## Coaxial Cable Solutions Guide

General Cable offers a complete line of Carol<sup>®</sup> Brand Coaxial Cables for today's sophisticated high-speed, wide-bandwidth electronics products that run over long distances with minimal signal loss or degradation.

General Cable has the right coaxial cable to serve every application, including:

- CATV/MATV/DBS
- HDTV/SDI
- CCTV

The General Cable Coaxial Cable Solutions Guide is a quick-reference tool to make it easier to specify and sell the right cable for the required application–residential, commercial, entertainment and security. Whatever the application calls for, we have a coaxial cable that delivers the performance your customers need.



## ELECTRONICS WIRE & CABLE



## CATV/MATV/DBS



Broadband signal, 5MHz–3GHz, VHF/UHF, is traditionally transmitted as an analog signal received directly off air (MATV) or delivered as a community access television (CATV) service and uses a 75 0hm system.

**Recommended Coaxial Cable Construction:** Copper clad steel (CCS) conductor with a foam polyethylene or Teflon\* core, an aluminum/Mylar\* foil, a minimum of 60% braid, which is typically aluminum (AL) for this application, and a PVC jacket.

For home use, a CM rated coax should be used. A commercial application may require a National Electrical Code (NEC 800 or 725) Riser (CMR) or Plenum (CMP) rated cable. Economical cable solutions use low smoke PVC (75°C) jackets. Teflon\* (FEP) and other fluoropolymer materials (150°C) may be used to provide a more durable and higher-temperature cable alternative.

It is a common misconception that RG 6 coax is "better" than RG 59. While RG 6 has become the industry standard and is an excellent value, it is a larger cable than RG 59. RG 6 allows the same signal level to be delivered a greater distance. This is expressed as a decibel value at particular frequencies. For example, at 100 MHz, General Cable's Carol<sup>®</sup> Brand part number C5775 RG 6 coax cable has an attenuation value of 2.05 db/100'. A similar construction Carol<sup>®</sup> Brand part number C5782 RG 59 coax cable exhibits an attenuation value (loss) at 100 MHz frequency of 2.70db/100'. This may or may not be significant, depending on the input signal level and distance of the cable run.

For a longer cable run, or if the coax cable is planned for use as the backbone in a system, Carol® Brand part number C5039 RG 11 coax cable should be used, because its attenuation at 100 MHz frequency is 1.30 db/100'.

CATV/MATV/DBS RG 59, RG 6 and RG 11 Ratings					
Coax Solution	Carol	Belden	Genesis	West Penn	Commscope
RG 6 CCS/Foil/60% AL Braid CATV/CM	C5775	9116/1829A	5303	841	5726
RG 6 CCS/Foil/60% AL Braid CATVR/CMR	C5886	9116R	_	_	_
RG 6 CCS/Quad/Foil/60%/40% AL Braid CATV/CM	C5785	1189A	5307	Q841	5740
RG 6 CCS/Quad/Foil/60%/40% AL Braid CATVR/CMR	C5889	1884A	_	_	_
RG 6 CCS/Foil/60% AL Braid CMP - Plenum	C3524	9116P	_	25841	2275K
RG 6 CCS/Quad/Foil/60%/40% AL Braid CMP - Plenum	C3525	1189AP	_	250841	—
RG 11 CCS/Foil/60% AL Braid CATV/CM	C5039	1525A	_	—	5913
RG 11 CCS/Foil/60% AL Braid CL2P/CMP - Plenum	C3528	1523AP	_	—	2285K

\*Note: DuPont™ trademark



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