# **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.

4

## **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:

### Insulation

### **Insulation Material:**

Insulation Ma	terial	Wall Thickness (mm)	Dia. (mm)
EPDM - Ethyle	ne 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	Nom. Wall Thickness (mm)	
EPDM - Ethylene Propylene Diene Monomer Rubber	0.9144	

### **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** 

Page 1 of 3 12-30-2012

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	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
Ple	enum/Non-Plenum	
	Plenum (Y/N):	No

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm) 52

Nom. Inductance:

Inductance (µH/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
8424 010100	30 MT	3.084 KG	BLACK		4 #20 EPDM SHLD EPDM
8424 0101000	305 MT	29.030 KG	BLACK	С	4 #20 EPDM BRD EPDM

Page 2 of 3 12-30-2012

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8424 010250	76 MT	7.598 KG	BLACK	С	4 #20 EPDM BRD EPDM
8424 010500	152 MT	14.515 KG	BLACK	С	4 #20 EPDM BRD EPDM

#### Notes:

C = CRATE REEL PUT-UP.

## **Test Reports**

i) UL Test Reports are available on-line through the UL Client Document Access web portal.
ii) UL Inspection Reports are also available through the UL Client Document Access web portal.

b) CSA

i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.

ii) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

\* other test data may be available if requested at time of order.

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