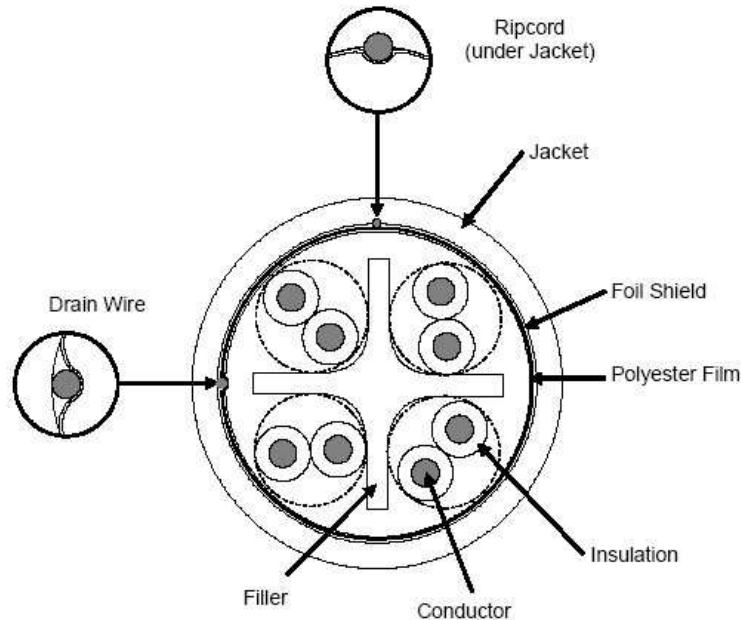


# XG Category 6A F/UTP Cable



1859222-X



## Description

AMP NETCONNECT Category 6<sub>A</sub> F/UTP cables exceed TIA/EIA-568-B.2-10 Category 6<sub>A</sub> and ISO/IEC 11801:2002 Class E<sub>A</sub> performance requirements by significant margins on all parameters. The AMP NETCONNECT Category 6<sub>A</sub> System complies with all of the performance requirements for current and proposed applications such as 10 Gigabit Ethernet, Gigabit Ethernet (1000BASE-Tx), 10/100BASE-Tx, token ring, 155 Mbps ATM, 100 Mbps TPPMD, ISDN, analog and digital video and analog and digital voice (VoIP).

## Specification (text in brackets [ ] requires a choice)

Horizontal cabling shall be 23 AWG, 4-pair F/UTP, UL/NEC CM rated Jacket shall be independently verified for compliance. Cable jacketing shall be [white, gray, blue]. Cable shall meet all the requirements of TIA 568-B.2-10 as well as the performance requirements listed in the following table: [include Performance Characteristics tables from page 2].

Cable shall be independently verified for performance and characterized to 500 MHz. Independent verification for flammability compliance shall be to NEC article 800 and UL 444. Cable shall be supplied on reels box. Horizontal cable shall be AMP NETCONNECT part number [1859222-X (X denotes jacket color)].

## Part Numbers

Description	UL/NEC Rating	Packaging	Part Numbers
Category 6 <sub>A</sub> (XG) F/UTP Cable, 4-Pair	CM	1000FT (305m) WR	1859222-X

X denotes jacket color: -2 = White, -4 = Gray, -6 = Blue

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## Performance Characteristics (meet or exceed EIA/TIA and ISO requirements)

Frequency (MHz)	ATTENUATION (dB/100m)	NEXT (dB, WORST PR)	PSNEXT (dB)	ELFEXT (dB, WORST PR)	PSELFEXT (dB)	DELAY (ns/100m)	RL (dB)	IMPEDANCE (ohms)	ACR (dB)
	MAXIMUM	MINIMUM	MINIMUM	MINIMUM	MINIMUM	MAXIMUM	MINIMUM		MINIMUM
4	3.7	65.3	63.3	55.8	52.8	552	23.0	100 ± 15	61
8	5.2	60.8	58.8	49.7	46.7	547	24.5	100 ± 15	55
10	5.9	59.3	57.3	47.8	44.8	545	25.0	100 ± 15	53
16	7.4	56.2	54.2	43.7	40.7	543	25.0	100 ± 15	49
20	8.3	54.8	52.8	41.8	38.8	542	25.0	100 ± 15	46
25	9.3	53.3	51.3	39.8	36.8	541	24.3	100 ± 15	44
31.25	10.4	51.9	49.9	37.9	34.9	540	23.6	100 ± 15	41
62.5	14.9	47.4	45.4	31.9	28.9	539	21.5	100 ± 15	32
100	19.0	44.3	42.3	27.8	24.8	538	20.1	100 ± 22	24
150	23.6	41.7	39.7	24.3	21.3	537	18.9	100 ± 22	16.8
200	27.5	39.8	37.8	21.8	18.8	537	18.0	100 ± 22	10.6
250	31.0	38.3	36.3	19.8	16.8	536	17.3	100 ± 25	5.3
300	34.2	37.1	35.1	18.3	15.3	536	16.8	100 ± 25	-
500	45.3	33.8	31.8	13.8	10.8	536	15.2	100 ± 25	-

## Technical Details

<b>Materials</b>	
Conductors –	23 AWG, Solid Copper, (Ø.0225 ± .0001)
Insulation –	0.010in (Ø.044 ± .001), Polyethylene
Jacket –	0.020in nominal (Ø.283 nominal), FR PVC
Filler –	Polyethylene
<b>Electrical Characteristics</b>	
Impedance –	100Ω ±15%, 1 – 62.5MHZ, 100Ω ±25%, 250 – 500MHZ
Propagation delay –	536 ns/100 m max. @ 250 MHz
Skew –	45ns/100m @ 250MHz maximum
Mutual capacitance –	5.6 nF max/100 m
Conductor resistance –	6.65Ω / 100m maximum @ 20°C
Nominal Velocity of Propagation –	72%
<b>Mechanical Characteristics</b>	
Bend radius –	The minimum bending radius is 8x outside diameter during installation and 4x the outside diameter after installation ≈ 1"
Operating temperature –	-20°C to 60°C (-4°F – 140°F)
Storage temperature –	-20°C to 50°C
Voltage –	300 Volts AC or DC
<b>Approvals</b>	
Safety –	IEC 60332-1-2
UL File Number –	E138034
Performance –	<b>ETL Verified to:</b> TIA/EIA-568-B, 2-10 "Performance Specifications for 4-Pair 100 Ω Augmented Category 6 Cabling and ISO/IEC 11801 Ed.2.1 Class E <sub>A</sub> "
RoHS Compliant	<b>RoHS</b>

Specifications subject to change without notice. Revised 02/10

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