Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION



502PTZ 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, 2-18 AWG stranded bare copper conductors with polyolefin insulation, Siamese with PVC jacket

oax	
Physical Characteristics Conductor	
AWG:	
# Coax AWG Stranding Conductor Mater	rial Dia. (mm)
1 20 Solid BC - Bare Copper	r 0.813
Insulation Insulation Material:	
Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density P	olyethylene 3.683
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. (mm) 5.766	
Outer Jacket Color Code Chart:	
NumberColorVideoBlack	
Applicable Specifications and Agency	
Applicable Standards & Environmen	
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:	
-	

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75

Nom. Inductance:

Inductance (µH/m)

0.318

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

53.480

Nominal Velocity of Propagation:

VP (%) 83.000

Nominal Delay:

Delay (ns/m)

4.003

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

32.810

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 11.484

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1.000	0.984
5.000	2.133
10.000	2.953
50.000	6.234
100.000	8.531
200.000	11.812
400.000	16.405
700.000	22.967
900.000	26.248
1000.000	27.889

Max. Operating Voltage - UL:

300 V RMS

Twisted Pair

20

7x28

Čon	cal Cha ductor VG:		eristics					
	# Pairs	AWG	Stranding	Condu	ctor Material	Dia. (mm)		
	1	18	19x30	BC - Ba	re Copper	1.118		
	Insulation Material:							
	Insulati	on Ma	terial Dia.	(mm)				
	PO - Po	lyolefiı	า 2.032	2				
Ти	visted F	Pair C	olor Code	Chart	:			
	Numbe	r Colo	r					
	1 Blue and White/Blue							
	er Shie Iter Shi		laterial:					
	Outer S	hield	Trade Nam	e Type	Outer Shield	d Material		Coverage
	Beldfoil	B		Tape	Aluminum Fo	oil-Polyester	Гаре	100.000
Οι	Outer Shield Drain Wire AWG:							
	AWG Stranding Drain Wire Conductor Material							

TC - Tinned Copper

Coverage (%)



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Outer Jacket		
Outer Jacket Material:		
Outer Jacket Material		
PVC - Polyvinyl Chloride		
Outer Jacket Diameter: Nom. Dia. (mm)		
5.563		
Outer Jacket Color Code Cha	art:	
NumberColor1Blue		
Applicable Specifications and Applicable Standards & En		
NEC/(UL) Specification:		CMR
CEC/C(UL) Specification:		CMG
Flame Test		
UL Flame Test:		UL1666 Vertical Shaft
Suitability		
Suitability - Indoor:		Yes
144.364 Nom. Capacitance Conductor for the second	e:	
Multi Conductor		
Physical Characteristics Conductor AWG:		
# Conductors AWG Strandin	-	
2 18 7x26	BC - Bare Copper	1.194
Insulation Insulation Material: Insulation Material		

PP - Polypropylene

Insulation Color Code Chart:

	Number	Color
ľ	1	Red
	2	Black



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Individual Shield Outer Jacket	
Outer Jacket Diameter:	
Nom. Dia. (mm) 4.013	
Outer Jacket Color Code Chart:	
Number Color	
1 White	
Applicable Specifications and Agency Comp	
Applicable Standards & Environmental Pro NEC/(UL) Specification:	CMR
	CMG
CEC/C(UL) Specification: Flame Test	
UL Flame Test:	UL1666 Vertical Shaft
Suitability	
Suitability - Indoor:	Yes
Electrical Characteristics	
Nom. Capacitance Conductor to Conductor:	
Capacitance (pF/m) 70.542	
Nom. Conductor DC Resistance: DCR @ 20°C (Ohm/km)	
21.327	
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 Cable	
Overall Nominal Diameter:	11.455 mm
Mechanical Characteristics (Overall)	
Operating Temperature Range:	-10°C To +75°C
Separation Temperature Range:	0°C To +75°C
Bulk Cable Weight:	110.127 Kg/Km
Max. Recommended Pulling Tension:	622.748 N
Min. Bend Radius/Minor Axis:	114.300 mm
Applicable Specifications and Agency Co	ompliance (Overall)
Applicable Standards & Environmental Progr	
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2000/53/EC (ELV):	Yes

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EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
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
Applicable Patents:	
Country www.belden.com/p	
Plenum/Non-Plenum	
Plenum (Y/N):	No
Plenum Number:	602PTZ

Notes (Overall)

Notes: RG59 CCTV + 1 STP18 AWG Control Grade + 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.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
502PTZ 0001000	1,000 FT	85.000 LB	NONE		RG59 +2C18 FS +2C18 CMR BPEEL
502PTZ 000500	500 FT	46.500 LB	NONE		RG59 +2C18 FS +2C18 CMR BPEEL

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