

Cat. 7 24x2x23/1 AWG S/FTP FR-PU

Part Number: 9928045101

Applications:

Data-Centers/SANs, Fixed or portable installations, Data processing and information systems, High data rates, Indoor use, fixed installations, Trunk Cable for Local Area Networks, Indoor Backbone, High bandwidth digital applications with low BER

General Construction:

24 individually shielded twisted pairs are cabled together, overall braid shielded and jacketed . The cable design and structure makes it suitable for Cat. 7 and Cat. 6_A applications.

Detailed Schematic:

Outer Jacket Material: FR-PU

Outer Diameter: 17.8 mm nom.

Weight: 320 kg/km



Design & Materials

Conductor Material:	Annealed Bare Copper			
Conductor Size:	23 AWG			
Conductor Construction:	Solid			
Insulation Material:	Cellular PO			
Insulation O.D.:	1.38 mm nom.			
Conductor unit identification:	Solid Color			
Conductor Color Code:	<u>No.</u>	<u>Color Code</u>	<u>No.</u>	<u>Color Code</u>
	1	White x Blue	13	Yellow x Blue
	2	White x Orange	14	Yellow x Orange
	3	White x Green	15	Yellow x Green
	4	White x Brown	16	Yellow x Brown
	5	Red x Blue	17	Purple x Blue
	6	Red x Orange	18	Purple x Orange
	7	Red x Green	19	Purple x Green
	8	Red x Brown	20	Purple x Brown
	9	Pink x Blue	21	Grey x Blue
	10	Pink x Orange	22	Grey x Orange
	11	Pink x Green	23	Grey x Green
	12	Pinc x Brown	24	Grey x Brown
Ind. Shield Material:	Aluminum/Polyester Foil			
Ind. Shield Design:	100% Coverage			
Conductor unit lay-up:	Pairs			
Overall Shield Design:	Braid			
Overall Braid Shield:	Yes			
Overall Braid Material:	Annealed Tinned Copper			
Braid Coverage:	85 % nom.			
Total number of conductors:	48			
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, IEC 60332-3

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

Frequency Range:	1 - 600 MHz
Impedance:	100 Ω
Coupling Attenuation:	Type I
Max. DC Resistance :	73 Ω/km@20°C
Max. Resistance Unbalance:	2 %
Capacitance Unbalance:	1.2 pF/m max.
Velocity of Propagation:	78 % nom.
Propagation Delay Skew:	25 ns/100m max.
Dielectric Strength:	700 V/minute
Dielectric Strength to Shield:	700 V/minute
Min. Insulation Resistance :	5 GΩ•km
Min. Bend Radius:	180 mm
Max. Operating Temperature:	+65 °C
Min. Operating Temperature:	-40 °C
UV Resistance:	Yes

Prepared By	Revised By	Version Num	Modified on
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