Product: 500PTZ

PTZ, RG-59 #20, #23-1pr, #18-2c, CM, Siamese

Product Description

PTZ (CCTV + Control + Power) Cable, Rated-CM, 1-RG59 20 AWG solid bare copper with foam polyolefin, 95% bare copper braid, 1-23 AWG solid bare copper pair with polyolefin insulation, 2-18 AWG stranded bare copper conductors with polyolefin insulation, Siamese with PVC jacket

Technical Specifications

Product Overview

Suitable Applications:	Surveillance, CCTV Camera, PTZ (Pan-Tilt-Zoom)

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	Nominal Diameter	No. of Conductors	No. of Coax
Coax(es)	20	Solid	BC - Bare Copper	0.032 in		1
Pair1	23	Solid	BC - Bare Copper	0.023 in	2	
Pair2	18	7x26	BC - Bare Copper	0.047 in	2	

Conductor Count:	5

Insulation

Element	Material	Nominal Diameter
Coax(es)	PE - Polyethylene (Foam)	0.145 in
Pair1	PP - Polypropylene	0.041 in
Pair2	PP - Polypropylene	

Table Notes:	Gas Injected

Color Chart

Number	Color
Coax Core	White
Pair1	Blue & White/Blue
Pair2	Black & Red

Inner Shield

Element	Type	Material	Coverage [%]	Nominal Diameter
Coax(es)	Braid	Bare Copper (BC)	95%	0.118 in
Pair1	No Shield	No Shield		
Pair2	No Shield			

Inner Jacket

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.227 in
PVC - Polyvinyl Chloride	0.118 in
PVC - Polyvinyl Chloride	0.158 in

Outer Jacket

Material	Nominal Diameter
Banana Peel (No Overall Jacket)	0.411 in

Electrical Characteristics

Conductor DCR

Element	Nominal Conductor DCR	Nominal Conductor DCR Conductor Resistance	Nominal Inner Shield DCR
Coax(es)	10 Ohm/1000ft	10 Ohm/1000ft	3.5 Ohm/1000ft
Pair1	20 Ohm/1000ft	20 Ohm/1000ft	
Pair2	6.5 Ohm/1000ft	6.5 Ohm/1000ft	

Capacitance

Element	Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
Coax(es)		16.3 pF/ft
Pair1	15 pF/ft	
Pair2	21.5 pF/ft	

Impedance

Element	Nominal Characteristic Impedance
Coax(es)	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

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

High Frequency

Min. RL (Return Loss) [dB]
24.5 dB

Current

Element	Max. Recommended Current [A]
Coax(es)	
Pair1	2.4 Amps per Conductor at 25ºC
Pair2	5 Amps per Conductor at 25ºC

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Installation Temperature Range:	0°C To +75°C
UL Temp Rating:	75°C
Operating Temperature Range:	-10°C To +75°C
Separation Temp Range:	0°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	60 lbs/1000ft
Max. Pull Tension:	115 lbs

Standards

NEC Articles:	Article 800

NEC/(UL) Compliance:	CMR
CPR Euroclass:	Fca
RG Type:	59
Other Specification:	Video coax: RG 59/U

Applicable Environmental and Other Programs

Environmental Space:	Indoor (Not Riser or Plenum)
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	600PTZ

Related Part Numbers

Variants

Item #	Color	UPC
500PTZ 0001000	Black, Blue, White	612825154501

Footnote:	C - CRATE REEL PUT-UP.
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/patents.

Product Notes

Notes:	RG59 CCTV + 1PR23 UTP + 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.

History

Update and Revision:	Revision Number: 0.371 Revision Date: 04-29-2024

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