


**Detailed Specifications &
Technical Data**



649948 Composite - New Generation®

	<p>For more information please call 1-800-Belden1</p> <p><u>See Put-ups and Colors</u></p> <p>Color Code Chart : New Generation - Security and Alarm Cables.pdf</p>
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Description:

Plenum-Rated Composite - Coax:Bare copper conductor, foamed FEP insulation, bare copper braid shield, Flamarrest® jacket. Pair:Halar® insulation, Flamarrest jacket. Coax and pair in Siamese configuration. Sequential footage marking every two feet.

SUITABLE APPLICATIONS:

Suitable Applications	CCTV plus Audio, Pan and Tilt CCTV Control
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PHYSICAL CHARACTERISTICS:

COAX:

Number of Coax	1
RG Type (Single Coax)	59/U

CONDUCTOR :

Coax AWG	20
Coax Stranding	Solid
Coax Conductor Diameter	.032 in.
Coax Conductor Material	BC - Bare Copper

INSULATION :

Coax Insulation Material	FFEP - Foam Fluorinated Ethylene Propylene
Coax Insulation Diameter	.134 in.

INNER SHIELD :

Coax Inner Shield Type	Braid
Coax Inner Shield Material	BC - Bare Copper
Coax Inner Shield % Coverage	95 %

TWISTED PAIR CABLE(S):

CONDUCTOR :

Number of Pairs	1
Twisted Pair AWG	18
Twisted Pair Stranding	7x26
Twisted Pair Conductor Diameter	.047 in.

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Twisted Pair Conductor Material BC - Bare Copper

INSULATION :

Twisted Pair Insulation Material FEP - Fluorinated Ethylene Propylene

Twisted Pair Insulation Diameter .059 in.

Twisted Pair Color Code Chart :

Number	Color
1	Black & Red

INNER SHIELD :

Twisted Pair Inner Shield Material Unshielded

OVERALL CABLING:

CONDUCTOR :

Total Number of Conductors 3

OUTER SHIELD :

Overall Cabling Outer Shield Material Unshielded

OUTER JACKET :

Overall Cabling Outer Jacket Material Trade Name Flamarrest®

Overall Cabling Outer Jacket Material LS PVC - Low Smoke Polyvinyl Chloride

OVERALL DIAMETER :

Overall Composite Cabling Nominal Diameter .199 x .383 in.

MECHANICAL CHARACTERISTICS:

OVERALL CABLING:

Overall Cabling Operating Temperature Range -20°C To +75°C

Overall Cabling UL Temperature Rating 75°C

Overall Cabling Bulk Cable Weight 48 lbs/1000 ft.

Overall Cabling Max. Recommended Pulling Tension 97 lbs.

Overall Cabling Min. Bend Rad.(Install)/Minor Axis 2 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

OVERALL CABLING:

APPLICABLE STANDARDS :

Overall Cabling NEC/(UL) Specification CMP

Overall Cabling CEC/C(UL) Specification CMP

FLAME TEST :

Overall Cabling UL Flame Test UL910 Steiner Tunnel

Overall Cabling C(UL) Flame Test FT6

SUITABILITY :

Overall Cabling Suitability - Indoor Yes

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PLENUM/NON-PLENUM :

Overall Cabling Plenum (Y/N)	Y
Overall Cabling Non-Plenum Number	549945

ELECTRICAL CHARACTERISTICS:

COAX:

Coax Nom. Characteristic Impedance	75 Ohms
Coax Nom. Inductance	.097 µH/ft
Coax Nom. Capacitance Conductor to Shield	16.1 pF/ft
Coax Nominal Velocity of Propagation	84 %
Coax Nominal Delay	1.21 ns/ft
Coax Nom. Conductor DC Resistance @ 20 Deg. C	10 Ohms/1000 ft
Coax Nom. Inner Shield DC Resistance	2.5 Ohms/1000 ft

Coax Nom. Attenuation :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100 ft.)
	1			.30
	5			.70
	10			1.0
	50			2.0
	100			2.7
	200			3.9
	400			5.9
	700			8.5
	900			10.0
	1000			10.7

Coax Max. Operating Voltage - UL 300 V RMS

MULTICONDUCTOR CABLE(S):

Multi-Conductor Nom. Cap. Cond. to Cond. @ 1 kHz 24 pF/ft

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
649948 8771000	PLENUM RG59,1PR18SIAMAS E	1000	54	NATURAL	C
649948 877500	PLENUM RG59,1PR18SIAMAS E	500	29	NATURAL	C

C = CRATE REEL PUT-UP.

Revision Number: 1 Revision Date: 11-16-2004

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BELDENCable™

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