

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

BELDEN
SENDING ALL THE RIGHT SIGNALS

503PTZ 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, 2-14 AWG stranded bare copper conductors with PVC insulation, Siamese with PVC jacket

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.)
Gas-injected FHDP - Foam High Density Polyethylene	0.145

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. (in.)
0.227

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)
75

Nom. Inductance:

Inductance (μH/ft)
0.097

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.300

Nominal Velocity of Propagation:

VP (%)

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83.000

Nominal Delay:

Delay (ns/ft)
1.220

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
10.000

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
3.500

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1.000	0.300
5.000	0.650
10.000	0.900
50.000	1.900
100.000	2.600
200.000	3.600
400.000	5.000
700.000	7.000
900.000	8.000
1000.000	8.500

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.)
PO - Polyolefin	0.080

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. (in.)
0.219

Outer Jacket Color Code Chart:

Number	Color
1	Blue

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

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Suitability - Indoor:

Yes

Electrical Characteristics

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
44.000

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
26.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
6.500

Max. Operating Voltage - Other:

Voltage
300 V RMS

Max. Recommended Current:

Description	Current
Data/Control	5.2 Amps

Multi Conductor

Physical Characteristics

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (in.)
2	14	19x27	BC - Bare Copper	0.070

Insulation

Insulation Material:

Insulation Material
PVC - Polyvinyl Chloride

Insulation Color Code Chart:

Number	Color
1	Red
2	Black

Individual Shield

Outer Jacket

Outer Jacket Diameter:

Nom. Dia. (in.)
0.236

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 Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
21.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
2.520

Max. Operating Voltage - Other:

Voltage
300 V RMS

Max. Recommended Current:

Current
5 Amps per conductor @ 25°C

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Physical Characteristics (Overall)

Conductor

Outer Jacket

Outer Jacket Material:

Outer Jacket Material

Unjacketed

Overall Cable

Overall Nominal Diameter: 0.496 in.

Mechanical Characteristics (Overall)

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

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

Bulk Cable Weight: 97.000 lbs/1000 ft.

Max. Recommended Pulling Tension: 190.000 lbs.

Min. Bend Radius/Minor Axis: 5.000 in.

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

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 08/22/206

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

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Plenum/Non-Plenum

Plenum (Y/N): No

Notes (Overall)

Notes: RG59 CCTV + 1 STP 18 AWG Control Grade + 2C 14 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
503PTZ 0001000	1,000 FT	101.000 LB	NONE	C	2C18 + 2C14 + 1 RG59 PVC

Notes:

C = CRATE REEL PUT-UP.

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