



**Product:** [449945](#)

PTZ, RG-59 #20, #18-2c, LSZH, Siamese, Dca

## Product Description

PTZ (CCTV + Power/Audio) Cable), Coax 59/U, Flame retardance IEC60332-1 20 AWG solid bare copper, foamed polyethylene core, 95% bare copper braid, LSZH jacket

## 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 Pairs	No. of Coax
Coax(es)	20	Solid	BC - Bare Copper	0.81 mm		1
Pair1	18	7x26	BC - Bare Copper	1.17 mm	1	

Conductor Count:	3
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#### Insulation

Element	Type	Material	Nominal Diameter	Diameter +/- Tolerance	Nominal Wall Thickness	Color
Coax(es)	Dielectric	PE - Polyethylene (Foam)	3.68 mm			
Twisted Pair(s)	Insulation	PE - Polyethylene	1.7 mm	0.05 mm	0.25 mm	Black & Red

#### Inner Shield

Element	Type	Material	Coverage [%]
Coax(es)	Braid	Bare Copper (BC)	95%

#### Outer Jacket

Element	Material	Nominal Diameter	Nominal Wall Thickness
Coax(es)	LSZH - Low Smoke Zero Halogen (Flame Retardant)	5.9 mm	0.38 mm

### Construction and Dimensions

OuterJacket1, Form:	Shotgun
OuterJacket1, Nominal Width:	11.7 mm

### Electrical Characteristics

#### Conductor DCR

Element	Nominal Conductor DCR	Nominal Outer Shield DCR
Coax(es)	10.3 Ohm/1000ft	12.5 Ohm/km
Twisted Pair(s)	21.3 Ohm/km	

#### Capacitance

Element	Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
Coax(es)		55.6 pF/m
Twisted Pair(s)	98.4 pF/m	

## Impedance

Element	Nominal Characteristic Impedance
Coax(es)	75 Ohm

## High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss
Coax(es)	1 MHz	0.98 dB/100m
	5 MHz	2.13 dB/100m
	10 MHz	2.95 dB/100m
	50 MHz	6.23 dB/100m
	100 MHz	8.53 dB/100m
	200 MHz	11.8 dB/100m
	400 MHz	16.4 dB/100m
	700 MHz	23 dB/100m
	900 MHz	26.2 dB/100m
	1000 MHz	27.9 dB/100m

## Delay

Element	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
Coax(es)	410 ns/ft	83%

## Voltage

Element	Voltage Rating [V]
Coax(es)	300 V RMS
Twisted Pair(s)	300 V RMS

## Temperature Range

Storage Temperature Range:	-30°C To +70°C
Operating Temperature Range:	-30°C To +70°C

## Mechanical Characteristics

Max. Pull Tension:	450 N
Min Bend Radius (W/o Pulling Strength):	29.5 mm
Min Setting Radius:	59 mm

## Standards

CPR Euroclass:	Dca-s2,d2,a1
RG Type:	59

## Applicable Environmental and Other Programs

Environmental Space:	Indoor/Outdoor - Euroclass Dca
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## Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
IEC 60754-1 - Halogen Amount:	Zero
IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity:	2.5 µS/mm
IEC 60754-2 - Halogen Acid Gas Amount - Min. pH:	4.3
IEC 61034-2 - Smoke Density Min. Transmittance:	60%

## Related Part Numbers

### Variants

Item #	Color	Put-Up Type	Length	EAN
449945.00100	Gray	Reel	100 m	8719605007018
449945.00500	Gray	Reel	500 m	8719605007025

## History

Update and Revision:	Revision Number: 0.269 Revision Date: 02-03-2025
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