

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

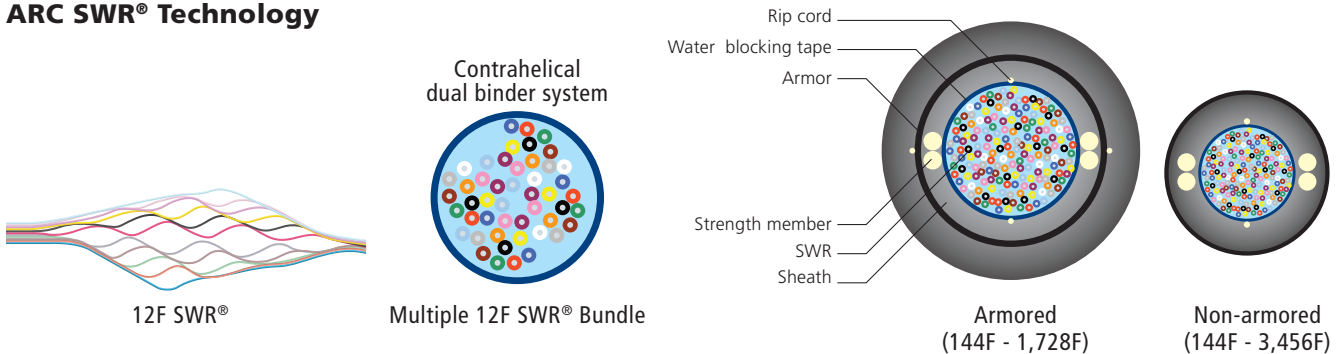
Wrapping Tube Cable (WTC), with SpiderWeb Ribbon® (SWR®), is an ultra-high density outside plant cable designed specifically for fiber-to-the-home (FTTH) or access markets. It is compliant with the latest issue of the outside plant cable standard, Telcordia GR-20. With an ultra-high density and a new 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 144 to 3,456.

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

- Access Ready Construction (ARC)**  
 Completely gel-free construction with easy-to-access and identify optical fiber circuits.
- SpiderWeb Ribbon® (SWR®) optical fiber technology**  
 Easily ribbonized for mass fusion splicing. SWR® is compacted and routed like individual fibers. Ideal for organizing slack loops in splice enclosures as there is no preferential bending of ribbon.
- Significantly higher fiber density compared to traditional ribbon cables**  
 Offers ability to expand capacity of existing pathways and allows use of smaller, lower cost duct systems.
- Smaller cable diameters and cable weights**  
 Means longer reel lengths that allow for lower scrap rates, easier handling of reels at the site and reduced transportation costs.
- Completely dry water-blocking technology**  
 Reduces time required to prep cable-end and mid-span access resulting in labor savings.
- Compact ribbon bundles**  
 Reduces enclosure/splice tray size requirements allowing for smaller telecommunications space allocation.
- Armored and non-armored packages**  
 Supports all the standard cable deployment options typically found in the OSP environment including, duct, direct buried and aerial.
- Fully qualified to Telcordia GR-20**  
 Provides assurance that the cable will support optical fiber network transport functions now and into the future.

### ARC SWR® Technology



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### Temperature Range

Operating	-40°C to +70°C
Storage	-40°C to +70°C
Installation	-30°C to +60°C

### Mechanical Data—Non-Armored

DESCRIPTION	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)
LWSE-144-9-C-144-1-00N1D	144	1 X 144F	0.414 (10.5)	56 (85)	607 (2700)	9 (228)	182 (810)	6 (152)
LWSE-288-9-C-72-4-00N1D	288	4 X 72F	0.473 (12.0)	69 (105)	607 (2700)	10 (254)	182 (810)	7 (177)
LWSE-432-9-C-72-6-00N1D	432	6 X 72F	0.532 (13.5)	88 (135)	607 (2700)	11 (279)	182 (810)	8 (203)
LWSE-576-9-C-72-8-00N1D	576	8 X 72F	0.591 (15.0)	108 (165)	607 (2700)	12 (305)	182 (810)	9 (228)
LWSE-864-9-C-72-12-00N1D	864	12 X 72F	0.689 (17.5)	140 (215)	607 (2700)	14 (356)	182 (810)	10 (254)
LWSE-1152-K-C-144-8-00N1D	1152	8 X 144F	0.721 (18.5)	156 (240)	607 (2700)	15 (381)	182 (810)	11 (279)
LWSE-1728-K-C-144-12-00N1D	1728	12 X 144F	0.871 (23.0)	221 (360)	607 (2700)	17 (431)	182 (810)	13 (330)
LWSE-3456-K-C-144-24-00N1D	3456	24 X 144F	1.182 (30.0)	391 (600)	607 (2700)	24 (609)	182 (810)	18 (457)

### Mechanical Data—Double Jacket Single Armor

DESCRIPTION	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)
LWSE-144-9-C-144-1-10S1D	144	1 X 144F	0.630 (16.0)	144 (220)	607 (2700)	13 (330)	182 (810)	10 (254)
LWSE-288-9-C-72-4-10S1D	288	4 X 72F	0.670 (17.5)	166 (255)	607 (2700)	14 (356)	182 (810)	10 (254)
LWSE-432-9-C-72-6-10S1D	432	6 X 72F	0.709 (19.0)	196 (300)	607 (2700)	14 (356)	182 (810)	11 (279)
LWSE-576-9-C-72-8-10S1D	576	8 X 72F	0.808 (20.5)	228 (350)	607 (2700)	16 (406)	182 (810)	12 (305)
LWSE-864-9-C-72-12-10S1D	864	12 X 72F	0.906 (23.0)	277 (425)	607 (2700)	18 (457)	182 (810)	14 (356)
LWSE-1152-K-C-144-8-10S1D	1152	8 X 144F	0.945 (24.0)	300 (460)	607 (2700)	19 (482)	182 (810)	14 (356)
LWSE-1728-K-C-144-12-10S1D	1728	12 X 144F	1.123 (28.5)	401 (615)	607 (2700)	23 (584)	182 (810)	17 (431)

### Optical Fiber

FIBER COUNT	FIBER DESIGNATOR	MFD	MAXIMUM ATTENUATION (CABLED) dB/km		
			1310 NM	1383 NM	1550 NM
144, 288, 432, 576, 864	9 (ITU-T G.652D/G.657.A1)	9.2 ± 0.4 μm	≤0.40	≤0.40	≤0.30
1152, 1728, 3456	K (ITU-T G.652D/G.657.A1)	8.6 ± 0.4 μm	≤0.40	≤0.40	≤0.30

### 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
144F	No Binder Unit	1-12 Ring Marking
288F	4 Binder Units	1-6 Ring Marking
432F	6 Binder Units	
576F	8 Binder Units	
864F	12 Binder Units	
1152F	8 Binder Units	1-12 Ring Marking
1728F	12 Binder Units	1-12 Ring Marking
3456F	24 Binder Units	1-12 Ring Marking

\*For binder units 13-24, the second binder unit is clear