**Description:**

24 AWG stranded (7x32) TC conductors, plenum, foam FEP insulation, twisted pairs, individually shielded w/Beldfoil® (100% coverage), 24 AWG stranded TC drain wire, overall fluorocopolymer jacket.

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

| # Pairs | AWG | Stranding | Conductor Material | Dia. (in.) |
|---------|-----|-----------|--------------------|------------|
| 2       | 24  | 7x32      | TC - Tinned Copper | .024       |

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

| Insulation Material                        | Dia. (in.) |
|--------------------------------------------|------------|
| FFEP - Foam Fluorinated Ethylene Propylene | .062       |

**Inner Shield****Inner Shield Material:**

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

**Inner Shield Drain Wire AWG:**

| AWG |
|-----|
| 24  |

Inner Shield Drain Wire Stranding: 7x32

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

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

| Outer Jacket Material  |
|------------------------|
| PVDF - Fluorocopolymer |

**Overall Cabling**

Overall Nominal Diameter: 0.261 in.

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

| Number | Color                       |
|--------|-----------------------------|
| 1      | White/Blue & Blue/White     |
| 2      | White/Orange & Orange/White |

**Mechanical Characteristics (Overall)**

Operating Temperature Range: -20°C To +150°C

Bulk Cable Weight: 32.600 lbs/1000 ft.

Max. Recommended Pulling Tension: 33 lbs.

Min. Bend Radius (Install)/Minor Axis: 2.750 in.

**Applicable Specifications and Agency Compliance (Overall)****Applicable Standards & Environmental Programs**

## 89729 Multi-Conductor - Multi-Pair Snake Cable

|                                       |            |
|---------------------------------------|------------|
| NEC/(UL) Specification:               | CMP        |
| CEC/C(UL) Specification:              | CMP        |
| EU CE Mark:                           | Yes        |
| EU Directive 2000/53/EC (ELV):        | Yes        |
| EU Directive 2002/95/EC (RoHS):       | Yes        |
| EU RoHS Compliance Date (mm/dd/yyyy): | 04/01/2005 |
| 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        |

## Flame Test

|                   |          |
|-------------------|----------|
| UL Flame Test:    | NFPA 262 |
| C(UL) Flame Test: | FT6      |

## Plenum/Non-Plenum

|                    |      |
|--------------------|------|
| Plenum (Y/N):      | Yes  |
| Non-Plenum Number: | 9729 |

## Electrical Characteristics (Overall)

## Nom. Characteristic Impedance:

|                 |
|-----------------|
| Impedance (Ohm) |
| 100             |

## Nom. Inductance:

|                    |
|--------------------|
| Inductance (μH/ft) |
| 0.24               |

## Nom. Capacitance Conductor to Conductor:

|                     |
|---------------------|
| Capacitance (pF/ft) |
| 13.5                |

## Nom. Capacitance Cond. to Other Conductor &amp; Shield:

|                     |
|---------------------|
| Capacitance (pF/ft) |
| 22.5                |

## Nominal Velocity of Propagation:

|        |
|--------|
| VP (%) |
| 76     |

## Nominal Delay:

|               |
|---------------|
| Delay (ns/ft) |
| 1.3           |

## Nom. Conductor DC Resistance:

|                          |
|--------------------------|
| DCR @ 20°C (Ohm/1000 ft) |
| 24                       |

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 14.400 Ohm/1000 ft

## Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| .384        | 0.74                     |
| .7056       | 0.87                     |
| .768        | 0.89                     |
| 1.024       | 0.95                     |
| 1.4112      | 1.03                     |
| 1.536       | 1.06                     |
| 2.048       | 1.17                     |

## 89729 Multi-Conductor - Multi-Pair Snake Cable

|         |      |
|---------|------|
| 2.8224  | 1.37 |
| 3.072   | 1.44 |
| 4.096   | 1.67 |
| 5.6448  | 1.89 |
| 6.144   | 1.96 |
| 8.192   | 2.26 |
| 11.2896 | 2.59 |
| 12.288  | 2.71 |
| 24.576  | 3.73 |

**Max. Operating Voltage - UL:****Voltage**

300 V RMS

**Max. Recommended Current:****Current**

2.0 Amps per conductor @ 25°C

**Put Ups and Colors:**

| Item #        | Putup    | Ship Weight | Color | Notes | Item Desc            |
|---------------|----------|-------------|-------|-------|----------------------|
| 89729 0081000 | 1,000 FT | 31.000 LB   | GRAY  | C     | 2 SH PR #24 FFEP SLF |
| 89729 008500  | 500 FT   | 17.000 LB   | GRAY  | C     | 2 SH PR #24 FFEP SLF |

**Notes:**

C = CRATE REEL PUT-UP.

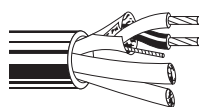
## Individually Shielded

Low-Capacitance Computer Cables for EIA RS-232, EIA RS-422, and Digital Audio Applications  
Plenum-Rated

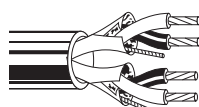
| Description | Part No. | UL NEC/<br>C(UL) CEC<br>Type | No.<br>of<br>Pairs | Color<br>Code | Standard<br>Lengths |   | Standard<br>Unit Weight |    | Nom. DCR |        | Nominal<br>OD |    | Nom.<br>Imp.<br>(Ω) | Nom.<br>Vel.<br>of<br>Prop. | Nom. Capacitance |               |                  |                |
|-------------|----------|------------------------------|--------------------|---------------|---------------------|---|-------------------------|----|----------|--------|---------------|----|---------------------|-----------------------------|------------------|---------------|------------------|----------------|
|             |          |                              |                    |               | Ft.                 | m | Lbs.                    | kg | Cond.    | Shield | Inch          | mm |                     |                             | *<br>pF/<br>Ft.  | *<br>pF/<br>m | **<br>pF/<br>Ft. | **<br>pF/<br>m |

**24 AWG** Stranded (7x32) TC Conductors • Twisted Pairs • Individually Shielded w/Beldfoil® (100% Coverage) • 24 AWG Stranded TC Drain Wire

### Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket

|                                                                                  |          |              |                                |   |                                          |              |                |              |              |                      |                      |               |     |     |      |    |      |      |
|----------------------------------------------------------------------------------|----------|--------------|--------------------------------|---|------------------------------------------|--------------|----------------|--------------|--------------|----------------------|----------------------|---------------|-----|-----|------|----|------|------|
|  | 300V RMS | <b>89729</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 2 | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000  | 152.4<br>304.8 | 17.0<br>31.0 | 7.7<br>14.1  | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .261<br>6.63  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|                                                                                  |          | <b>89730</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 3 | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000  | 152.4<br>304.8 | 21.5<br>40.0 | 9.8<br>18.2  | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .278<br>7.06  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|                                                                                  |          | <b>89728</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 4 | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000  | 152.4<br>304.8 | 26.5<br>50.0 | 12.0<br>22.7 | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .307<br>7.80  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|                                                                                  |          | <b>89731</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 6 | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000† | 152.4<br>304.8 | 35.0<br>71.0 | 15.9<br>32.3 | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .361<br>9.17  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|                                                                                  |          | <b>89732</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 9 | See<br>Chart 5<br>(Tech Info<br>Section) | 1000         | 304.8          | 108.0        | 49.0         | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .429<br>10.90 | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |

### Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket

|                                                                                    |          |              |                                |   |                                          |                |                  |              |              |                      |                      |              |     |     |      |    |      |      |
|------------------------------------------------------------------------------------|----------|--------------|--------------------------------|---|------------------------------------------|----------------|------------------|--------------|--------------|----------------------|----------------------|--------------|-----|-----|------|----|------|------|
|  | 300V RMS | <b>82729</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 2 | See<br>Chart 5<br>(Tech Info<br>Section) | U-1000<br>1000 | U-304.8<br>304.8 | 26.0<br>28.0 | 11.8<br>12.7 | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .255<br>6.48 | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|------------------------------------------------------------------------------------|----------|--------------|--------------------------------|---|------------------------------------------|----------------|------------------|--------------|--------------|----------------------|----------------------|--------------|-----|-----|------|----|------|------|

DCR = DC Resistance • TC = Tinned Copper

\*Capacitance between conductors.

\*\*Capacitance between one conductor and other conductors connected to shield.

† Spools are one piece, but length may vary ±10% from length shown.