

*When failure is not an option.*

## Product Review

# HyperRel™ Series

*Ruggedized Connectors Intermateable with MIL-C-38999 Series III*



*Ruggedized Socket Interconnects*

*High Shock and Vibration Resistance*

*Metal and Composite Shell Styles*

*Hypertac® Style 39029 Contacts*

*Intermateable with Industry Standard MIL-C-38999 Series III Connectors*

*Cable to Cable and Panel Mount Styles*

Hypertronics offers ruggedized connectors that are intermateable with MIL-C-38999 Series III connectors. HyperRel is built upon the legendary Hypertac contact technology which outperforms other interconnect options in terms of performance reliability, number of mating cycles, contact forces, contact resistance and value.

### HyperRel Series Metal (HRM) Connector

The HRM series offers the maximum in vibration, shock and EMI resistance. A general duty threaded connector; the HRM series offers thicker wall sections and greater coupling surface with 100% metal-to-metal bottoming, a superior anti-coupling system and a proven dielectric contact retention.

The positive metal-to-metal coupling design, superior interfacial seals, and cadmium over nickel

plating provide excellent EMI, moisture and corrosion resistance. Elongated mounting holes permit the HRM connector to intermount with existing standard MS/38999 box or wall mount receptacles, giving it a design replacement advantage.

### HyperRel Series Composite (HRC) Connector

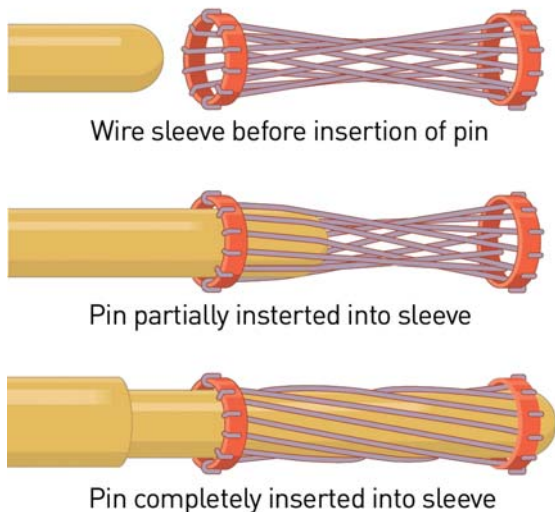
The HRC series eliminates the largest contributing factor in advanced systems malfunction: corrosion. Corrosion is the main cause of mechanical, electrical, and electromagnetic connector degradation. Electromotive force differentials between many dissimilar metals found in connectors and accessories produce galvanic action. The HRC eliminates these dissimilar metals resulting in an interconnection system that withstands over 2000 hours of salt spray.

# HyperRel Series

## Ruggedized Connectors Intermateable with MIL-C-38999 Series III

### Features & Benefits:

- Hypertac contacts with up to 100,000 mating cycles
- Triple start, self locking, threaded coupling
- Crimp style terminations
- Metal and composite shells
- 100% metal to metal bottoming
- Low mating forces per pin (1.5 oz)
- 50% reduction in resistance over MIL-C-39029 contacts
- Vibration/shock (proven @ 2 nano seconds)
- Fretting (base line x 100 min)
- Intermateable with industry standard MIL-C-38999 Series III connectors
- Size 12, 16, 20, 22D Hypertac contacts
- All standard inserts and arrangements for MIL-C-38999 Series III connectors (9, 11, 13, 15, 17, 19, 21, 23, 25 / A-J)
- Standard shells for receptacles and plugs (square flange, wall mount, jam-nut, and straight)
- Plating: Class W - O.D. CAD over nickel
- Environmental per MIL-C-38999 Series III specs
- EMI Shielding (Class W)



*Hypertronics connectors are built upon the legendary Hypertac contact technology. These contacts feature a hyperboloid-shaped basket of individual spring wires that provide up to 100,000 mating cycles, approximately half the resistance of conventional contact designs, immunity to shock and vibration, extremely low insertion/extraction forces, and 360-degree wiping action.*



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