



Connector Types

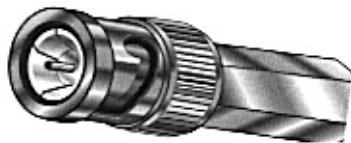
There are various electrical connector types available for coaxial cable. Mechanically, they can be installed on a wide variety of cables but their physical differences are as varied as their electrical differences.

- Crimp-on type "F" connector. This type of connector is designed for, and used in broadcast television where a considerably higher band of frequencies exist, as opposed to those found in CCTV. The cable center conductor is actually the connector center pin. Connectors of this type are usually found in cable television (CATV) installations. This is the type found in most home television systems. "F" connectors should never be used in a CCTV installation.



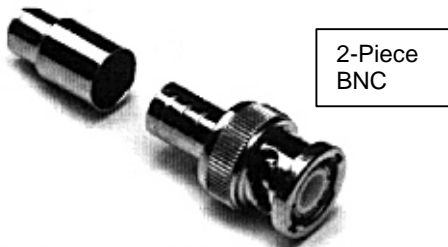
"F" Connector

- Twist-on connector. The name twist-on comes from the fact that, after the cable is stripped to the correct lengths, the connector is actually twisted, or screwed, on to the cable. The barrel has coarse internal threads that contact the shield braid. It also has a center pin which "threads" on to the center conductor. These connectors can easily be distinguished by the approximate $\frac{3}{4}$ hexagonal barrel on the rear of the connector. Due to the signal loss that occurs over time with these connectors, their use for CCTV is not recommended.

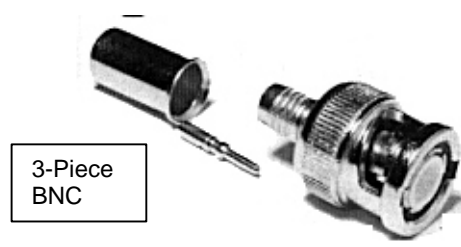


Twist-On BNC Connector

- Two-piece crimp-on connector. The cable center conductor is pushed into the connector center pin where it is gripped by spring contacts. The ferrule is then slipped up the cable over the braid and then crimped with an appropriate tool. The crimping action sandwiches the braid between the ferrule and the connector barrel, providing a solid electrical connection.
- Three-piece crimp-on connector. This type has a separate center pin that is first crimped onto the center conductor. The rest of the assembly is similar to the two-piece type.



2-Piece
BNC



3-Piece
BNC

Either two or three piece connectors are suitable for CCTV use but three piece are preferred.