

# Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

## 8424 Multi-Conductor - Four-Conductor Star Quad, Low-Impedance Cable



For more Information  
please call

1-800-Belden1



### General Description:

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

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (mm)
4	20	26x34	High Conductivity TC - Tinned Copper	0.9398

Total Number of Conductors: 4

#### Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)	Dia. (mm)
EPDM - Ethylene Propylene Diene Monomer Rubber	0.5842	2.1082

#### Outer Shield

Outer Shield Material:

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

Outer Shield Separator Material: Cotton Wrap

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
EPDM - Ethylene Propylene Diene Monomer Rubber

#### Overall Cable

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	White
3	Red
4	Green

Overall Cabling Separator Material: Rayon Braid

Overall Nominal Diameter: 7.468 mm

### Mechanical Characteristics (Overall)

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

Non-UL Temperature Rating: 60°C

Bulk Cable Weight: 90.780 Kg/Km

Max. Recommended Pulling Tension: 386.993 N

Min. Bend Radius/Minor Axis: 76.200 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

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## 8424 Multi-Conductor - Four-Conductor Star Quad, Low-Impedance Cable

EU Directive 2011/65/EU (ROHS II):	Yes
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):	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
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### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)
52

#### Nom. Inductance:

Inductance ( $\mu$ H/m)
0.59058

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)
154.207

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

Capacitance (pF/m)
193.579

#### Nominal Velocity of Propagation:

VP (%)
52

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
33.4662

#### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
10.4992

#### Max. Operating Voltage - UL:

Voltage
600 V RMS

#### Max. Recommended Current:

Current
3.2 Amps per conductor @ 25°C

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

### Notes (Overall)

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

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8424 010U500	152 MT	14.515 KG	BLACK		4 #20 EPDM SHLD EPDM

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8424 010100	30 MT	3.084 KG	BLACK		4 #20 EPDM SHLD EPDM
8424 0101000	305 MT	29.030 KG	BLACK	C	4 #20 EPDM BRD EPDM
8424 010250	76 MT	7.598 KG	BLACK	C	4 #20 EPDM BRD EPDM
8424 010500	152 MT	14.515 KG	BLACK	C	4 #20 EPDM BRD EPDM

**Notes:**

C = CRATE REEL PUT-UP.

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