

## 8412 Multi-Conductor - Two-Conductor, Low-Impedance Cable



### Description:

20 AWG stranded (26x34) high-conductivity TC conductors, EPDM rubber insulation, rayon braid, TC braid shield (85% coverage), cotton wrap, EPDM jacket.

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (in.)
2	20	26x34	High Conductivity TC - Tinned Copper	.037

#### Insulation

##### Insulation Material:

Insulation Material	Wall Thickness (in.)	Dia. (in.)
EPDM - Ethylene Propylene Diene Monomer Rubber	.023	.083

#### Outer Shield

##### Outer Shield Material:

Layer #	Type	Outer Shield Material	Coverage (%)
1	Braid	Cotton	
2	Braid	TC - Tinned Copper	85

Outer Shield Separator Material: Cotton Wrap

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
EPDM - Ethylene Propylene Diene Monomer Rubber	.035

#### Overall Cabling

##### Overall Cabling Color Code Chart:

Number	Color
1	White
2	Black

Overall Cabling Separator Material: Rayon Braid

Overall Nominal Diameter: 0.262 in.

### Mechanical Characteristics (Overall)

Operating Temperature Range: -50°C To +90°C

Non-UL Temperature Rating: 90°C

Bulk Cable Weight: 42.800 lbs/1000 ft.

Max. Recommended Pulling Tension: 100 lbs.

Min. Bend Radius (Install)/Minor Axis: 2.750 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

## 8412 Multi-Conductor - Two-Conductor, Low-Impedance Cable

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
MII Order #39 (China RoHS):	Yes

### Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)

52

#### Nom. Inductance:

Inductance (µH/ft)

.18

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

30

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

Capacitance (pF/ft)

55

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

10.2

#### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

3.06

#### Max. Operating Voltage - Non-UL:

Voltage

600 V RMS

#### Max. Recommended Current:

Current

4 Amps per conductor @ 25°C

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8412 0021000	1,000 FT	47.000 LB	YELLOW	C	2 #20 EPDM BRD EPDM
8412 0041000	1,000 FT	47.000 LB	YELLOW	C	2 #20 EPDM BRD EPDM
8412 0061000	1,000 FT	47.000 LB	BLUE, LIGHT	C	2 #20 EPDM BRD EPDM
8412 010U1000	1,000 FT	46.000 LB	BLACK		2 #20 EPDM SHLD EPDM
8412 010U500	500 FT	23.500 LB	BLACK		2 #20 EPDM SHLD EPDM
8412 010100	100 FT	5.200 LB	BLACK		2 #20 EPDM BRD EPDM
8412 0101000	1,000 FT	47.000 LB	BLACK	C	2 #20 EPDM BRD EPDM
8412 010250	250 FT	12.000 LB	BLACK		2 #20 EPDM BRD EPDM
8412 010500	500 FT	22.000 LB	BLACK	C	2 #20 EPDM BRD EPDM

#### Notes:

C = CRATE REEL PUT-UP.

# Microphone and Musical Instrument Cable

Two-Conductor, 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

**24 AWG** Stranded (19x36) HC TC Conductors • Twisted Pair • Noise Reducing Tape • Beldfoil® Shield (100% Coverage) • TC Drain Wire

**High-density Polyethylene Insulation • Black PVC Jacket**

200V RMS 75°C	9452	—	2	Black, Red	U-500	U-152.4	6.5	3.0	.008	.20	.020	.51	.135	3.43	30	98	58	190			
					500	152.4	6.0	2.7													
					U-1000	U-304.8	12.0	5.5													
					1000	304.8	12.0	5.5													

Shorting Fold

**24 AWG** Stranded (27x38) High-conductivity Bare Copper Conductors • Bare Copper Spiral Shield (92% Coverage)

**PVC Insulation • Black Matte PVC Jacket**

100V RMS 60°C	1813A	—	2	Red, Blue	328	100.0	10.2	4.6	.017	.43	.055	1.40	.236	5.99	33	108	61	200
					1000	304.8	31.0	14.1										

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

**Polyethylene Insulation • Chrome PVC Jacket**

1000V RMS 80°C	8422	—	2	Clear, Black	500	152.4	15.0	6.8	.021	.53	.022	.56	.231	5.87	18	59	32	105		
					U-1000	U-304.8	31.0	14.1												
					1000	304.8	33.0	15.0												

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

**EPDM Rubber Insulation • EPDM Jacket** (Available in Black, Red, Yellow or Blue)\*

600V RMS 90°C	8412	—	2	White, Black	100	30.5	5.2	2.4	.023	.58	.035	.89	.262	6.65	30	98	55	180			
					250	76.2	12.0	5.5													
					U-500	U-152.4	24.0	10.9													
					500	152.4	22.0	10.0													
					U-1000	U-304.8	46.0	20.9													
					1000	304.8	47.0	21.4													

\*Red, Yellow or Blue available in 1000 ft. put-up only.

**EPDM Rubber Insulation • Brown Hypalon® Jacket**

600V RMS 60°C	8402	—	2	White, Black	500	152.4	25.0	11.3	.023	.58	.035	.89	.263	6.68	30	98	55	180
VW-1					U-1000	U-304.8	52.0	23.6										

**18 AWG** Stranded (41x34) High-conductivity TC Conductors • Rayon Braid • TC Braid Shield (85% Coverage) • Cotton Wrap

**EPDM Rubber Insulation • Black Neoprene Jacket**

600V RMS 60°C	8428	—	2	White, Black	100	30.5	6.3	2.8	.023	.58	.030	.76	.290	7.37	35	115	60	197			
					U-500	U-152.4	29.0	13.2													
					500	152.4	28.0	12.7													
					1000	304.8	59.0	26.8													

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

**EPDM Rubber Insulation • Brown Hypalon® Heavy-duty Jacket**

600V RMS 60°C	8408	—	2	Black, White	500	152.4	50.0	22.7	.037	.94	.040	1.02	.380	9.65	30	98	55	180
VW-1																		

BC = Bare Copper • EPDM = Ethylene Propylene Diene Monomer • HC = High-conductivity • TC = Tinned Copper

Hypalon is a DuPont trademark.

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