

## Cat. 7 4x2x23/1 AWG S/FTP Drop FR-LSZH/UV-FR-PVC

**Part Number:** 9928011101

**Applications:** High data rates, High bandwidth digital applications with low BER, Indoor/Outdoor use, fixed installations, Outdoor installations, Trunk Cable for Local Area Networks

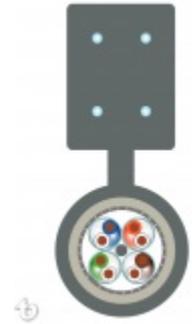
**General Construction:** The cable is build up from an internal Cat. 7 cable and a square fiberglass reinforced self-supporting messenger element made of FR-PVC compound to allow the cable to be used as a drop installations (see figure).  
The internal cable contains 4 individually foil-shielded twisted pairs cabled together with a drain wire, overall braid- shielded and jacketed with FR-LSZH compound.  
The cable exceeds IEC 61156-5 Cat. 7, Cat. 6<sub>A</sub>, Cat. 6, and Cat. 5e transmission requirements.

**Detailed Schematic:**

**Outer Jacket Material:** UV resistant FR-PVC

**Outer Diameter:** 10.9 mm nom.

**Weight:** 140 kg/km



## Design & Materials

### Detailed Construction:

The drop cable is designed for a maximum span of 60 meters. The max. span is depended on the environmental conditions in the installation area.

The installation of this drop cable should be done by using appropriate clamps.

<b>Conductor Material:</b>	Annealed Bare Copper
<b>Conductor Size:</b>	23 AWG
<b>Conductor Construction:</b>	Solid
<b>Insulation Material:</b>	Cellular PO
<b>Insulation O.D.:</b>	1.35 mm nom.
<b>Conductor unit identification:</b>	Solid Color
<b>Color Code:</b>	Per TIA/EIA 568-B
<b>Ind. Shield Material:</b>	Aluminum/Polyester Foil
<b>Ind. Shield Design:</b>	100% Coverage
<b>Conductor unit lay-up:</b>	Pairs
<b>Overall Shield Design:</b>	Braid
<b>Overall Shield Material:</b>	Tinned-copper braid
<b>Overall Braid Shield:</b>	Yes
<b>Overall Braid Material:</b>	Annealed Tinned Copper
<b>Braid Coverage:</b>	35 % nom.
<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>	7.8 mm nom
<b>Inner Jacket Color:</b>	Per request
<b>Total number of conductors:</b>	8
<b>Outer Jacket Dimension - X:</b>	5 (messenger) mm nom.
<b>Outer Jacket Dimension - Y:</b>	7 (messenger) mm nom.
<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, UL 1581 VW-1

## Electrical Properties:

### Cat. 7 Horizontal 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. 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	2.0	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

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

## Performance

<b>Frequency Range:</b>	1 - 1000 MHz
<b>Impedance:</b>	100 Ω
<b>Coupling Attenuation:</b>	Type I
<b>Max. DC Resistance :</b>	73 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>	25 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>	60 mm
<b>Max. Operating Temperature:</b>	+65 °C
<b>Min. Operating Temperature:</b>	-40 °C
<b>UV Resistance:</b>	Yes

Prepared By	Revised By	Version Num	Modified on
Asher Bohbut	Jacob Ben Ary	2.2	06-06-2011

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