



Medical Interconnect Solutions

For MRI Machines and High Tesla Imaging Coils



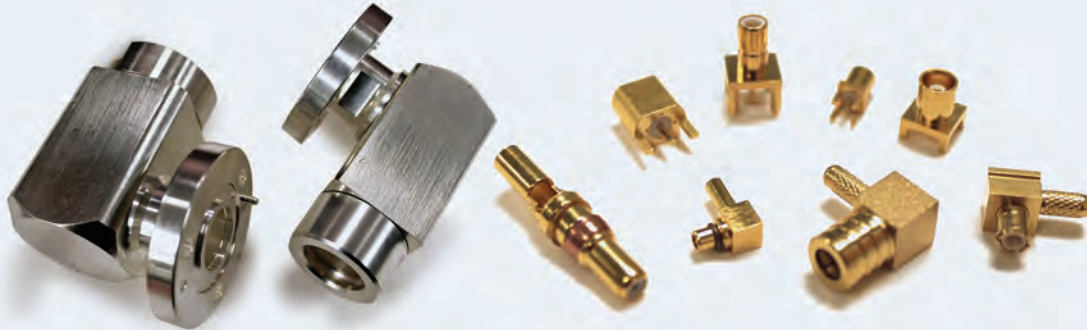
(630) 595-2300 • (800) 323-9562 • www.phoenixofchicago.com



To meet the demands of an evolving medical diagnostics market, The Phoenix Company of Chicago offers a series of non-magnetic connectors and cable assemblies for MRI applications. MRI systems have very specific and sensitive requirements to ensure connectors and cables do not interfere with image quality. Phoenix's non-magnetic products meet exacting requirements of expanding Tesla applications, allowing safe placement in or near the imaging area of diagnostic equipment.

Non-Magnetic RF Coaxial Contacts and Connectors

Designed to protect against image and magnetic field distortion in MRI equipment, Phoenix's non-magnetic standard line of RF Coaxial Contacts and Connectors provide the necessary immunity to ensure patients' scans are not compromised by outside magnetic distortions. Our connectors are manufactured under strict controls, dedicated tooling, and in special manufacturing/assembly environments ensuring ferromagnetic materials are not present during the manufacturing process.

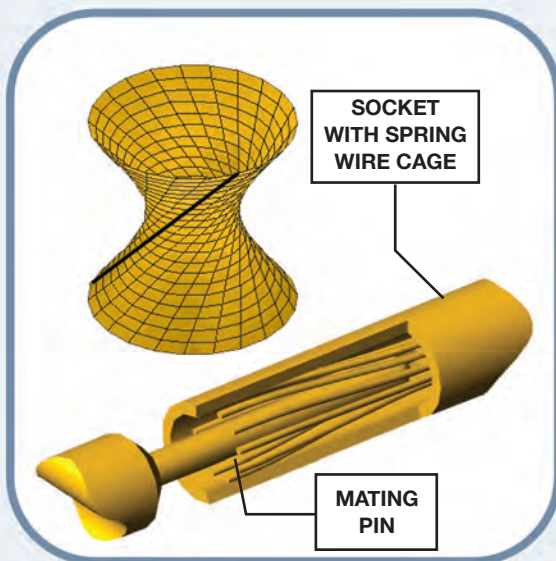


Name	Series	Non-Magnetic	RoHS	Coupling	Frequency	Current Rating	Cable Groups (Custom Cables Available)	Axial Mating Tolerance	Housing
SMA (Brass)	22	Yes	Yes	Threaded	18 GHz	N/A	RG 188, 316, 174, 141, 142	N/A	N/A
SMB	09	Yes	Yes	Snap-On	4 GHz	N/A	RG 188, 316, 174	N/A	N/A
SMC	10	Yes	Yes	Threaded	10 GHz	N/A	RG 188, 316, 174	N/A	N/A
MCX	13	Yes	Yes	Snap-On	6 GHz	N/A	RG 178, 196, 404, 188, 316	N/A	N/A
MMCX	33	Yes	Yes	Snap-On	6 GHz	N/A	RG 178, 196, 404, 188, 316	N/A	N/A
SMP	32	Yes	Yes	Snap-On	26 GHz	N/A	RG 178, 196, 188, 316	N/A	N/A
SMPM	132	Yes	Yes	Snap-On	26 GHz	N/A	RG 178, 196, 188, 316	N/A	N/A
High Power Connectors (SMT Power)	PS	Yes	Yes	Snap-On	N/A	10-40 Amps	#20 - #8 Wire	N/A	N/A
EIA	599	Yes	Yes	Clamp	1 GHz	N/A	LMRLW900FR PVC, LMRLW1200F RPVC	N/A	N/A
33 Ohm Contacts	15	Yes	Yes	Slide-On	1 GHz	N/A	RG 188, 316, 174	Non-Constant Impedance	D-Subminiature, Custom
50 Ohm Contacts	24	Yes	Yes	Slide-On	2 GHz	N/A	RG 188, 316, 174	Non-Constant Impedance	D-Subminiature, Custom
75 Ohm Contacts	16	Yes	Yes	Slide-On	2 GHz	N/A	RG 179	Non-Constant Impedance	D-Subminiature, Custom
50 Ohm PkZ Blindmate Contacts, Size-8	26	Yes	Yes	Slide-On	26 GHz	N/A	RG 188, 316, 174	.090", Constant Impedance	D-Subminiature, Custom
50 Ohm PkZ Blindmate Contacts, Size-12	56	Yes	Yes	Slide-On	40 GHz	N/A	RG 188, 316, 174	.070", Constant Impedance	MIL-DTL-38999, Custom
High Power Contacts, Size-8	15	Yes	Yes	Slide-On	N/A	10-40 Amps	#16 - #8 Wire	N/A	D-Subminiature, Custom
High Power Contacts, Size-12	56	Yes	Yes	Slide-On	N/A	20 Amps	#16 - #12 Wire	N/A	MIL-DTL-38999, Custom

Non-Magnetic High Mating Life Coaxial Contacts

The Phoenix Company of Chicago has expanded its product capabilities to include custom non-magnetic hyperboloid coaxial contacts. These high mating life contacts can be designed for medical applications such as patient monitoring systems with frequent connector mating and unmating.

- Available in 50 Ohm Blindmate Contacts (Straight Plug and Receptacle)
- High Mating Life
- Low Insertion and Extraction Forces
- High Current Capability
- High Quality Machined Contacts
- Custom Design Capabilities
- RoHS Compliant



* Custom housings pictured. Please contact factory for your specific requirements.

Non-Magnetic D-Subminiature Combination Connectors

The Phoenix Company of Chicago offers a comprehensive line of non-magnetic D-Subminiature Combination Connectors that incorporate coax, high power, high voltage, and signal contacts into one, space-saving housing. In addition, custom designs can be engineered for your specific medical application to include filters, ground straps, special hardware, plating, or selectively loaded contact configurations.

- High Quality Machined Contacts
- Custom Design Capabilities
- Magnetic Measurements at ≤ 1.00010 ur Relative Permeability
- Contact (Pin): Brass Alloy per ASTM-B-140 or QQ-B-626
- Contact (Socket): Phosphor Bronze per QQ-B-750
- Insert: Thermoplastic Type GPT-30F per MIL-M-24519
- Shells: Brass Alloy 260
- Hardware: Consult Factory
- Current Rating: 7.5 Amps (Soldercup), 7.5 Amps (P.C. Tail $\phi.040$ "), 5.0 Amps (P.C. Tail $\phi.030$ "), 2.5 Amps (P.C. Tail $\phi.024$ ")
- Insulation Resistance: 1 Megohm Minimum Dielectric Strength: 500 VRMS Minimum (Sea Level); 200 VRMS Minimum (70,000 Feet)



Medical Cable Assemblies and Harnesses

Medical systems require high performing products delivered through a responsive and cost-effective supply base. The Phoenix Company of Chicago helps its customers achieve these goals through expertise in connector design and assembly, matched by efficient cable assembly manufacturing practices. Whether our customers require a single molded cable design or a complex and proprietary chassis assembly, Phoenix's design and application specialists assist customers with connector and cable selections to optimize performance and cost. Our product capabilities extend to: **Overmolded Cable Assemblies, Wire Harnesses, and Flexible, Semi-Rigid, Comformable Coaxial Cable Assemblies.**

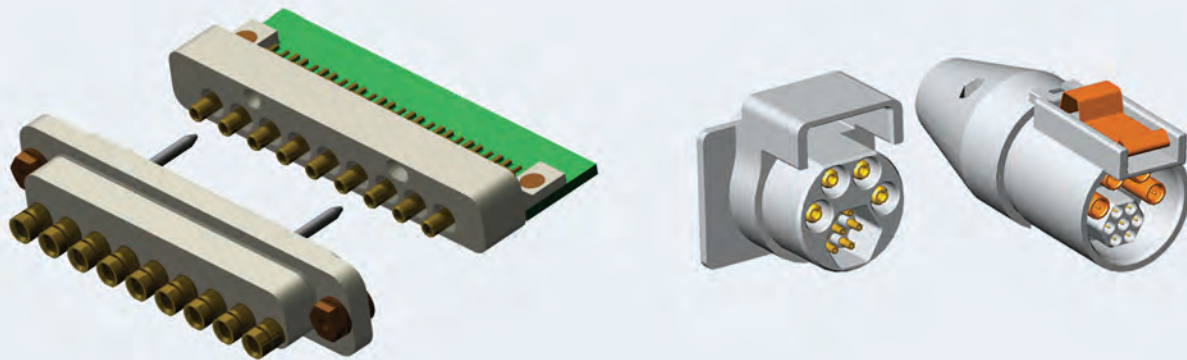


- Design and Application Services
- NPI Development
- Custom Design Capabilities
- Global Sourcing
- J-STD-001D Standards
- IPC/WHMA-620-A Standards



Custom Engineered/Application Specific Designs

Providing advanced technologies that exceed industry standards, our team of electrical, mechanical, and manufacturing engineers provide high quality interconnect solutions over a broad range of applications. Focused on emerging market advances, Phoenix's innovative engineering resources have developed many custom connectors and cable assemblies specifically for medical applications.



Worldwide Locations

With 5 global locations to serve its customers, The Phoenix Company of Chicago is positioned for growth and worldwide customer service. Phoenix began manufacturing quality RF connectors and cable assemblies in 1969. Since its inception, the company has added additional facilities to meet an increasingly global economy; most recently, facilities in Guaymas, Mexico and Shanghai, China. Under the guidance of their parent company, the Guaymas and Shanghai facilities adhere to a strict commitment of continuous improvement, dedication to customers, and determination to offer superior products; consistent in quality and competitive pricing.



Wood Dale, IL



Wood Dale, IL



Naugatuck, CT



Guaymas, Mexico



Shanghai, China