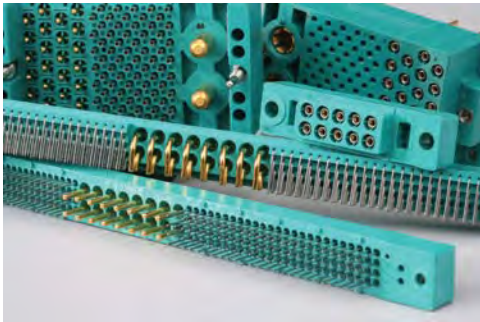


## A SUPERIOR CHOICE FOR BOARD LEVEL INTERCONNECTS



Low Mating Force Connectors with Bristle Brush contact technology.

Many styles are available, including styles that have arrangements of brush, fiber optic, coax and other contact types.

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.

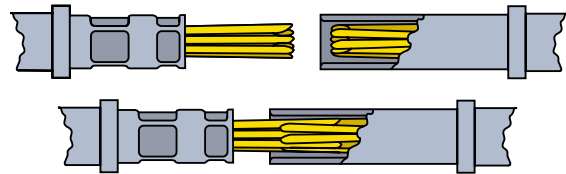
The Bristle Brush contact is used in military avionics packages and meets the requirements of MIL-DTL-55302. It provides high density in tight spacing, low mating/inmating forces, proven durability and long contact life. Applications for Amphenol connectors with brush contacts include:

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

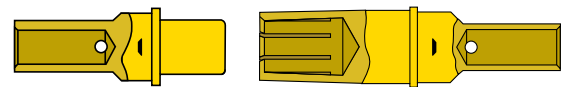


Multiple strands of high tensile strength wires bundled together, provide superior electrical connection with low mating force.

### 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

Introduction/  
Pkg. Solutions/  
Brush Contact

LRM (Line Replaceable Modules)  
Staggered/  
GEN-X

Hybrid - Fiber Optics/  
Hi Speed/RF/Power

Options/  
Accessories

Ruggedized  
VME 64x/  
VITA 60, 66

High Density  
HDB3

HSB3  
Hi Speed

Standard  
Brush

Low Mating Force MIL-DTL-55302  
Hybrid - Signal/Power/  
Coax/Fiber Optics

Docking Conn./  
Accessories/Install.

Rack & Panel  
Brush  
Ruggedized

LMD/LMS  
Rectangular  
Interconnects

Other  
Rectangular  
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Interconnects

Other  
Rectangular  
Interconnects

### Amphenol® B3 Bristle Brush Contact Advantages:

#### Low Mating & Unmating Forces

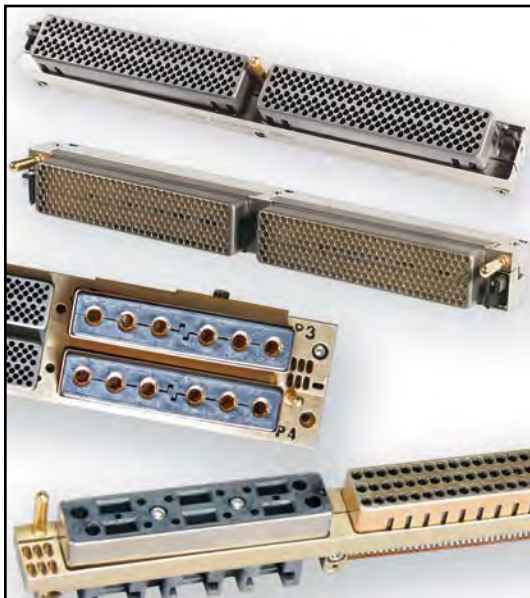
- Smooth, low friction interfaces
- 70% to 90% reduction in mating/unmating forces from conventional pin-socket contacts
- 1.5 oz. maximum forces per contact pair (one ounce typical)
- Easy mating/unmating makes high circuit counts practical (25 lbs. typical for 400 contacts)
- Mechanical mating aids 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.



Amphenol rectangular products group, including low mating force PCB connectors, LRM connectors and the OBIS Backplane with brush contacts and MT ferrule fiber optics.



High technology production centers at the Amphenol home facility and its satellite facilities create volume runs that are cost effective and meet on-time delivery demands.