


**Detailed Specifications & Technical Data**



**1505F Coax - Precision Video Cable for Analog and Digital**

	<p><b>For more information please call</b>  <b>1-800-Belden1</b></p> <p><u>See Put-ups and Colors</u></p>
---	---

**Description:**

22 AWG stranded (7x29) .031" bare compacted copper conductor, gas-injected foam HDPE insulation double tinned copper braid shield, PVC jacket.

**PHYSICAL CHARACTERISTICS:**

**CONDUCTOR:**

Number of Coax	1
Total Number of Conductors	1
RG Type	59/U
AWG	22
Stranding	7x29
Conductor Diameter	.031 in.
Conductor Material	BCC - Bare Compacted Copper

**INSULATION:**

Insulation Material	Gas-injected FHDPE - Foam High Density Polyethylene
Insulation Diameter	.145 in.

**OUTER SHIELD:**

Outer Shield Type	Braid/Braid
Outer Shield Material :	

Layer Number	Trade Name	Type	Material	% Coverage (%)
1		Braid	TC - Tinned Copper	94
2		Braid	TC - Tinned Copper	94

Outer Shield % Coverage 95 %

Outer Shield Diameter :	
Description	Diameter (in.)
Layer 1	.167
Description	Diameter (in.)
Layer 2	.189

**OUTER JACKET:**

Outer Jacket Material	PVC - Polyvinyl Chloride
-----------------------	--------------------------

**OVERALL NOMINAL DIAMETER:**

Overall Nominal Diameter	.242 in.
--------------------------	----------

**Detailed Specifications & Technical Data**



**1505F Coax - Precision Video Cable for Analog and Digital**

**MECHANICAL CHARACTERISTICS:**

Operating Temperature Range	-35°C To +75°C
UL Temperature Rating	75°C
Bulk Cable Weight	40 lbs/1000 ft.
Max. Recommended Pulling Tension	90 lbs.
Min. Bend Radius (Install)	2.4 in.

**APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:**

**APPLICABLE STANDARDS:**

NEC/(UL) Specification	CM
CEC/C(UL) Specification	CM

**FLAME TEST:**

UL Flame Test	UL1581 Vertical Tray
---------------	----------------------

**SWEEP TEST:**

Sweep Testing	100% Sweep tested 5 MHz to 3 GHz.
---------------	-----------------------------------

**SUITABILITY:**

Suitability - Indoor	Yes
Suitability - Outdoor	Yes - Black Only
Suitability - Aerial	Yes - Black only, when supported by a messenger wire

**PLENUM/NON-PLENUM:**

Plenum (Y/N)	N
--------------	---

**ELECTRICAL CHARACTERISTICS:**

Nom. Characteristic Impedance	75 Ohms
Nom. Inductance	0.094 µH/ft
Nom. Capacitance Conductor to Shield	17.0 pF/ft
Nominal Velocity of Propagation	80 %
Nominal Delay	1.3 ns/ft
Nom. Conductor DC Resistance @ 20 Deg. C	12.2 Ohms/1000 ft
Nominal Outer Shield DC Resistance @ 20°C	2.4 Ohms/1000 ft

**Minimum Structural Return Loss :**

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Minimum Structural Return Loss (dB)
		5	3000	15

Nom. Attenuation :

## Detailed Specifications & Technical Data



### BELDEN Cable™

## 1505F Coax - Precision Video Cable for Analog and Digital

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100 ft.)
	1			.2
	3.6			.5
	5			.6
	7			.73
	10			.9
	67.5			2.4
	71.5			2.5
	88.5			2.8
	100			3.0
	135			3.5
	143			3.6
	180			4.1
	270			5.1
	360			6.0
	540			7.4
	720			8.7
	750			8.9
	1000			10.5
	1500			13.3
	2000			15.7
	2250			16.9
	3000			20.3

Max. Operating Voltage - UL	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.
Other Electrical Characteristic 2	Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, using a 75 Ohm fixed bridge and termination.

#### NOTES:

Notes	Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductor.
-------	--

#### PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
1505F 0041000	#21 GIFHDLDP DBLB PVC	1000	45	YELLOW	C
1505F B591000	#21 GIFHDLDP DBLB PVC	1000	45	BLACK, MATTE	C
1505F G7V1000	#21 GIFHDLDP DBLB PVC	1000	45	RED, MATTE	C
1505F G7W1000	#21 GIFHDLDP DBLB PVC	1000	45	GREEN, MATTE	C
1505F G7X1000	#21 GIFHDLDP DBLB PVC	1000	45	BLUE, MATTE	C

**Detailed Specifications &  
Technical Data**



**1505F Coax - Precision Video Cable for Analog and Digital**

1505F G7Y1000	#21 GIFHDLDPE DBLB PVC	1000	45	WHITE, MATTE	C
1505F G8L1000	#21 GIFHDLDPE DBLB PVC	1000	45	ORANGE, MATTE	C
1505F Z4B1000	#21 GIFHDLDPE DBLB PVC	1000	45	VIO Z4B	

C = CRATE REEL PUT-UP.

Revision Number: 5      Revision Date: 09-23-2004

© 2003 Belden Wire & Cable Company  
All Rights Reserved.

Although Belden Electronics Division ("Belden") makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.