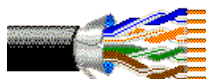


## 7929A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable



For more Information  
please call

1-800-Belden1

**General Description:**

24 AWG Bonded-Pairs solid bare copper conductors, polyolefin insulation, overall Beldfoil® shield (100% coverage), industrial grade sunlight- and oil-resistant PVC jacket, drain wire, rip cord. Sequential marking at two foot intervals

**Usage (Overall)****Suitable Applications:**

Industrial Ethernet Cable, Harsh Environments, 200MHz Category 5e, Industrial Ethernet, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, Noisy Environments, CMX - Outdoor, RJ-45 Compatible\*

**Physical Characteristics (Overall)****Conductor****AWG:**

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 4       | 24  | Solid     | BC - Bare Copper   |

Total Number of Conductors:

8

**Insulation****Insulation Material:**

| Insulation Material | Wall Thickness (in.) | Dia. (in.) |
|---------------------|----------------------|------------|
| PO - Polyolefin     | 0.010                | 0.044      |

**Outer Shield****Outer Shield Material:**

| Outer Shield Trade Name | Type | Outer Shield Material        | Coverage (%) |
|-------------------------|------|------------------------------|--------------|
| Beldfoil®               | Tape | Aluminum Foil-Polyester Tape | 100          |

**Outer Shield Drain Wire AWG:**

| AWG | Stranding | Drain Wire Conductor Material |
|-----|-----------|-------------------------------|
| 24  | 7x32      | TC - Tinned Copper            |

**Outer Jacket****Outer Jacket Material:**

| Outer Jacket Material                     | Nom. Wall Thickness (in.) |
|-------------------------------------------|---------------------------|
| Industrial Grade PVC - Polyvinyl Chloride | 0.030                     |

Outer Jacket Ripcord:

No

**Overall Cable**

Overall Nominal Diameter:

0.265 in.

**Pair****Pair Color Code Chart:**

| Number | Color                        |
|--------|------------------------------|
| 1      | White/Blue Stripe & Blue     |
| 2      | White/Orange Stripe & Orange |
| 3      | White/Green Stripe & Green   |
| 4      | White/Brown Stripe & Brown   |

**Mechanical Characteristics (Overall)**

Storage Temperature Range: -40°C To +80°C

Installation Temperature Range: -25°C To +75°C

Operating Temperature Range: -40°C To +75°C

Bulk Cable Weight: 32 lbs/1000 ft.

Max. Recommended Pulling Tension: 40 lbs.

Min. Bend Radius/Minor Axis: 0.500 in.

## 7929A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable

## Applicable Specifications and Agency Compliance (Overall)

## Applicable Standards &amp; Environmental Programs

|                                       |                                                      |
|---------------------------------------|------------------------------------------------------|
| NEC(UL) Specification:                | CMR, CMX-Outdoor                                     |
| CEC/C(UL) Specification:              | CMR                                                  |
| EU Directive 2011/65/EU (ROHS II):    | Yes                                                  |
| EU Directive 2000/53/EC (ELV):        | Yes                                                  |
| EU Directive 2002/95/EC (RoHS):       | Yes                                                  |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2004                                           |
| EU Directive 2002/96/EC (WEEE):       | Yes                                                  |
| EU Directive 2003/11/EC (BFR):        | Yes                                                  |
| CA Prop 65 (CJ for Wire & Cable):     | Yes                                                  |
| MII Order #39 (China RoHS):           | Yes                                                  |
| PMSHA Specification:                  | P-07-KA060003                                        |
| Telecommunications Standards:         | Category 5e - TIA 568.C.2                            |
| Other Specification:                  | NEMA WC-63.1 Category 5e, UL verified to Category 5e |

## Applicable Patents:

|                  |
|------------------|
| Country          |
| www.belden.com/p |

## Flame Test

|                  |                       |
|------------------|-----------------------|
| UL Flame Test:   | UL1666 Vertical Riser |
| CSA Flame Test:  | FT4                   |
| IEEE Flame Test: | 1202                  |

## Suitability

|                        |     |
|------------------------|-----|
| Suitability - Outdoor: | Yes |
| Sunlight Resistance:   | Yes |
| Oil Resistance:        | Yes |

## Plenum/Non-Plenum

|               |    |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

## Electrical Characteristics (Overall)

## Nom. Mutual Capacitance:

|                     |
|---------------------|
| Capacitance (pF/ft) |
| 15                  |

|                                           |     |
|-------------------------------------------|-----|
| Maximum Capacitance Unbalance (pF/100 m): | 330 |
|-------------------------------------------|-----|

## Nominal Velocity of Propagation:

|        |
|--------|
| VP (%) |
| 70     |

## Maximum Delay:

|                  |
|------------------|
| Delay (ns/100 m) |
| 538 @ 100MHz     |

## Max. Delay Skew:

|                       |
|-----------------------|
| Delay Skew (ns/100 m) |
| 45                    |

## Maximum Conductor DC Resistance:

|                        |
|------------------------|
| DCR @ 20°C (Ohm/100 m) |
| 9.38                   |

## Max. Operating Voltage - UL:

|           |
|-----------|
| Voltage   |
| 300 V RMS |

## Maximum DCR Unbalanced:

|                          |
|--------------------------|
| DCR Unbalance @ 20°C (%) |
| 3                        |

## Electrical Characteristics-Premise (Overall)

## Premise Cable Electrical Table 1:

| Freq. (MHz) | Max. Attenuation (dB/100 m) | Min. NEXT (dB) | Min. PSNEXT (dB) | Min. ACR (dB) | Min. PSACR (dB) | Min RL (dB) | Min. SRL (dB) |
|-------------|-----------------------------|----------------|------------------|---------------|-----------------|-------------|---------------|
|-------------|-----------------------------|----------------|------------------|---------------|-----------------|-------------|---------------|

## 7929A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 1     | 2.0  | 65.3 | 62.3 | 63.0 | 60.0 | 20.0 | 23   |
| 4     | 4.1  | 56.3 | 53.3 | 51.0 | 49.0 | 23.0 | 23.0 |
| 8     | 5.8  | 51.8 | 48.8 | 46.0 | 43.0 | 24.5 | 24.5 |
| 10    | 6.5  | 50.3 | 47.3 | 43.0 | 41.0 | 25.0 | 25.0 |
| 16    | 8.2  | 47.3 | 44.3 | 39.0 | 36.0 | 25.0 | 25.0 |
| 20    | 9.3  | 45.8 | 42.8 | 36.5 | 33.5 | 25.0 | 25.0 |
| 25    | 10.4 | 44.3 | 41.3 | 33.9 | 30.9 | 24.3 | 24.3 |
| 31.25 | 11.7 | 42.9 | 39.9 | 31.0 | 28.0 | 23.6 | 23.6 |
| 62.5  | 17.0 | 38.4 | 35.4 | 22.0 | 19.0 | 21.5 | 21.5 |
| 100   | 22.0 | 35.3 | 32.3 | 14.0 | 11.0 | 20.1 | 20.1 |
| 200   | 32.4 |      | 27.8 |      | 1.0  |      | 15.0 |

Premise Cable Electrical Table 2:

| Freq. (MHz) | Input (Unfitted) Imp. (Ohms) | Fitted Impedance | Min. ELFEXT (dB) | Min. PSELFEXT (dB) |
|-------------|------------------------------|------------------|------------------|--------------------|
| 1           | 100 ± 15                     | 100 ± 15         | 63.8             | 60.8               |
| 4           | 100 ± 15                     | 100 ± 15         | 51.7             | 48.7               |
| 8           | 100 ± 15                     | 100 ± 15         | 45.7             | 42.7               |
| 10          | 100 ± 15                     | 100 ± 15         | 43.8             | 40.8               |
| 16          | 100 ± 15                     | 100 ± 15         | 39.7             | 36.7               |
| 20          | 100 ± 15                     | 100 ± 15         | 37.7             | 34.7               |
| 25          | 100 ± 15                     | 100 ± 15         | 35.8             | 32.8               |
| 31.25       | 100 ± 15                     | 100 ± 15         | 33.9             | 30.9               |
| 62.5        | 100 ± 15                     | 100 ± 15         | 27.8             | 24.8               |
| 100         | 100 ± 15                     | 100 ± 15         | 23.8             | 20.8               |
| 200         | 100 ± 25                     |                  |                  | 14.7               |

## Notes (Overall)

**Notes:** Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581. \*Special RJ45 plug required. See WWW. BELDEN.COM - Tools - Connector Cross Reference.

## Notes (Cont'd.):

T568A Plug Compatible Part Number: R301601 T568B Plug Compatible Part Number: R301602

## Put Ups and Colors:

| Item #        | Putup    | Ship Weight | Color       | Notes | Item Desc          |
|---------------|----------|-------------|-------------|-------|--------------------|
| 7929A 0021000 | 1,000 FT | 37.000 LB   | RED         | C     | 4 PR #24 PP FS PVC |
| 7929A 0061000 | 1,000 FT | 37.000 LB   | BLUE, LIGHT | C     | 4 PR #24 PP FS PVC |
| 7929A 0081000 | 1,000 FT | 37.000 LB   | GRAY        | C     | 4 PR #24 PP FS PVC |
| 7929A 0101000 | 1,000 FT | 37.000 LB   | BLACK       | C     | 4 PR #24 PP FS PVC |
| 7929A 0102000 | 2,000 FT | 70.000 LB   | BLACK       | C     | 4 PR #24 PP FS PVC |
| 7929A 0105000 | 5,000 FT | 170.000 LB  | BLACK       | C     | 4 PR #24 PP FS PVC |
| 7929A 1NH1000 | 1,000 FT | 37.000 LB   | TEAL 1NH    | C     | 4 PR #24 PP FS PVC |

## Notes:

C = CRATE REEL PUT-UP.

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