

## 1801B Paired - Single-Pair Cable

|   |  |   |
|---|--|---|
|  |  | <p>For more information please call<br/><b>1-800-Belden1</b></p> <p><u>See Put-ups and Colors</u></p> |
|---|--|---|

### Description:

24 AWG stranded (7x32) tinned copper conductors, plenum, foam FEP Teflon® insulation, twisted pairs, overall Beldfoil® shield (100% coverage), 24 AWG drain wire, Flamarrest® jacket.

### PHYSICAL CHARACTERISTICS:

#### CONDUCTOR:

|                            |                    |
|----------------------------|--------------------|
| Number of Pairs            | 1                  |
| Total Number of Conductors | 2                  |
| AWG                        | 24                 |
| Stranding                  | 7x32               |
| Conductor Diameter         | .024 in.           |
| Conductor Material         | TC - Tinned Copper |

#### INSULATION:

|                                |  |
|--------------------------------|--|
| Insulation Material Trade Name | Teflon®                                    |
| Insulation Material            | FFEP - Foam Fluorinated Ethylene Propylene |
| Insulation Diameter            | .066 in.                                   |

#### Pair Color Code Chart :

| Number | Color       |
|--------|-------------|
| 1      | Red & Black |

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

#### OUTER JACKET:

|                                  |                                       |
|----------------------------------|---------------------------------------|
| Outer Jacket Material Trade Name | Flamarrest®                           |
| Outer Jacket Material            | LS PVC - Low Smoke Polyvinyl Chloride |

#### OVERALL NOMINAL DIAMETER:

**1801B Paired - Single-Pair Cable**

|                          |          |
|--------------------------|----------|
| Overall Nominal Diameter | .165 in. |
|--------------------------|----------|

**MECHANICAL CHARACTERISTICS:**

|                                  |                 |
|----------------------------------|-----------------|
| Operating Temperature Range      | -20°C To +75°C  |
| UL Temperature Rating            | 75°C            |
| Bulk Cable Weight                | 13 lbs/1000 ft. |
| Max. Recommended Pulling Tension | 16.5 lbs.       |
| Min. Bend Radius (Install)       | 1.75 in.        |

**APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:**

**APPLICABLE STANDARDS:**

|                                       |            |
|---------------------------------------|------------|
| NEC/(UL) Specification                | CMP        |
| CEC/C(UL) Specification               | CMP        |
| EU CE Mark (Y/N)                      | Yes        |
| EU RoHS Compliant (Y/N)               | Yes        |
| EU RoHS Compliance Date (mm/dd/yyyy): | 10/01/2005 |
| Other Specification                   | AES/EBU    |

**FLAME TEST:**

|                  |     |
|------------------|-----|
| C(UL) Flame Test | FT6 |
|------------------|-----|

**PLENUM/NON-PLENUM:**

|                   |       |
|-------------------|-------|
| Plenum (Y/N)      | Y     |
| Non-Plenum Number | 1800B |

**ELECTRICAL CHARACTERISTICS:**

|   |                   |
|---|-------------------|
| Nom. Characteristic Impedance                   | 110 Ohms          |
| Nom. Inductance                                 | .18 µH/ft         |
| Nom. Capacitance Conductor to Conductor @ 1 KHz | 12 pF/ft          |
| Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz | 26 pF/ft          |
| Nominal Velocity of Propagation                 | 78 %              |
| Nom. Conductor DC Resistance @ 20 Deg. C        | 23.7 Ohms/1000 ft |
| Nom. Attenuation (dB/100 ft) :                  |                   |

## 1801B Paired - Single-Pair Cable

| Description | Frequency (MHz) | Start Frequency (MHz) | Stop Frequency (MHz) | Nom. Attenuation (dB/100 ft.) |
|-------------|-----------------|-----------------------|----------------------|-------------------------------|
|             | .384            |                       |                      | .82                           |
|             | .7056           |                       |                      | 1.01                          |
|             | .768            |                       |                      | 1.02                          |
|             | 1.024           |                       |                      | 1.08                          |
|             | 1.4112          |                       |                      | 1.15                          |
|             | 1.536           |                       |                      | 1.16                          |
|             | 2.048           |                       |                      | 1.23                          |
|             | 2.8224          |                       |                      | 1.34                          |
|             | 3.072           |                       |                      | 1.38                          |
|             | 4.096           |                       |                      | 1.58                          |
|             | 5.6448          |                       |                      | 1.79                          |
|             | 6.144           |                       |                      | 1.85                          |
|             | 8.192           |                       |                      | 2.05                          |
|             | 11.2896         |                       |                      | 2.34                          |
|             | 12.288          |                       |                      | 2.43                          |
|             | 24.576          |                       |                      | 3.33                          |

Max. Operating Voltage - UL 300 V RMS

Max. Recommended Current 2.75 Amps per conductor @ 25°C

### NOTES:

Notes Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

### PUT-UPS AND COLORS:

| Item           | Description              | Put-Up (ft.) | Ship Weight (lbs.) | Jacket Color | Notes |
|----------------|--------------------------|--------------|--------------------|--------------|-------|
| 1801B 8771000  | 2 #24 NFFEP FS<br>FLMRST | 1000         | 12                 | NATURAL      | C     |
| 1801B 877500   | 2 #24 NFFEP FS<br>FLMRST | 500          | 6                  | NATURAL      | C     |
| 1801B 877U1000 | 2 #24 NFFEP FS<br>FLMRST | U1000        | 14                 | NATURAL      |       |
| 1801B Z4B1000  | 2 #24 NFFEP FS<br>FLMRST | 1000         | 12                 | VIO Z4B      | C     |
| 1801B Z4B500   | 2 #24 NFFEP FS<br>FLMRST | 500          | 6                  | VIO Z4B      |       |
| 1801B Z4BU1000 | 2 #24 NFFEP FS<br>FLMRST | U1000        | 14                 | VIO Z4B      |       |

C = CRATE REEL PUT-UP.

Revision Number: 1      Revision Date: 10-06-2005

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