

9729 Paired - Low Capacitance Computer Cable for EIA RS-422 Applications

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|  | <p>For more information please call 1-800-Belden1</p> <p><u>See Put-ups and Colors</u></p> <p>Color Code Chart : No. 3 for Paired Cables (Belden Standard).pdf</p> |
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Description:

24 AWG stranded (7x32) tinned copper conductors, twisted pairs, Datalene® insulation, individually shielded with 100% Beldfoil® shield, 24 AWG stranded tinned copper drain wire each pair, PVC jacket.

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

| | |
|----------------------------|--------------------|
| Number of Pairs | 2 |
| Total Number of Conductors | 4 |
| AWG | 24 |
| Stranding | 7x32 |
| Conductor Diameter | .024 in. |
| Conductor Material | TC - Tinned Copper |

INSULATION:

| | |
|--------------------------------|-------------------------|
| Insulation Material Trade Name | Datalene® |
| Insulation Material | FPE - Foam Polyethylene |
| Insulation Diameter | .061 in. |

PAIR:

| | |
|---------------------------------|------------------------------|
| Pair Lay Length | 1.1 in. |
| Pair Twists/ft. | 10.9 |
| Pair Shield Material Trade Name | Beldfoil® (Z-Fold®) |
| Pair Shield Type | Tape |
| Pair Shield Material | Aluminum Foil-Polyester Tape |
| Pair Shield % Coverage | 100 % |

PAIR SHIELD DRAIN WIRE :

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

Pair Color Code Chart :

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| Number | Color | Number | Color |
|--------|-------------|--------|---------------|
| 1 | Black & Red | 2 | Black & White |

OUTER JACKET:

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|-----------------------|--------------------------|
| Outer Jacket Material | PVC - Polyvinyl Chloride |
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OVERALL NOMINAL DIAMETER:

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|--------------------------|----------|
| Overall Nominal Diameter | .317 in. |
|--------------------------|----------|

MECHANICAL CHARACTERISTICS:

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|----------------------------------|--------------------------|
| Operating Temperature Range | -20°C To +80°C |
| UL Temperature Rating | 60°C (UL AWM Style 2493) |
| Bulk Cable Weight | 34.5 lbs/1000 ft. |
| Max. Recommended Pulling Tension | 22 lbs. |
| Min. Bend Radius (Install) | 3.25 in. |

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

| | |
|-------------------------|----------------------------|
| NEC/(UL) Specification | CM |
| CEC/C(UL) Specification | CM |
| AWM Specification | UL Style 2493 (300 V 60°C) |

FLAME TEST:

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|---------------|----------------------|
| UL Flame Test | UL1581 Vertical Tray |
|---------------|----------------------|

PLENUM/NON-PLENUM:

| | |
|---------------|--------------|
| Plenum (Y/N) | N |
| Plenum Number | 89729, 82729 |

ELECTRICAL CHARACTERISTICS:

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|--|-----------------|
| Nom. Characteristic Impedance | 100 Ohms |
| Nom. Inductance | 0.23 µH/ft |
| Nom. Capacitance Conductor to Conductor @ 1 KHz | 12.5 pF/ft |
| Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz | 23.2 pF/ft |
| Nominal Velocity of Propagation | 78 % |
| Nom. Conductor DC Resistance @ 20 Deg. C | 24 Ohms/1000 ft |
| Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C | 15 Ohms/1000 ft |
| Nom. Attenuation (dB/100 ft) : | |



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| Description | Frequency (MHz) | Start Frequency (MHz) | Stop Frequency (MHz) | Nom. Attenuation (dB/100 ft.) |
|-------------|-----------------|-----------------------|----------------------|-------------------------------|
| | .384 | | | 0.74 |
| | .7056 | | | 0.87 |
| | .768 | | | 0.88 |
| | 1.024 | | | 0.94 |
| | 1.4112 | | | 1.01 |
| | 1.536 | | | 1.03 |
| | 2.048 | | | 1.13 |
| | 2.8224 | | | 1.29 |
| | 3.072 | | | 1.35 |
| | 4.096 | | | 1.57 |
| | 5.6448 | | | 1.78 |
| | 6.144 | | | 1.84 |
| | 8.192 | | | 2.13 |
| | 11.2896 | | | 2.45 |
| | 12.288 | | | 2.57 |
| | 24.576 | | | 3.57 |

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|-----------------------------------|-------------------------------|
| Max. Operating Voltage - UL | 300 V RMS (UL AWM Style 2493) |
| Other Maximum Continuous Currents | 1.0 Amps per conductor @ 25°C |

NOTES:

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| Notes | Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight. |
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PUT-UPS AND COLORS:

| Item | Description | Put-Up (ft.) | Ship Weight (lbs.) | Jacket Color | Notes |
|---------------|-----------------------|--------------|--------------------|--------------|-------|
| 9729 060100 | 2 FS PR #24 FHDPE PVC | 100 | 4.3 | CHROME | |
| 9729 0601000 | 2 FS PR #24 FHDPE PVC | 1000 | 39 | CHROME | C |
| 9729 06010000 | 2 FS PR #24 FHDPE PVC | 10000 | 390 | CHROME | C Y |
| 9729 060500 | 2 FS PR #24 FHDPE PVC | 500 | 20.5 | CHROME | C |

C = CRATE REEL PUT-UP.

Y = FINAL PUT-UP LENGTH MAY VARY -10% TO +20% FROM LENGTH SHOWN. MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.

Revision Number: 1 Revision Date: 11-17-2003



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