

**Detailed Specifications &  
Technical Data**



**639948 Composite - New Generation®**

	<p><b>For more information please call</b> <b>1-800-Belden1</b></p> <p><b>Color Code Chart : New Generation - Security and Alarm Cables.pdf</b></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)	6/U

**CONDUCTOR :**

Coax AWG	18
Coax Stranding	Solid
Coax Conductor Diameter	.040 in.
Coax Conductor Material	BC-Bare Copper

**INSULATION :**

Coax Insulation Material	FFEP - Foam Fluorinated Ethylene Propylene
Coax Insulation Diameter	.170 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	7
Twisted Pair Conductor Diameter	.047 in.
Twisted Pair Conductor Material	BC-Bare Copper

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**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
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**OVERALL CABLING:**

**CONDUCTOR :**

Total Number of Conductors	3
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**OUTER SHIELD :**

Overall Cabling Outer Shield Material	Unshielded
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**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	.232 x .416 in.
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**MECHANICAL CHARACTERISTICS:**

**OVERALL CABLING:**

Overall Cabling Operating Temperature Range	-20°C To +75°C
Overall Cabling Non-UL Temperature Rating	75°C
Overall Cabling Bulk Cable Weight	60 lbs/1000 ft.
Overall Cabling Max. Recommended Pulling Tension	129 lbs.
Overall Cabling Min. Bend Rad.(Install)/Minor Axis	2.5 in.

**APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:**

**OVERALL CABLING:**

**APPLICABLE STANDARDS :**

Overall Cabling NEC/(UL) Specification	CMP
Overall Cabling NEC Articles	800
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	649948

**ELECTRICAL CHARACTERISTICS:**

**COAX:**

Coax Nom. Characteristic Impedance	75 Ohms
Coax Nom. Inductance	.097 $\mu$ H/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	6.4 Ohms/1000 ft
Coax Nom. Inner Shield DC Resistance	2.2 Ohms/1000 ft

Coax Nom. Attenuation :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100 ft.)
	1			.11
	5			.24
	10			.7
	50			1.6
	100			2.3
	200			3.5
	400			5.1
	700			7.4
	900			8.6
	1000			9.1

Coax Max. Operating Voltage - UL	300 V RMS
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**MULTICONDUCTOR CABLE(S):**

Multi-Conductor Nom. Cap. Cond. to Cond. @ 1 kHz	24 pF/ft
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**OVERALL CABLING:**

Overall Cabling Max. Operating Voltage - UL	300 V RMS
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Revision Number: 1      Revision Date: 11-16-2004

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**BELDEN**Cable™

**639948 Composite - New Generation®**

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