

## Cat6A LSZH F/UTP Bulk Cable

Shielded cable for long runs in electrically noisy environments

- Meets Category 6A standards.
- Ideal for carrying data, audio, video, and for use in 10 / 100 Mbps, and 1 / 10 Gbps networks.
- Features aluminium Mylar® tape foil shield to protect against noise and EMI/RFI interference.
- Solid Copper Conductors.
- 23 AWG.
- **WARRANTY – Guaranteed for life!**



Our Low Smoke Zero Halogen cable is ideal for public areas, transport systems, factories, and any other areas where the protection of people and equipment from toxic and corrosive gases is essential. The zero halogen jacket has excellent fire and safety characteristics, giving off less smoke and emitting very low gases. This high quality solid core bulk cable is ideal for Ethernet, Fast Ethernet, Gigabit Ethernet, 10G Ethernet, Power over Ethernet (PoE) and other demanding structured cabling applications.

This cable is 3<sup>rd</sup> party tested and complies with a wide range of electrical and safety standards including ISO/IEC11801, CENELEC EN50173-1:2011, and ANSI/TIA-568-C2 making it appropriate for almost every indoor application.

This cable comfortably exceeds the Cat6A requirements for insertion loss, crosstalk, alien crosstalk and return loss. Details are published on the following pages.

The cable is compatible with the range of shielded GigaTrue jacks, wallplates, Patch cables, and patch panels.



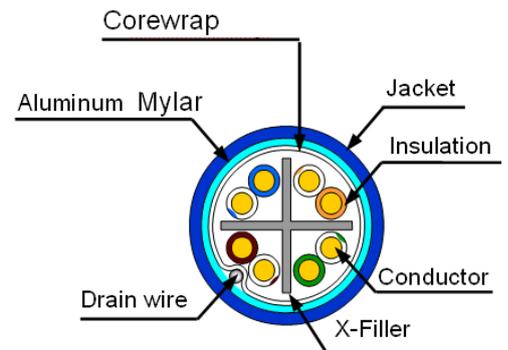
FMT700 Jack



JPM10GF24 Patch Panel

## Technical Specification

Environmental: RoHS2 Compliant  
CE: LVD (2006/95/EC) , RoHS2(2011/65/EC)  
Construction: 23 AWG Solid Bare Copper Twisted-Pair  
Conductors  
Polyethylene Insulation, PE X-Filler  
F/UTP Overall Foil Screen with Drain Wire,  
LSZH Jacket



## Applicable Standards:

Electrical:

ISO/IEC 61156-5  
CENELEC EN 50173-1:2011

Safety:

CENELEC EN 60332-1-2 / IEC 60332-1-2  
CENELEC EN 50268-1 / IEC 61034-1  
CENELEC EN 50267-2-3 / IEC 60754-2

Materials/Construction :

CENELEC EN 60811-1-1 / IEC 60811-1-1  
CENELEC EN 60811-1-2 / IEC 60811-1-2

### Black Box Explains

#### LSZH (Low Smoke Zero Halogen)

The European market is demanding that cables used in LANs, WANs, etc. meet this specification.

IEC60332-1 governs the Flame Retardant Grade specifications in reference to LSZH cables. Essentially, the compound used in manufacturing cables

Meeting the above specification reduces the amount of dangerous/poisonous gases in case of fire. The main

## Physical

Conductors:	Material	23AWG Solid Bare Copper	
	Diameter	0.550±0.02 mm	
Insulation:	Material	HDPE	
	Diameter	Blue and Green pair:	1.17±0.02mm
		Orange Pair:	1.14±0.02mm
		Brown Pair:	1.12±0.02mm
Shielding:	Filler:	PE Filler (0.7 x 5.6mm ±0.2mm)	
	Mylar Tape	25 x 0.025mm	
	Drain Wire	Solid Tinned Copper (1/0.43mm ±0.01mm)	
	Al-Mylar Tape	Laminated Aluminum-Polyester (23 x 0.063mm)	
Jacket:	Material	LSZH	
	Diameter	7.2±0.2mm	
	Colour	Purple	
Packaging:	Wooden Spool		
Temperature:	Installation	-20°C up to +60°C	
	Operation	0°C up to +60°C	
Min Bend Radius:	Installation	8 x overall diameter	
	Operation	6 x overall diameter	
Max Pulling Tension:	90 N		
Flame Retardance:	IEC 60332-1-2		

## Electrical Characteristics at 20°C

Maximum Conductor DC Resistance:	9.38 Ohm/100m
Mutual Capacitance:	56 pF/m Max
Maximum Propagation Delay:	600 MHz 535.5 ns/100m
Maximum Delay Skew:	1 ~ 600 MHz 45 nS/100m
Max. Operating Voltage:	300 V rms

## Electrical Performance

Frequency (MHz)	IL MAX. (dB/100m)	NEXT MIN. (dB)	ACR MIN. (dB)	PS. NEXT MIN. (dB)	PS. ACR MIN. (dB)	ACRF MIN. (dB/100m)	PS. ACRF MIN. (dB/100m)	R.L. MIN. (dB)
1	2.1	75.3	73.2	73.3	71.2	68.0	65.0	20.0
4	3.8	66.3	62.5	64.3	60.5	56.0	53.0	23.0
8	5.3	61.8	56.5	59.8	54.5	49.9	46.9	24.5
10	5.9	60.3	54.4	58.3	52.4	48.0	45.0	25.0
16	7.5	57.2	49.7	55.2	47.7	43.9	40.9	25.0
20	8.4	55.8	47.4	53.8	45.4	42.0	39.0	25.0
25	9.4	54.3	44.9	52.3	42.9	40.0	37.0	24.3
31.25	10.5	52.9	42.4	50.9	40.4	38.1	35.1	23.6
62.5	15.0	48.4	33.4	46.4	31.4	32.1	29.1	21.5
100	19.1	45.3	26.2	43.3	24.2	28.0	25.0	20.1
155	24.1	42.4	18.3	40.4	16.3	24.2	21.2	18.8
200	27.6	40.8	13.2	38.8	11.2	22.0	19.0	18.0
250	31.1	39.3	8.2	37.3	6.2	20.0	17.0	17.3
300	34.3	38.1	3.8	36.1	1.8	18.5	15.5	16.8
400	40.1	36.3	NA	34.3	NA	13.2	10.2	15.9
500	45.3	34.8	NS	32.8	NA	14.0	11.0	15.2
550	47.7	34.2	NA	32.2	NA	13.2	10.2	14.9
600	50.0	33.6	NA	31.6	NA	12.4	9.4	14.7

**Item** \_\_\_\_\_ **Code** \_\_\_\_\_

Cat6A LSZH Cable F/UTP Bulk solid Conductor 305m spool

Purple

EYNLSF6A48AW-PB-1000