

## 502PTZ Composite - For PTZ Cameras: CCTV + Control + Power



For more Information  
please call

1-800-Belden1



### General Description:

PTZ (CCTV+Control+Power) Cable, Riser-CMR, 1-RG59 20 AWG solid bare copper with foam polyolefin, 95% bare copper braid, 1-18 AWG stranded bare copper pair with polyolefin insulation and Beldfoil® shield, 2-18 AWG stranded bare copper conductors with polyolefin insulation, Siamese with PVC jacket

### 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

##### Outer Shield

###### Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Braid	BC - Bare Copper	95.000

##### 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)
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METRIC MEASUREMENT VERSION

## 502PTZ 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

### Nominal Outer 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	18	19x30	BC - Bare Copper	1.118

#### Insulation

##### Insulation Material:

Insulation Material	Dia. (mm)
PO - Polyolefin	2.032

##### Twisted Pair Color Code Chart:

Number	Color
1	Blue and White/Blue

#### 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
20	7x28	TC - Tinned Copper

## Outer Jacket

### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

### Outer Jacket Diameter:

Nom. Dia. (mm)
5.563

### 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)
144.364

### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)
85.306

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
21.327

### Max. Operating Voltage - Other:

Voltage
300 V RMSI

### Max. Recommended Current:

Description	Current
Data/Control	5.2 Amps

## 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
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: 11.455 mm

## Mechanical Characteristics (Overall)

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

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

Bulk Cable Weight: 110.127 Kg/Km

Max. Recommended Pulling Tension: 622.748 N

Min. Bend Radius/Minor Axis: 114.300 mm

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

EU Directive 2011/65/EU (ROHS II): Yes

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

## METRIC MEASUREMENT VERSION

### 502PTZ Composite - For PTZ Cameras: CCTV + Control + Power

EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
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

#### Applicable Patents:

Country
<a href="http://www.belden.com/p">www.belden.com/p</a>

#### Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	602PTZ

#### Notes (Overall)

**Notes:** RG59 CCTV + 1 STP18 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.

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
502PTZ 0001000	1,000 FT	85.000 LB	NONE		RG59 +2C18 FS +2C18 CMR BPEEL
502PTZ 000500	500 FT	46.500 LB	NONE		RG59 +2C18 FS +2C18 CMR BPEEL

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