

# BT Security-Tec<sup>®</sup> – Coaxial Cables

RG-59, RG-6 and RG-11, Solid Conductor  
75 Ohm Coaxial Cables for CCTV and Video  
BT Cables Part No: C1028 – C1029 – C1030

## Applications

CCTV and Video

## Operating Temperature

-25 to +75 °C

## Max. Operating Voltage

300 Vrms

## Sector

BT-Security-TEC™  
Coaxial Cables

## Standard References

IEC 61196  
(BS) EN 50117  
(BS) EN 50290-2  
RoHS directives

## Design

**1. Conductor**  
Solid Bare Copper (BC)

**2. Dielectric**  
Foamed Polyethylene

## 3. Braid

Bare Copper

## 4. Sheath Material

Polyvinyl Chloride (PVC)

## Standard Put Up Length

305 or 500 metres



## Physical Characteristics

Coax Cables for CCTV and Video		RG-59 Solid Conductor	RG-6 Solid Conductor	RG-11 Solid Conductor
BTCL Part Numbers		C1028	C1029	C1030
Nom. Diameter Conductor	mm	0.81	1.02	1.63
Nom. Diameter Dielectric	mm	3.71	4.60	7.11
Nom. Overall Diameter	mm	6.0	6.8	10.0
Coverage Braid	%	95	95	90
Max. Recommended Pulling Tension	N	220	310	640
Min. Bend Radius (Install)	mm	60	68	100
Nom. Cable Weight	kg/km	47.12	55.5	115.9

## Electrical Characteristics (at 20°C)

Coax Cables for CCTV and Video		RG-59 Solid Conductor	RG-6 Solid Conductor	RG-11 Solid Conductor
BTCL Part Numbers		C1028	C1029	C1030
Impedance	Ohm	75 ± 3	75 ± 3	75 ± 3
Max. DC Resistance Conductor	Ω/km	33.5	21.5	8.8
Max. DC Resistance Screen	Ω/km	10.1	10.8	6.5
Nominal Capacitance	pF/m	53.5	53.5	52.8
Nominal Inductance	μH/m	0.32	0.32	0.32
Velocity of Propagation	%	83	83	83
Nominal Time Delay	ns/m	3.97	3.97	3.97
Min. Return Loss 1 to 1000 MHz	dB	20	20	20

## Nominal Attenuation in dB/100m

MHz	5	10	50	100	200	300	400	450	550	700	750	870	1000
RG-59	1.9	2.95	6.23	8.53	11.81	15.3	16.41	18.92	21.03	22.97	24.8	26.84	27.89
RG-6	1.78	2.36	4.92	6.56	9.51	12.43	13.78	15.14	17.15	18.37	19.73	20.26	21.96
RG-11	0.99	1.51	2.96	4.27	6.23	8.27	9.51	10.31	11.51	13.45	13.95	14.87	17.06