

## Cat. 6 4x2x23/1 AWG U/FTP Outdoor LSZH/FR-LSZH

**Part Number:** **8300904101**

**Applications:** High data rates, High bandwidth digital applications with low BER, Indoor/Outdoor use, fixed installations

**General Construction:** The cable contains 4 individually foil-shielded twisted pairs (U/FTP), cabled together and protected by an outer jacket, and an additional black UV resistant jacket for outdoor use.

**Outer Jacket Material:** FR-LSZH

**Outer Diameter:** 9.6 mm nom.

**Weight:** 85 kg/km



### Design & Materials

#### Detailed Construction:

The cable can be installed in cable trays and cable conduits in accordance to the local earth safety regulations limited to 300 V.

<b>Conductor Material:</b>	Annealed Bare Copper
<b>Conductor Size:</b>	23 AWG
<b>Conductor Construction:</b>	Solid
<b>Insulation Material:</b>	SFS PO
<b>Insulation O.D.:</b>	1.38 mm nom.
<b>Color Code:</b>	Per TIA/EIA 568-B
<b>Conductor Color Code:</b>	White x Blue, White x Orange, White x Green, White x Brown
<b>Ind. Shield Material:</b>	Aluminum/Polyester Foil
<b>Ind. Shield Design:</b>	Helically applied aluminum foil, 100% coverage
<b>Overall Drain-wire Material:</b>	Annealed Tinned Copper
<b>Overall Drain-wire size:</b>	0.41 mm
<b>Overall Drain-wire Construction:</b>	Solid
<b>Inner Jacket Material:</b>	FR-LSZH
<b>Inner Jacket Diameter nom.:</b>	7.2 mm nom
<b>Total number of conductors:</b>	8
<b>Outer Jacket Color:</b>	Black
<b>Marking:</b>	Per request, Teldor Standard

### Standards

<b>Applicable Standards:</b>	IEC 61156, ISO/IEC 11801-1, TIA/EIA-568
<b>Flammability Rating:</b>	IEC 60332-1, UL 1581 VW-1, EN 50575:2014 Dcas2d2a1 (CPR)

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### Electrical Properties:

#### Cat. 6 Screened-Pair Horizontal Cables\*

Freq. MHz	Attenuation dB/100m 20°C		PS NEXT Loss dB		NEXT Loss dB		RL dB		PS ELFEXT dB		ELFEXT dB	
	Typical Value	Cat. 6	Typical Value	Cat. 6	Typical Value	Cat. 6	Typical Value	Cat. 6	Typical Value	Cat. 6	Typical Value	Cat. 6
1	2.0	2.8	90.0	72.3	93.0	75.3	22.0	20.0	90.0	65.0	93.0	68.0
4	3.7	3.8	85.0	63.3	88.0	66.3	25.0	23.0	90.0	53.0	93.0	56.0
10	5.7	6.0	85.0	57.3	88.0	60.4	28.0	25.0	80.0	45.0	83.0	48.0
20	8.1	8.5	85.0	52.8	88.0	55.8	28.0	25.0	80.0	39.0	83.0	42.0
30	10.0	10.5	85.0	50.1	88.0	53.1	27.0	23.8	70.0	35.5	73.0	38.5
100	19.0	19.9	80.0	42.3	83.0	45.3	24.0	21.1	63.0	25.0	66.0	28.0
150	23.6	24.9	80.0	39.7	83.0	42.7	22.0	18.8	60.0	21.5	63.0	24.5
200	27.7	29.1	80.0	37.8	83.0	40.8	21.0	18.0	58.0	19.0	61.0	22.0
250	31.4	33.0	77.0	36.3	80.0	39.3	20.0	17.3	55.0	17.0	58.0	20.0

\*Supplied cables meet the minimum Cat. 6 transmission requirements as per **IEC 61156-5 Ed. 2**

## Performance

<b>Frequency Range:</b>	1 - 250 MHz
<b>Impedance:</b>	100 Ω
<b>Coupling Attenuation:</b>	Type II
<b>DC Resistance:</b>	73 Ω/km nom.
<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>	35 ns/100m max.
<b>Dielectric Strength:</b>	700 V/minute
<b>Dielectric Strength to Shield:</b>	700 V/minute
<b>Min. Insulation Resistance :</b>	5 GΩ•km
<b>Min. Bend Radius:</b>	95 mm
<b>Max. Operating Temperature:</b>	+70 °C
<b>Min. Operating Temperature:</b>	-40 °C
<b>UV Resistance:</b>	Yes

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