The Amphenol® Brush Contact Technology has proven advantages over standard pin & socket contacts and Amphenol has a very broad family of brush contact products which are shown in this catalog.

The Bristle Brush contact is used in military avionics packages and meets the requirements of MIL-DTL-55302. It provides high density in tight spacing, low mating/inmating forces, proven durability and long contact life. Applications for Amphenol connectors with brush contacts include:

- Medical equipment
- IC chip testers
- Telecommunications
- Military and Commercial Aviation
- Military Ground Vehicles
- GPS systems

**BRUSH CONTACTS**

**CONVENTIONAL PIN AND SOCKET CRIMP CONTACTS**

**Brush vs. Conventional Contacts**

- Brush Contact Innovation
- Multiple contact interfaces - Strands of high tensile wire are bundled together to form brush-like contacts. By intermeshing two multi-strand wire bundles, an electrical connection is made.
- Provides redundant current paths, 14-70 (points of contact) per mated contact with a gas tight junction
- Very smooth (low friction) interface

Conventional Pin/Socket

- Machined surface finish on both parts
- Higher friction and wear
- Limited number of contact sites

Multiple strands of high tensile strength wires bundled together, provide superior electrical connection with low mating force.
Amphenol® B3 Bristle Brush Contact Advantages:

**Low Mating & Unmating Forces**
- Smooth, low friction interfaces
- 70% to 90% reduction in mating/unmating forces from conventional pin-socket contacts
- 1.5 oz. maximum forces per contact pair (one ounce typical)
- Easy mating/unmating makes high circuit counts practical (25 lbs. typical for 400 contacts)
- Mechanical mating aids not required
- No need for external board support structures for connectors up to 7 inches long. A center support is recommended for Mother Board Connectors over 7 inches.

**Proven Durability and Long Contact Life**
- 100,000 mating cycles even when hot swapped
- Documented intermittency free performance – no 10 nano second discontinuities during 50m cycles of 0.010 displacement
- Overall cost effectiveness (reduced life cycle costs)

**Multiple Points of Contact Provide Superior Electrical Capability**
- 14-70 points of contact per mated contact
- Stable, low resistance – 20 milliohms max.
- Redundant current paths results in lower total resistance
- Proven electrical and gas tight contact sites

Amphenol offers configurations of LRM connectors that combine the brush contact in some inserts along with other types of contacts in other inserts.