



Product: [2505PTZ](#)

PTZ, RG-59 #20, #18-1pr, #16-2c, Shielded, 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, 1-18 AWG stranded bare copper pair with PVC insulation and Beldfoil® shield, 2-16 AWG stranded bare copper conductors with PVC insulation, Siamese with PVC jacket, Aluminum interlocking armor

Technical Specifications

Product Overview

Suitable Applications:	Surveillance, CCTV Camera, PTZ (Pan-Tilt-Zoom)
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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	18	7x26	BC - Bare Copper		2	
Pair2	16	19x29	BC - Bare Copper		2	
Conductor Count:				5		

Insulation			
Element	Material	Nominal Diameter	Nominal Wall Thickness
Coax(es)	PE - Polyethylene (Foam)	0.145 in	
Pair1	PP - Polypropylene		0.008 in
Pair2	PP - Polypropylene		0.008 in
Table Notes:		Gas Injected	

Color Chart	
Number	Color
Coax Core	White
Pair1	Black & Red
Pair2	Black & Red

Color Chart 4	
Number	Color
Coax Jacket	Black
Pair1 Jacket	Gray
Pair2 Jacket	White

Inner Shield						
Element	Type	Material	Material Trade Name	Coverage [%]	Drainwire AWG	Drainwire Construction n x D
Coax(es)	Braid	Bare Copper (BC)		93%	24	7x32
Pair1	Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	100%		
Pair2	No Shield					

Inner Jacket	
Material	
PVC - Polyvinyl Chloride	

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Table Notes:	Jacket Material is Same for All Components, Diameters: .165 in, .496 in
Table Notes:	Polyester

Outer Jacket

Material
Banana Peel (No Overall Jacket)
PVC - Polyvinyl Chloride

Construction and Dimensions

Armor

Type of Armor	Material	Diameter over Armoring
Interlocked	Aluminum	0.633 in

Electrical Characteristics

Conductor DCR

Element	Nominal Conductor DCR	Nominal Inner Shield DCR
Coax(es)	10 Ohm/1000ft	3.5 Ohm/1000ft
Pair1	6.5 Ohm/1000ft	
Pair2	4.2 Ohm/1000ft	

Capacitance

Element	Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield	Nom. Capacitance Conductor to Shield
Coax(es)			16.3 pF/ft
Pair1	53 pF/ft	95.5 pF/ft	
Pair2			

Impedance

Element	Nominal Characteristic Impedance
Coax(es)	75 Ohm

High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss
Coax(es)	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)	5 Amps per Conductor at 25°C
Pair1	
Pair2	5 Amps per Conductor at 25°C

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

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

Mechanical Characteristics

Bulk Cable Weight:	142 lbs/1000ft
Max. Pull Tension:	210 lbs

Standards

NEC Articles:	Article 800
NEC/(UL) Compliance:	CMG
CEC/C(UL) Compliance:	CMG
RG Type:	59
Other Standards:	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
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Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	UPC
2505PTZ 0001000	Black	612825132042

Footnote:	C - CRATE REEL PUT-UP.
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Product Notes

Notes:	RG59 CCTV + 2C 18 AWG Shld + 2 C 16 AWG CMR. Individually jacketed and color coded components, cabled with an overall aluminum interlocked armor.
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History

Update and Revision:	Revision Number: 0.365 Revision Date: 12-15-2021
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