

601PTZ Composite - For PTZ Cameras: CCTV + Control + Power



Description:

(1) coax-20 AWG solid BC cond., gas-injected foam HDPE insul., 95% BC braid shld., cabled with (1) pair-22 AWG stranded (7x30) solid BC cond., PO insul., Beldfoil® shld., cabled with (2) cond.-18 AWG (7x26) BC cond., PVC insul., with Flamarrest® jkts.

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.)
0.193

Outer Jacket 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:

Impedance (Ohm)

601PTZ Composite - For PTZ Cameras: CCTV + Control + Power

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

Nom. Inner 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	22	7x30	BC - Bare Copper	0.030

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
FEP - Fluorinated Ethylene Propylene	0.042

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
22	7x30	TC - Tinned Copper

601PTZ Composite - For PTZ Cameras: CCTV + Control + Power

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.)
0.116

Outer Jacket Color Code Chart:

Number	Color
1	Blue

Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

Flame Test

UL Flame Test: NFPA 262

Suitability

Suitability - Indoor: Yes

Electrical Characteristics

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
67.000

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
35.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
15.000

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
12.000

Max. Operating Voltage - Other:

Voltage
300 V RMS

Max. Recommended Current:

Current
2.4 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:

Number	Color
1	Red

601PTZ Composite - For PTZ Cameras: CCTV + Control + Power

2	Black
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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

Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

Flame Test

UL Flame Test: NFPA 262

Suitability

Suitability - Indoor: Yes

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)

Conductor

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
Unjacketed

Overall Cabling

Overall Nominal Diameter: 0.351 in.

Mechanical Characteristics (Overall)

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

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

Bulk Cable Weight: 55.000 lbs/1000 ft.

Max. Recommended Pulling Tension: 130.000 lbs.

Min. Bend Radius (Install)/Minor Axis: 3.500 in.

601PTZ Composite - For PTZ Cameras: CCTV + Control + Power

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): 4/01/2005

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

Plenum/Non-Plenum

Plenum (Y/N): Yes

Non-Plenum Number: 501PTZ

Notes (Overall)

Notes: RG59 CCTV + 1 STP 22 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
601PTZ 0001000	1,000 FT	65.000 LB	NONE		1 RG59 + 1 STP 22 + 2C18
601PTZ 000500	1,000 FT	67.000 LB	NONE		1 RG59 + 1 STP 22 + 2C18

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.
CATV/MATV Coax										
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
CCTV Coax										
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
CCTV Coax, Surveillance										
RG-59/U	20	Solid	—	—	—	—	7986LC	CMP	95% Bare Copper	20.50
RG-6/U	18	Solid	—	—	—	—	7985LC	CMP	95% Bare Copper	20.50
CATV Coax, Water-blocked										
RG-59/U	20	Solid	5439W5	CM	Duofoil® + 95% TC	20.37	—	—	—	—
RG-6/U	18	Solid	5339W5	CM	Duofoil + 60% Aluminum	20.37	—	—	—	—
Security Coax										
RG-62	22	Solid	—	—	—	—	6539Y8	CMP	95% Bare Copper	20.39
Schlage Coax										
RG-6/U	18	Solid	5399B5	CM	Duobond® + 60% Alum.	20.48	—	—	—	—
CCTV Composite Coax with Unshielded Pair for Control or Power										
Mini RG-59 UTP	25	Solid	579945	CM	95% Bare Copper	20.38	679948	CMP	95% Bare Copper	20.38
UTP	20	7	—	—	Unshielded	—	—	—	Unshielded	—
RG-59 UTP	20	Solid	549945	CM	95% Bare Copper	20.38	649948	CMP	95% Bare Copper	20.38
	18	7	—	—	Unshielded	—	—	—	Unshielded	—
RG-6 UTP	18	Solid	539945	CM	95% Bare Copper	20.38	639948	CMP	95% Bare Copper	20.38
	18	7	—	—	Unshielded	—	—	—	Unshielded	—
Pan/Tilt/Zoom BananaPeel Composite Coax										
RG-59/U 1UTP 2/C	20	Solid	500PTZ	CMR	95% Bare Copper Braid Unshielded	20.42	600PTZ	CMP	95% Bare Copper Braid Unshielded	20.43
	23	Solid								
	18	7								
RG-59/U 1STP 2/C	20	Solid	501PTZ	CMR	95% Bare Copper Braid Beldfoil® Unshielded	20.44	601PTZ	CMP	95% Bare Copper Braid Beldfoil Unshielded	20.45
	22	7								
	18	7								
RG-59/U 1STP 2/C	20	Solid	502PTZ	CMR	95% Bare Copper Braid Beldfoil Unshielded	20.46	602PTZ	CMP	95% Bare Copper Braid Beldfoil Unshielded	20.47
	18	7								
	18	7								
CCTV Surveillance UTP and Composite Cables										
2/C	16	19	5284US	CMR	Unshielded Unshielded	20.51	6284US	CMP	Unshielded Unshielded	20.52
2TP	24	Solid								
2/C	16	19	5284UE	CMR	Unshielded Unshielded	20.51	6284UE	CMP	Unshielded Unshielded	20.52
2TP	23	Solid								
2/C	16	19	5288US	CMR	Unshielded Unshielded	20.51	6288US	CMP	Unshielded Unshielded	20.52
4TP	23	Solid								
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
Access Control BananaPeel® Composite Cables										
4/C	18	7	558AFS	CMR	Beldfoil Beldfoil Beldfoil Beldfoil	20.36	658AFS	CMP	Beldfoil Beldfoil Beldfoil Beldfoil	20.35
3TP	22	7								
4/C	22	7								
2/C	22	7								
4/C	16	19	538AFS	CMR	Beldfoil Beldfoil Beldfoil Beldfoil	20.36	638AFS	CMP	Beldfoil Beldfoil Beldfoil Beldfoil	20.35
3TP	18	7								
4/C	18	7								
2/C	18	7								

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 conductor, Foam Perfluoroalkoxy (FPFA) insulation, bare copper braid shield (95% coverage), Black Flamarrest® jacket.

(1) **Pair:** 22 AWG stranded (7x30) bare copper conductors, FEP insulation, Beldfoil® shield (100% coverage), Blue Flamarrest jacket. Color code: White/Blue Stripe & Blue. Category 5e tested.

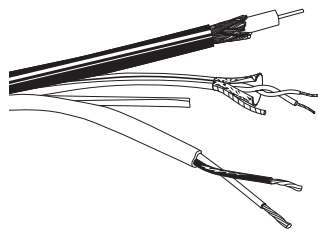
(2) **Conductors:** 18 AWG stranded (7x26) bare copper conductors, Flamarrest insulation, White Flamarrest jacket. Color code: Black & Red.

Specifications

Conductor	Bare Copper
Application Shielding	
Video	Bare Copper Braid
Control	Aluminum/Polyester
Power	Unshielded
Component Jackets	Flamarrest
Overall Jacket	None
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	800
Voltage Rating	300V
Temperature Rating	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 22 AWG Pair • 18 AWG Cond.										
601PTZ <small>NEW</small>	(1) Coax: RG-59/U 20 AWG (solid) BC Cond.	FPFA, BC Braid Shield (95% coverage)	.193	4.90	.351	8.9	500	152	40.0	18.2
	(1) 1-Pair 22 AWG (7x30) BC Cond.	FEP, Beldfoil Shield (100% coverage)	.116	2.95			1000	305	73.0	33.2
	(1) 2-Cond. 18 AWG Stranded (7x26) BC Cond.	Flamarrest, Unshielded	.158	4.01						

BC = Bare Copper • FEP = Fluorinated Ethylene Propylene • FPFA = Foam Perfluoroalkoxy
U.S. Patent 7,049,523

Individual Cable Jacket Color Coding System

Jacket Color	Cable Type
Black	Coax: RG-59/U, 20 AWG, BC Braid Shield
Blue	1/P, 22 AWG, Beldfoil Shield
White	2/C, 18 AWG, Unshielded