



### Description

AMP NETCONNECT Category 6 cables exceed the TIA/EIA-568-B.2-1 and ISO/IEC 11801:2002 requirements for Category 6 performance. They comply with all of the performance requirements for current and proposed applications such as Gigabit Ethernet, 100BASE-Tx, token ring, 155 Mbps ATM, 100 Mbps TP-PMD, ISDN, analog (broadband, baseband) and digital video and analog and digital (VoIP) voice. The cables are available in CMR, white, gray, and blue, and packaged as reel box.

### Specification (Text in brackets [ ] requires a choice.)

Horizontal cabling shall be 23 AWG, 4-pair UTP, UL/NEC CM rated, with a [white, gray or blue] [CM] PVC jacket. Cable shall meet the performance requirements listed in the following table [include Performance Characteristics table from back page]. Cable shall be AMP part number [X-1427254-X].

Description	UL/NEC Ratings	Nominal Diameter		V <sub>p</sub> (nom%)	Weight	Package	Part Numbers		
		Dielectric	Outside				White	Gray	Blue
4-Pair Non-Plenum	CMR	0.042 in	0.230 in	70	26 lbs/mft	Reel Box	0-1427254-2	0-1427254-4	0-1427254-6

Package: Reel Box (1000 ft.)

**Performance Characteristics** (exceed TIA/EIA-568-B.2-1 Category 6)

Frequency (MHz)	Attenuation (dB/100m)	NEXT (dB)		PSNEXT (dB)		ELFEXT (dB)		PSELFEXT (dB)		RL (dB)		ACR (dB)		PSACR (db)	
		Min	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ
	Max														
0.772	1.8	79	82	77	79	70	73	67	69	-	-	77.2	80.2	75.2	77.2
1	2	77	80	75	77	68	71	65	67	20	28	75	78.3	73	75.3
4	3.8	68	71	66	68	56	59	53	55	23	31	64.2	67.5	62.2	64.5
8	5.3	64	67	62	64	50	53	47	49	24.5	32.5	58.7	61.4	56.7	58.4
10	6	62	65	60	62	48	51	45	47	25	33	56	59.3	54	56.3
16	7.6	59	62	57	59	44	47	41	43	25	33	51.4	54.7	49.4	51.7
20	8.5	58	61	56	58	42	45	39	41	25	33	49.5	52.3	47.5	49.3
25	9.5	56	59	54	56	40	43	37	39	24.3	32.3	46.5	49.8	44.5	46.8
31.25	10.7	55	58	53	55	38	41	35	37	23.6	31.6	44.3	47.2	42.3	44.2
62.5	15.4	50	53	48	50	32	35	29	31	21.5	29.5	34.6	37.9	32.6	34.9
100	19.8	47	50	45	47	28	31	25	27	20.1	28.1	27.2	30.4	25.2	27.4
155	25.3	44	47	42	44	24	27	21	23	18.8	26.8	18.7	22.1	16.7	19.1
200	29	43	46	41	43	22	25	19	21	18	26	14	16.6	12	13.6
250	32.8	41	44	39	41	20	23	17	19	17.3	25.3	8.2	11.3	6.2	8.3
300	36.6	40	43	38	40	18	21	15	17	16.8	24.8	3.4	6.5	1.4	3.5
350	40	39	42	37	39	17	20	14	16	16.3	24.3	-	2.1	-	-
400	43.2	38	41	36	38	16	19	13	15	15.9	23.9	-	-	-	-
450	46.3	38	41	36	38	15	18	12	14	15.5	23.5	-	-	-	-
500	49.2	37	40	35	37	14	17	11	13	15.2	23.2	-	-	-	-
550	52	36	39	34	36	13	16	10	12	14.9	22.9	-	-	-	-
600	54.8	36	39	34	36	12	15	9	11	14.7	22.7	-	-	-	-

**Impedance:** 100 ohms  $\pm$  5%, 1 MHz to 600 MHz

**Propagation delay:** 536 ns/100m max. @ 250 MHz

**Delay Skew:** 45 ns max

**Bend radius:** (4 X cable diameter)  $\approx$  1"

**Conductor resistance:** 66.58 ohms max/km

**Mutual capacitance:** 5.6 NF max/100m

**Voltage:** 300 volts AC or DC

**Materials:**

**Conductors** – 23 AWG solid bare copper

**Insulation** –

1427254 – Polyethylene, .042" dia. Nom.

**Jacket** – FR PVC

**Operating temperature:** -20 °C – 60 °C

**Storage temperature:** -20 °C – 80 °C

**Approvals:** UL listed file no. E138034

Specifications subject to change without notice.

Revised 3/08

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