



SERIES IRT • ITS 500 • ITS 901 • UJ

Rugged high current/high voltage power connectors for rail and industrial applications

Connection of power cables in rolling stock is a critical application. Beyond specific parameters like voltage, current, or watertight sealing, other application requirements must be considered: environment and operating conditions, robustness, handling, and other specifications.

The IRT connector series is one of the most popular connection systems used around the world, and is able to satisfy all of the common parameters from different railway authorities. Glenair is able to develop customized connectors for specific applications, certifying the products according to unique customer requirements.



Innovative tool-free locking and latching mechanisms

SERIES IRT RECTANGULAR MULTIPOLE HIGH VOLTAGE TRACTION MOTOR CONNECTORS



Plug Connector



Receptacle Connector

The Glenair IRT series is a rectangular power connector for harsh environmental conditions. Available with three, four and six contacts, typical for traction motor applications. Suitable for single cables AWG 4 – 373MCM (35 to 185 mmq). Working voltage up to 3000 Vcc.

Two mating systems offered:

- Screws, for light weight and reduced dimensions
- Lever system with secondary lock, easy to use in difficult positions.

The IRT Series is suitable for separated power cables, with or without shielding, ground body available with a copper plait.

Available with three different cable backend styles:

- Metallic gland
- Clamp with strain relief
- EMC shield and gland



Glenair high-power tractor connector with TurboFlex™ cable, locking/lever coupling, and flexible standoff

SERIES IRT • ITS • UJ

High Current/High Voltage Power Connectors

for rail and industrial applications



ITS 901 SERIES REVERSE BAYONET MULTI-POLE MEDIUM VOLTAGE JUMPER CONNECTORS



Plug Connector



Receptacle Connector

ITS 901 Series is the extension of the ITS Reverse Bayonet connector family, for power cables over AWG 1/0.

Suitable for harsh environmental conditions, 901 Series Connectors accept cable from AWG 4 to 262 MCM (35 - 120 mmq), for current up to 450 Amp.

Working voltage: 800 - 1000 Vac.

Available for single wires and multipole jacketed cables, with cable clamp or conduit.

Male contacts with Finger Test Protection, Load Side (Receptacle or Plug).

Long bayonet ramps, three polarization keys and rubber recovered coupling facilitate mating and unmating operations.

901 Series meet the most important rail requirements and specifications:

- Salt Spray Test Corrosion: 500 hours;
- 500 Mating Cycles;
- Shock and Vibrations for Under-Car and Car-To-Car Applications;
- IP67 Sealing (Coupled Connectors);
- Fire Resistant and RoHS Compliant Materials.

ITS 500 SERIES REVERSE BAYONET SINGLE-POLE HIGH VOLTAGE JUMPER CONNECTORS



Plug Connector



Receptacle Connector

ITS 500 Series derives from an important Military Specification for Power Connectors: VG96929.

Suitable for harsh environmental conditions, ITS 500 accepts cable gauges AWG 3/0 to 444MCM (95-240 mmq), for current up to 750 Amp.

Special insulator drawing allows high working voltage, up to 3000 Vcc.

Suitable for jacketed cables, with or without conduit protection.

Receptacle with finger protection (Load side).

ITS 500 meets the most important rail requirements and specifications:

- 500 Mating Cycles;
- Salt Spray Test Corrosion: 500 hours;
- Shock and Vibrations for Under-Car and Car-To-Car Applications;
- IP67 Sealing (Coupled Connectors);
- Fire Resistant and RoHS Compliant Materials.

UJ SERIES POWER JOINT CONNECTOR SYSTEM



Offers the possibility to connect medium and high power cables without the need for bulky junction boxes. The UJ Power Joint System offers the same environmental protection with substantial size and weight savings.



	UJ Series	Junction Box
Dimensions	Small	Regular / Big
Weight	Light	Heavy
Protective Varnish	No	Yes
Modularity	Yes	No
Environmental	Yes	Yes
Electrical Performance	Yes	Yes
Cost Reduction	Yes	No
Temperature Range	High	Standard