

## 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	Conductor Material	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

## 179DT Coax - Sub-Miniature

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
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## Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No

## Plenum/Non-Plenum

Plenum (Y/N):	No
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## Electrical Characteristics (Overall)

## Nom. Characteristic Impedance:

Impedance (Ohm)
75

## Nom. Inductance:

Inductance (µH/m)
0.347786

## Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
57.0894

## Nominal Velocity of Propagation:

VP (%)
77

## 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 RI 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	C	#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	C	#28H PE/GIFPE SH PVC
179DT 0031000	305 MT	4.082 KG	ORANGE	C	#28H PE/GIFPE SH PVC
179DT 0041000	305 MT	4.082 KG	YELLOW	C	#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	C	#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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