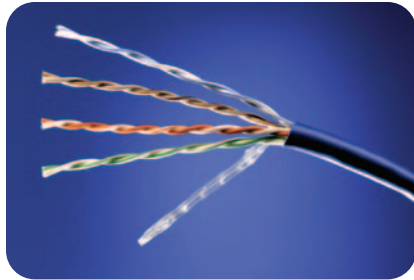


Basic Structured Cabling Systems

Category 5e 4-Pair Plenum Data Cable



ADC's Basic Category 5e and Category 6 Structured Cabling Systems are complete channel solutions offering 20-year product performance warranties along with a multitude of product choices and design options. In addition, the components of these economical systems are also guaranteed to meet the minimum requirements of TIA 568B for Category 5e and Category 6 for dependable data transmission in any network configuration, from the switch to the network interface.

Features:

- Unparalleled delay skew performance
- Manufactured with lead-free materials

Compliances:

- UL Subject 444
- (UL)-C(UL) Type CMP
- ICEA S-90-661
- NEC 800 Type CMP
- ISO/IEC 11801 Class D
- ETL verified TIA/EIA-568-B.2 Category 5e horizontal cable requirements

SPEC SHEET



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Basic Structured Cabling Systems

Category 5e 4-Pair Plenum Data Cable

Specifications

CONSTRUCTION

| | |
|--------------------------------|--------------------------------|
| Conductors: | 24 AWG solid bare copper |
| Insulation: | 100% FEP |
| Pairing: | Short, staggered pair lays |
| Jacket: | Lead-free, flame retardant PVC |
| Nominal outer diameter: | 4.57 mm (.180") |

ELECTRICAL CHARACTERISTICS

| | |
|---|--|
| Conductor DC resistance (maximum): | 9.38 Ω /100 meters (28.6 Ω /1000 ft) @ 20 °C (68 °F) |
| DC resistance unbalance (maximum): | 2% |
| Mutual capacitance (maximum): | 5.6 nF/100 meters (17 pF/ft) |
| Operating temperature (maximum): | 75 °C (167 °F) |
| Operating voltage (maximum): | 300 VDC |
| Worst case cable skew: | 25 nS/100 meters (25 nS/328 ft) |
| Nominal velocity of propagation: | 75% |

| FREQ (MHz) | FITTED IMPEDANCE (Ohms) | INSERTION LOSS (dB/100m) | | RETURN LOSS (dB/100m) | | Pair-Pair NEXT (dB/100m) | | PSNEXT (dB/100m) | |
|------------|-------------------------|--------------------------|----------|-----------------------|----------|--------------------------|----------|------------------|----------|
| | SPEC | Max | TIA Spec | Min | TIA Spec | Min | TIA Spec | Min | TIA Spec |
| 1 | 100 +/- 15 | 1.9 | 2.0 | 25.6 | 20.0 | 71.7 | 65.3 | 69.6 | 62.3 |
| 4 | 100 +/- 15 | 4.0 | 4.1 | 27.1 | 23.0 | 64.1 | 56.3 | 60.8 | 53.3 |
| 8 | 100 +/- 15 | 5.6 | 5.8 | 28.5 | 24.5 | 57.9 | 51.8 | 56.3 | 48.8 |
| 10 | 100 +/- 15 | 6.3 | 6.5 | 29.8 | 25.0 | 57.2 | 50.3 | 55.2 | 47.3 |
| 16 | 100 +/- 15 | 8.1 | 8.2 | 29.5 | 25.0 | 54.2 | 47.2 | 51.7 | 44.2 |
| 20 | 100 +/- 15 | 9.2 | 9.3 | 30.4 | 25.0 | 53.1 | 45.8 | 50.0 | 42.8 |
| 25 | 100 +/- 15 | 10.2 | 10.4 | 31.2 | 24.3 | 48.5 | 44.3 | 46.8 | 41.3 |
| 31.25 | 100 +/- 15 | 11.5 | 11.7 | 30.7 | 23.6 | 50.9 | 42.9 | 48.0 | 39.9 |
| 62.5 | 100 +/- 15 | 16.5 | 17.0 | 26.7 | 21.5 | 46.6 | 38.4 | 44.0 | 35.4 |
| 100 | 100 +/- 15 | 21.3 | 22.0 | 24.6 | 20.1 | 42.5 | 35.3 | 39.9 | 32.3 |
| 155 | 100 +/- 15 | 26.5 | | 23.0 | | 44.6 | | | |

| FREQ (MHz) | Pair-Pair ACR (dB/100m) | | PSACR (dB/100m) | | Pair-Pair ELFEXT (dB/100m) | | PSELFEXT (dB/100m) | |
|------------|-------------------------|----------|-----------------|----------|----------------------------|----------|--------------------|----------|
| | Min | TIA Spec | Min | TIA Spec | Min | TIA Spec | Min | TIA Spec |
| 1 | 69.8 | 63.3 | 67.7 | 60.3 | 67.3 | 63.8 | 65.8 | 60.8 |
| 4 | 60.2 | 52.2 | 56.9 | 49.2 | 55.8 | 51.8 | 54.2 | 48.8 |
| 8 | 52.4 | 46.0 | 50.7 | 43.0 | 49.9 | 45.7 | 48.3 | 42.7 |
| 10 | 51.0 | 43.8 | 48.8 | 40.8 | 47.8 | 43.8 | 46.3 | 40.8 |
| 16 | 46.3 | 39.0 | 43.8 | 36.0 | 43.9 | 39.7 | 42.3 | 36.7 |
| 20 | 44.1 | 36.5 | 41.1 | 33.5 | 41.9 | 37.8 | 40.3 | 34.8 |
| 25 | 38.5 | 33.9 | 36.8 | 30.9 | 40.1 | 35.8 | 38.5 | 32.8 |
| 31.25 | 39.6 | 31.2 | 36.8 | 28.2 | 38.1 | 33.9 | 36.5 | 30.9 |
| 62.5 | 30.4 | 21.4 | 27.9 | 18.4 | 32.5 | 27.9 | 30.8 | 24.9 |
| 100 | 21.8 | 13.3 | 19.0 | 10.3 | 29.0 | 23.8 | 27.3 | 20.8 |
| 155 | 20.5 | | 17.8 | | 27.5 | | 25.3 | |

NOTE: The above listed discrete frequency electrical performance values are provided for engineering informatoin only. Actual compliance testing is based on swept frequency measurements. The spec values are based on TIA/EIA-568-B.2 specification.

Category 5e 4-Pair Plenum Cable

1 2 / 0 5 • 1 0 1 8 4 9 A E



Basic Structured Cabling Systems

Category 5e 4-Pair Plenum Data Cable

Ordering Information

| Description | Weight (Lbs/kft) | Catalog Number |
|---------------------|------------------|----------------|
| 4-pair cable | | |
| Reel packaging | 21 | 5ESP-XXYY |
| Reelx-1000' | 20 | 5ESP-XXII |

XX = Jacket Color: BL = Blue, WT = White, GY = Gray, GN = Green, YL = Yellow, RD = Red
YY = Length: 02 = 1,000 ft, 04 = 2,000 ft

Category 5e 4-Pair Plenum Cable

12/05 • 101849AE

SPEC SHEET



Web Site: www.adc.com

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Fax: +1-952-917-3237 • For a listing of ADC's global sales office locations, please refer to our web site.

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