

Sales Launch of "Single Jacket Single Armor WTC™"

Fujikura Ltd. (President and CEO: Naoki Okada) is pleased to announce the completion of development and sales launch of a new fiber optic cable, "Single Jacket Single Armor WTC™" (hereinafter referred to as SJSA-WTC™).

The new product SJSA-WTC™ is our unique Wrapping Tube Cable™ (WTC™) structure with optical fiber ribbon SWR™ that allows for mass fusion splicing connections. In this release, we have consolidated the double jacket (sheath) structure with a corrugated steel tape armor into a single jacket structure, resulting in approximately 31% reduction in cross-sectional area and approximately 25% weight reduction compared to our conventional products.

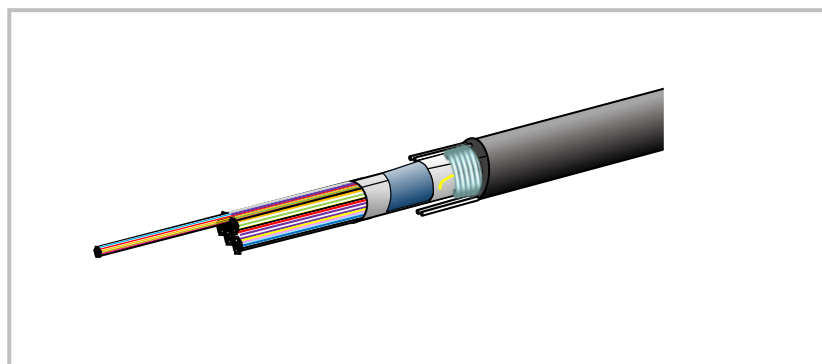


Figure 1. New Product "SJSA-WTC™"

Key Features:

- ✓ Adoption of a single-layer jacket structure enables approximately 31% reduction in cross-sectional area compared to conventional WTC™.
- ✓ Elimination of the inner-layer jacket reduces cable weight by approximately 25%, contributing to environmental sustainability.
- ✓ Optimized design achieves required tensile and bending strength as conventional WTC™.

SJSA-WTC™ adopts a single-layer jacket structure.

By revising the conventional two-layer jacket structure (double jacket single armor), the newly developed SJSA-WTC™ has a single jacket structure (see Figure 2) in which fibers are covered with a tube, instead of WTC™, then the tension members are in the outer jacket. This structure further reduces diameter and weight.

Furthermore, we have achieved high density without compromising the required mechanical strength (tensile strength, bending strength, and so on) by design optimization.

As a result, SJSA-WTC™ can be used in environments that require mechanical strength, such as along railway tracks, direct burial in soil, and rural or underground areas where there is a risk of wildlife damage by rodents. Additionally, the accessibility to optical fibers from cables by removing jacket is greatly improved compared to existing products.

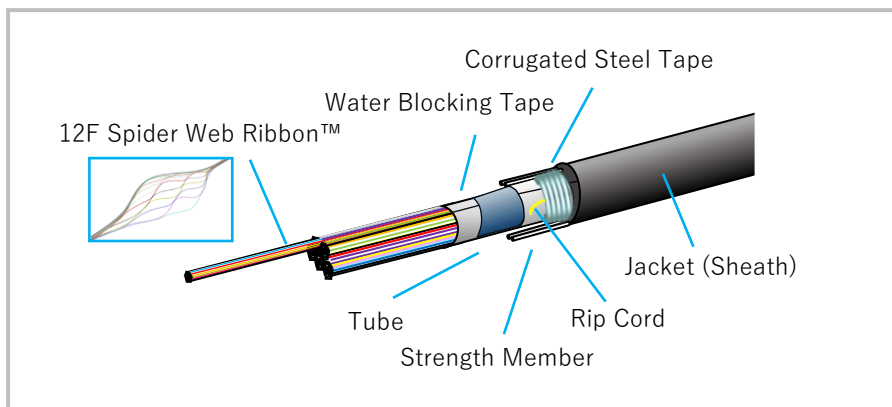


Figure 2. Structure of SJSA-WTC™

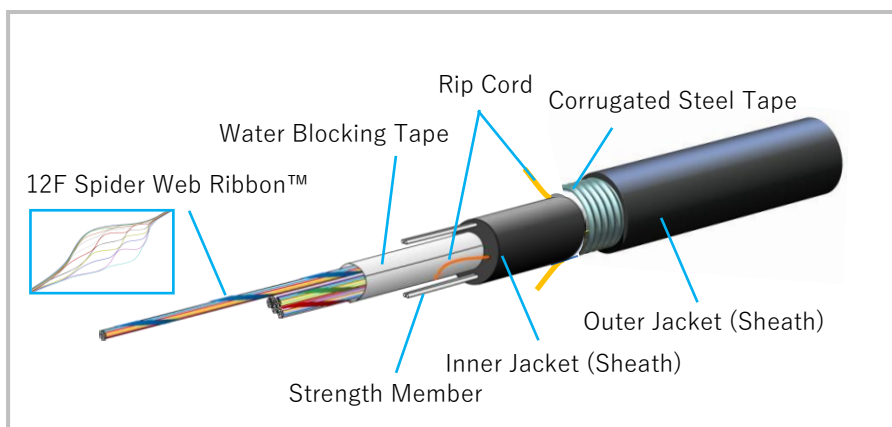


Figure 3. Structure of Conventional Double Jacket Structure WTC™

Comparison of Conventional WTC™ and SJSA-WTC™ Structures

	Conventional Double Jacket Structure WTC™			SJSA-WTC™		
Fiber Count	144	288	432	144	288	432
Diameter (mm)	16.5	17.5	19.0	14.0	14.5	16.0
Weight (kg/km)	230	255	300	175	190	215

As the data traffic continues to increase, urban areas are reaching saturation in terms of available space for cable installation.

SJSA-WTC™ enables to build telecommunication networks more efficiently in underground areas of urban regions and utilize the railway networks connecting cities and achieve the expansion and improvement of communication services in rural areas.

We will continue to develop high-quality and innovative products using advanced technologies to contribute to the construction of high-density communication networks in various environments while reducing environmental impact.

*Spider Web Ribbon™ (SWR™), Wrapping Tube Cable™ (WTC™), Single Jacket Single Armor WTC™ and SJSA-WTC™ are trademarks of our company.

*1 Spider Web Ribbon™ (SWR™)

An optical fiber ribbon developed using our proprietary technology. It has intermittent adhesion of single fibers, providing flexibility. It enables high-density implementation within the cable, contributing to the slimming and densification of optical fiber cables.

*2 Wrapping Tube Cable™ (WTC™)

The name of our proprietary technology for a slim and high-density optical fiber cable that incorporates SWR™. It is a simply structured fiber optic cable that covers the optical fiber ribbons with a wrapping tape. It has a slim and high-density structure compared to conventional fiber optic cables, such as slotted structures commonly used domestically in Japan and loose tube structures commonly used in many regions, allowing the use of existing conduits and significant reduction in installation time.

Website:

<https://www.optic-product.fujikura.com/optical-fiber-cables/en/products/single-jacket-single-armor-wtcsjsa-wtc/>

