



Product: [602PTZ](#)

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

Product Description

PTZ (CCTV + Control + Power) Cable, Plenum-CMP, 1-RG59 20 AWG solid bare copper with foam PFA, 95% bare copper braid, 1-18 AWG stranded bare copper pair with FEP insulation and Beldfoil® shield, 2-18 AWG stranded bare copper conductors with Flamarrest® insulation, Siamese with Flamarrest® 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	18	19x30	BC - Bare Copper	0.044 in	2	
Pair2	18	7x26	BC - Bare Copper	0.047 in	2	

Conductor Count:	5
------------------	---

Insulation

Element	Material	Material Trade Name	Nominal Diameter	Nominal Wall Thickness
Coax(es)	FEP - Fluorinated Ethylene Propylene (Foam)		0.133 in	
Pair1	FEP - Fluorinated Ethylene Propylene		0.059 in	
Pair2	PVC - Polyvinyl Chloride	Flamarrest®		0.009 in

Color Chart

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

Color Chart 4

Number	Color
Coax Jacket	Black
Pair1 Jacket	Blue
Pair2 Jacket	White

Inner Shield Material

Element	Type	Material	Material Trade Name	Coverage [%]
Coax(es)	Braid	Bare Copper (BC)		95%
Pair1	Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	100%
Pair2	No Shield			

Inner Jacket Material

Material	Material Trade Name	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	Flamarrest®	0.193 in	0.016 in
PVC - Polyvinyl Chloride	Flamarrest®	0.150 in	0.014 in

PVC - Polyvinyl Chloride	Flamarrest®	0.158 in	0.015 in
--------------------------	-------------	----------	----------

Outer Shield Material

Drainwire AWG	Drainwire Construction n x D
20	19x32

Outer Jacket Material

Material	Nominal Diameter
Banana Peel (No Overall Jacket)	0.363 in
	0.15 in
	0.158 in
No Jacket	0.363 in

Electrical Characteristics

Conductor DCR

Element	Nominal Conductor DCR	Nominal Conductor DCR Conductor Resistance	Nominal Inner Shield DCR	Nominal Outer Shield DCR
Coax(es)	10 Ohm/1000ft	10 Ohm/1000ft	2.5 Ohm/1000ft	
Pair1	5.5 Ohm/1000ft	5.5 Ohm/1000ft	7.3 Ohm/1000ft	7.3 Ohm/1000ft
Pair2	6.5 Ohm/1000ft	6.5 Ohm/1000ft		

Capacitance

Element	Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
Coax		16.1 pF/ft
Pair1	51 pF/ft	97 pF/ft
Pair2	30 pF/ft	

Impedance

Element	Nominal Characteristic Impedance
Coax	75 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	.29 dB/100ft
5 MHz	0.7 dB/100ft
10 MHz	1.1 dB/100ft
50 MHz	1.8 dB/100ft
100 MHz	2.7 dB/100ft
200 MHz	3.9 dB/100ft
400 MHz	5.9 dB/100ft
700 MHz	8.5 dB/100ft
900 MHz	10 dB/100ft
1000 MHz	10.7 dB/100ft

Delay

Element	Max. Delay Skew	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
Coax	84 ns/100m	1.21 ns/ft	84%

Current

Element	Max. Recommended Current [A]
Coax	
Pair1	5.2 Amps per Conductor at 25°C
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:	65 lbs/1000ft
Max. Pull Tension:	162 lbs

Standards

NEC Articles:	Article 800
NEC/(UL) Compliance:	CMP
RG Type:	59
Other Specification:	Video coax: RG 59/U

Applicable Environmental and Other Programs

Environmental Space:	Indoor - 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, LSOH, Toxicity Testing

UL Flammability:	NFPA 262
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
---------------	-----

Part Number

Non-Plenum Number:	502PTZ
--------------------	--------

Variants

Item #	Color	UPC
602PTZ 0001000	Black, Blue, White	612825172062
602PTZ 000500	Black, Blue, White	612825172079

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/resources/patents .

Product Notes

Notes:	RG59 CCTV + 1 STP 18 AWG Control Grade + 2C 18 AWG CMP. 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: 0.343 Revision Date: 09-10-2021
----------------------	--

© 2021 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product

Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.