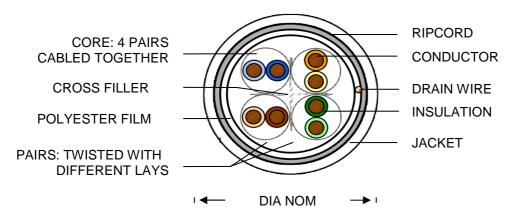
## XG Category 6A F/UTP Cable







### **Description**

AMP NETCONNECT Category  $6_A$  F/UTP cables exceed TIA/EIA-568-B.2-10 Category  $6_A$ , TIA/EIA 568-C Category  $6_A$  and ISO/IEC 11801:2002 Class  $E_A$  performance requirements by significant margins on all parameters. The AMP NETCONNECT Category  $6_A$  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, Jacket LSZH rated and shall be independently verified for compliance to IEC 332-1/IEC 60332-1 fire propagation delay, IEC 1034 Smoke Emission, IEC754-1/IEC 60754-1 and IEC 754-2/IEC 60754-2 Acid Gas Emission and IEC 61034. Cable jacketing shall be [white, gray, blue]. Cable shall meet all the requirements of TIA 568-C.2 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 [1859218-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	LSZH	1000FT (305m) WR	1859218-X

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

# XG Category 6A F/UTP Cable



1859218-X

### Performance Characteristics (meet or exceed EIA/TIA 568-C.2 and ISO/IEC 11801 Class EA 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	МІМИМИМ	MINUMUM	MINUMUM	MINUMUM	MAXIMUM	MINUMUM		MINUMUM
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	$100 \pm 15$	53
16	7.4	56.2	54.2	43.7	40.7	543	25.0	$100 \pm 15$	49
20	8.3	54.8	52.8	41.8	38.8	542	25.0	$100 \pm 15$	46
25	9.3	53.3	51.3	39.8	36.8	541	24.3	$100 \pm 15$	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	$100 \pm 22$	24
150	23.6	41.7	39.7	24.3	21.3	537	18.9	$100 \pm 22$	16.8
200	27.5	39.8	37.8	21.8	18.8	537	18.0	$100 \pm 22$	10.6
250	31.0	38.3	36.3	19.8	16.8	536	17.3	$100 \pm 25$	5.3
300	34.2	37.1	35.1	18.3	15.3	536	16.8	$100 \pm 25$	ı
500	45.3	33.8	31.8	13.8	10.8	536	15.2	$100 \pm 25$	-

### **Technical Details**

Materials	
Conductors –	23 AWG, Solid Copper, (Ø.0225 ± .0001)
Insulation –	0.010in (Ø.044 ± .001), Polyethylene
Jacket –	0.020in nominal (Ø.283 nominal), LSZH
Filler –	Polyethylene
Electrical Characteristics	
Impedance –	$100\Omega$ ±15%, 1 – 62.5MHZ, $100\Omega$ ±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℃
Nominal Velocity of Propagation –	72%
Mechanical Characteristics	
Bend radius –	The minimum bending radius is 8x outside diameter during installation and 4x the outside diameter after installation $\approx$ 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
Approvals	
Safety –	IEC 60332-1-2 IEC 60754-1 IEC 60754-2 IEC 61034-2
Performance –	ETL Verified to: TIA/EIA-568-B.2-10 "Performance Specifications for 4-Pair 100 $\Omega$ Augmented Category 6 Cabling and ISO/IEC 11801 Ed.2.1 Class $E_A$ "
RoHS Compliant	

Specifications subject to change without notice.

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