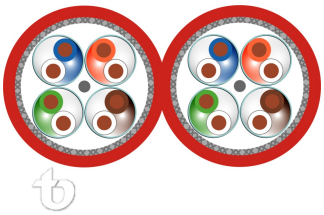
Cat. 7 2x(4x2x23/1 AWG) S/FTP FR-LSZH
COMPUTER & LAN
P/N 9928002103

TELECOM

Applications

Indoor use, fixed installations, High data rates, Data processing and information systems, Telecom systems, Optimized for IEEE 802.3bt 4PPoE



Outer Jacket Material
FR-LSZH

Weight
100 kg/km

General Construction

Two groups of 4 individually foil-shielded twisted pairs, cabled together with tinned copper drain conductor, overall braid-shielded and jacketed.
The cable conforms to IEC 61156-5 Cat. 7, Cat. 6_A Cat. 6, and Cat. 5e requirements and tested up to 1000 MHz.
The two groups are laid in parallel in a FIG-8 ('Siames') formtion.

Design & Materials

Conductor Material	Annealed Bare Copper
Conductor Size (AWG)	23
Conductor Construction	Solid
Insulation Material	Cellular PO
Insulation O.D. (mm nom)	1.38
Conductor Unit Identification	Solid/stripe
Color Code	Per TIA/EIA 568-B
Ind. Shield Material	Aluminum/Polyester Foil
Ind. Shield Design	100% Coverage
Conductor Unit Lay-Up	Pairs
Overall Braid Shield	Yes
Braid Coverage (% nom)	35
Overall Drain-wire Material	Annealed Tinned Copper
Overall Drain-wire size (mm)	0.41
Overall Drain-wire Construction	Solid
Total Number Of Conductors	16
Outer Jacket Dimension – X (mm nom)	7.1
Outer Jacket Dimension – Y (mm nom)	14.7

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Outer Jacket Color	Red
Other Jacket Colors Available	Yes
Marking	Teldor Standard|Per request

Performance

Frequency Range (MHz)	1 - 600
Impedance (Ω)	100
Transfer Impedance Grade	Grade 2
Coupling Attenuation	Type I
Max. DC Resistance (Ω/km@20°C)	73
Max. Resistance Unbalance (%)	2
Capacitance Unbalance (pF/m max)	1.2
Velocity of Propagation (% nom)	78
Propagation Delay Skew (ns/100m max)	25
Dielectric Strength (V/minute)	700
Dielectric Strength to Shield (V/minute)	700
Min. Insulation Resistance (GΩ•km)	5
Max. Installation Tensile Load (N max.)	100
Min. Bend Radius (mm)	60
Min. Operating Temperature (°C)	-40
Max. Operating Temperature (°C)	+65

Standards

Flammability Rating
IEC 60332-1
UL 1581 VW-1

Applicable Standards
IEC 61156
IEC 61156-5
IEEE 802.3af (PoE)
IEEE 802.3at (PoE+)
IEEE 802.3an 10GBASE-T 10 Gigabit Ethernet
IEEE 802.3bt (4PPoE)
ISO/IEC 11801-1
ANSI/TIA-568.2-D
RoHS 3 2015/863/EU

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

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