

## 8404 Multi-Conductor - Four-Conductor Star Quad, Low-Impedance Cable



### Description:

20 AWG stranded (19x32) high-conductivity tinned copper conductors, polyethylene insulation, rayon braid, tinned copper braid shield (85% coverage), PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (in.)
4	20	19x32	High Conductivity TC - Tinned Copper	.037

#### Insulation

##### Insulation Material:

Insulation Material	Wall Thickness (in.)	Dia. (in.)
PE - Polyethylene	.016	.069

#### Outer Shield

##### Outer Shield Material:

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

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.032

#### Overall Cabling

##### Overall Cabling Color Code Chart:

Number	Color
1	Clear
2	Black
3	Red
4	Green

Overall Cabling Separator Material: Rayon Braid

Overall Nominal Diameter: 0.252 in.

### Mechanical Characteristics (Overall)

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

UL Temperature Rating: 60°C (UL AWM Style 2094)

Bulk Cable Weight: 47 lbs/1000 ft.

Max. Recommended Pulling Tension: 100 lbs.

Min. Bend Radius (Install)/Minor Axis: 2.500 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

AWM Specification: UL Style 2094 (300 V 60°C)

EU CE Mark: Yes

## 8404 Multi-Conductor - Four-Conductor Star Quad, Low-Impedance Cable

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MIL Order #39 (China RoHS):	Yes

### Flame Test

UL Flame Test:	VW-1
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### Plenum/Non-Plenum

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

### Nom. Characteristic Impedance:

Impedance (Ohm)

45

### Nom. Inductance:

Inductance (µH/ft)

.2

### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

23

### Nom. Cap. Between Cond. in a Quad Config.:

Capacitance (pF/ft)

49

### Nominal Velocity of Propagation:

VP (%)

66

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

10.2

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

3.23

### Max. Operating Voltage - UL:

Voltage

300 V RMS (UL AWM Style 2094)

### Max. Recommended Current:

Current

3.1 Amps per conductor @ 25°C

**Other Electrical Characteristic 1:** 2/c 17 AWG equivalent DCR when connected to a 3-pin XLR.

## Notes (Overall)

**Notes:** Quad connection scheme: The two blue wires (or wires directly opposite one another) are connected together to form one conductor, and similarly the two white wires (or remaining wires) are connected together to form the second conductor.

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8404 060U1000	1,000 FT	48.000 LB	CHROME		4 #20 PE SHLD PVC
8404 060100	100 FT	5.400 LB	CHROME		4 #20 PE SHLD PVC
8404 0601000	1,000 FT	49.000 LB	CHROME	C	4 #20 PE SHLD PVC

ENGLISH MEASUREMENT VERSION

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## 8404 Multi-Conductor - Four-Conductor Star Quad, Low-Impedance Cable

8404 060500	500 FT	23.000 LB	CHROME	C	4 #20 PE SHLD PVC
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**Notes:**

C = CRATE REEL PUT-UP.

# Microphone and Musical Instrument Cable

Four-Conductor Star Quad, Low-Impedance Cables†  
High-Conductivity Copper



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	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

**28 AWG** Stranded (19x40) High-conductivity Silver-plated Copper Alloy Conductors • Tinned Copper Braid Shield (78% Coverage)

**Polypropylene Insulation • Matte PVC Jacket** (Available in Red, Yellow, Blue, Beige or Black)

<b>Mini Star Quad</b> 100V RMS 60°C 	<b>1804A</b>	—	4	Blue/White, White/Blue	100 ▲	30.5	1.6	0.7	.006	.15	.014	.36	.115	2.92	40	131	60	197
					500 ■	152.4	4.5	2.0										

2/c 25 AWG equivalent DCR when connected to a 3-pin XLR.

▲100 ft. put-up available in Black only.

■May contain more than one piece. Min. length of any one piece is 50 ft.

One Blue conductor and one White conductor are striped for use in MIDI and other four conductor applications.

**26 AWG** Stranded (30x40) High-conductivity BC Conductors • TC “French Braid” Shield (95% Coverage) • BC Drain Wire

**Polyethylene Insulation • Matte PVC Jacket** (Available in Red, Green, Yellow, Blue, Gray or Black)

100V RMS 60°C 	<b>1172A</b>	—	4	Blue/White, White/Blue	500 *	152.4	13.5	6.1	.011	.28	.030	.76	.190	4.83	39	128	57	187
					1000	304.8	25.0	11.3										

2/c 23 AWG equivalent DCR when connected to a 3-pin XLR.

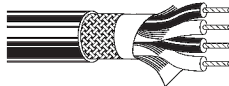
French Braid

\*500 ft. put-up available in Black only.

One Blue conductor and one White conductor are striped for use in MIDI and other four conductor applications.

**24 AWG** Stranded (42x40) High-conductivity Bare Copper Conductors • Tinned Copper Braid Shield (95% Coverage)

**Polyethylene Insulation • Matte PVC Jacket** (Available in Red, Green, Yellow, Blue, Gray or Black)

100V RMS 75°C 	<b>1192A</b>	—	4	Blue/White, White/Blue	100 ▼	30.5	4.1	1.8	.016	.41	.045	1.14	.245	6.22	39	128	57	187			
					500 ▼	152.4	16.5	7.5													
					1000	304.8	37.0	16.8													

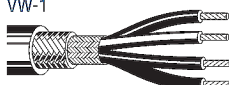
2/c 21 AWG equivalent DCR when connected to a 3-pin XLR.

▼100 ft. put-up available in Black only. 500 ft. put-up available in Blue or Black only.

One Blue conductor and one White conductor are striped for use in MIDI and other four conductor applications.

**20 AWG** Stranded (19x32) High-conductivity Tinned Copper Conductors • Rayon Braid • Tinned Copper Braid Shield (85% Coverage)


**Polyethylene Insulation • Chrome PVC Jacket**

UL AWM Style 2094 (300V RMS 60°C) VW-1 	<b>8404</b>	—	4	Clear, Black, Red, Green	100	30.5	5.4	2.4	.016	.41	.032	.81	.252	6.40	23	75	49	161				
					500	152.4	23.0	10.4														
					U-1000	U-304.8	48.0	21.8														
					1000	304.8	49.0	22.3														

2/c 17 AWG equivalent DCR when connected to a 3-pin XLR.

**20 AWG** Stranded (26x34) High-conductivity Tinned Copper Conductors • Rayon Braid • TC Braid Shield (85% Coverage) • Cotton Wrap


**EPDM Rubber Insulation • Black EPDM Rubber Jacket**

600V RMS 90°C 	<b>8424</b>	—	4	Black, White, Red, Green	100	30.5	6.8	3.1	.023	.58	.036	.91	.294	7.47	47	154	59	194				
					250	76.2	15.3	6.9														
					U-500	U-152.4	32.0	14.5														
					500	152.4	30.5	13.8														
					1000	304.8	64.0	29.1														

2/c 17 AWG equivalent DCR when connected to a 3-pin XLR.

**16 AWG** Stranded (65x34) High-conductivity Tinned Copper Conductors • Rayon Braid • TC Braid Shield (85% Coverage) • Cotton Wrap

**EPDM Rubber Insulation • Black Neoprene Jacket**

600V RMS 60°C VW-1 	<b>8407</b>	—	4	Black, White, Red, Green	100	30.5	11.3	5.1	.031	.79	.043	1.09	.416	10.57	30	98	66	216					
					250	76.2	28.3	12.8															

2/c 13 AWG equivalent DCR when connected to a 3-pin XLR.

BC = Bare Copper • EPDM = Ethylene Propylene Diene Monomer • TC = Tinned Copper

\*Capacitance between conductors. \*\*Nom. capacitance between conductors in a Quad configuration.

Ⓢ Not RoHS compliant at time of printing.

†**Quad connection scheme:** The two blue wires (or wires directly opposite one another) are connected together to form one conductor, and similarly the two white wires (or remaining wires) are connected together to form the second conductor.