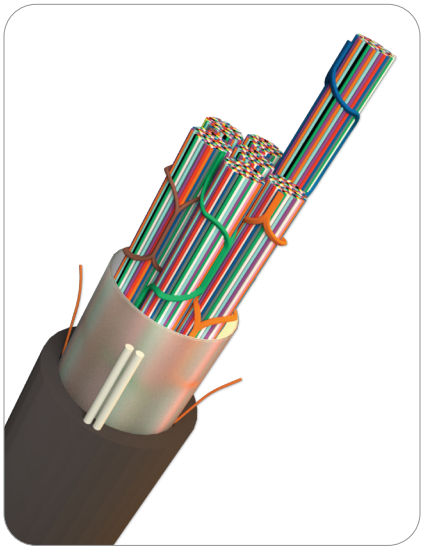


250 µm Wrapping Tube Cable (WTC) with SpiderWeb Ribbon® (SWR®)

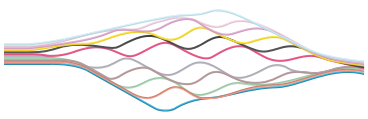
Wrapping Tube Cable (WTC), with SpiderWeb Ribbon® (SWR®), is an ultra-high density outside plant cable designed specifically for fiber-to-the-home (FTTH) or access markets. It is compliant with the latest issue of the outside plant cable standard, Telcordia GR-20. With an ultra-high density and a new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

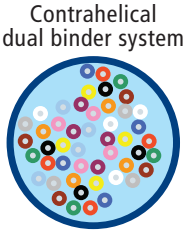
Features

- **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.

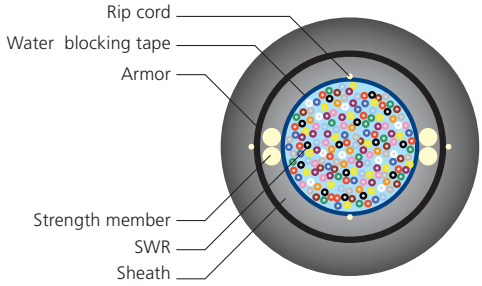
ARC SWR® Technology



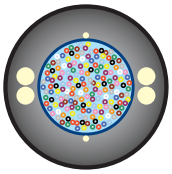
12F SWR®



Multiple 12F SWR® Bundle



Armored
(144F - 1,728F)



Non-armored
(144F - 3,456F)

250 µm Wrapping Tube Cable (WTC) with SpiderWeb Ribbon® (SWR®)

Temperature Specifications

TEMPERATURE RANGE	
OPERATION	-40°F to +158°F (-40°C to +70°C)
STORAGE	-40°F to +158°F (-40°C to +70°C)
INSTALLATION	-22°F to +140°F (-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	0.41 (10.5)	57 (85)	607 (2700)	9 (229)	182 (810)	6 (158)
LWSE-288-9-C-72-4-00N1D	288	4 X 72F	0.47 (12.0)	71 (105)	607 (2700)	10 (254)	182 (810)	7 (180)
LWSE-432-9-C-72-6-00N1D	432	6 X 72F	0.53 (13.5)	91 (135)	607 (2700)	11 (270)	182 (810)	8 (203)
LWSE-576-9-C-72-8-00N1D	576	8 X 72F	0.59 (15.0)	111 (165)	607 (2700)	12 (300)	182 (810)	9 (225)
LWSE-864-9-C-72-12-00N1D	864	12 X 72F	0.69 (17.5)	145 (215)	607 (2700)	14 (350)	182 (810)	11 (279)
LWSE-1152-K-C-144-8-00N1D	1152	8 X 144F	0.73 (18.5)	161 (240)	607 (2700)	15 (370)	182 (810)	11 (279)
LWSE-1728-K-C-144-12-00N1D	1728	12 X 144F	0.91 (23.0)	242 (360)	607 (2700)	18 (460)	182 (810)	14 (345)
LWSE-3456-K-C-144-24-00N1D	3456	24 X 144F	1.20 (30.5)	403 (600)	607 (2700)	24 (610)	182 (810)	18 (458)

Mechanical Data—OSP 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-144-1-10S1D	144	1 X 144F	0.63 (16.0)	148 (220)	607 (2700)	13 (320)	182 (810)	10 (254)
LWSE-288-9-C-72-4-10S1D	288	4 X 72F	0.69 (17.5)	172 (255)	607 (2700)	14 (350)	182 (810)	11 (279)
LWSE-432-9-C-72-6-10S1D	432	6 X 72F	0.75 (19.0)	202 (300)	607 (2700)	15 (380)	182 (810)	11 (285)
LWSE-576-9-C-72-8-10S1D	576	8 X 72F	0.81 (20.5)	235 (350)	607 (2700)	16 (410)	182 (810)	12 (308)
LWSE-864-9-C-72-12-10S1D	864	12 X 72F	0.91 (23.0)	286 (425)	607 (2700)	18 (460)	182 (810)	14 (345)
LWSE-1728-K-C-144-12-10S1D	1728*	12 X 144F	1.14 (29.0)	410 (610)	607 (2700)	23 (580)	182 (810)	17 (435)

* **NOTE:** Modified temperature performance

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	2	3	4								1-6 Ring Marking
432F	6 Binder Units	1	2	3	4	5	6						
576F	8 Binder Units	1	2	3	4	5	6	7	8				
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
3456F	24 Binder Units	1	2	3	4	5	6	7	8	9	10	11	12	1-12 Ring Marking
		13	14	15	16	17	18	19	20	21	22	23	24	1-12 Ring Marking

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