

Cat. 7 24x2x26/7 AWG U/FTP PU Work Area cable

Part Number: 8302D24129

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 marked pairs cabled together with a drain stranded conductor, overall wrapped with a non-woven tape and jacketed with FR-PU compound. The cable design and structure makes it suitable for Cat. 7 and Cat. 6A portable work area applications
Outer Jacket Material:	FRZH-PU
Outer Diameter:	15 mm nom.
Weight:	167 kg/km



Design & Materials

Detailed Construction:

Cable core:

24 aluminum-foil shielded pairs, cabled together with drain conductor.

Overall wrapping tape: non-woven white tape.

Core OD: 13 mm nom.

Pairs:

Pair type: twisted pair

Shield: aluminum foil 100% coverage (with 30% overlap), metal face out.

Marking: yellow numbered marking tape (1 to 24).

Pair OD: 2.1 mm nom.

Conductor Material:	Annealed Tinned Copper
Conductor Size:	26 AWG
Conductor Construction:	7x0.17 mm
Insulation Material:	Cellular PE
Insulation O.D.:	1.0 mm nom.
Conductor unit identification:	Numbered
Conductor Color Code:	blue X white + numbered tape
Ind. Shield Material:	Aluminum/Polyester Foil
Ind. Shield Design:	Aluminum face outwards
Overall Drain-wire Material:	Annealed Tinned Copper
Overall Drain-wire size:	7X0.127 AWG
Overall Drain-wire Construction:	Stranded
Total number of conductors:	48
Outer Jacket Color:	Light Gray
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 Work Area 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	2.9	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

Frequency Range:	1 - 600 MHz
Impedance:	100 Ω
Coupling Attenuation:	Type II
Max. DC Resistance :	145 Ω/km@20°C
Max. Resistance Unbalance:	2 %
Capacitance Unbalance:	1.2 pF/m max.
Velocity of Propagation:	78 % nom.
Propagation Delay Skew:	35 ns/100m max.
Dielectric Strength:	700 V/minute
Dielectric Strength to Shield:	500 V/minute
Min. Insulation Resistance :	5 GΩ•km
Min. Bend Radius:	100 mm
Max. Operating Temperature:	+65 °C
Min. Operating Temperature:	-30 °C

Prepared By	Revised By	Version Num	Modified on
Jacob Ben Ary	Jacob Ben Ary	2.2	26-07-2010

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Teldor Cables & Systems Ltd. - Ein-Dor, 1933500

ISRAEL

Tel: +972 4 6770555

Fax: +972 4 6770650