

Part Number: 503PTZ

PTZ, RG-59 #20, #18-1pr, #14-2c, Shielded, CMR, Siamese



Product 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

Technical Specifications

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	Nominal Diameter	No. of Conductors	No. of Pairs	No. of Coax
Video	20	Solid	BC - Bare Copper	0.032 in	1		1
Data/Control	18	19x30	BC - Bare Copper	0.044 in		1	
Power	14	19x27	BC - Bare Copper	0.07 in	2		
Conductor Count:				5			
Conductor Size:				20 AWG			

Insulation

Material	Nominal Diameter	Nominal Wall Thickness
Gas-injected FHDPE - Foam High Density Polyethylene	0.145 in	
PO - Polyolefin	0.018 in	
PVC - Polyvinyl Chloride		0.014 in

Color Chart

Number	Color
Coax core	Natural
Data/Control pair	Blue and White
Power conductors	Black and White
Coax Jacket	Black
Data/Control Jacket	Blue
Power jacket	White

Color Chart 4

Number	Color
Video	Black
1	Blue
1	White

Inner Shield Material

Type	Material	Material Trade Name	Coverage [%]
Braid	BC - Bare Copper		95 %
Tape	Aluminum Foil-Polyester Tape	Beldfoil® with shorting fold	100.0 %
Unshielded			

Inner Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.227 in	0.030 in
PVC - Polyvinyl Chloride	0.219 in	0.028 in

PVC - Polyvinyl Chloride	0.236 in	0.020 in
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Outer Shield Material

Coverage [%]	Drainwire Construction n x D
95 %	7x28

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.496 in
PVC - Polyvinyl Chloride	0.219 in
Unjacketed	0.236 in
	0.496 in

Electrical Characteristics

Conductor DCR

Element	Nominal Conductor DCR	Nominal Conductor DCR Conductor Resistance	Nominal Inner Shield DCR
Video	10 Ohm/1000ft	10 Ohm/1000ft	3.5 Ohm/1000ft
Data/Control	6.5 Ohm/1000ft	6.5 Ohm/1000ft	
Power	2.5 Ohm/1000ft	2.52 Ohm/1000ft	

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
	16.3 pF/ft
26 pF/ft	44 pF/ft
21.5 pF/ft	

Shielding:	Multiple or Specialty
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Inductance

Nominal Inductance
0.097 μ H/ft

Impedance

Nominal Characteristic Impedance
75 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.3 dB/100ft
5 MHz	0.65 dB/100ft
10 MHz	0.9 dB/100ft
50 MHz	1.9 dB/100ft
100 MHz	2.6 dB/100ft
200 MHz	3.6 dB/100ft
400 MHz	5 dB/100ft
700 MHz	7 dB/100ft
900 MHz	8 dB/100ft
1000 MHz	8.5 dB/100ft

Delay

Max. Delay Skew	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
83 ns/100m	1.22 ns/ft	83 %

Current

Element	Max. Recommended Current [A]
Data/Control	
	Per conductor @ 25°C: 5.2 A
	Per conductor @ 25°C: 5 A

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Operating Temp Range:	-10°C To +75°C
Separation Temp Range:	0°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	97 lbs/1000ft
Max Recommended Pulling Tension:	190 lbs
Min Bend Radius/Minor Axis:	5 in

Standards

NEC Articles:	800
NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
RG Type:	59/U Type
RG / Series Type:	59/U Type
Other Specification:	Video coax: RG 59/U

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2006-08-22
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
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Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 Vertical Tray (UL loading)
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Footnote
503PTZ 0001000	Black, Blue, White	C

Footnote:	C - CRATE REEL PUT-UP.
Patent:	https://www.belden.com/resources/patents

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