

## 7919A Paired - Category 5e DataTuff® Twisted Pair Cable

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|   | <p>For more information please call<br/><b>1-800-Belden1</b></p> <p><u>See Put-ups and Colors</u></p> <p><b>Related Documents :</b><br/><b>Termination Instructions for Shielded UTP.pdf</b></p> |
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### Description:

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

### SUITABLE APPLICATIONS:

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

### PHYSICAL CHARACTERISTICS:

#### CONDUCTOR:

|                            |                  |
|----------------------------|------------------|
| Number of Pairs            | 4                |
| Total Number of Conductors | 8                |
| AWG                        | 24               |
| Stranding                  | Solid            |
| Conductor Material         | BC - Bare Copper |

#### INSULATION:

|                                |                 |
|--------------------------------|-----------------|
| Insulation Material            | PO - Polyolefin |
| Nom. Insulation Wall Thickness | .010 in.        |

#### Pair Color Code Chart :

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

#### OUTER SHIELD:

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

#### OUTER SHIELD DRAIN WIRE :

|                             |    |
|-----------------------------|----|
| Outer Shield Drain Wire AWG | 24 |
|-----------------------------|----|

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|  |                    |
|--|--------------------|
| Outer Shield Drain Wire Stranding          | 7x32               |
| Outer Shield Drain Wire Conductor Material | TC - Tinned Copper |

### OUTER JACKET:

|                       |   |
|-----------------------|---|
| Outer Jacket Material | Industrial Grade PVC - Polyvinyl Chloride |
| Outer Jacket Ripcord  | No  |

### OVERALL NOMINAL DIAMETER:

|                          |          |
|--------------------------|----------|
| Overall Nominal Diameter | .265 in. |
|--------------------------|----------|

### MECHANICAL CHARACTERISTICS:

|                                  |                 |
|----------------------------------|-----------------|
| Operating Temperature Range      | -40°C To +75°C  |
| Installation Temperature Range   | -25°C To +75°C  |
| Bulk Cable Weight                | 30 lbs/1000 ft. |
| Max. Recommended Pulling Tension | 25 lbs.         |
| Min. Bend Radius (Install)       | 1 in.           |

### APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

#### APPLICABLE STANDARDS:

|                                       |  |
|---------------------------------------|--|
| NEC/(UL) Specification                | CMR, CMX-Outdoor, UL444                              |
| CEC/C(UL) Specification               | CMR  |
| IEC Specification                     | 11801 Category 5                                     |
| EU RoHS Compliant (Y/N)               | Yes  |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2004   |
| PMSHA Specification                   | P-07-KA060004  |
| TIA/EIA Specification                 | 568-B.2 Category 5e                                  |
| Other Specification                   | NEMA WC-63.1 Category 5e, UL verified to Category 5e |

### FLAME TEST:

|                |              |
|----------------|--------------|
| UL Flame Test  | UL1666 Riser |
| CSA Flame Test | FT4          |

### SUITABILITY:

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

### PLENUM/NON-PLENUM:

|              |   |
|--------------|---|
| Plenum (Y/N) | N |
|--------------|---|

### ELECTRICAL CHARACTERISTICS:

|  |              |
|--|--------------|
| Nom. Mutual Capacitance @ 1 KHz          | 15 pF/ft     |
| Maximum Capacitance Unbalance (pF/100 m) | 330 pF/100 m |
| Nominal Velocity of Propagation          | 70 %         |

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|   |                       |
|---|-----------------------|
| Maximum Delay (ns/100 m)                    | 538 @ 100MHz ns/100 m |
| Maximum Delay Skew (ns/100m)                | 45 ns/100 m           |
| Maximum Conductor DC Resistance @ 20 Deg. C | 9.38 Ohms/100 m       |
| Maximum DCR Unbalance @ 20 Deg. C           | 3 %                   |
| Max. Operating Voltage - UL                 | 300 V RMS             |

### ELECTRICAL CHARACTERISTICS - PREMISE:

Premise Cable Electricals Table 1 :

| Frequency (MHz) | Max. Attenuation (dB/100 m) | Min. NEXT (dB) | Min. PSNEXT (dB) | Min. ACR (dB) | Min. PSACR (dB) | Min. Return Loss (dB) | Min. Structural Return Loss (dB) |
|-----------------|-----------------------------|----------------|------------------|---------------|-----------------|-----------------------|----------------------------------|
| 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                             |

Premise Cable Electricals Table 2 :

| Frequency (MHz) | Input (Unfitted) Impedance (Ohms) | Fitted Impedance (Ohms) | 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               |

### NOTES:

|       |   |
|-------|---|
| Notes | Operating temperatures are subject to length de-rating. Cable passes -40°C Cold Bend per UL 1581. |
|-------|---|

### PUT-UPS AND COLORS:

| Item          | Description        | Put-Up (ft.) | Ship Weight (lbs.) | Jacket Color | Notes |
|---------------|--------------------|--------------|--------------------|--------------|-------|
| 7919A 0061000 | 4 PR #24 PP FS PVC | 1000         | 35                 | BLUE, LIGHT  | C     |
| 7919A 0101000 | 4 PR #24 PP FS PVC | 1000         | 35                 | BLACK        | C     |
| 7919A 0102000 | 4 PR #24 PP FS PVC | 2000         | 68                 | BLACK        | C     |

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## **7919A Paired - Category 5e DataTuff® Twisted Pair Cable**

C = CRATE REEL PUT-UP.

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