



power and signal connectors for general-purpose rail and industrial applications Rugged reverse-bayonet



Environmental and mechanical protection of cables, conductors, and contacts is a critical requirement in rail and industrial applications especially when frequent mating and unmating is required, or when cables are routed through exposed intercar or undercar locations. To ensure rapid and accurate car linking and cabin reconfigurations, interconnects must be easy to couple and keyed to avoid mis-mating. Vibration, shock, and connector decoupling problems are also common in rail applications and require focused attention when selecting shell materials and mating technologies. As passenger and crew safety is paramount, interconnection systems must not compound flammability, smoke, or toxicity risks. Series ITS meets all of these requirements and more, and has demonstrated proven performance on virtually every rail industry sub-system.

- **Proven interconnect** solution built IAW MIL-DTL-5015 and qualified to VG95234
- Hundreds of power and signal crimp and solder contact arrangements
- Standard insert, flameresistant insert, rigid dielectric insert, and high-temperature ceramic stainless steel firewall

SERIES ITS (EXPLODED VIEW)



- Machined body and shell components
- Broad range of plating choices including innovative new Tin-Zinc formulas
- Silver- or gold-plated crimp and/or solder cup contacts
- Reverse-bayonet mating with stainless steel locking pins
- · Environmentally sealed

ITS Power Industry-Standard 5015-Type Reverse-Bayonet Connector Series



VG-qualified and Glenair Signature solutions

FR ITS FLAME-RESISTANT SERIES



FR ITS is the fire-resistant ITS connector series, designed with flame, smoke, and toxicity-compliant insulating materials, FRITS is broadly utilized for environmental and non-environmental rail applications. More than 230 insert arrangements are available, from 1 to 150 contacts. FRITS connectors are RoHS-compliant and IP67 environmentally sealed.

Available FRITS - STR backshells provide versatile locking of cables or wires into the connector, providing IP67 sealing and EMI/RFI termination.



FR-ITS STR backshell for EMI shielding and IP67 sealing

ITH RIGID-DIELECTRIC SERIES



The ITH connector series is based on the MIL-C-5015 standard but with improved reverse bayonet coupling. Rigid inserts and crimp contacts provide better electrical insulation and reduced assembly time. The 3-point, positive-locking reverse bayonet coupling mechanism provides easier mating in awkward positions, reliable resistance to vibration and shock, and prevents de-coupling. ITH connectors conform to the VG95234 standard, French (NFF 61030) electrical standards, as well as EEC compliance directives for electromagnetic compatibility. EMI shield termination accessories are available for both overall as well as individual wire shields.

- Design IAW MIL-C-5015 and VG95234
- Temperature range -40°C to +100°C (conductive plating) or -55°C to +125°C (non-conductive plating)
- RoHS compliant
- Low fire hazard inserts, UL94VO and NFF 16-102 compliant
- Halogen-free silicone rubber gaskets per NFF 16-102

ITK STAINLESS STEEL / CERAMIC INSERT FIREWALL SERIES

Standard plug and receptacle

The high-temperature tolerant ITK series is a rugged reverse-bayonet mating connector that utilizes stainless steel connector shells and special high-temperature ceramic inserts. Compliant to EN 45545 standards, ITK connectors are capable of operation at +700°C for 15 minutes without electrical discontinuity.



ITK "piccolo"
2-pin plug and receptacle

- Ultra high-temperature tolerant ceramic inserts
- · Stainless-steel construction
- EN 45545 compliant
- Operates at +700°C for 15 minutes, with no electrical discontinuity

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