

9842 Paired - Low Capacitance EIA RS-485



#### **Description:**

24 AWG stranded (7x32) tinned copper conductors, twisted pairs, polyethylene insulated, overall 100% Beldfoil® shield plus a 90% tinned copper braid shield, 24 AWG (7x32) tinned copper drain wire, PVC jacket.

### PHYSICAL CHARACTERISTICS:

#### CONDUCTOR:

| Number of Pairs            | 2                  |
|----------------------------|--------------------|
| Total Number of Conductors | 4                  |
| AWG                        | 24                 |
| Stranding                  | 7x32               |
| Conductor Material         | TC - Tinned Copper |
| INSULATION:                |                    |
| Insulation Material        | PE - Polyethylene  |

## PAIR:

| Pair Lay Length :       |                         |        |             |                             |  |
|-------------------------|-------------------------|--------|-------------|-----------------------------|--|
| Lay Length (in.)        | Direction               |        | Twists/ft ( | twist/ft)                   |  |
| 1.0                     | Left Hand Lay           |        | 12          |                             |  |
| Pair Twists/ft.         | 12                      |        |             |                             |  |
| Pair Color Code Chart : |                         |        |             |                             |  |
| Number                  | Color                   | Number |             | Color                       |  |
| 1                       | White/Blue & Blue/White | 2      |             | White/Orange & Orange/White |  |

#### **OUTER SHIELD:**

| Outer Shield Material Trade | Name                  | Beldfoil®  |                                 |                |  |
|-----------------------------|-----------------------|------------|---------------------------------|----------------|--|
| Outer Shield Type           |                       | Tape/Braid |                                 |                |  |
| Outer Shield Material :     |                       |            |                                 |                |  |
| Layer Number                | Material Trade Name   | Туре       | Material                        | % Coverage (%) |  |
| 1                           |                       |            |                                 |                |  |
|                             | Beldfoil <sup>®</sup> | Tape       | Aluminum Foil-Polyester<br>Tape | 100            |  |



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| 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                           | PVC - Polyvinyl Chloride      |
| OVERALL NOMINAL DIAMETER:                       |                               |
| Overall Nominal Diameter                        | .340 in.                      |
| MECHANICAL CHARACTERISTICS:                     |                               |
| Operating Temperature Range                     | -30°C To +80°C                |
| UL Temperature Rating                           | 80°C                          |
| Bulk Cable Weight                               | 62 lbs/1000 ft.               |
| Max. Recommended Pulling Tension                | 87 lbs.                       |
| Min. Bend Radius (Install)                      | 3.5 in.                       |
| APPLICABLE SPECIFICATIONS AND AGENCY            | COMPLIANCE:                   |
| APPLICABLE STANDARDS:                           |                               |
| NEC/(UL) Specification                          | СМ                            |
| CEC/C(UL) Specification                         | СМ                            |
| AWM Specification                               | 2919 (30 V)                   |
| PLENUM/NON-PLENUM:                              |                               |
| Plenum (Y/N)                                    | Ν                             |
| Plenum Number                                   | 82842                         |
| ELECTRICAL CHARACTERISTICS:                     |                               |
| Nom. Characteristic Impedance                   | 120 Ohms                      |
| Nom. Capacitance Conductor to Conductor @ 1 KHz | 12.8 pF/ft                    |
| Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz | 23 pF/ft                      |
| Nominal Velocity of Propagation                 | 66 %                          |
| Nominal Delay                                   | 1.6 ns/ft                     |
| Nom. Conductor DC Resistance @ 20 Deg. C        | 24 Ohms/1000 ft               |
| Nominal Outer Shield DC Resistance @ 20 Deg. C  | 2.2 Ohms/1000 ft              |
| Nom. Attenuation (dB/100 ft)                    | 0.6 (@ 1 MHz) dB/100 ft.      |
| Max. Operating Voltage - UL                     | 300 V RMS                     |
| Other Maximum Continuous Currents               | 2.1 Amps per conductor @ 25°C |

### PUT-UPS AND COLORS:

|  | Item | Description | Put-Up (ft.) | Ship Weight (lbs.) | Jacket Color | Notes |
|--|------|-------------|--------------|--------------------|--------------|-------|
|--|------|-------------|--------------|--------------------|--------------|-------|



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| 9842 060100  | 2 PR #24 PE SH PVC | 100  | 5.8  | CHROME |   |
|--------------|--------------------|------|------|--------|---|
| 9842 0601000 | 2 PR #24 PE SH PVC | 1000 | 57   | CHROME | С |
| 9842 060500  | 2 PR #24 PE SH PVC | 500  | 29.5 | CHROME | С |

C = CRATE REEL PUT-UP.

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