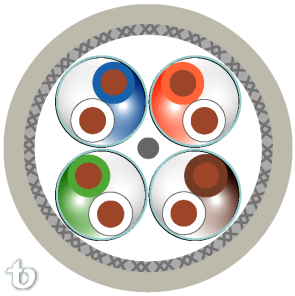
Cat. 7_A 4x2x22/1 AWG S/FTP FR-LSZH

COMPUTER & LAN
P/N 99XG254122

TELECOM

Applications

Indoor Backbone, Indoor use, fixed installations, High bandwidth digital applications with low BER, High data rates, Telecom systems, Optimized for IEEE 802.3bt 4PPoE, Hi-End Coupling Attenuation Requirements



Outer Jacket Material	Outer diameter	Weight
FR-LSZH	8.3 mm nom.	80 kg/km

General Construction

The cable contains 4 individually aluminum-foil screened twisted pairs, cabled with a drain conductor, overall braid shielded and jacketed . Transmission performance exceeds the requirements of IEC 61156-5 Cat. 7_A

Design & Materials

Conductor Material	Annealed Bare Copper
Conductor Size (AWG)	22
Conductor Construction	Solid
Insulation Material	SFS PO
Insulation O.D. (mm nom)	1.56
Color Code	Per TIA/EIA 568-B
Ind. Shield Material	Aluminum/Polyester Foil
Ind. Shield Design	Aluminum face outwards
Overall Shield Design	Braid
Overall Shield Material	Tinned-copper braid
Overall Braid Shield	Yes
Braid Coverage (% nom)	55
Overall Drain-wire size (mm)	0.41
Overall Drain-wire Construction	Solid
Total Number Of Conductors	8
Outer Jacket Color	Light Gray
Other Jacket Colors Available	Yes
Marking	Teldor Standard|Per request

TELDOR
Cables & Systems Ltd.

Cat. 7_A 4x2x22/1 AWG S/FTP FR-LSZH
P/N 99XG254122

TELECOM

Performance

Frequency Range (MHz)	1 - 1200
Impedance (Ω)	100
Transfer Impedance Grade	Grade 1
Coupling Attenuation	Type I
Max. DC Resistance (Ω/km@20°C)	64
Max. Resistance Unbalance (%)	2
Capacitance Unbalance (pF/m max)	1.2
Velocity of Propagation (% nom)	78
Propagation Delay Skew (ns/100m max)	20
Dielectric Strength (V/minute)	700
Dielectric Strength to Shield (V/minute)	700
Min. Insulation Resistance (GΩ•km)	5
Max. Installation Tensile Load (N max.)	140
Min. Bend Radius (mm)	60
Min. Operating Temperature (°C)	-40
Max. Operating Temperature (°C)	+65
UV Resistance	Yes

Standards

Flammability Rating
IEC 60332-1
IEC 60332-3
IEC 60332-3-22
IEC 60332-3-24
UL 1581 VW-1
EN 50575:2014 D_{ca}s1d1a1 (CPR)

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-C.2
RoHS 3 2015/863/EU

Electrical Properties

Cat. 7_A 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_A	Typical Value	Cat. 7_A	Typical Value	Cat. 7_A	Typical Value	Cat. 7_A	Typical Value	Cat. 7_A	Typical Value	Cat. 7_A	Typical Value	Cat. 7_A
1	1.9	2.0	107.0	105.4	110.0	108.4	22.0	20.0	70.0	67.0	95.0	75.0	98.0	78.0
4	3.4	3.8	98.0	96.3	101.0	99.3	25.0	23.0	70.0	67.0	90.0	75.0	93.0	78.0
10	5.3	5.8	95.0	90.4	98.0	93.4	28.0	25.0	70.0	67.0	86.0	71.0	89.0	74.0
20	7.8	8.2	90.0	85.9	93.0	88.9	28.0	25.0	70.0	67.0	80.0	65.0	83.0	68.0
30	9.4	10.1	90.0	83.2	93.0	86.2	27.0	23.8	70.0	67.0	76.0	61.5	79.0	64.5
100	17.5	18.5	80.0	75.4	83.0	78.4	24.0	21.1	70.0	62.5	66.0	51.0	69.0	54.0
150	22.7	22.8	80.0	72.7	83.0	75.7	22.0	18.8	68.0	59.8	63.0	47.5	66.0	50.5
200	25.1	26.5	80.0	70.8	83.0	73.8	21.0	18.0	68.0	58.0	60.0	45.0	63.0	48.0
250	28.2	29.7	77.0	69.4	80.0	72.4	20.0	17.3	65.0	56.5	58.0	43.0	61.0	46.0
300	31.0	32.7	77.0	68.2	80.0	71.2	19.0	17.3	65.0	55.3	52.0	41.5	55.0	44.5
400	36.0	38.0	72.0	66.3	75.0	69.3	19.0	17.3	65.0	53.4	49.0	38.9	52.0	41.9

500	39.5	42.7	72.0	64.9	75.0	67.9	19.0	17.3	65.0	52.0	47.0	37.0	50.0	40.0
600	44.1	47.1	72.0	63.7	75.0	66.7	19.0	17.3	65.0	50.8	45.0	35.4	48.0	38.4
1000	59.0	62.0	72.0	60.4	75.0	63.4	19.0	17.3	65.0	47.5	39.0	31.0	42.0	34.0

*Supplied cables meet the minimum Cat. 7_A transmission requirements as per IEC 61156-5 Ed. 2

Teldor Cables & Systems Ltd. (“Teldor”) reserves the right to make changes to the products described in this catalog without prior notice. Teldor does not assume any liability which may occur due to the use of the products described herein. Drawings may not be to scale and are provided for general and informational purposes only. The information contained in this catalog is the proprietary property of Teldor, and may not be used, reproduced or disclosed to others, in whole or in part, without the written authorization of Teldor.

Version 1.10 | Last update: 2024-06-24