

Coax & Triax Cable

Aptiv's Coaxial and Triaxial Cables are designed to transmit high-frequency signals with low loss and excellent shielding. Coaxial cables offer a single shield layer, while triaxial cables provide a second shield and layer of insulation for extra EMI/RFI protection. Suitable for use in aerospace, defense, industrial, medical, and automotive markets, these cables can be used in a variety of applications including radar, satellite and space communications, precision instrumentation, and electronic countermeasures.



FEATURES & BENEFITS

- High Signal Integrity – Maintains consistent impedance and minimizes attenuation for reliable performance over distance.
- Robust Construction – Built to withstand mechanical stress, bending, and harsh environments.
- Enhanced EMI/RFI Protection – Triaxial designs provide superior shielding for critical applications.
- High Bandwidth Capability – Reliable performance across wide frequency ranges, from DC to GHz.
- Noise Protection – Shields prevent external interference and reduce emissions.
- Versatile Applications – Suitable for aerospace, defense, industrial, medical, and automotive systems.
- Environmental Flexibility – Available in multiple jacket materials to meet environmental demands.
- Customizable Designs – Tailored impedance, shielding, and frequency options to meet specific requirements.

PRODUCT SPECIFICATIONS

Electrical Properties	
Impedance	50 Ω , 75 Ω , 93 Ω
Frequency Range (Coax)	DC to 20 GHz (or higher)
Velocity of Propagation	66% to 85%

Mechanical Properties	
Conductor Material	Copper (tinned, silver-plated), Aluminum, Copperweld
Insulation Material	Polyethylene (PE), Fluoropolymer, FEP (solid or cellular)
Shield Construction (Coax)	Braid (copper, aluminum), Foil, Tape
Shield Construction (Triax)	Inner braid, Outer braid
Outer Jacket Material	Polyethylene (PE), PTFE, PUR, PVC Fluoropolymer, FEP
Outer Diameter	0.100 in to 0.870 in (2.54 mm to 22.1 mm)
Operating Temperature	to +200°C
Durability (Mating Cycles)	500 cycles (for associated connectors)

PRODUCT SPECIFICATIONS CONTD.

Environmental Properties	
Operating Temperature	–65°C to +200°C
Chemical Resistance	Resistant to hydraulic fluids, Skydrol
RoHS and REACH Compliance	Compliant
Low Smoke, Zero Halogen (LSZH)	Available for specific types