

## 88741 Multi-Conductor - Audio, Control and Instrumentation Cable



### Description:

22 AWG stranded (7x30) tinned copper conductors, plenum, FEP insulation, twisted pairs, FEP jacket.

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 2       | 22  | 7x30      | TC - Tinned Copper |

#### Insulation

##### Insulation Material:

| Insulation Material                  | Wall Thickness (in.) |
|--------------------------------------|----------------------|
| FEP - Fluorinated Ethylene Propylene | .006                 |

#### Outer Shield

##### Outer Shield Material:

| Outer Shield Material |
|-----------------------|
| Unshielded            |

#### Outer Jacket

##### Outer Jacket Material:

| Outer Jacket Material                | Nom. Wall Thickness (in.) |
|--------------------------------------|---------------------------|
| FEP - Fluorinated Ethylene Propylene | .012                      |

### Overall Cabling

Overall Nominal Diameter: 0.169 in.

### Pair

#### Pair Color Code Chart:

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

### Mechanical Characteristics (Overall)

|  |                     |
|--|---------------------|
| Operating Temperature Range:           | -70°C To +200°C     |
| Bulk Cable Weight:                     | 16.300 lbs/1000 ft. |
| Max. Recommended Pulling Tension:      | 18 lbs.             |
| Min. Bend Radius (Install)/Minor Axis: | 1.750 in.           |

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

|                                       |            |
|---------------------------------------|------------|
| 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 |

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|                                   |     |
|-----------------------------------|-----|
| 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: | 8741 |

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

88

### Nom. Inductance:

Inductance (µH/ft)

.15

### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

17

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

16

### Nominal Conductor Loop Resistance:

Resistance @ 20°C (Ohm/1000 ft)

32

### Max. Operating Voltage - UL:

Voltage

300 V RMS

### Max. Recommended Current:

Current

3.3 Amps per conductor @ 25°C (10°C rise in temp)

## Put Ups and Colors:

| Item #        | Putup    | Ship Weight | Color | Notes | Item Desc           |
|---------------|----------|-------------|-------|-------|---------------------|
| 88741 0021000 | 1,000 FT | 16.000 LB   | RED   | C     | 2 TW PR #22 FEP FEP |
| 88741 002500  | 500 FT   | 8.000 LB    | RED   | C     | 2 TW PR #22 FEP FEP |

### Notes:

C = CRATE REEL PUT-UP.


# Unshielded

Audio, Control and Instrumentation Cables  
Plenum-Rated


| Description | Part No. | UL NEC/<br>C(UL) CEC<br>Type | No.<br>of<br>Pairs | Color<br>Code | Standard Lengths |   | Standard<br>Unit Weight |    | Insulation<br>Thickness |    | Jacket<br>Thickness |    | Nominal OD |    |
|-------------|----------|------------------------------|--------------------|---------------|------------------|---|-------------------------|----|-------------------------|----|---------------------|----|------------|----|
|             |          |                              |                    |               | Ft.              | m | Lbs.                    | kg | Inch                    | mm | Inch                | mm | Inch       | mm |

**22 AWG** Stranded (7x30) Tinned Copper Conductors • Twisted Pairs

**Plenum • FEP Insulation • Red FEP Jacket**

|  |              |                                |   |  |                   |       |      |     |      |     |      |     |      |      |  |
|--|--------------|--------------------------------|---|--|-------------------|-------|------|-----|------|-----|------|-----|------|------|--|
|  | <b>88442</b> | NEC:                           | 1 | Black & Red  | 100               | 30.5  | 2.3  | 1.0 | .006 | .15 | .012 | .30 | .102 | 2.59 |  |
|  |              | CMP                            |   |  | 500 <sup>†</sup>  | 152.4 | 5.5  | 2.5 |      |     |      |     |      |      |  |
|  |              | CEC:<br>CMP FT6                |   |  | 1000 <sup>†</sup> | 304.8 | 8.0  | 3.6 |      |     |      |     |      |      |  |
|  | <b>88741</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 2 | Black & Red,<br>Black & White                                    | 500 <sup>†</sup>  | 152.4 | 8.0  | 3.6 | .006 | .15 | .012 | .30 | .169 | 4.29 |  |
|  |              | 1000 <sup>†</sup>              |   |  | 304.8             | 16.0  | 7.3  |     |      |     |      |     |      |      |  |
|  |              |                                |   |  |                   |       |      |     |      |     |      |     |      |      |  |
|  | <b>88757</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 4 | Black & Red,<br>Black & White,<br>Black & Green,<br>Black & Blue | 500 <sup>†</sup>  | 152.4 | 14.0 | 6.4 | .006 | .15 | .019 | .23 | .200 | 5.08 |  |
|  |              | 1000 <sup>†</sup>              |   |  | 304.8             | 28.0  | 12.7 |     |      |     |      |     |      |      |  |
|  |              |                                |   |  |                   |       |      |     |      |     |      |     |      |      |  |

**Plenum • FEP Insulation • Natural Flamarrest® Jacket**

|  |              |                                |   |   |                     |         |      |      |      |     |      |     |      |      |
|--|--------------|--------------------------------|---|---|---------------------|---------|------|------|------|-----|------|-----|------|------|
|  | <b>82442</b> | NEC:                           | 1 | Black & Red   | U-1000 <sup>†</sup> | U-304.8 | 9.0  | 4.1  | .006 | .15 | .014 | .36 | .112 | 2.84 |
|  |              | CMP                            |   |   | 1000 <sup>†</sup>   | 304.8   | 8.0  | 3.6  |      |     |      |     |      |      |
|  |              | CEC:<br>CMP FT6                |   |   |                     |         |      |      |      |     |      |     |      |      |
|  | <b>82741</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 2 | Black & Red,<br>Black & White   | U-1000 <sup>†</sup> | U-304.8 | 18.0 | 8.2  | .006 | .15 | .014 | .36 | .179 | 4.55 |
|  |              | 1000 <sup>†</sup>              |   |   | 304.8               | 20.0    | 9.1  |      |      |     |      |     |      |      |
|  |              |                                |   |   |                     |         |      |      |      |     |      |     |      |      |
|  | <b>82742</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 3 | Black & Red,<br>Black & White,<br>Black & Green   | U-1000 <sup>†</sup> | U-304.8 | 24.0 | 10.9 | .006 | .15 | .014 | .36 | .191 | 4.85 |
|  |              | 1000 <sup>†</sup>              |   |   | 304.8               | 26.0    | 11.8 |      |      |     |      |     |      |      |
|  |              |                                |   |   |                     |         |      |      |      |     |      |     |      |      |
|  | <b>82757</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 4 | Black & Red,<br>Black & White,<br>Black & Green,<br>Black & Blue                                      | 1000 <sup>†</sup>   | 304.8   | 32.0 | 14.5 | .006 | .15 | .014 | .36 | .210 | 5.33 |
|  |              |                                |   |   |                     |         |      |      |      |     |      |     |      |      |
|  |              |                                |   |   |                     |         |      |      |      |     |      |     |      |      |
|  | <b>82743</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 6 | Black & Red,<br>Black & White,<br>Black & Green,<br>Black & Blue,<br>Black & Yellow,<br>Black & Brown | U-1000 <sup>†</sup> | U-304.8 | 44.0 | 20.0 | .006 | .15 | .015 | .38 | .238 | 6.05 |
|  |              | 1000 <sup>†</sup>              |   |   | 304.8               | 46.0    | 20.9 |      |      |     |      |     |      |      |
|  |              |                                |   |   |                     |         |      |      |      |     |      |     |      |      |

<sup>†</sup>Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.