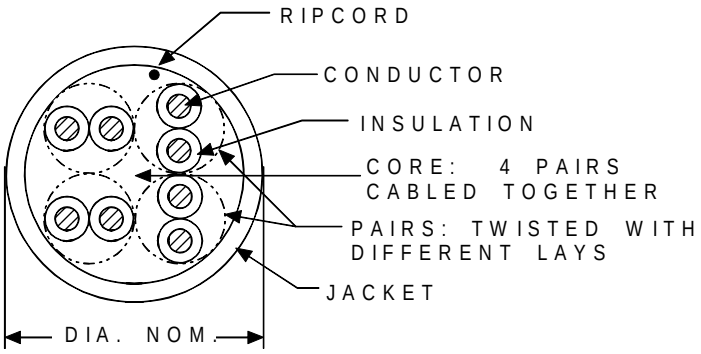
Enhanced Category 5e Cable

57825-X, 57826-X



Description

AMP NETCONNECT Enhanced Category 5e cables exceed TIA/EIA-568-B.2 requirements for Category 5e performance by significant margins, providing extra headroom for a more robust cabling system. 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 [550 MHz], baseband) and digital video and voice. The cables are available in plenum and non-plenum, white, gray, blue and yellow, and packaged in reel boxes, pull boxes and wooden reels. Additional jacket colors can also be provided.

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

Horizontal cabling shall be 24 AWG, 4-pair UTP, UL/NEC [CMP or CMR] rated, with a [white, gray, blue or yellow] [plenum-rated] PVC jacket. [Individual conductors shall be 100% FEP insulated (if plenum)]. Cable jacketing shall be lead-free. Cable shall meet the performance requirements listed in the following table [include Performance Characteristics table from back page] in addition to all other standard Category 5e performance requirements. Cable shall be supplied [on wooden reels, in reel boxes or in pull boxes]. Cable shall be UL listed under file number E138034. Cable shall be ETL verified to Category 5e. Horizontal cable shall be AMP NETCONNECT part number [57825-X or 57826-X].

Description	UL/NEC Ratings	Nominal Diameter		Vp (nom%)	Weight	Package	Part Numbers			
		Dielectric	Outside				White	Gray	Blue	Yellow
4-Pair Non-Plenum	CMR	0.037 in	0.200 in	70	24 lbs/mft	WR	57826-1	57826-3	57826-5	57826-7
						RB	57826-2	57826-4	57826-6	57826-8
						PB	6-57826-2	6-57826-4	6-57826-6	6-57826-8
4-Pair Plenum	CMP	0.035 in	0.195 in	74	22 lbs/mft	WR	57825-1	57825-3	57825-5	57825-7
						RB	57825-2	57825-4	57825-6	57825-8
						PB	6-57825-2	6-57825-4	6-57825-6	6-57825-8

Package: WR= Wooden Reel, RB = Reel Box, PB = Pull Box (1000 ft. ±2%)

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Performance Characteristics (meet or exceed TIA/EIA-568-B.2 Category 5e)

Frequency, MHz	**Attenuation, dB/100m** Max.	**NEXT, dB** Min./Typical	**PSNEXT, dB** Min./Typical	**ELFEXT, dB** Min./Typical	**PSELFEXT, dB** Min./Typical	**Return Loss, dB** Min./Typical	**ACR, dB** Min./Typical	**PS ACR, dB** Min./Typical
.772	1.8	72/81	69/77	66/73	63/70	–	70.2/79.2	67.0/73.4
1	2.0	70/79	67/75	64/71	61/68	20.0/28.0	68.3/77.3	65.1/71.2
4	4.1	61/70	58/66	52/59	49/56	23.1/31.0	57.2/66.2	53.9/60.3
8	5.8	57/66	54/62	46/53	43/50	24.5/32.5	51.0/60.0	47.7/54.8
10	6.5	55/64	52/60	44/51	41/48	25.0/33.0	48.8/57.8	45.5/52.2
16	8.2	52/61	49/57	40/47	37/44	25.0/33.0	44.0/53.0	40.6/47.6
20	9.3	51/60	48/56	38/45	35/42	25.0/33.0	41.5/50.5	38.1/45.6
25	10.4	49/58	46/54	36/43	33/40	24.3/32.3	38.9/47.9	35.5/42.6
31.25	11.7	48/57	45/53	34/41	31/38	23.6/31.6	36.2/45.2	32.7/40.5
62.5	17.0	43/52	40/48	28/35	25/32	21.5/29.5	26.4/35.4	22.7/30.7
100	22.0	40/49	37/45	24/31	22/28	20.1/28.1	18.3/27.3	14.2/23.2
155	28.1	37/46	34/42	20/27	17/24	18.8/26.8	9.4/18.4	5.9/14.7
200	32.4	36/45	33/41	18/25	15/22	18.0/26.0	3.4/12.4	2.5/9.8
225	34.7	35/44	32/40	17/24	14/21	17.6/25.6	0.3/9.3	0.5/8.7
250	36.9	34/43	31/39	16/23	13/20	17.3/25.3	–/6.5	–/4.7
300	41.0	33/42	30/38	14/21	11/18	16.8/24.8	–/1.2	–/–
350	44.9	32/41	29/37	13/20	10/17	16.3/24.3	–/–	–/–

Impedance: 100 ohms ± 15, 1 MHz to 350 MHz

Mutual capacitance: 5.6 nF/100 m max.

DC resistance: 9.38 ohms/100 m max.

Propagation delay: 538 ns/100 m max. @ 100 MHz

Delay skew: 25 ns/100 m max

Voltage: 300 volts AC or DC

Bend radius: (4 X cable diameter) ≈ 1"

Operating temperature: -20°C – 60°C

Storage temperature: -20°C – 80°C

Approvals: UL listed file no. E138034
ETL verified to TIA/EIA-568-B.2
Category 5e

Materials:
Conductors - 24 AWG solid bare copper
Insulation -
57825 - FEP, .032" dia. nom.
57826 - Polyethylene, .036" dia. nom.
Jacket -
57825 - Polymer alloy, .195" dia. nom.
57826 - FR PVC, .200" dia. nom.

Specifications subject to change without notice.

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