

- High / Medium / Low Voltage Train Lines
- High / Medium current AC and DC
- Traction Motors
- Car to Car Jumpers
- Power Distribution



IRT Series Power Connectors

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 customer 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 your unique requirements.

Application

To select the right IRT interconnection system, consider the following parameters:

Electrical Data:

- Working Voltage
- Working Current and Max Current applicable
- Frequency
- Insulation Resistance

Mechanical Data:

- Mating Cycles requested
- Area where the connection is located

Glenair Power Connectors Introduction



IRT
Connectors

Environmental Data:

- Working Temperature
- Shock and Vibration
- Water Ingress Protection
- Corrosion Resistance
- Applicable Specs

The Cable's choice is strictly related to the above data.
Square section, outer diameter of the conductor and the isolator are necessary to define contact characteristics and connector accessory specifications in order to guarantee watertightness and clamp strength.

The cable chosen defines:

- Type of contact (cable's section – power conductor)
- Type of connector (working voltage – number of contacts)
- Type of clamp (external diameter of the connector – setting in the application)



A

A schematic of the basic characteristics of the Power connectors can be a useful guide in the passage from the wires to the connector.

Connector Series	Contacts Number				Cable Section
	1	2	3	4	
UJ Connectors	X	X	X		10 - 240 mmq (AWG8 - 444MCM)
ITS 500 Connectors	X	X	X		95 - 240 mmq (AWG3/0 - 535MCM)
ITS 901 Connectors		X	X	X	35 - 120 mmq (AWG4 - 262MCM)
IRT Connectors			X	X	35 - 185 mmq (AWG4 - 373MCM)

Glenair is here to help you choose catalog parts for your application, or to design a specific solution to your unique power connector application.