



## Description:

(1) coax-20 AWG solid BC cond., FPFA insul., 95% BC braid shield, cabled with (1) pair-18 AWG stranded (19x30) solid BC cond., FEP insul., Beldfoil® shield, cabled with (2) cond.-18 AWG (7x26) BC cond., Flamarrest® insul., Flamarrest® jakets.

## Coax

### Physical Characteristics

#### Conductor

##### AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	20	Solid	BC - Bare Copper	0.032

#### Insulation

##### Insulation Material:

Insulation Material	Dia. (in.)
FPFA - Foam Perfluoroalkoxy	0.133

#### Outer Shield

##### Outer Shield Material:

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

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

##### Outer Jacket Diameter:

Nom. Dia. (in.)
1.930

#### Overall Cabling

##### Overall Cabling Color Code Chart:

Number	Color
Video	Black

### Applicable Specifications and Agency Compliance

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

EU CE Mark: Yes

RG Type: 59/U

#### Flame Test

UL Flame Test: NFPA 262

#### Suitability

Suitability - Indoor: Yes

### Electrical Characteristics

Nom. Characteristic Impedance:

## 602PTZ Composite - For PTZ Cameras: CCTV + Control + Power

**Impedance (Ohm)**

75

**Nom. Inductance:**

**Inductance (μH/ft)**

0.097

**Nom. Capacitance Conductor to Shield:**

**Capacitance (pF/ft)**

16.100

**Nominal Velocity of Propagation:**

**VP (%)**

84.000

**Nominal Delay:**

**Delay (ns/ft)**

1.210

**Nom. Conductor DC Resistance:**

**DCR @ 20°C (Ohm/1000 ft)**

10.000

**Nominal Outer Shield DC Resistance:**

**DCR @ 20°C (Ohm/1000 ft)**

2.500

**Nom. Attenuation:**

Freq. (MHz)	Attenuation (dB/100 ft.)
1.000	0.290
5.000	0.700
10.000	1.100
50.000	1.800
100.000	2.700
200.000	3.900
400.000	5.900
700.000	8.500
900.000	10.000
1000.000	10.700

**Max. Operating Voltage - UL:**

300 V RMS

## Twisted Pair

### Physical Characteristics

#### Conductor

**AWG:**

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
1	18	19x30	BC - Bare Copper	0.044

#### Insulation

**Insulation Material:**

Insulation Material	Dia. (in.)
FEP - Fluorinated Ethylene Propylene	0.059

#### Inner Jacket

**Inner Jacket 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:**

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AWG	Stranding	Drain Wire	Conductor Material
20	19x32		TC - Tinned Copper

### Outer Jacket

**Outer Jacket Material:**

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

**Outer Jacket Diameter:**

Nom. Dia. (in.)
0.150

**Outer Jacket Color Code Chart:**

Number	Color
1	Blue

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

NEC/(UL) Specification: CMP

CEC/(UL) Specification: CMP

### Flame Test

UL Flame Test: NFPA 262

### Suitability

Suitability - Indoor: Yes

### Electrical Characteristics

**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/ft)
97.000

**Nom. Capacitance Conductor to Conductor:**

Capacitance (pF/ft)
51.000

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)
5.500

**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)
7.300

**Max. Operating Voltage - Other:**

Voltage
300 V RMS

**Max. Recommended Current:**

Current
5.2 Amps per conductor @ 25°C

## Multi Conductor

### Physical Characteristics

#### Conductor

**AWG:**

# Conductors	AWG	Stranding	Conductor Material	Dia. (in.)
2	18	7x26	BC - Bare Copper	0.047

#### Insulation

**Insulation Material:**

Insulation Trade Name	Insulation Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

**Insulation Color Code Chart:**

## 602PTZ Composite - For PTZ Cameras: CCTV + Control + Power

Number	Color
1	Red
2	Black

### Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

Outer Jacket Diameter:

Nom. Dia. (in.)
0.158

Outer Jacket Color Code Chart:

Number	Color
1	White

### Electrical Characteristics

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
30.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
6.500

Max. Operating Voltage - Other:

Voltage
300 V RMS

Max. Recommended Current:

Current
5 Amps per conductor @ 25°C

### Physical Characteristics (Overall)

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
Unjacketed

#### Overall Cabling

Overall Nominal Diameter: 0.363 in.

### Mechanical Characteristics (Overall)

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

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

Bulk Cable Weight: 66.000 lbs/1000 ft.

Max. Recommended Pulling Tension: 162.000 lbs.

Min. Bend Radius (Install)/Minor Axis: 3.600 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

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

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

## 602PTZ Composite - For PTZ Cameras: CCTV + Control + Power

MII Order #39 (China RoHS): Yes

### Plenum/Non-Plenum

Plenum (Y/N): Yes

Plenum Number: 502PTZ

### Notes (Overall)

**Notes:** RG59 CCTV + 1 STP 18 AWG Control Grade + 2C 18 AWG CMP. 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
602PTZ 0001000	1,000 FT	70.000 LB	NONE	C	1 RG59 + 2C18 SH + 2C18
602PTZ 000500	500 FT	36.000 LB	NONE	C	1 RG59 + 2C18 SH + 2C18

**Notes:**

C = CRATE REEL PUT-UP.

# Sound, Security and Alarm Cables

## Cable Finder Guide — Coax and Composite



Coax Series or Component Type	AWG Size	Stranding	Non-Plenum				Plenum			
			Part No.	Rating	Shield/Braid Coverage	Page No.	Part No.	Rating	Shield/Braid Coverage	Page No.
<b>CATV/MATV Coax</b>										
RG-59/U	20	Solid	—	—	—	—	6439C8	CMP	Duofoil + 80% Aluminum	20.49
	20	Solid	—	—	—	—	6439Q8	CMP	Quad Shield	20.49
RG-6/U	18	Solid	5339B5	CM	Duofoil + 60% Aluminum	20.48	633938	CMP	Duofoil + 90% Aluminum	20.49
	18	Solid	5339Q5	CM	Quad Shield	20.48	6339Q8	CMP	Quad Shield	20.49
RG-11/U	14	Solid	—	—	—	—	6139B8	CMP	Duofoil + 60% Aluminum	20.49
<b>CCTV Coax</b>										
Mini 59	25	Solid	573945	CM	94% Bare Copper	20.37	673948	CMP	95% Bare Copper	20.39
RG-59/U	22	7	551945	CM	95% Bare Copper	20.37	—	—	—	—
	20	Solid	543945	CM	95% Bare Copper	20.37	643948	CMP	95% Bare Copper	20.39
RG-6/U	18	Solid	533945	CM	95% Bare Copper	20.37	633948	CMP	95% Bare Copper	20.39
RG-11/U	14	Solid	513945	CM	95% Bare Copper	20.37	613948	CMP	95% Bare Copper	20.39
<b>CCTV Coax, Surveillance</b>										
RG-59/U	20	Solid	—	—	—	—	7986LC	CMP	95% Bare Copper	20.50
RG-6/U	18	Solid	—	—	—	—	7985LC	CMP	95% Bare Copper	20.50
<b>CATV Coax, Water-blocked</b>										
RG-59/U	20	Solid	5439W5	CM	Duofoil® + 95% TC	20.37	—	—	—	—
RG-6/U	18	Solid	5339W5	CM	Duofoil + 60% Aluminum	20.37	—	—	—	—
<b>Security Coax</b>										
RG-62	22	Solid	—	—	—	—	6539Y8	CMP	95% Bare Copper	20.39
<b>Schlage Coax</b>										
RG-6/U	18	Solid	5399B5	CM	Duobond® + 60% Alum.	20.48	—	—	—	—
<b>CCTV Composite Coax with Unshielded Pair for Control or Power</b>										
Mini RG-59	25	Solid	579945	CM	95% Bare Copper	20.38	679948	CMP	95% Bare Copper	20.38
UTP	20	7	—	—	Unshielded	—	—	—	Unshielded	—
RG-59	20	Solid	549945	CM	95% Bare Copper	20.38	649948	CMP	95% Bare Copper	20.38
UTP	18	7	—	—	Unshielded	—	—	—	Unshielded	—
RG-6	18	Solid	539945	CM	95% Bare Copper	20.38	639948	CMP	95% Bare Copper	20.38
UTP	18	7	—	—	Unshielded	—	—	—	Unshielded	—
<b>Pan/Tilt/Zoom BananaPeel Composite Coax</b>										
RG-59/U	20	Solid	500PTZ	CMR	95% Bare Copper Braid	20.42	600PTZ	CMP	95% Bare Copper Braid	20.43
1UTP	23	Solid	—	—	Unshielded	—	—	—	Unshielded	—
2/C	18	7	—	—	Unshielded	—	—	—	Unshielded	—
RG-59/U	20	Solid	501PTZ	CMR	95% Bare Copper Braid	20.44	601PTZ	CMP	95% Bare Copper Braid	20.45
1STP	22	7	—	—	Beldfoil®	—	—	—	Beldfoil	—
2/C	18	7	—	—	Unshielded	—	—	—	Unshielded	—
RG-59/U	20	Solid	502PTZ	CMR	95% Bare Copper Braid	20.46	602PTZ	CMP	95% Bare Copper Braid	20.47
1STP	18	7	—	—	Beldfoil	—	—	—	Beldfoil	—
2/C	18	7	—	—	Unshielded	—	—	—	Unshielded	—
<b>CCTV Surveillance UTP and Composite Cables</b>										
2/C	16	19	5284US	CMR	Unshielded	20.51	6284US	CMP	Unshielded	20.52
2TP	24	Solid	—	—	Unshielded	—	—	—	Unshielded	—
2/C	16	19	5284UE	CMR	Unshielded	20.51	6284UE	CMP	Unshielded	20.52
2TP	23	Solid	—	—	Unshielded	—	—	—	Unshielded	—
2/C	16	19	5288US	CMR	Unshielded	20.51	6288US	CMP	Unshielded	20.52
4TP	23	Solid	—	—	Unshielded	—	—	—	Unshielded	—
4TP	24	Solid	1583A	CM	Unshielded	20.40/53	1585A	CMP	Unshielded	20.41/54
4TP	24	Solid	1500A	CM	Unshielded	20.40/53	1501A	CMP	Unshielded	20.41/54
4TP	24	Solid	1583R	CMR	Unshielded	20.40/53	—	—	—	—
2TP	24	Solid	1500R	CMR	Unshielded	20.40/53	—	—	—	—
4TP	23	Solid	7881A	CMR	Unshielded	20.40/53	7882A	CMP	Unshielded	20.41/54
<b>Access Control BananaPeel® Composite Cables</b>										
4/C	18	7	558AFS	CMR	Beldfoil	20.36	658AFS	CMP	Beldfoil	20.35
3TP	22	7	—	—	Beldfoil	—	—	—	Beldfoil	—
4/C	22	7	—	—	Beldfoil	—	—	—	Beldfoil	—
2/C	22	7	—	—	Beldfoil	—	—	—	Beldfoil	—
4/C	16	19	538AFS	CMR	Beldfoil	20.36	638AFS	CMP	Beldfoil	20.35
3TP	18	7	—	—	Beldfoil	—	—	—	Beldfoil	—
4/C	18	7	—	—	Beldfoil	—	—	—	Beldfoil	—
2/C	18	7	—	—	Beldfoil	—	—	—	Beldfoil	—

STP = Shielded Twisted Pair • TC = Tinned Copper • TP = Twisted Pair(s) • UTP = Unshielded Twisted Pair • /C = Conductor(s) (Multi-conductor)

# Pan/Tilt/Zoom Banana Peel® Composite

CCTV plus Audio or Power or Pan and Tilt CCTV Control Applications  
Plenum-Rated



**Composite Coax,  
Pair and Multi-Conductors**  
CMP FT6 Rated

### Product Description

**(1) Coax:** 20 AWG solid bare copper conductors, Foam Perfluoroalkoxy (FPFA) insulation, bare copper braid shield (95% coverage), Black Flamarrest® jacket.

**(1) Pair:** 18 AWG stranded (19x30) bare copper conductor, FEP insulation, Beldfoil® shield (100% coverage), Blue Flamarrest jacket. Color code: White/Blue Stripe & Blue. Category 5e tested.

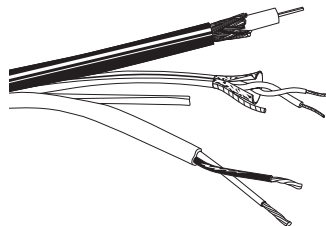
**(2) Conductors:** 18 AWG stranded (7x26) bare copper conductors, Flamarrest insulation, White Flamarrest jacket. Color code: Black & Red.

### Specifications

<b>Conductor</b>	Bare Copper
<b>Application Shielding</b>	
Video	Bare Copper Braid
Control	Aluminum/Polyester
Power	Unshielded
<b>Component Jackets</b>	Flamarrest
<b>Overall Jacket</b>	None
<b>Approvals</b>	
NEC	CMP
CEC	CMP FT6
<b>NEC Articles</b>	800
<b>Voltage Rating</b>	300V
<b>Temperature Rating</b>	75°C

### Applications

- CCTV plus Control and Power
- Pan, Tilt and Zoom CCTV Control



Part No.	Component Descriptions	Insulation Material & Shielding	Component Nom. OD		Overall Nom. OD		Standard Lengths		Standard Unit Weight	
			Inch	mm	Inch	mm	Ft.	m	Lbs.	kg

**Plenum-rated Composite (NEC CMP and CEC CMP FT6)**

RG-59/U 20 AWG Coax • Cat. 5e 18 AWG Pair • 18 AWG Cond.										
<b>602PTZ</b> <small>NEW</small>	(1) Coax: RG-59/U 20 AWG (solid) BC Cond.	FPFA, BC Braid Shield (95% coverage)	.193	4.90	.363	9.2	500 1000	152 305	42.5 79.0	19.3 35.8
	(1) 1-Pair 18 AWG (19x30) BC Cond.	FEP, Beldfoil Shield (100% coverage)	.150	3.81						
	(1) 2-Cond. 18 AWG Stranded (7x26) BC Cond.	Flamarrest, Unshielded	.158	4.01						

BC = Bare Copper • FEP = Fluorinated Ethylene Propylene • FPFA = Foam Perfluoroalkoxy

### Individual Cable Jacket Color Coding System

Jacket Color	Cable Type
<b>Black</b>	Coax: RG-59/U, 20 AWG, BC Braid Shield
<b>Blue</b>	1/P, 18 AWG, Beldfoil Shield
<b>White</b>	2/C, 18 AWG, Unshielded

US Patent 7,049,523