

## **FEATURES**

- Impedance of 75 Ω
- Seven strands
- Internal wire size of 38 AWG
- RG-179 gauge (thickness) rating
- Outer diameter of 2.8 mm
- Reel length of 50 m
- Silver conductor
- RG-179 coax connector
- PVC jacket for insulation and durability
- Tinned copper shielding for conductivity
- Operating temperature of -30°C to +70°C
- Unterminated
- Complies with EU Directives 2011/65/EU and 2015/863

# RS PRO Black Unterminated to Unterminated RG179 Coaxial Cable, 75 Ω 2.8mm OD 50m

RS Stock No.: 521-7950



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.



## **Product Description**

The RS PRO unterminated to unterminated RG179 coaxial cable lets you connect a radio frequency antenna easily to an electronic device in both home and business settings. Rated as RG-179, this denotes that it's suitable for a range of applications, including connecting medical equipment, computers and video/audio security systems, particularly where high-temperature performance is required.

The cable comes in a handy 50-m reel, which means you can create connections across greater distances and also transport it between jobs. You can install it in temperatures between -5°C and +50°C and it will operate safely at a temperature range of -25°C to +70°C.

## **General Specifications**

Coaxial Type	RG179	
Connector A	Unterminated	
Connector B	Unterminated	
Terminated/Unterminated	Unterminated	
Shielding	Braid Tinned Copper	
Sheath Colour	Black	
Applications	Industrial, Instrument, Medical Equipment	

## **Electrical Specifications**

Voltage Rating	2000DC / 1000V RMS
Capacitance	67pF/m (3pF/m Tolerance)
Characteristic Impedance	750
Velocity Propagation (%)	66
Conductor DCR (Ohm/km)	802 Max.
Maximum Operating Frequency (MHz)	1000
Maximum Operating Voltage (RMS)	1000



# Attenuation (@ 20°C)

Frequency (MHz/GHz)	Attenuation (db/100m)
400	52.5
700	64.6
900	73.2
1	78.7

# **Mechanical Specifications**

Length	50m
Outer Diameter	2.8mm
Conductor Strand Type	Stranded
American Wire Gauge	30 AWG
Number of Strands	7

# **Operation Environment Specifications**

Operating Temperature Range	-25°C to 70°C
Minimum Operating Temperature	-25°C
Maximum Operating Temperature	+70°C

# **Approvals**

Standards Met	Fca Euroclass, EN 50290-2-20 and EN 50289, 58/U
	Type, MIL-C-17, 2011/65/EU and 2015/863, IEC
	60332-1-2, RoHS Compliance, 7777 Approved





# **Physical Characteristics (Overall)**

#### Conductor

Stranding	Material	Const	ruction n x D	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
Stranded	SPCCS - Silver Plated Copper Covered Steel	7x0.10	mm	0.3 mm	0.02 mm	1
Conductor Count:			1			
Conductor Size:			30 AWG			

#### Insulation

Туре	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	Polyethylene	1.6 mm	0.15 mm

## **Outer Shield Material**

Туре	Material	Coverage [%]	Nominal Diameter	Diameter +/- Tolerance	Coverage +/- Tolerance
Braid	TC - Tinned Copper	85 %	2 mm	0.15 mm	4 %

## **Outer Jacket Material**

Material	Nominal Diameter	Diameter +/- Tolerand
PVC - Polyvinyl Chloride	2.8 mm	0.1 mm
OuterJacket1, Table Note	e:	Acc

# **Coaxial Cable**



## **Electrical Characteristics**

## **Conductor DCR**

Max. Conductor DCR 802 Ohm/km

#### Capacitance

Nom. Capacitance	Capacitance Tolerance	
67 pF/m	3 pF/m	

#### Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance	Regularity of Impedance
75 Ohm	3 Ohm	Min. 40 dB

## High Frequency (Nominal/Typical)



10 MHz	15 dB/100m
100 MHz	27 dB/100m
1000 MHz	85 dB/100m

#### Delay

Nominal Velocity of Propagation (VP) [%] 66 %

## Voltage

Voltage Rating [V] 2000 DC / 1000 V RMS

## **Temperature Range**

Installation Temp Range:	-5°C To +50°C
Storage Temp Range:	-25°C To +70°C
Operating Temp Range:	-25°C To +70°C

## Standards

CPR Euroclass:	Fca
RG Type:	179/U Type
MIL Spec Rating:	MIL-C-17

## **Applicable Environmental and Other Programs**

EU RoHS Compliance Date (yyyy-mm-dd):	2005-11-17

## **Part Number**

#### Variants

Item #	Color	Length
MRG1791.00100	Black	100 m
MRG1791.0050	Black	50 m