# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



1829BC Coax - Series 6

For more Information please call

1-800-Belden1



## **General Description:**

Series 6, 18 AWG solid .040" bare copper conductor, gas-injected foam polyethylene insulation, Duobond® II + aluminum braid shield (60% coverage), black polyethylene jacket.

## **Physical Characteristics (Overall)**

## Conductor

## AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	18	Solid	BCAC - Bare Copper w/Anti-Corrosion Treatment	.0403
Total Nu	ımber	of Conduct	ors: 1	
Corrosion Resistance: Yes				

#### Insulation

#### Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FPE - Foam Polyethylene	.180

#### **Outer Shield**

#### Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Таре	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	AL - Aluminum	60

Outer Shield Flooding Grease:

CoreGuard®

#### Outer Jacket

#### Outer Jacket Material:



## Overall Cable

Overall Nominal Diameter:

0.270 in.

#### **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-55°C To +80°C
Non-UL Temperature Rating:	80°C
Bulk Cable Weight:	24 lbs/1000 ft.
Max. Recommended Pulling Tension:	80 lbs.
Min. Bend Radius/Minor Axis:	2.750 in.

## **Applicable Specifications and Agency Compliance (Overall)**

#### **Applicable Standards & Environmental Programs**

EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	No
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
Series Type:	Series 6

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Suitability		
Suitability - Burial:	Yes	
Plenum/Non-Plenum		
Plenum (Y/N):	No	
Electrical Characteristics (Overall)		
Nom. Characteristic Impedance:		
Impedance (Ohm)		
75.000		
Nom. Inductance:		
Inductance (µH/ft) .097		
Nom. Capacitance Conductor to Shield:		
Capacitance (pF/ft) 16.2		
Nominal Velocity of Propagation:		
<b>VP (%)</b> 83		
Nominal Delay:		
Delay (ns/ft) 1.2		
Nom. Conductor DC Resistance:		
DCR @ 20°C (Ohm/1000 ft) 6.4		
Nominal Outer Shield DC Resistance:		
DCR @ 20°C (Ohm/1000 ft)		

#### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
5	.5
55	1.4
211	2.6
500	4.1
750	5.1
862	5.5
1000	6.0
1450	7.8
1800	8.6
2250	9.8
3000	11.3

## Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
5	0.67
55	1.60
211	2.87
500	4.48
750	5.59
862	5.98
1000	6.54
1450	8.00
1800	8.80
2250	10.0
3000	11.9

## Max. Operating Voltage - Non-UL:

Voltage 300 V RMS

#### Minimum Structural Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
950	2250	15
2250	3000	10

#### **Sweep Test**

Sweep Testing: 950 MHz - 3 GHz

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#### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1829BC 0101000	1,000 FT	26.000 LB	BLACK	С	#18 LDPE/GIFHDLDPE SH PE

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 5 Revision Date: 10-26-2012

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