



Electronic Components

# *Cannon & VEAM Connectors*

*For the Railway Industry*



*Engineered for life*



# History of Innovation and Leadership

ITT Electronic Components is a division of the multi-national ITT Corporation a \$7.5 billion dollar global enterprise. Offering the broadest selection of railway interconnect solutions, ITT is the one stop source for design, development, manufacturing, and testing.

ITT offers Cannon and VEAM product lines designed specifically for transit applications. These product lines come in a large style of shell sizes and contact arrangements to meet the most demanding applications, both electrical and optical. Inserts to meet low smoke/zero halogen and RoHS requirements are also available. ITT provides complete harnessing solutions and junction boxes.

As the industry leader in harsh environment interconnect applications, ITT's world class engineering teams will work directly with our customers to design and develop cost effective solutions for their applications. In many cases we may modify one of our standard designs to ensure a reliable solution where timing is critical. Yet, in those cases where a complete custom interconnect solution is required, ITT will work with our customer's Engineers to design an interconnect solution which will be cost effective yet highly reliable.



## **VEAM VBN**

Circular connectors with rigid insert according to NF F 61030 regulations. Field configurable, allows easy and quick harnessing. Suitable both for signal and power.

## **Applications**

- Control switchboard connections
- Panel connections
- Battery charging systems



## **VEAM CIR High Temperature Connector**

The new European standards series CEN/TS 45545 for fire rail safety regulations requires a connector able to withstand for 15 minutes when exposed to the ISO 834-1 heating curve (max Temperature 800°C). The VEAM CIR High Temp connector meets this standard.

## **Applications**

- Critical control signals
- Fire resistant applications



## **Cannon CA Bayonet**

VG/CA-Bayonet signal and power connectors provide superior performance in extreme environmental conditions. They offer exceptional sealing against the ingress of fluids and will withstand the effects of high vibration. In accordance to VG95234.

## **Applications**

- Control panel connections
- Intervehicle applications
- Communications equipment
- CCTV equipment



**VEAM CIR and FRCIR Standard**

Multipurpose bayonet circular connectors. 1 up to 159 solder or crimp contacts. Both for signal and power. In accordance to VG95234.

**Applications**

- Control switchboard connections
- Control panel connections



**VEAM FRMGCIR**

Multipurpose bayonet circular connectors, completely covered with fire-resistant rubber.

**Applications**

- Power connections
- Signal connections
- Intervehicle applications



**VEAM FRCIR-WCML Series**

Multipole connector with group shielding contact for several cables. IP67, waterproof.

**Applications**

- Intervehicle connections
- Power and signal connections



**VEAM FRCIR for databus and power**

FRCIR for databus and power applications.

**Applications**

- Intervehicle applications
- Databus applications



**VEAM FRCIR/VBN connector series with grounding system**

Grounding system to ground the connector shell.

**Applications**

- Air conditioning
- Lighting
- Converters

**Optical Products**



**Multi-channel Fiber Optic Connectors**

Typical applications in automation and control systems.

**Applications**

- Intervehicle applications
- CCTV equipment
- Entertainment



**VEAM PCB Optical Connections**

PCB version optical connection system according to DIN41612 STYLE E, 16 channels. Active contacts are removable for quick and easy repair.

**Applications**

- Power conversion control panel

## Rack and Panel



### ***Cannon Trident Multiway***

The Multiway range is an extremely reliable and robust series of rack and panel connectors. The design is based on the requirements of MIL-C-28748 and will accept any of the Trident signal or coax contacts. It is available in 6 arrangements ranging from 14 to 75 ways, together with a wide range of accessories and mounting hardware.

### ***Applications***

- Trackside signalling
- Test equipment



### ***VEAM Rack and Panel connector***

Push pull connector for power and signal applications. Typical applications in power conversion panels.

### ***Applications***

- Power conversion
- Power connections

## Junction Boxes



### ***Junction Box***

Junction box with CIR Connectors.

### ***Applications***

- Controls
- Tilting systems
- CCTV equipment



### ***Junction Boxes for Optical Connections***

### ***Applications***

- Controls
- Tilting systems
- CCTV equipment

## Signal Connectors



### ***VEAM FRCIR M12***

4 ethernet lines connector M12 type for harsh applications used in signal networks.

### ***Applications***

- Intervehicle connections
- Databus applications



### ***VEAM FRCIR for MVB lines***

FRCIR for MVB databus with shielding.

### ***Applications***

- Intervehicle connections
- Databus applications



### **VEAM FRCIR RJ45**

FRCIR with 2 RJ45 connector for ethernet applications.

### **Applications**

- Intervehicle connections
- Databus applications



### **VEAM D Sub WCML Series Backshell**

Backshell to connect the shield in D Sub series.

### **Applications**

- Internal signal lines
- Databus applications



### **Cannon Combo D Sub**

Combo D, D\*M connector series offers the advantages of an industry standard shield I/O interconnect, with the flexibility of a customized special, designed for any application.

### **Applications**

- Control systems
- Trackside signalling
- Communications equipment



### **Hermetic Connector**

High performance through-wall hermetic connector (vacuum: 6x10 x -3 bar Max. Ermeticity: <10 x-7 m bar l/sec. temperature range: -40°C +90° C)

### **Applications**

- GTO Control
- Power Conversion

## **Power Connectors**



### **VEAM FRCIR 290**

Circular bayonet connector for both power and data connections. IP67, waterproof.

### **Applications**

- Intervehicle power connections
- Motor supply



### **VEAM VPLABB Series**

Single pole power connector up to 660A for traction applications.

### **Applications**

- High current connections
- Power conversion



# ITT

With manufacturing facilities, sales representatives and distributors located worldwide, please visit our website at [www.ittcannon.com](http://www.ittcannon.com) for a complete listing and to find the office nearest you.

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