

# ClearImage™ Series

*Non-magnetic interconnect solutions for imaging applications*



*Hypertac® High  
Reliability Contacts*

*Gold-Plated Sockets  
Meet Non-Magnetic  
Requirements*

*Contact Kits Available  
in 6 Different Ranges*

*Cable Assemblies  
Available in 4 Different  
Configurations*

*Customized Kits and  
Cables*

*Prototype Bezel and  
Handle Assemblies  
Available*

## Proven High Reliability

Hypertronics ClearImage product line features non-magnetic contacts and cable assemblies designed specifically for interconnections in imaging systems, beds, coils and other associated accessories. These contacts and cables feature a non-magnetic version of the highly reliable Hypertac® hyperboloid contact technology.

As MRI systems with higher magnet strengths are developed, the need for non-magnetic components becomes crucial in preventing image distortion. Components used in imaging equipment must be free of any material that could potentially distort magnetic flux such as iron, nickel and cobalt. Any distortion can lead to unreadable images which could put the patient's health at risk.

Hypertronics ClearImage non-magnetic contacts include offerings for power, signal and coax – each meeting or exceeding the magnetic permeability requirements for MRI usage. ClearImage contacts feature a self-cleaning wiping action, high cycle life, low mating force and are impervious to contact fretting caused by the vibration of imaging equipment.

Hypertronics offers ClearImage non-magnetic contacts in various combinations of kits to fully accommodate development projects and production orders. ClearImage cable assemblies come preloaded with non-magnetic contacts in four different channel designs. Many ClearImage kits and cables are available with quick-turn delivery. Tools and accessories are also available.

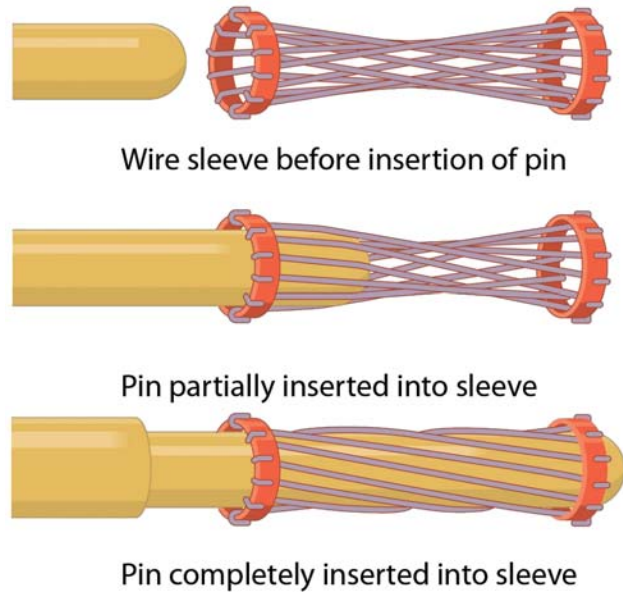
# ClearImage™ Series

## Features

- Hypertac High Reliability Contacts
- Magnet permeability to  $\pm 30 \times 10^{-5} \mu_r$
- High cycle life
- Self-cleaning contacts
- Low mating forces
- Immunity to contact fretting caused by vibration
- One-stop shopping for R&D and production cable assemblies



## Hypertac® Contact System



ClearImage Contacts - General Specifications	
Magnetic Permeability	$\pm 30 \times 10^{-5} \mu_r$ Max. Differential
Current Rating	4 to 50 Amps per contact
Contact Resistance	Up to 8 milliohms
Extraction Force Pin and Socket Coax	0.5 to 32.0 oz. 3.0 to 160.0 oz.
Impedance (Coax Only)	50 ohms
Contact Life Cycles	Up to 25,000 Cycles
Temperature Rating	-55° C to 125° C
Contact Material (Coax, Pins and Sockets)	Non-magnetic brass, beryllium copper, phosphor bronze
Plating	Gold over copper flash over base metal

\* Indicates that product is available with quick-turn delivery.

## Standard Product Offering

### Cable Assemblies

- CLR-RC0001: 4 Channel Cable Assembly - 4 Channel 12 DC
- CLR-RC0002\*: 8 Channel Cable Assembly - 8 Channel 32 DC
- CLR-RC0003\*: 16 Channel Cable Assembly - 16 Channel 17 DC
- CLR-RC0004: 32 Channel Cable Assembly - 32 Channel 34 DC

### Contact Kits

- CLR-CKIT0001\*: Coax and DC Kit - (32) 3.15mm coax, (60) 0.6mm pins and sockets
- CLR-CKIT0002\*: Coax and DC Kit - (64) 3.15mm coax, (120) 0.6mm pins and sockets
- CLR-CKIT0003\*: Power DC and Coax Kit - (32) 3.5mm pins and sockets, (32) 3.15mm coax
- CLR-CKIT0004\*: Power DC and Coax Kit - (32) 3.5mm pins and sockets, (32) 3.15mm coax, (32) 0.6mm pins and sockets
- CLR-CKIT0005: Power Coax and DC Kit - (6) 8.6mm power coax, (32) 3.15mm coax, (60) 0.6mm pins and sockets
- CLR-CKIT0006: Power Coax and DC Kit - (12) 8.6mm power coax, (64) 3.15mm coax, (120) 0.6mm pins and sockets

## Accessories

- CLR-PLUGKIT0001\*: Plug Handle and insulator kit for cable assemblies
- CLR-RECKIT0001\*: Receptacle housing and insulator for cable assemblies
- CLR-SR0001: Slide/glue on 4 channel strain relief for 4 channel cable assembly
- CLR-SR0002\*: Slide/glue on 8 channel strain relief for 8 channel cable assembly
- CLR-SR0003\*: Slide/glue on 16 channel strain relief for 16 channel cable assembly
- CLR-SR0004: Slide/glue on 32 channel strain relief for 32 channel cable assembly



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