

## Flame-Retardant Wrapping Tube Cable (WTC) with SpiderWeb Ribbon® (SWR®)

Flame-retardant (FR) Wrapping Tube Cable (WTC) with SpiderWeb Ribbon (SWR) is a high-density fiber optic ribbon cable intended for inside plant and indoor/outdoor network applications where riser-rated products are required. The FR-WTC-SWR incorporates the leading-edge SpiderWeb Ribbon technology in a robust, flame-retardant cable package that can be used within buildings and, because of the core water-blocking feature, can also be routed outside provided the cable is housed within covered pathway spaces including duct-banks and cable trays.

The FR-WTC-SWR product set is available in LSZH, UL 1666 Riser Rated, CPR Classification, non-armored 250 μm SR15E fiber (288F) and 200 μm SR15E-200 fiber (864F and 1728F) constructions.

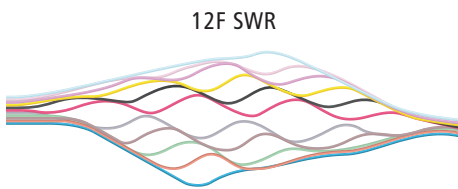
### Features

- Collapsible ribbon reduces size of cable compared to other encapsulated or pliable ribbon technologies
- Design optimizes the fiber packing density making WTC-SWR cables the smallest ribbon cables without compromising robustness of the cable
- Small-diameter cable allows more optical fibers to be placed into crowded or limited-space pathways
- Water-blocked core
- Light weight for easy handling in the field compared to traditional cables
- Completely Gel-free for reduced time to access fiber and prep for splicing

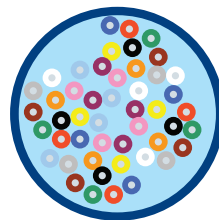
### Applications

- Riser spaces within build structures
- Data Center Inter-building Connections

### SWR Technology

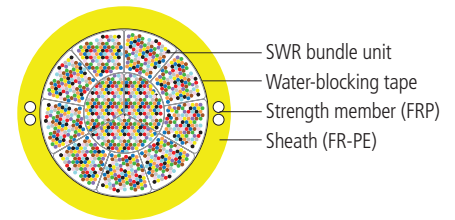


12F SWR  
Contra-helical dual binder system



Multiple 12F SWR bundle  
72F OR 144F bundles depending on cable fiber count

### Cable Components



OFNR-LS Non-armored  
(288F, 864F, 1728F)

*continued*  
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### Mechanical Data—Non-Armored

DESCRIPTION	EN 13501-6 CLASSIFICATION	FIBER COUNT	BINDER UNIT	NOMINAL DIAMETER	WEIGHT	SHORT TERM / INSTALLATION		LONG TERM / STORAGE /STATIC	
				inches (mm)		lbs/1,000 ft (kg/km)	MAX TENSILE LOAD lbs (N)	MIN BEND RADIUS inches (mm)	MAX TENSILE LOAD lbs (N)
<b>250 µm SR15E FIBER</b>									
FR-OGNM12WTZTWBE SR15Ex288C	Cca-s1a,d0,a1	288	4 X 72F	0.49 (12.5)	108 (160)	297 (1320)	7.4 (188)	89 (396)	4.9 (125)
<b>200 µm SR15E FIBER</b>									
FR-OGNM12WTZTWBE SR15E-200x864C	Cca-s2,d2,a1	864	12 X 72F	0.65 (16.5)	181 (270)	297 (1320)	9.7 (248)	89 (396)	6.5 (165)
FR-OGNM12WTZTWBE SR15E-200x1728C	Cca-s1,d0,a1	1728	12 X 144F	0.85 (21.5)	276 (410)	297 (1320)	12.7 (323)	89 (396)	8.5 (215)

### Optical Fiber

OPTICAL FIBER (FIBER COUNT)	FIBER DIA.	FIBER PITCH	OPTICAL FIBER STANDARD	MFD	MAXIMUM ATTENUATION (CABLED) dB/km		
					1310 nm	1383 nm	1550 nm
Fujikura SR15E (288F)	250 µm	250 µm	K (ITU-T G.652D/G.657.A1)	8.6 ± 0.4 µm	≤ 0.35 dB/km	≤ 0.35 dB/km	≤ 0.25 dB/km
Fujikura SR15E-200 (864F, 1728F)	200 µm	250 µm	BE (ITU-T G.652.D AND G.657.A1)	8.6 ± 0.4 µm	≤ 0.35 dB/km	≤ 0.35 dB/km	≤ 0.25 dB/km

### Stripe Ring Fiber Identification

R NO.	STRIPE RING MARKING	R NO.	STRIPE RING MARKING
1	█	7	███ █
2	██	8	████ █
3	███	9	█████ █
4	████	10	██████ █
5	█████	11	███████ █
6	██████	12	████████ █

FIBER COUNT	BINDER UNIT (BU)	RING MARKINGS
288F	4 Binder Units 1 2 3 4	
864F	12 Binder Units 1 2 3 4 5 6 7 8 9 10 11 12	1-6 Ring Marking
1728F	12 Binder Units 1 2 3 4 5 6 7 8 9 10 11 12	1-12 Ring Marking

### Qualifications

GOVERNING BODY	STANDARD CODE
UL	1666, Listed Riser 1685, Fire Propagation and Low Smoke
ANSI/ICEA	S-83-596
EU	EN 13501-6 (CPR)

### Temperature Specifications

TEMPERATURE RANGE	
INSTALLATION	+14°F to +140°F (-10°C to +60°C)
OPERATING	-4°F to +158°F (-20°C to +70°C)
STORAGE	-40°F to +158°F (-40°C to +70°C)

Contact AFL for further details.