

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, non-armored 250 µm ACE fiber (288F), 250 µm SR15E fiber (288F, 864F and 1,728F), and 200 µm SR15E fiber (864F and 1728F) constructions.

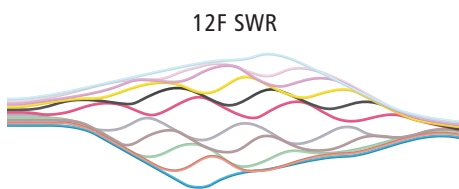
Features

- 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

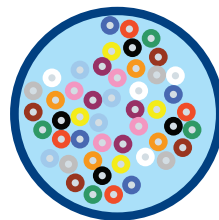
Applications

- Riser spaces within build structures
- Data Center Inter-building Connections
- Access Provider Metro Rings
- Service Provider FTTx
- Cable TV Subscriber Networks
- Metro Rail Track-side Network Links
- Suitable for Aerial Lashing, Pulled-in-duct, Air-Jetted-in-Duct
- Campus LAN

SWR Technology

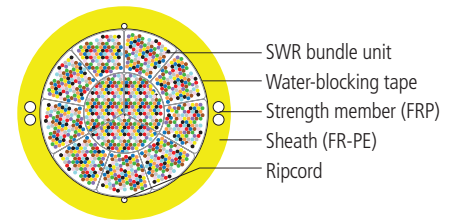


12F SWR
Contrahelical dual binder system



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) | MIN BEND RADIUS inches (mm) |
| 250 µm ACE FIBER | | | | | | | | | |
| FR-OGNM12WTZTWBE ACEx288C | Cca-s1a, d2, a1 | 288 | 4 X 72F | 0.49 (12.5) | 108 (160) | 297 (1320) | 10 (250) | 89 (396) | 8 (188) |
| 250 µm SR15E FIBER | | | | | | | | | |
| FR-OGNM12WTZTWBE SR15Ex288C | Cca-s1a, d2, a1 | 288 | 4 X 72F | 0.49 (12.5) | 108 (160) | 297 (1320) | 10 (250) | 89 (396) | 8 (188) |
| FR-OGNM12WTZTWBE SR15Ex864C | Cca-s2, d0, a1 | 864 | 12 X 72F | 0.71 (18.0) | 208 (310) | 297 (1320) | 14 (360) | 89 (396) | 11 (270) |
| FR-OGNM12WTZTWBE SR15Ex1728C | Cca-s2, d0, a1 | 1728 | 12 X 144F | 0.93 (23.5) | 329 (490) | 297 (1320) | 19 (470) | 89 (396) | 14 (353) |
| 200 µm SR15E FIBER | | | | | | | | | |
| FR-OGNM12WTZTWBE SR15E-200x864C | Cca-s2, d2, a1 | 864 | 12 X 72F | 0.65 (16.5) | 181 (270) | 297 (1320) | 13 (330) | 89 (396) | 10 (248) |
| FR-OGNM12WTZTWBE SR15E-200x1728C | Cca-s1, d0, a1 | 1728 | 12 X 144F | 0.87 (22.0) | 276 (410) | 297 (1320) | 18 (440) | 89 (396) | 13 (330) |

Optical Fiber

| OPTICAL FIBER (FIBER COUNT) | FIBER BUFFER | OPTICAL FIBER STANDARD | MFD | MAXIMUM ATTENUATION (CABLED) dB/km | | |
|------------------------------------|--------------|---------------------------------|--------------|------------------------------------|-----------|-----------|
| | | | | 1310 nm | 1383 nm | 1550 nm |
| Fujikura ACE (288F) | 250 µm | 9 (ITU-T G.652D/G.657.A1) | 9.2 ± 0.4 µm | 0.4 dB/km | 0.4 dB/km | 0.3 dB/km |
| Fujikura SR15E (288F, 864F, 1728F) | 250 µm | K (ITU-T G.652D/G.657.A1) | 8.6 ± 0.4 µm | 0.4 dB/km | 0.4 dB/km | 0.3 dB/km |
| Fujikura SR15E (864F, 1728F) | 200 µm | BE (ITU-T G.652.D AND G.657.A1) | 8.6 ± 0.4 µm | 0.4 dB/km | 0.4 dB/km | 0.3 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 | | | | | | | | | 1-6 Ring Marking |
| 864F | 12 Binder Units | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| 1728F | 12 Binder Units | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |

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.

Premise Cable