METRIC MEASUREMENT VERSION



179DT Coax - Sub-Miniature

For more Information please call

1-800-Belden1



### **Description:**

28.5 AWG solid .012" bare copper conductor, gas-injected foam HDPE insulation, Duobond® foil + tinned copper braid shield (95% coverage), PVC jacket.

#### **Usage (Overall)**

Suitable Applications: Broadcast Mobil Trucks, Digital Video, Precision Video, Telecommunications

#### **Physical Characteristics (Overall)**

#### Conductor

AWG:

# Coax	AWG	Stranding	<b>Conductor Material</b>	Dia. (mm)
1	28.5	Solid	BC - Bare Copper	0.30988

#### Insulation

#### **Insulation Material:**

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	1.4224

#### **Outer Shield**

#### **Outer Shield Material:**

Layer # Outer Shield Trade Name		Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

#### **Outer Jacket**

#### **Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

#### **Overall Cabling**

Overall Nominal Diameter: 2.540 mm

# Mechanical Characteristics (Overall) Operating Temperature Range: -20°C To +75°C UL Temperature Rating: 75°C Bulk Cable Weight: 10.864 Kg/Km Max. Recommended Pulling Tension: 66.723 N Min. Bend Radius (Install)/Minor Axis: 12.700 mm

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

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

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes

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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
RG Type:	179/U
Flame Test	
UL Flame Test:	UL1666 Vertical Shaft
Suitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No
Plenum/Non-Plenum	
Plenum (Y/N):	No

#### **Electrical Characteristics (Overall)**

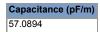
#### Nom. Characteristic Impedance:



#### Nom. Inductance:



#### Nom. Capacitance Conductor to Shield:



#### Nominal Velocity of Propagation:



#### Nominal Delay:

**Delay (ns/m)** 4.33092

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 354.348

#### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 29.2009

#### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1	3.87158
5	6.06985
7	7.05415
10	7.84159
67.5	19.3251
71.5	19.6204
88.5	21.6874
100	22.6061
135	25.7558
143	26.4777
180	29.2993
270	35.4348

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360	41.0125
540	50.5274
720	58.7299
750	60.0423
1000	69.8853
1500	86.2903
2000	101.055
2250	107.617
3000	125.662
4500	155.848

#### Max. Operating Voltage - UL:

Voltage 300 V RMS

Other Electrical Characteristic 1: Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2

using a 75 Ohm fixed bridge and termination. 75 +/- 3 Ohms

Other Electrical Characteristic 2: Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, using a

75 Ohm fixed bridge and termination.

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5	1600	23
1600	4500	21

**Sweep Test** 

Sweep Testing: 100% Sweep tested 5 MHz to 4.5 GHz.

Misc. Information (Overall)

Other Description: Added CMR and CMG to UL section. 3/14/06 added rl requirements. 06/02/06

changed to duofoil tape.

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

Item #	Putup	Ship Weight	Color	Notes	Item Desc
179DT N3U1000	305 MT	4.082 KG	GREEN, MIL	С	#28H PE/GIFPE SH PVC
179DT 0011000	305 MT	4.082 KG	BROWN		#28H PE/GIFPE SH PVC
179DT 0021000	305 MT	4.082 KG	RED	С	#28H PE/GIFPE SH PVC
179DT 0031000	305 MT	4.082 KG	ORANGE	С	#28H PE/GIFPE SH PVC
179DT 0041000	305 MT	4.082 KG	YELLOW	С	#28H PE/GIFPE SH PVC
179DT 0061000	305 MT	4.082 KG	BLUE, LIGHT		#28H PE/GIFPE SH PVC
179DT 0071000	305 MT	4.082 KG	VIOLET		#28H PE/GIFPE SH PVC
179DT 0081000	305 MT	4.082 KG	GRAY	С	#28H PE/GIFPE SH PVC
179DT 0091000	305 MT	4.082 KG	WHITE		#28H PE/GIFPE SH PVC
179DT 0101000	305 MT	4.082 KG	BLACK		#28H PE/GIFPE SH PVC
179DT 010500	152 MT	2.041 KG	BLACK		#28H PE/GIFPE SH PVC

#### Notes:

C = CRATE REEL PUT-UP.

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