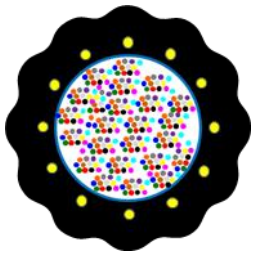
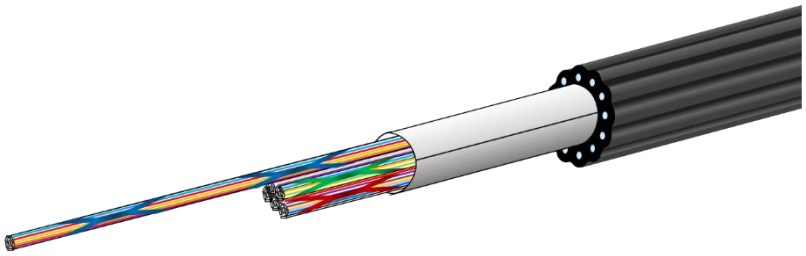
Wrapping Tube Cable (WTC™) with 12 Fiber Spider Web Ribbon (SWR™)
Air Blown WTC™ 48 – 864F





The Wrapping Tube Cable (WTC™), with Spider Web Ribbon (SWR™), is an ultra-high density outside plant cable designed specifically for fiber-to-the-home (FTTH), access markets, and hyperscale data center. Ultra-high density and a new ribbon technology called Spider Web Ribbon, WTC provides the smallest cable diameter and lowest weight, high-fiber count ribbon cable in the industry. WTC™ with SWR™ cables are available in fiber counts from 48 to 864.
SWR™ is a bonded fiber ribbon design allowing for either a highly efficient ribbon splicing or an individual fiber breakout splicing process. With the ability to roll and conform, the SWR™ provides ultra high density fiber packaging in the WTC™.
Air Blown WTC™ is designed for easy installation using air blowing installation method. These cables have a lightweight and flexible construction, allowing them to be blown through pre-installed microducts or tubes. The compressed air creates a pathway for the cable, eliminating the need for traditional cable pulling methods. This technology enables quick and efficient deployment of fiber optic networks, saving time and reducing installation costs.

Features

- Air blown installation
- UV Resistant
- Full dry (gel-free) construction
- Fully dielectric
- Splicing compatibility with 250µm Ribbon
- Mid Span Access

Application

- Microduct

Physical & Mechanical Characteristics

			48F	72F	96F	144F	192F	288F	432F	576F	864F
Cable diameter (in approx.)		mm (in.)	6.1 (0.240)			6.6 (0.260)	7.3 (0.288)	8.1 (0.319)	9.7 (0.382)	10.7 (0.422)	12.3 (0.485)
Cable weight (in approx.)		kg/km (lbs/1000ft)	25 (17)			30 (21)	36 (25)	45 (31)	65 (44)	80 (54)	105 (71)
Fiber counts in bundled units			-				48F	72F			
Number of bundled units			-				4		6	8	12
Tensile performance(*1)	Short term	N	245			294	353	441	637	784	1030
Bending radius(*1)	Cyclic flexing	mm	122			132	146	162	194	214	246
	Cable bend	mm	122			132	146	162	194	214	246
Compressive Strength(*1)		N/ 100mm	500								
Impact resistance(*1)		N・m	1								

*1. Reference standard : IEC 60794-1-21

Contact us

1-5-1, Kiba, Koto-ku, Tokyo 135-8512, Japan

Optical Fiber Characteristics

Fiber Count	Fiber Diameter	Fiber Pitch	Fiber Type	MFD	Maximum Attenuation (Cabled) (dB/km)		
					1310 nm	1383 nm (*2, 3)	1550 nm
48F to 864F	200 µm	250 µm	SR15E-200 (ITU-T G.652.D and G.657.A1)	8.6 ± 0.4 µm	≤ 0.40	≤ 0.40	≤ 0.30

***2.** The value after hydrogen aging in optical fiber in accordance with IEC 60793-2-50 test procedure.
***3.** The value before coloring process

Fiber Colors in 12F SWR

No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	No.9	No.10	No.11	No.12
Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Turquoise

Stripe Ring Mark (*4, 5)

SWR No.1	SWR No.2	SWR No.3	SWR No.4	SWR No.5	SWR No.6
▮	▮▮	▮▮▮	▮▮▮▮	■	■▮
SWR No.7	SWR No.8	SWR No.9	SWR No.10	SWR No.11	SWR No.12
■▮▮	■▮▮▮	■▮▮▮▮	■■	■■▮	■■▮▮

***4.** Each block denotes "5" and each bar denotes "1".
***5.** The order of block and bar for SWR may be reversed in the cable (e.g. No.6 may be ■▮ or ▮■)

Environmental Characteristics

Temperature cycling(*6)	-30°C to 70°C (-22°F to +158°F)

***6.** Reference: IEC 60794-1-22

Contact us

1-5-1, Kiba, Koto-ku, Tokyo 135-8512, Japan