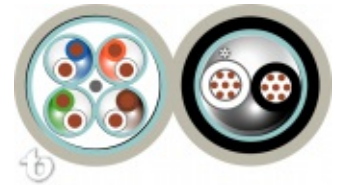


Cat.7 4x2x23/1 AWG F/FTP + 1x2x20/1 AWG OFS FIG-8 PU

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)

Conductor Material:	Annealed Bare Copper
Conductor Size:	23 AWG
Conductor Construction:	Solid
Insulation Material:	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:	Helically applied aluminum foil, 100% coverage
Conductor unit lay-up:	Pairs
Overall Shield Design:	Helically applied aluminum foil, 100% coverage
Overall Shield Material:	Aluminum/Polyester Foil
Overall Foil Shield:	Yes
Overall Drain-wire Material:	Annealed Tinned Copper
Overall Drain-wire size:	0.41 mm
Overall Drain-wire Construction:	Solid
Total number of conductors:	8
Outer Jacket Dimension - X:	16.4 mm nom.
Outer Jacket Dimension - Y:	8.1 mm nom.
Outer Jacket Color:	Black
Marking:	Per request, Teldor Standard

Standards

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

Frequency Range:	1 - 600 MHz
Impedance:	100 Ω
Coupling Attenuation:	Type II
Max. Resistance Unbalance:	2 %
Capacitance Unbalance:	1.2 pF/m max.
Velocity of Propagation:	78 % nom.
Propagation Delay Skew:	20 ns/100m max.
Dielectric Strength:	700 V/minute
Dielectric Strength to Shield:	700 V/minute
Min. Insulation Resistance :	5 GΩ•km
Min. Bend Radius:	80 (small axis) mm
Max. Operating Temperature:	+80 °C
Min. Operating Temperature:	-40 °C
UV Resistance:	Yes

Prepared By	Revised By	Version Num	Modified on
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Asher Bohbut	Jacob Ben Ary	1.21	31-07-2013
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Teldor Cables & Systems Ltd. - Ein-Dor, 1933500 ISRAEL Tel: +972 4 6770555 Fax: +972 4 6770650