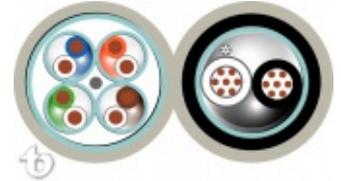


## Cat.7 4x2x23/1 AWG F/FTP + 1x2x20/1 AWG OFS FIG-8 PU

**Part Number:** 4T00640101



**Applications:** Outdoor installations in harsh environments, Data processing and information systems, High data rates, Indoor/Outdoor use, fixed installations

**General Construction:** The cable contains two cores in Fig-8 configuration:

**core 1:**

Four individually aluminum-foil shielded twisted pairs, cabled together with a drain wire and overall shielded with aluminum-foil.

This cable conforms to the IEC 61156-5 Cat. 7, Cat 6A, Cat. 6 and Cat. 5e

**core 2 :**

One twisted pair, cabled together with a drain-wire and overall aluminum-foil shielded and jacketed with FR-PVC compound.

**Detailed Schematic:**

**Outer Jacket Material:** PU

**Weight:** 120 kg/km

### Design & Materials

**Detailed Construction:**

**Core 2 Design & Materials:**

- Conductor Material:** Bare Copper
- Conductor Size:** 20 AWG
- Conductor Construction:** Stranded 7x0.32 mm nom.
- Conductor DC resistance:** 36 Ω/km (20°C)
- Insulation Material:** PVC
- Insulation O.D.:** 1.75 mm nom.
- Color Code:** Black x White
- Drain-wire Material:** Tinned Copper
- Drain-wire Size:** 20 AWG
- Drain-wire Construction:** Stranded 7x0.32 mm nom.
- Overall Shield Design:** 100% Coverage
- Overall Shield Material:** Aluminum/Polyester foil
- Total number of conductors:** 2
- Outer Jacket Color:** Black

(the information bellow refer to the data section only)

<b>Conductor Material:</b>	Annealed Bare Copper
<b>Conductor Size:</b>	23 AWG
<b>Conductor Construction:</b>	Solid
<b>Insulation Material:</b>	PO
<b>Insulation O.D.:</b>	1.35 mm nom.
<b>Conductor unit identification:</b>	Solid/stripe
<b>Color Code:</b>	Per TIA/EIA 568-B

<b>Ind. Shield Material:</b>	Aluminum/Polyester Foil
<b>Ind. Shield Design:</b>	Helically applied aluminum foil, 100% coverage
<b>Conductor unit lay-up:</b>	Pairs
<b>Overall Shield Design:</b>	Helically applied aluminum foil, 100% coverage
<b>Overall Shield Material:</b>	Aluminum/Polyester Foil
<b>Overall Foil Shield:</b>	Yes
<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>Total number of conductors:</b>	8
<b>Outer Jacket Dimension - X:</b>	16.4 mm nom.
<b>Outer Jacket Dimension - Y:</b>	8.1 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	99.4	108.0	102.4	22.0	20.0	68.0	N/A	95.0	75.0	98.0	78.0
4	3.6	3.7	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	5.6	5.8	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	7.9	8.3	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	9.7	10.2	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	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 - 600 MHz
<b>Impedance:</b>	100 Ω
<b>Coupling Attenuation:</b>	Type II
<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>	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>	80 (small axis) mm
<b>Max. Operating Temperature:</b>	+80 °C
<b>Min. Operating Temperature:</b>	-40 °C
<b>UV Resistance:</b>	Yes

<b>Prepared By</b>	<b>Revised By</b>	<b>Version Num</b>	<b>Modified on</b>
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