

## 82740 Multi-Conductor - Audio, Control and Instrumentation Cable



### Description:

18 AWG stranded (19x30) tinned copper conductors, plenum, FEP insulation, twisted pair, Flammarrest® jacket.

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Pairs	AWG	Stranding	Conductor Material
1	18	19x30	TC - Tinned Copper

#### Insulation

##### Insulation Material:

Insulation Material	Wall Thickness (in.)
FEP - Fluorinated Ethylene Propylene	.007

#### 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	.015

### Overall Cabling

Overall Nominal Diameter: 0.143 in.

### Pair

##### Pair Color Code Chart:

Number	Color
1	Black & Red

### Mechanical Characteristics (Overall)

Operating Temperature Range: 0°C To +75°C

Bulk Cable Weight: 17.400 lbs/1000 ft.

Max. Recommended Pulling Tension: 50 lbs.

Min. Bend Radius (Install)/Minor Axis: 1.500 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): 10/01/2005

## 82740 Multi-Conductor - Audio, Control and Instrumentation Cable

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
Plenum Number:	9740

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)
72

### Nom. Inductance:

Inductance (µH/ft)
0.14

### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
20

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
5.5

### Max. Operating Voltage - UL:

Voltage
300 V RMS

### Max. Recommended Current:

Current
5.4 Amps per conductor @ 25°C

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
82740 877U1000	1,000 FT	17.000 LB	NATURAL		1 PR #18 FEP FLMRST
82740 8771000	1,000 FT	15.000 LB	NATURAL	C	1 PR #18 FEP FLMRST

### Notes:


C = CRATE REEL PUT-UP.


# Unshielded


Audio, Control and Instrumentation Cables  
Plenum-Rated and Non-Plenum

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


**18 AWG** Stranded (19x30) Tinned Copper Conductors • Twisted Pair

Plenum • FEP Insulation • Red FEP Jacket															
	300V RMS	<b>89740</b>	NEC:	1	Black, Red	100	30.5	3.0	1.4	.006	.17	.009	.23	.136	3.45
			CMP			500 <sup>†</sup>	152.4	9.0	4.1						
			CEC: CMP FT6			1000 <sup>†</sup>	304.8	15.0	6.8						


Plenum • FEP Insulation • Red Fluorocopolymer Jacket															
	300V RMS	<b>87740</b>	NEC:	1	Black, Red	500 <sup>†</sup>	152.4	9.0	4.1	.006	.17	.011	.28	.140	3.56
			CMP			1000 <sup>†</sup>	304.8	15.0	6.8						
			CEC: CMP FT6												

Plenum • FEP Insulation • Natural Flamarrest® Jacket															
	300V RMS	<b>82740</b>	NEC:	1	Black, Red	U-1000	U-304.8	17.0	7.7	.006	.17	.015	.38	.147	3.73
			CMP			1000 <sup>†</sup>	304.8	16.0	7.3						
			CEC: CMP FT6												

**16 AWG** Stranded (19x29) Tinned Copper Conductors • Twisted Pair


PVC Insulation • Chrome PVC Jacket															
	UL AWM Style 2598 (300V 60°C)	<b>8471</b>	NEC:	1	Black, White	U-500	U-152.4	21.0	9.5	.023	.58	.032	.81	.274	6.96
			CMG			500	152.4	20.0	9.1						
			CEC: CMG FT4			U-1000	U-304.8	41.0	18.6						
						1000	304.8	43.0	19.5						

**14 AWG** Stranded (42x30) Tinned Copper Conductors • Twisted Pair

PVC Insulation • Chrome PVC Jacket															
	UL AWM Style 2587 (600V 90°C)	<b>8473</b>	NEC:	1	Black, White	U-500	U-152.4	29.0	13.2	.031	.79	.032	.81	.340	8.64
			CL3			500	152.4	30.5	13.9						
			CEC: FAS 90 FT4			1000	304.8	58.0	26.4						

See NEC Guidelines for applicable CL3 voltage ratings.

**12 AWG** Stranded (65x30) Tinned Copper Conductors • Twisted Pair

PVC Insulation • Chrome PVC Jacket															
	UL AWM Style 2587 (600V 90°C)	<b>8477</b>	NEC:	1	Black, White	U-500	U-152.4	41.5	18.8	.032	.81	.035	.89	.386	9.80
			CL3R			500	152.4	43.5	19.7						
						1000	304.8	85.0	38.6						

See NEC Guidelines for applicable CL3 voltage ratings.

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