

## 501PTZ Composite - For PTZ Cameras: CCTV + Control + Power

For more Information  
please call

1-800-Belden1



### Description:

(1) Coax - 20 AWG solid BC cond., gas-injected foam HDPE insul., 95% BC braid shield, PVC jkt, cabled with (1) pair - 22 AWG stranded (7x30) BC cond., PO insul., Beldfoil® shield, PVC jkt, cabled with (2) cond., 18 AWG (7x26) BC cond., PP insul., PVC Jkt

### Coax

#### Physical Characteristics

##### Conductor

###### AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	20	Solid	BC - Bare Copper	0.813

##### Insulation

###### Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	3.683

##### Inner Shield

###### Inner Shield Material:

Type	Inner Shield Material	% Coverage (%)
Braid	BC - Bare Copper	95

##### Outer Jacket

###### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

###### Outer Jacket Diameter:

Nom. Dia. (mm)
5.766

###### Outer Jacket Color Code Chart:

Number	Color
Video	Black

#### Applicable Specifications and Agency Compliance

##### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

EU CE Mark: Yes

RG Type: 59/U

##### Flame Test

UL Flame Test: UL1666 Vertical Shaft

##### Suitability

Suitability - Indoor: Yes

#### Electrical Characteristics

##### Nom. Characteristic Impedance:

Impedance (Ohm)
-----------------

METRIC MEASUREMENT VERSION

## 501PTZ Composite - For PTZ Cameras: CCTV + Control + Power

75

**Nom. Inductance:**

Inductance (µH/m)
0.318

**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/m)
53.480

**Nominal Velocity of Propagation:**

VP (%)
83.000

**Nominal Delay:**

Delay (ns/m)
4.003

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/km)
32.810

**Nom. Inner Shield DC Resistance:**

DCR @ 20°C (Ohm/km)
11.484

**Nom. Attenuation:**

Freq. (MHz)	Attenuation (dB/100m)
1.000	0.984
5.000	2.133
10.000	2.953
50.000	6.234
100.000	8.531
200.000	11.812
400.000	16.405
700.000	22.967
900.000	26.248
1000.000	27.889

**Max. Operating Voltage - UL:** 300 V RMS

### Twisted Pair

#### Physical Characteristics

##### Conductor

**AWG:**

# Pairs	AWG	Stranding	Conductor Material	Dia. (mm)
1	22	7x30	BC - Bare Copper	0.762

##### Insulation

**Insulation Material:**

Insulation Material	Dia. (mm)
PO - Polyolefin	1.575

**Twisted Pair Color Code Chart:**

Number	Color
1	Blue and White/Blue

##### Individual Shield

##### Outer Shield

**Outer Shield Material:**

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100.000

**Outer Shield Drain Wire AWG:**

AWG	Stranding	Drain Wire	Conductor Material

## 501PTZ Composite - For PTZ Cameras: CCTV + Control + Power

22	7x30	TC - Tinned Copper
----	------	--------------------

### Outer Jacket

**Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

**Outer Jacket Diameter:**

Nom. Dia. (mm)
4.496

**Outer Jacket Color Code Chart:**

Number	Color
1	Blue

### Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/(UL) Specification: CMG

### Flame Test

UL Flame Test: UL1666 Vertical Shaft

### Suitability

Suitability - Indoor: Yes

### Electrical Characteristics

**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/m)
154.207

**Nom. Capacitance Conductor to Conductor:**

Capacitance (pF/m)
78.744

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/km)
52.496

**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/km)
39.372

**Max. Operating Voltage - Other:**

Voltage
300 V RMS

**Max. Recommended Current:**

Current
2.9 Amps per conductor @ 25°C

## Multi Conductor

### Physical Characteristics

#### Conductor

**AWG:**

# Conductors	AWG	Stranding	Conductor Material	Dia. (mm)
2	18	7x26	BC - Bare Copper	1.194

#### Insulation

**Insulation Material:**

Insulation Material
PP - Polypropylene

**Insulation Color Code Chart:**

Number	Color
--------	-------

## 501PTZ Composite - For PTZ Cameras: CCTV + Control + Power

1	Red
2	Black

### Individual Shield

#### Outer Jacket

Outer Jacket Diameter:

Nom. Dia. (mm)
4.013

Outer Jacket Color Code Chart:

Number	Color
1	White

### Applicable Specifications and Agency Compliance

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

#### Flame Test

UL Flame Test: UL1666 Vertical Shaft

#### Suitability

Suitability - Indoor: Yes

### Electrical Characteristics

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)
70.542

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
21.327

Max. Operating Voltage - Other:

Voltage
300 V RMS

Max. Recommended Current:

Current
5 Amps per conductor @ 25°C

### Physical Characteristics (Overall)

#### Conductor

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
Unjacketed

#### Overall Cable

Overall Nominal Diameter: 10.643 mm

### Mechanical Characteristics (Overall)

Operating Temperature Range: -10°C To +75°C

Separation Temperature Range: 0°C To +75°C

Bulk Cable Weight: 89.292 Kg/Km

Max. Recommended Pulling Tension: 533.784 N

Min. Bend Radius/Minor Axis: 106.680 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

EU Directive 2000/53/EC (ELV): Yes

## 501PTZ Composite - For PTZ Cameras: CCTV + Control + Power

<b>EU Directive 2002/95/EC (RoHS):</b>	Yes
<b>EU RoHS Compliance Date (mm/dd/yyyy):</b>	04/01/2005
<b>EU Directive 2002/96/EC (WEEE):</b>	Yes
<b>EU Directive 2003/11/EC (BFR):</b>	Yes
<b>CA Prop 65 (CJ for Wire &amp; Cable):</b>	Yes
<b>MII Order #39 (China RoHS):</b>	Yes

### Plenum/Non-Plenum

<b>Plenum (Y/N):</b>	No
<b>Plenum Number:</b>	601PTZ

### Notes (Overall)

**Notes:** RG59 CCTV + 1 STP22 AWG Control Grade + 2C 18 AWG CMR. Individually jacketed and color coded components, cabled around and each fused to a central binding spline. Cold environment installation: When installing cables that have been stored at ambient temperatures of 32 degrees Fahrenheit (0 degrees Centigrade) or lower, Belden recommends conditioning of the cable for 12 hours at room temperature prior to individual cable leg separation. Banana Peel® US PATENT 7049523.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
501PTZ 0001000	305 MT	32.205 KG	NONE	C	1 RG59 + 1 STP 22 + 2C18

**Notes:**

C = CRATE REEL PUT-UP.

Revision Number: 1    Revision Date: 07-15-2008

© 2012 Belden, Inc.  
All Rights Reserved.

Although 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.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.