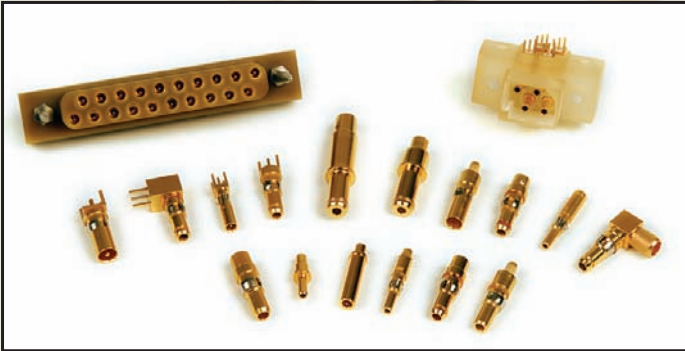




Phoenix PkZ[®] Blindmate Contacts

-High performance contacts for blindmate applications

Product Description



Phoenix's patented PkZ series of constant impedance contacts are designed for a wide range of connector housings including: ARINC, Bendix LRM, DIN, D-Subminiature, HDI, Mil-C-38999, and custom housings. The PkZ solves the issues of maintaining constant ratios through a unique, straight-forward approach to the internal construction. U.S. patent number 4,917,630. Japanese patent number 1769278.

Features

- Robust designs for mass mating.
- Stable RF performance over Z-Axis blindmate of up to 0.090"/2.29 mm.
- Wide frequency range 800 MHz - 32 GHz.
- Scalable interface for high density. Standard fit to #8 and #12 cavities.
- High power designs to > 250W RF power.

Applications

- Telecommunications.
- Backplane.
- Airborne platforms.
- Ship and ground radar.
- Soldier connector systems.
- Medical.
- Aircraft GPS and transponders.

Connector Types

PCB: Straight, right angle plugs and receptacles for through-hole and SMT mount.

Cable: Crimp and solder, straight and right angle.

PkZ: Other series adapters.

Custom designs upon request.

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The Phoenix Company of Chicago and its affiliates have manufacturing facilities in the United States, Mexico, and China.



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Materials

Bodies: Plug Bodies- Brass Per ASTM-B-16.

Receptacle Bodies- Brass Per ASTM-B-16.

Plating: Gold Per Mil-G-45204, Copper Per Mil-C-14550, Nickel Per QQ-N-290.

Insulators- Virgin Teflon (PTFE) Per ASTM-D-1710 And ASTM-D-1457.

Retaining Ring- Beryllium Copper Per ASTM-B-196.

Male Contacts- Beryllium Copper Per ASTM-B-197.

Female Contacts- Beryllium Copper Per ASTM-B-197.

Electrical For 26 Series*

Frequency Range: DC To 32 GHz.

Voltage Rating Straight: 1,000 VRMS.

Voltage Rating Angled: 800 VRMS.

Current Rating: 5 Amps.

Insulation Resistance: 2,000 Megohms Min.

Insertion Loss: $.06 \sqrt{f(\text{GHz})}$ dB.

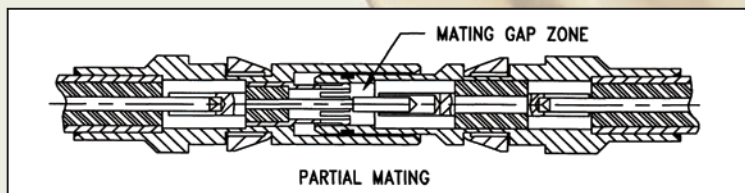
Contact Resistance: Center Contact 5 Milliohms.

Contact Resistance: Outer Contact 3 Milliohms.

* For electrical specifications of 2.8, 27, 56, 68, and 78 series, please reference applicable Interface Design Standard.

PkZ[®] Blindmate Design*

In a partial mate condition, a mating gap zone occurs in the interface of the two connectors. As the gap varies, air fills the mating gap zone. The dielectric constant is unchanged, due to the use of air as the original dielectric. A different diameter of center conductor is exposed, but the ratio of conductors is maintained, with a corresponding change to the inside diameter of the outer conductor.



This unique control and maintenance of dielectric constant and ratio of conductors in a partial mate condition, provides a flexible blindmate solution, open to many different sizes, configurations, and applications.

* For varied mating condition drawings, please visit: www.phoenixofchicago.com

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