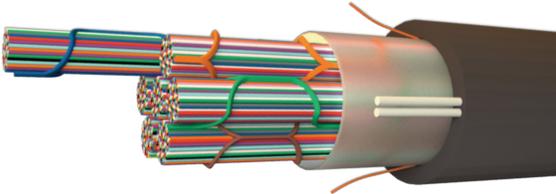


Wrapping Tube Cable (WTC) with SpiderWeb Ribbon® (SWR®) – 250 μm Fiber/250 μm Pitch

The 250 μm Fiber/250 μm Pitch Wrapping Tube Cable (WTC), with SpiderWeb Ribbon® (SWR®), is an ultra-high density outside plant cable designed specifically for fiber-to-the-home (FTTH) or access markets. It is compliant with the latest issue of the outside plant cable standard, Telcordia GR-20. With an ultra-high density and a new ribbon technology called SpiderWeb 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 1,728.



SWR® is a bonded fiber ribbon design allowing for either a highly efficient ribbon splicing or an individual fiber breakout splicing process. This flexibility allows for a single cable design to cover a diverse set of applications from access networks to high-fiber count mass fusion splicing. With the ability to roll and conform, the SWR® provides for ultra-high density packaging in the WTC.

Features

- Build America/Buy America options available
- 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
- 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

- 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, and Direct Buried (armored only)
- Campus LAN

SWR Technology

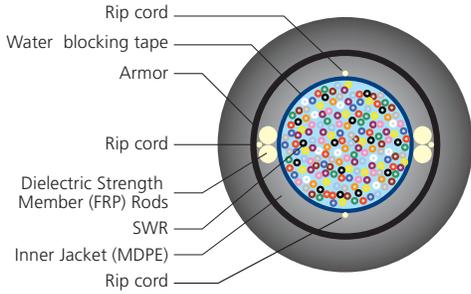


12F SWR®

Contrahelical dual binder system



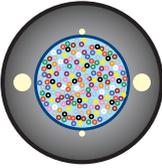
Multiple 12F SWR® Bundle



Armored 4-rod FRP (288F - 1,728F)



Non-armored 4-rod FRP (288F - 1,728F)



Non-armored & Armored 2-rod FRP (48F - 144F)



continued →

Wrapping Tube Cable (WTC) with SpiderWeb Ribbon® (SWR®) – 250 μm Fiber/ 250 μm Pitch

Mechanical Data

AFL No.	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)
Non-Armored								
LWSE-48-X-C-48-1-00N1D-L*	48	1 X 48F	0.43 (11.0)	61 (90)	607 (2700)	8.7 (221)	182 (810)	6.5 (165)
LWSE-72-X-C-72-1-00N1D-L*	72	1 X 72F	0.43 (11.0)	61 (90)	607 (2700)	8.7 (221)	182 (810)	6.5 (165)
LWSE-96-X-C-96-1-00N1D-L*	96	1 X 96F	0.43 (11.0)	64 (95)	607 (2700)	8.7 (221)	182 (810)	6.5 (165)
LWSE-144-X-C-144-1-00N1D-L*	144	1 X 144F	0.43 (11.0)	61 (90)	607 (2700)	8.7 (221)	182 (810)	6.5 (165)
LWSE-288-X-C-288-1-00N1D-L*	288	1 X 288F	0.47 (12.0)	71 (105)	607 (2700)	9.5 (242)	182 (810)	7.1 (181)
LWSE-432-X-C-72-6-00N1D-L*	432	6 X 72F	0.53 (13.5)	91 (135)	607 (2700)	10.6 (270)	182 (810)	8.0 (203)
LWSE-576-X-C-72-8-00N1D-L*	576	8 X 72F	0.59 (15.0)	111 (165)	607 (2700)	11.8 (300)	182 (810)	8.9 (226)
LWSE-864-X-C-72-12-00N1D-L*	864	12 X 72F	0.69 (17.5)	145 (215)	607 (2700)	13.8 (351)	182 (810)	10.3 (262)
LWSE-1152-K-C-144-8-00N1D-L*	1152	8 X 144F	0.73 (18.5)	161 (240)	607 (2700)	14.6 (371)	182 (810)	10.9 (277)
LWSE-1728-K-C-144-12-00N1D-L*	1728	12 X 144F	0.91 (23.0)	242 (360)	607 (2700)	18.1 (460)	182 (810)	13.6 (346)
Armored								
LWSE-144-X-C-144-1-10S1D-L*	144	1 X 144F	0.63 (16.0)	148 (220)	607 (2700)	12.6 (320)	182 (810)	9.5 (242)
LWSE-288-X-C-288-1-10S1D-L*	288	1 X 288F	0.69 (17.5)	172 (255)	607 (2700)	13.8 (351)	182 (810)	10.3 (262)
LWSE-432-X-C-72-6-10S1D-L*	432	6 X 72F	0.75 (19.0)	202 (300)	607 (2700)	15.0 (381)	182 (810)	11.2 (285)
LWSE-576-X-C-72-8-10S1D-L*	576	8 X 72F	0.81 (20.5)	235 (350)	607 (2700)	16.1 (409)	182 (810)	12.1 (307)
LWSE-864-X-C-72-12-10S1D-L*	864	12 X 72F	0.91 (23.0)	286 (425)	607 (2700)	18.1 (460)	182 (810)	13.6 (346)
LWSE-1728-K-C-144-12-10S1D-L*	1728**	12 X 144F	1.14 (29.0)	410 (610)	607 (2700)	22.8 (579)	182 (810)	17.1 (435)

NOTES:

For Fiber Type, replace "X" in the AFL No. with the character in the "Fiber Designator" field of the Optical Fiber table below.

To designate length markings in AFL No., replace "L" in the AFL No. with "F" for Feet or "M" for Meters.

* For BABA-compliant Wrapping Tube Cable, add -B to the end of the AFL No.

** Modified temperature performance – see Temperature Specifications table on page 3.

Optical Fiber

Fiber Type (Fiber Count)	Fiber Designator	Fiber Diameter	Fiber Pitch	Standard	MFD	Maximum Attenuation (cabled) dB/km	
						1310 nm	1550 nm
250 μm Single-mode (48F to 864F)	9	250 μm	250 μm	ITU-T G.652.D and G.657.A1	9.2 ± 0.4 μm	≤ 0.40	≤ 0.30
Fujikura SR15E (144F to 1728F)	K	250 μm	250 μm	ITU-T G.652.D and G.657.A1	8.6 ± 0.4 μm	≤ 0.40	≤ 0.30
BABA-Compliant Single-mode (48F to 864F)	BK	250 μm	250 μm	ITU-T G.652.D and G.657.A1	9.2 ± 0.4 μm	≤ 0.40	≤ 0.30
BABA-Compliant Corning Single-mode (48F to 864F)	BL	250 μm	250 μm	ITU-T G.652.D and G.657.A1	9.2 ± 0.4 μm	≤ 0.40	≤ 0.30

Ordering Information

Example: For BABA-compliant, 864F Wrapping Tube Cable with BABA-compliant Corning single-mode fiber and length markings in feet, order AFL No. LWSE-864-BL-C-72-12-10S1D-F-B

Base Part Number: LWSE-864-X-C-72-12-10S1D-L*

BL: BABA-Compliant Corning Single-mode Fiber

F: Feet Markings

-B: BABA-Compliant Wrapping Tube Cable Option



continued
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Wrapping Tube Cable (WTC) with SpiderWeb Ribbon® (SWR®) – 250 μm Fiber/ 250 μm Pitch

Stripe Ring Fiber Identification

R No.	Stripe Ring Marking	R No.	Stripe Ring	R No.	Stripe Ring	R No.	Stripe Ring
1	█	7	███	13	█████	19	█████████
2	██	8	████	14	██████	20	████████
3	███	9	█████	15	███████	21	█████████
4	████	10	█████	16	███████	22	█████████
5	█████	11	██████	17	████████	23	█████████
6	█████	12	███████	18	█████████	24	█████████

Fiber Count	Binder Unit (BU)						Ring Markings							
48F	No Binder Unit						1-4 Ring Marking							
72F	No Binder Unit						1-6 Ring Marking							
96F	No Binder Unit						1-8 Ring Marking							
144F	No Binder Unit						1-12 Ring Marking							
288F	No Binder Unit						1-24 Ring Marking							
432F	6 Binder Units	1	2	3	4	5	6							
576F	8 Binder Units	1	2	3	4	5	6	7	8	1-6 Ring Marking				
864F	12 Binder Units	1	2	3	4	5	6	7	8	9	10	11	12	
1152F	8 Binder Units	1	2	3	4	5	6	7	8	1-12 Ring Marking				
1728F	12 Binder Units	1	2	3	4	5	6	7	8	9	10	11	12	1-12 Ring Marking

Temperature Specifications

	Temperature Range	1728F Armored
Operation	-40°F to +158°F (-40°C to +70°C)	-4°F to +158°F (-20°C to +70°C)
Storage	-40°F to +158°F (-40°C to +70°C)	-4°F to +158°F (-20°C to +70°C)
Installation	-22°F to +140°F (-30°C to +60°C)	-4°F to +140°F (-20°C to +60°C)

Qualifications

Governing Body	Standard Code	Component
Telcordia	GR-20	Fiber Optic Cable

Contact AFL for further details.

