

【Japan, February 25, 2021】

---

## **TJ\*L Series, a connector for railways, has been installed in Tokaido Shinkansen Bullet Train N700S – Snap-in Lock Design Ethernet Connector that Requires No Screws–**

---

Hirose Electric is happy to announce that the Ethernet interface connector for railways, TJ\*L Series, has been installed by Central Japan Railway Company for use on the N700S Tokaido Sanyo Shinkansen bullet train. The bullet train begins commercial operation on July 1, 2020.

### **● Why this Ethernet Connectors with User Friendly Snap-in Lock Design was Chosen**

Conventional connectors used in railways are mainly locked by screw tightening. However these connectors have poor operability, require screw tightening management and do not meet the demand for increased information transmission volume as railways evolve.

In order to solve such problems, Hirose Electric developed the market leading TJ\*L Series (\* is a 2 digit number to identify the mounting method) of interface connectors capable of transmitting 100Mbps Ethernet signals with a snap-in lock design for next generation railways.

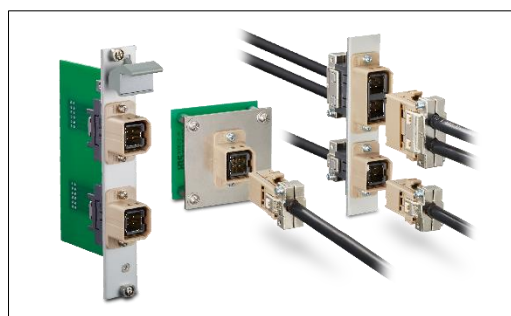
This connector has a snap-in lock design for easy operation, and has high quality and performance that passes the severe vibration and shock tests required for railroad vehicles. These features has been highly evaluated and are the basis in which TJ\*L Series was selected for the N700S. In addition to Central Japan Railway Company, this product is also used by other private railway companies.

### **● Features**

- Supports on-site information wiring system, JIS X 5150 (ISO/IEC 11801) Class D (Category 5), and can be used for 100Mbps Ethernet connection.
- The connector is highly resistant to shock and vibration, and has passed shock and vibration tests for railway vehicles (JIS E 4031 Group 1 Grade B).
- Compared to conventional connectors that are fastened with screws, the snap-in lock design provides easy locking with clear tactile click upon connector insertion, eliminating screw tightening management and enabling easy installation.
- The incorrection insertion prevention keying prevents improper insertion of plugs when multiple are used side by side.
- Applicable cable size is AWG 18 and 22 and we have already evaluated several cables in addition to Hitachi Metals' Rail NETSTAR® (RailNS).



New Bullet Train N700S



TJ\*L Series

### **● Other Connectors Ideal for Railways**

Hirose offers the following Ethernet connectors that can be used for railways in addition to TJ\*L Series.

- IEC Standard, The Next Generation Ethernet Connector ix Industrial™
- IP67/68 Waterproof, Circular Interface Connector LF Series

## ● Corporate Profile and Related Information

### ■ Company Overview

Hirose Electric Co., Ltd.

[https://www.hirose.com/en/about/corporate\\_data/](https://www.hirose.com/en/about/corporate_data/)

Hitachi Metals, Ltd.

<https://www.hitachi-metals.co.jp/e/>

### ■ Hirose Electric Co., Ltd. TJ\*L Series

Product Page

[https://www.hirose.com/product/series/TJ\\*L](https://www.hirose.com/product/series/TJ*L)

Product Image

[https://prd-4s-public.s3.ap-northeast-1.amazonaws.com/sys-master/public/ha3/hd4/9006279557150/TJL\\_image\\_dl.png](https://prd-4s-public.s3.ap-northeast-1.amazonaws.com/sys-master/public/ha3/hd4/9006279557150/TJL_image_dl.png)

### ■ Hitachi Metals, Ltd. Rail NETSTAR® (RailNS)

Product Page (Japanese)

[https://www.hitachi-metals.co.jp/products/infr/ra/rail\\_ns.html](https://www.hitachi-metals.co.jp/products/infr/ra/rail_ns.html)