



## Description:

16 AWG stranded (19x29) tinned copper conductors, PVC insulation, twisted pair, tinned copper spiral wrapped shield (85% coverage), PVC jacket.

## Physical Characteristics (Overall)

### Conductor

#### AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
1	16	19x29	TC - Tinned Copper	.059

### Insulation

#### Insulation Material:

Insulation Material	Wall Thickness (in.)
PVC - Polyvinyl Chloride	.023

### Outer Shield

#### Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Spiral Serve	TC - Tinned Copper	85

### Outer Jacket

#### Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.030

### Overall Cabling

Overall Nominal Diameter: 0.280 in.

### Pair

#### Pair Color Code Chart:

Color
Black and White

#### Pair Lay Length & Direction:

Lay Length (in.)	Twists/ft. (twist/ft)
2.000	6.000

## Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +60°C

UL Temperature Rating: 60°C

Bulk Cable Weight: 42.900 lbs/1000 ft.

Max. Recommended Pulling Tension: 61 lbs.

Min. Bend Radius (Install)/Minor Axis: 5.300 in.

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMG

CEC/C(UL) Specification: CMG

## 8780 Multi-Conductor - Single-Pair Cable

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

C(UL) Flame Test:	FT4
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### Plenum/Non-Plenum

Plenum (Y/N):	No
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## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

37

### Nom. Inductance:

Inductance (μH/ft)

0.18

### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

57

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

Capacitance (pF/ft)

98

### Nominal Velocity of Propagation:

VP (%)

65

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

4.75

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

19

### Max. Operating Voltage - UL:

Voltage

300 V RMS

### Max. Recommended Current:

Current

7.1 Amps per conductor @ 25°C

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8780 060U1000	1,000 FT	44.000 LB	CHROME		1 PR #16 PVC SHLD PVC
8780 0601000	1,000 FT	46.000 LB	CHROME	C	1 PR #16 PVC SHLD PVC
8780 060500	500 FT	23.000 LB	CHROME	C	1 PR #16 PVC SHLD PVC

### Notes:


C = CRATE REEL PUT-UP.

# Overall Spiral Shield


Audio, Control and Instrumentation Cables

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		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m


**Overall Spiral • 22 AWG** Stranded (7x30) Tinned Copper Conductors • Twisted Pair • Tinned Copper Spiral Wrapped Shield (85% Coverage)

<b>PVC Insulation • Chrome PVC Jacket</b>																				
	UL AWM Style 2095 (300V 80°C)	<b>8737</b>	NEC:	1	Black,	U-500	U-152.4	10.5	4.8	.015	.38	.025	.64	.180	4.57	40	131	70	230	
			CMG:		Red	500	152.4	10.0	4.5											
			CEC:			U-1000	U-304.8	20.0	9.1											
			CMG FT4			1000	304.8	20.0	9.1											


**Overall Spiral • 20 AWG** Stranded (7x28) Tinned Copper Conductors • Twisted Pair • Tinned Copper Spiral Wrapped Shield (89% Coverage)

<b>PVC Insulation • Chrome PVC Jacket</b>																					
	UL AWM Style 2095 (300V 80°C)	<b>8759</b>	NEC:	1	Black,	U-500	U-152.4	12.5	5.7	.016	.41	.025	.64	.199	5.05	47	154	79	259		
			CMG:		Red	U-1000	U-304.8	24.0	10.9												
			CEC:			1000	304.8	25.0	11.4												
			CMG FT4																		

**Overall Spiral • 18 AWG** Stranded (7x26) Tinned Copper Conductors • Twisted Pair • Tinned Copper Spiral Wrapped Shield (85% Coverage)

<b>PVC Insulation • Chrome PVC Jacket</b>																					
	300V RMS 60°C	<b>8790</b>	NEC:	1	Red,	U-500	U-152.4	17.5	7.9	.022	.56	.028	.71	.241	6.12	53	174	92	302		
			CMG:		White	500	152.4	17.0	7.7												
			CEC:			U-1000	U-304.8	33.0	15.0												
			CMG FT4			1000	304.8	35.0	15.9												

**Overall Spiral • 16 AWG** Stranded (19x29) Tinned Copper Conductors • Twisted Pair • Tinned Copper Spiral Wrapped Shield (85% Coverage)

<b>PVC Insulation • Chrome PVC Jacket</b>																						
	300V RMS 60°C	<b>8780</b>	NEC:	1	Black,	500	152.4	23.5	10.7	.023	.58	.030	.76	.280	7.11	57	187	98	322			
			CMG:		White	U-1000	U-304.8	44.0	20.0													
			CEC:			1000	304.8	46.0	20.9													
			CMG FT4																			

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