Optional choices, other than standard crimp or solder 500 cycle and 1500 cycle contacts, are often required for high frequency interconnections. Amphenol offers shielded contacts for RF applications as well as balanced high sensitivity circuits.

**SHIELDED COAXIAL CONTACTS**

High speed coax contacts within a connector provide the shielding protection, and many cases the RF/microwave performance, needed in the circuitry of many applications.

All popular series of Amphenol circular connectors and many rectangular connectors are available with coax contacts. Diameters are standardized in sizes 4, 8, 12 and 16 so that coaxial contacts may be interchanged with power contacts in connector arrangements which include those sizes. Popular RG cable types and a variety of other commercial coaxial cables can be accommodated. See page 244 for coax contact performance data. Matched impedance size 12 coax contacts are also available (see page 248). The use of coax contacts within a connector, compared to the use of individual coaxial/shielded connectors, offers advantages of savings in space and weight and no cross-mating difficulties. Coax and standard contacts may be mixed within the connector to meet special signal needs. The connector itself offers further protection and environmental integrity through the grommets and seals used, and coaxial junction is protected by the connector outer shell.

**CONCENTRIC TWINAX SHIELDED CONTACTS**

High performance shielding capabilities are available with Concentric Twinax contacts. These are designed for protection from magnetic and electrostatic interference including nuclear electro-magnetic pulse. The contact is crimp terminable to twisted shielded cable and is fully scoop-proof (recessed pins) in MIL-DTL-38999 connectors. The concentric twinax contact is engineered to maintain shield integrity through a multi-pin circular connector and does not require contact polarization within the insert. Size 8 concentric twinax contacts were developed for use in MIL-STD-1553B Airborne multiplex data bus applications. Ideal for this application need is the high performance Tri-Start connector with its fully scoop-proof feature of recessed pins.

The concentric twinax contact is crimp terminable to twisted shielded cable. Size 12 concentric twinax contacts were developed for SAAB. They can be used in any size 12 cavity of D38999 I, II or III or SJT connector.

Size 8 & 12 coax, triax or twinax contacts or size 16 coax contacts are available in Ground Plane Connectors (See photo preceding page). These are MIL-DTL-38999 Series III connectors for data bus, LAN and coax/triax/twinax transmission lines with conductive inserts that ground the outer contact conductor to the shell. They are sold “less contacts”