1.2 pF/m max.
<b>Velocity of Propagation:</b>	78 % nom.
<b>Propagation Delay Skew:</b>	20 ns/100m max.
<b>Dielectric Strength:</b>	500 V/minute
<b>Dielectric Strength to Shield:</b>	500 V/minute
<b>Min. Insulation Resistance :</b>	5 GΩ•km
<b>Min. Bend Radius:</b>	120 mm
<b>Max. Operating Temperature:</b>	+65 °C
<b>Min. Operating Temperature:</b>	-40 °C

Prepared By	Revised By	Version Num	Modified on
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