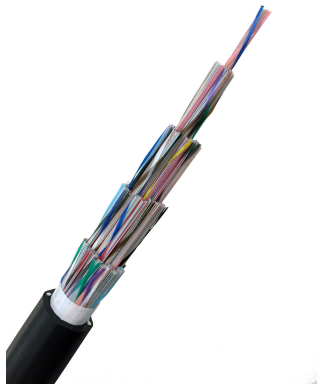


## Furukawa Electric Achieves World's First Installation of World's Highest Density 6912 Fiber Optic Cable into 1.25 inch Diameter Conduit

*Enables Expansion in Data Centers using Existing Duct*

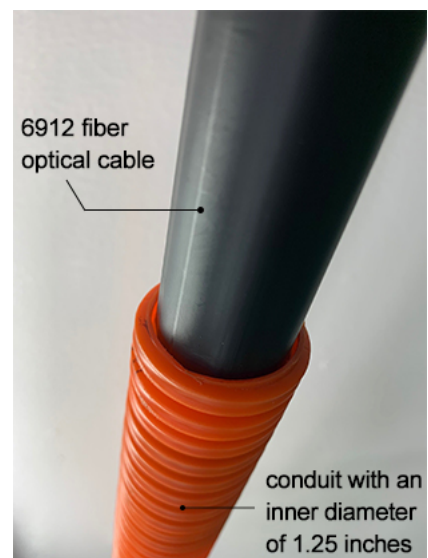
**Tokyo, Japan, August 26, 2020** - The continuing rapid increase in bandwidth demand has created an urgent need for data centers to increase the capacity of optical fiber networks. Within and between existing data center buildings, it has become necessary to maximize the fiber count in existing conduit to avoid expensive and time-consuming creation of new installations.



Furukawa Electric Co., Ltd. (FEC) conducted an experiment in its Mie, Japan facility to demonstrate the installation of a 6912-fiber optic cable with an outer diameter of 1.14 inches (29 mm) in a 696 foot (200m) long conduit with three 90 degree curves and an inner diameter of 32mm. The conduit used was a standard product installed in conventional data center campuses. Engineers confirmed a maximum pulling tension of 84 pounds (372N), well below the maximum pulling tension of 600 pounds (2700N) specified for the cable.

The cable was installed in a 1.25 inch (32mm) conduit with a maximum length of 1,411 feet (430m) in a North American data center campus in 2020 to support live traffic. The high fill ratio in this application is not typically recommended for Outside Plant (OSP) cable installation. However, in this application, the end-user was willing to accept the installation risk in return for maximum fiber density. The installation demonstrated that FEC's 6912 fiber optic cable can be successfully installed into 1.25 inch (32mm) conduit using appropriate tools, work procedures, and optimum installation conditions.

"The FEC 6912 fiber optic cable at least doubled the fiber count possible in a 1.25 inch conduit, compared to competing available designs," said Ichiro Kobayashi, General Manager of optical fiber & cable engineering department, FEC.



FEC will continue to provide and improve its ultra-high fiber count cabling, featuring small diameter and high density, along with the tools and training necessary to successfully build high capacity networks.

### **About Furukawa Electric Company, Ltd.**

Furukawa Electric Co., Ltd. ([www.furukawa.co.jp/english](http://www.furukawa.co.jp/english)) is an \$8.4 billion global leader in the design, manufacture and supply of fiber optic products, network products, electronics components, power cables, nonferrous metals, and other advanced technology products. Headquartered in Tokyo, Japan, Furukawa operates production facilities on five continents around the globe, including OFS in the USA, Europe, Morocco, and China.

### **Furukawa Electric Group's efforts towards the SDGs**

Based on the corporate philosophy of "Drawing on more than a century of expertise in the development and fabrication of advanced materials to contribute to the realization of a sustainable society through continuous technological innovation," the Furukawa Electric Group is conducting business activities centered on four core technological capabilities (metals, polymers, photonics and high frequency). Moreover, keeping in mind the "Sustainable Development Goals (SDGs)" adopted by the UN, we formulated the "Furukawa Electric Group Vision 2030," which clarified the business areas of the Furukawa Electric Group, and are advancing efforts aimed at "creating solutions for the new generation of global infrastructure combining information, energy, and mobility to build a sustainable world and make people's life safe, peaceful, and rewarding.

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