

Industrial Data Solutions® — Industrial Ethernet

Category 5e DataTuff® Twisted Pair Cables, 2-Pair and 4-Pair

Heavy-Duty Sunlight and Oil-Resistant Jackets

Table with columns: Description, Part No., UL NEC/C(UL) CEC Type, No. of Pairs, Standard Lengths (Ft., m), Standard Unit Wt. (Lbs., kg), Nominal OD (Inch, mm), Freq. (MHz), Max. Atten. (dB/100m), Min. PSUM NEXT (dB), Min. PSUM ACR (dB/100m), Min. PSUM ELFEXT (dB/100m), Input Imped. (Ω), Min. RL (dB)

Enhanced Cat 5e • 22 AWG Bonded-Pairs Solid Bare Copper Conductors • Rip Cord • See Color Code Chart (below)

Polyolefin Insulation • .030" Industrial Grade Sunlight- and Oil-resistant Black PVC Jacket

Table for 22 AWG Bonded-Pairs with columns for Description (PLTC), Part No. (7922A), NEC/CMR/CMX/Outdoor/CEC (CMR FT4), No. of Pairs (4), Standard Lengths (1000, 2000), Standard Unit Wt. (46.3, 21.0, 92.5, 42.0), Nominal OD (.301, 7.65), Freq. (1, 4, 8, 10, 16, 25, 31.25, 62.5, 100, 155, 200, 250, 350), Max. Atten. (2.0, 4.0, 5.7, 6.4, 8.1, 10.3, 11.6, 16.8, 21.7, 27.7, 32.0, 36.4, 44.3), Min. PSUM NEXT (65.3, 56.3, 51.8, 50.3, 47.3, 44.3, 42.9, 38.4, 35.3, 32.5, 30.8, 29.3, 27.2), Min. PSUM ACR (63.3, 52.3, 46.1, 43.9, 39.1, 34.1, 31.3, 21.6, 17.1, 17.1, 14.7, 12.8, 9.9), Input Imped. (100±12, 100±12, 100±12, 100±12, 100±12, 100±15, 100±15, 100±15, 100±15, 100±18, 100±20, 100±20, 100±22), Min. RL (20.0, 23.0, 24.5, 25.0, 25.0, 24.3, 23.6, 21.5, 20.1, 19.0, 19.0, 18.0, 17.0)

Cable passes -25°C Cold Bend per UL1581 • Installation Temperature: -10°C to +75°C • Operating Temperature: -25°C to +75°C** Jacket sequentially marked at 2 ft. intervals • Third party verified to TIA/EIA-568-B.2, Category 5e • U.S. Patents 5,606,151 and 5,734,126

Enhanced Cat 5e • 24 AWG Bonded-Pairs Stranded (7x32) TC Conductors • See Color Code Chart (below)

Polyolefin Insulation • .030" Industrial Grade Sunlight- and Oil-resistant PVC Jacket (Black, Red or Teal)

Table for 24 AWG Bonded-Pairs with columns for Description (Stranded Flexible), Part No. (7924A), NEC/CMR/CMX/Outdoor/CEC (CMR FT4), No. of Pairs (4), Standard Lengths (1000, 2000), Standard Unit Wt. (30.0, 13.6, 58.0, 26.3), Nominal OD (.242, 6.15), Freq. (1, 4, 8, 10, 16, 25, 31.25, 62.5, 100, 155, 200, 250, 350), Max. Atten. (2.4, 4.8, 6.8, 7.7, 9.7, 12.4, 13.9, 20.2, 26.0, 33.2, 38.4, 43.7, 53.2), Min. PSUM NEXT (65.3, 56.3, 51.8, 50.3, 47.3, 44.3, 42.9, 38.4, 35.3, 32.5, 30.8, 29.3, 27.2), Min. PSUM ACR (62.9, 51.5, 45.0, 42.6, 37.5, 31.9, 29.0, 18.3, 9.2, 16.9, 14.7, 12.8, 9.9), Input Imped. (100±12, 100±12, 100±12, 100±12, 100±12, 100±15, 100±15, 100±15, 100±18, 100±18, 100±20, 100±20, 100±22), Min. RL (20.0, 23.6, 25.4, 26.0, 26.0, 25.5, 25.0, 23.5, 22.5, 19.0, 19.0, 18.0, 17.0)

*2000 ft. put-up available in Black only. • RJ-45 Compatible • Jacket sequentially marked at 2 ft. intervals Cable passes -40°C Cold Bend per UL1581 • Installation Temperature: -25°C to +75°C • Operating Temperature: -40°C to +75°C** Third party verified to TIA/EIA-568-B.2, Category 5e • U.S. Patents 5,606,151; 5,734,126 and 5,763,823

Enhanced Cat 5e • 24 AWG Bonded-Pairs Solid BC Conductors • Overall Beldfoil® Shield (100%) • Drain Wire • See Color Codes (below)

Polyolefin Insulation • .030" Industrial Grade Sunlight- and Oil-resistant PVC Jacket (Black, Red or Teal)

Table for 24 AWG Bonded-Pairs with columns for Description (EtherNet/IP Compliant Shielded), Part No. (7933A), NEC/CMR/CMX/Outdoor/CEC (CMR FT4), No. of Pairs (2), Standard Lengths (1000, 2000), Standard Unit Wt. (32.0, 14.5, 64.8, 29.4), Nominal OD (.227, 5.77), Freq. (1, 4, 10, 16, 31.25, 62.5, 100, 200), Max. Atten. (2.0, 4.1, 6.5, 8.2, 11.7, 17.0, 22.0, 32.4), Min. PSUM NEXT (62.3, 53.3, 47.3, 44.3, 39.9, 35.4, 32.3, 27.8), Min. PSUM ACR (60.3, 49.2, 40.8, 36.1, 28.2, 18.4, 10.3, 1.0), Input Imped. (100±15, 100±15, 100±15, 100±15, 100±15, 100±15, 100±15, 100±25), Min. RL (20.0, 23.6, 26.0, 26.0, 25.0, 23.5, 22.5, 15.0)

*2000 ft. put-up available in Black only. • M-12 or RJ-45 Compatible • Shield is bonded to jacket inner wall for electrical stability. Cable passes -40°C Cold Bend per UL1581 • Installation Temperature: -25°C to +75°C • Operating Temperature: -40°C to +75°C** Jacket sequentially marked at 2 ft. intervals • Third party verified to TIA/EIA-568-B.2, Category 5e • U.S. Patents 5,606,151 and 5,734,126

Polyolefin Insulation • .030" Industrial Grade Sunlight- and Oil-resistant PVC Jacket (Black or Blue)

Table for 24 AWG Bonded-Pairs with columns for Description (Shielded), Part No. (7929A), NEC/CMR/CMX/Outdoor/CEC (CMR FT4), No. of Pairs (4), Standard Lengths (1000, 2000), Standard Unit Wt. (37.0, 16.8, 72.0, 32.7), Nominal OD (.265, 6.73), Freq. (1, 4, 10, 16, 31.25, 62.5, 100, 200), Max. Atten. (2.0, 4.1, 6.5, 8.2, 11.7, 17.0, 22.0, 32.4), Min. PSUM NEXT (62.3, 53.3, 47.3, 44.3, 39.9, 35.4, 32.3, 27.8), Min. PSUM ACR (60.3, 49.2, 40.8, 36.1, 28.2, 18.4, 10.3, 1.0), Input Imped. (100±15, 100±15, 100±15, 100±15, 100±15, 100±15, 100±15, 100±25), Min. RL (20.0, 23.0, 25.0, 25.0, 23.6, 21.5, 20.1, 15.0)

*2000 ft. put-up available in Black only. • RJ-45 Compatible • Shield is bonded to jacket inner wall for electrical stability. Cable passes -40°C Cold Bend per UL1581 • Installation Temperature: -25°C to +75°C • Operating Temperature: -40°C to +75°C** Jacket sequentially marked at 2 ft. intervals • Third party verified to TIA/EIA-568-B.2, Category 5e • U.S. Patents 5,606,151 and 5,734,126 • P-07-KA060003-MSHA*

Enhanced Cat 5e • 24 AWG Bonded-Pairs Solid BC Conductors • Overall Beldfoil (100%) + TC Braid Shield (70% Coverage) • Drain Wire*

Polyolefin Insulation • .030" Industrial Grade Sunlight- and Oil-resistant PVC Jacket (Black, Red, Blue or Teal)

Table for 24 AWG Bonded-Pairs with columns for Description (EtherNet/IP Compliant Heavy-shielded), Part No. (7921A), NEC/CMR/CMX/Outdoor/CEC (CMR FT4), No. of Pairs (4), Standard Lengths (1000, 2000), Standard Unit Wt. (55.0, 24.9, 106.0, 48.1), Nominal OD (.330, 8.38), Freq. (1, 4, 10, 16, 31.25, 62.5, 100), Max. Atten. (2.0, 4.1, 6.5, 8.2, 11.7, 17.0, 22.0), Min. PSUM NEXT (62.3, 53.3, 47.3, 44.3, 39.9, 35.4, 32.3), Min. PSUM ACR (60.3, 49.2, 40.8, 36.1, 28.2, 18.4, 10.3), Input Imped. (100±15, 100±15, 100±15, 100±15, 100±15, 100±15, 100±15), Min. RL (20.0, 23.6, 26.0, 26.0, 25.0, 23.5, 22.5)

*2000 ft. put-up available in Black only. *24 AWG solid spiral drain wire. Cable passes -40°C Cold Bend per UL1581 • Installation Temperature: -25°C to +75°C • Operating Temperature: -40°C to +75°C** Jacket sequentially marked at 2 ft. intervals • Third party verified to TIA/EIA-568-B.2, Category 5e • NEMA WC-63.1 Category 5e • U.S. Patents 5,606,151 and 5,734,126

ACR = Attenuation Crosstalk Ratio • AL = Aluminum • BC = Bare Copper • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • TC = Tinned Copper EtherNet/IP is a trademark of ControlNet International, Ltd. under license by Open DeviceNet Vendor Association, Inc. *Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration Certification. **Subject to length de-rating.

DataTuff Color Codes: Pair 1 = White/Blue Stripe & Blue, Pair 2 = White/Orange Stripe & Orange, Pair 3 = White/Green Stripe & Green, Pair 4 = White/Brown Stripe & Brown For two pair products: use color codes for Pairs 2 & 3