

## 82741 Multi-Conductor - Audio, Control and Instrumentation Cable



### Description:

22 AWG stranded (7x30) tinned copper conductors, plenum, FEP insulation, twisted pairs, Flammarrest® 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 Trade Name	Outer Jacket Material	Nom. Wall Thickness (in.)
Flammarrest®	LS PVC - Low Smoke Polyvinyl Chloride	.014

### Overall Cabling

Overall Nominal Diameter: 0.179 in.

### Pair

Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White

### Mechanical Characteristics (Overall)

Operating Temperature Range: 0°C To +60°C

Bulk Cable Weight: 16.100 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

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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
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## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

80

### Nom. Inductance:

Inductance (µH/ft)

.15

### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

21

### 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
82741 8771000	1,000 FT	20.000 LB	NATURAL	C	2PR#22 FEP FLMRST

### Notes:

C = CRATE REEL PUT-UP.


# Unshielded

Audio, Control and Instrumentation Cables  
Plenum-Rated


Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket 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: CMP CEC: CMP FT6	1 Black & Red	100 500 <sup>†</sup> 1000 <sup>†</sup>	30.5 152.4 304.8	2.3 5.5 8.0	1.0 2.5 3.6	.006 .006 .006	.15 .15 .15	.012 .012 .019	.30 .30 .23	.102 .169 .200	2.59 4.29 5.08					
													2 Black & Red, Black & White	500 <sup>†</sup> 1000 <sup>†</sup>	152.4 304.8	8.0 16.0	3.6 7.3
													4 Black & Red, Black & White, Black & Green, Black & Blue	500 <sup>†</sup> 1000 <sup>†</sup>	152.4 304.8	14.0 28.0	6.4 12.7

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

	<b>82442</b> NEC: CMP CEC: CMP FT6	1 Black & Red	U-1000 <sup>†</sup> 1000 <sup>†</sup>	U-304.8 304.8	9.0 8.0	4.1 3.6	.006 .006	.15 .15	.014 .014	.36 .36	.112 .179	2.84 4.55					
													2 Black & Red, Black & White	U-1000 <sup>†</sup> 1000 <sup>†</sup>	U-304.8 304.8	18.0 20.0	8.2 9.1
													3 Black & Red, Black & White, Black & Green	U-1000 <sup>†</sup> 1000 <sup>†</sup>	U-304.8 304.8	24.0 26.0	10.9 11.8
													4 Black & Red, Black & White, Black & Green, Black & Blue	1000 <sup>†</sup>	304.8	32.0	14.5
													6 Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow, Black & Brown	U-1000 <sup>†</sup> 1000 <sup>†</sup>	U-304.8 304.8	44.0 46.0	20.0 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.