

Category 6_A U-FTP Copper Cable

AFL's Category 6_A U-FTP cable is one of the highest performing on the market today. It is the best choice for the most advanced networks.

Shielding techniques improve its immunity to alien crosstalk which ensures 10 Gigabit performance now and into the future. Use AFL's Category 6_A cable together with AFL's Category 6_A outlets and patch panels to achieve superior network performance.

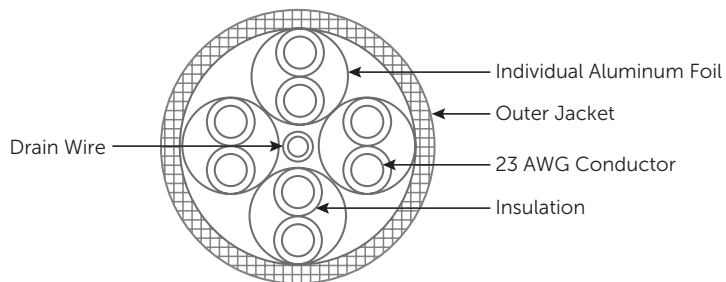
Features and Benefits

- Tested from 1 to 600 MHz and offers guaranteed headroom to ISO/IEC 11801, 2nd edition, Amendment 2, Class EA
- Fully compliant with Power over Ethernet (PoE) technology
- Guaranteed 10GBASE-T performance compliant
- Components are twisted into pairs with varying left hand lays to minimise crosstalk
- RoHS compliant
- Use with AFL Cat 6_A outlets and patch panels for optimal system performance

Applications

- 10GBASE-T Ethernet
- 1000BASE-T Gigabit Ethernet
- 100BASE-TX Fast Ethernet
- 10BASE-T Ethernet
- Broadband Video
- 155 / 622 Mbps ATM
- 100 Mbps TP-PMD
- 4 / 16 Mbps Token Ring
- Voice

Cross Sectional Drawing



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Technical Specifications

CABLE CONSTRUCTION	
Category 6_A Physical Characteristics	
Conductor	23 AWG solid bare copper
UTP Riser Jacket	PVC LF (7.1 mm NOM OD) UL Listed Type FT4 per UL 444
Construction	Four twisted pairs are cabled around a 24 AWG drain wire. Each pair is individually shielded with a polyester-aluminum foil (aluminum facing outwards) providing 100% coverage.
6_A 10GBASE-T Electrical Characteristics*	
Characteristic Impedance	100 ± 15 Ω (1 to 500 MHz)
Maximum Conductor Resistance	8.9 Ω / 100 meters @ 20° C
Maximum Resistance Unbalanced	3%
Maximum Mutual Capacitance	5.6 nF / 100 meters @ 1kHz
Maximum Capacitance Unbalanced	330 pF / 100 meters
NVP	78%

* Discrete values are for information only. Equations for swept frequencies govern limits. Verified to meet Cat 6_A TIA-568-B.2-10 performance requirements per the verification requirements defined in E108971.

Standards Compliance

- ANSI/TIA-568-C.2 Category 6_A
- ISO/IEC 11801, 2nd edition, Amendment 2, Class EA
- ACMA Compliant (A-Tick)
- IEEE-10GBASE-T 802.3an clause 55.7 (Compliant to link definition)

Technical Specifications

TRANSMISSION SPECIFICATIONS									
Frequency (MHz)	Insertion Loss Max (dB100m)	Next Loss Min (dB)		ACR Min (dB)		ACRF Min (dB)		Return Loss Min (dB)	Delay Max (ns)
		WP	PS	WP	PS	WP	PS		
1	2.1	74.3	72.3	72.2	70.2	73.8	70.8	20	35
4	3.8	74.3	72.3	70.5	68.5	61.8	58.8	23	35
10	5.9	74.3	72.3	68.3	66.3	53.8	50.8	25	35
16	7.5	74.2	71.2	66.6	63.6	49.7	46.7	25	35
20	8.4	72.8	69.8	64.3	61.3	47.8	44.8	25	35
31.25	10.5	69.9	66.9	59.1	56.1	43.9	40.9	23.6	35
62.5	15.0	65.4	62.4	49.9	46.9	37.9	34.9	21.5	35
100	19.1	62.3	59.3	42.4	39.4	33.8	30.8	20.1	35
200	27.6	57.8	54.8	28.6	25.6	27.8	24.8	18	35
250	31.1	56.3	53.3	23.3	20.3	25.8	22.8	17.3	35
300	34.3	55.1	52.1	18.5	15.5	24.3	21.3	16.8	35
350	37.2	54.1	51.1	14.2	11.2	22.9	19.9	16.3	35
400	40.1	53.3	50.3	10.1	7.1	21.8	18.8	15.9	35
500	45.3	51.8	48.8	2.7	-	19.8	16.8	15.2	35

Ordering Information

PART NUMBER	DESCRIPTION
AFLCABLE6AS-BL	Category 6 _A U-FTP Cable, Blue, CM rated PVC, 305 m Reel