

Wrapping Tube Cable (WTC) with Spider Web Ribbon® (SWR®)

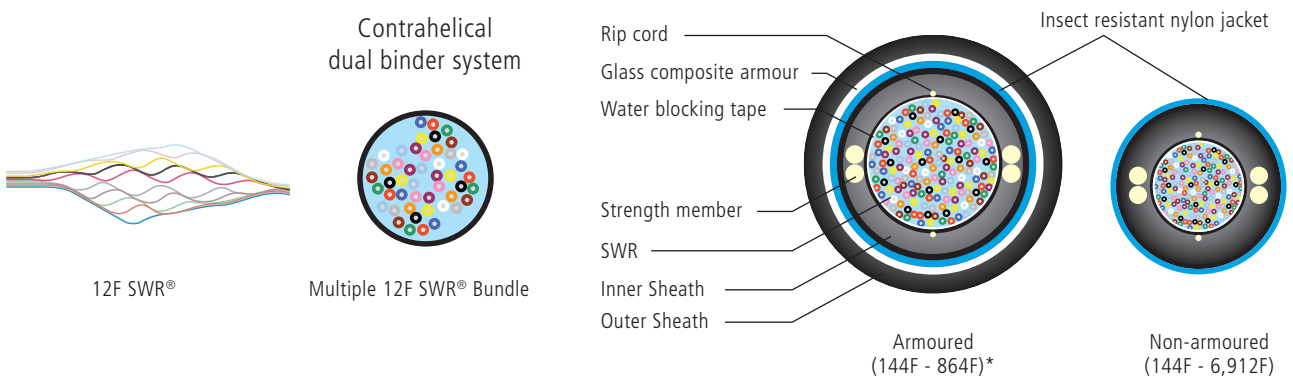
Wrapping Tube Cable (WTC), with Spider Web Ribbon® (SWR®), is an ultra-high density outside plant cable designed specifically for Data Centre, Telco, Fibre-to-the-home (FTTH) or access markets. With an ultra-high density and a new ribbon technology called Spider Web Ribbon®, WTC provides the smallest cable diameter and lowest weight, high-fibre count ribbon cable in the industry. WTC with SWR® cables are available in fibre counts from 144 to 6,912.

SWR® is a bonded fibre ribbon design allowing for either a highly efficient ribbon splicing or an individual fibre breakout splicing process. This flexibility allows for a single cable design to cover a diverse set of applications from access networks to high-fibre 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 fibre circuits.
- Spider Web Ribbon® (SWR®) optical fibre technology**
 Easily ribbonised for mass fusion splicing. SWR® is compacted and routed like individual fibres. Ideal for organising slack loops in splice enclosures as there is no preferential bending of ribbon.
- Significantly higher fibre density compared to traditional ribbon cables**
 Offers ability to expand capacity of existing pathways and allows use of smaller, lower cost duct system.
- 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 labour savings.
- Compact ribbon bundles**
 Reduces enclosure/splice tray size requirements allowing for smaller telecommunications space allocation.
- Armoured and non-armoured 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, IEC 60794, IEC 60793, AS/CA S008:2010, ITU-T G.652.D and G.657.A1**
 Provides assurance that the cable will support optical fibre network transport functions now and into the future.

ARC SWR® Technology



* Higher fibre count options verified upon request

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Temperature Range

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

Mechanical Data - Termite Resistant Cable

PART NUMBER	DESCRIPTION	FIBRE COUNT	BINDER UNIT	Nom. DIAMETER	Nom. WEIGHT	SHORT TERM / UNDER LOAD		LONG TERM / NO LOAD		CRUSH (kN/100mm)
				mm	kg/km	MAX TENSILE (N)	MIN BEND RADIUS	MAX TENSILE (N)	MIN BEND RADIUS	
W5D1LFWA144BE	SWR WTC 250micron SM 144F PE/NY	144	1 x 144F	11.4	101	2700	20 x OD	810	15 x OD	2.2
W5D1LFWA288BE	SWR WTC 250micron SM 288F PE/NY	288	4 x 72F	12.9	123					
W5D1LFWA432BE	SWR WTC 250micron SM 432F PE/NY	432	6 x 72F	14.4	155					
W5D1LFWA576BE	SWR WTC 250micron SM 576F PE/NY	576	8 x 72F	15.9	172					
W5D1LFWA720BE	SWR WTC 250micron SM 720F PE/NY	720	10 x 72F	17.4	215					
W5D1LFWA864BE	SWR WTC 250micron SM 864F PE/NY	864	12 x 72F	18.4	241					
W5D1LFWA1152BE	SWR WTC 250micron SM 1152F PE/NY	1152	8 x 144F	19.4	268					
W5D1LMWA1728BE	SWR WTC 200micron SM 1728F PE/NY	1728	12 x 144F	22.4	332					
W5D1LMWA3456BE	SWR WTC 200micron SM 3456F PE/NY	3456	24 x 144F	27.4	513					
W5D1LMWA6912BE	SWR WTC 200micron SM 6912F PE/NY	6912	24 x 288F	36.0	868					

Mechanical Data - Termite Resistant Cable + Sacrificial Jacket

PART NUMBER	DESCRIPTION	FIBRE COUNT	BINDER UNIT	Nom. DIA.	Nom. WEIGHT	SHORT TERM / UNDER LOAD		LONG TERM / NO LOAD		CRUSH (kN/100mm)
				mm	kg/km	MAX TENSILE (N)	MIN BEND RADIUS	MAX TENSILE (N)	MIN BEND RADIUS	
W5H1LFWy144xx	SWR WTC 250micron SM 144F PE/NY/PE	144	1 x 144F	13.4	136	2700	20 x OD	810	15 x OD	2.2
W5H1LFWy288xx	SWR WTC 250micron SM 288F PE/NY/PE	288	4 x 72F	14.9	162					
W5H1LFWy432xx	SWR WTC 250micron SM 432F PE/NY/PE	432	6 x 72F	16.4	199					
W5H1LFWy576xx	SWR WTC 250micron SM 576F PE/NY/PE	576	8 x 72F	17.9	219					
W5H1LFWy720xx	SWR WTC 250micron SM 720F PE/NY/PE	720	10 x 72F	19.4	268					
W5H1LFWy864xx	SWR WTC 250micron SM 864F PE/NY/PE	864	12 x 72F	20.4	297					
W5H1LFWy1152xx	SWR WTC 250micron SM 1152F PE/NY/PE	1152	8 x 144F	21.4	326					
W5H1LMWy1728xx	SWR WTC 200micron SM 1728F PE/NY/PE	1728	12 x 144F	24.4	400					

xx = PE Sacrificial Jacket Colour (**BK** - Black, **BE** - Blue, **YW** - Yellow) *Other colours on request
y = **A** if Black Sacrificial Jacket & **B** for all other Colours

Mechanical Data - Termite & Rodent Resistant Cable

PART NUMBER	DESCRIPTION	FIBRE COUNT	BINDER UNIT	Nom. DIAMETER	Nom. WEIGHT	SHORT TERM / UNDER LOAD		LONG TERM / NO LOAD		CRUSH (kN/100mm)
				mm	kg/km	MAX TENSILE (N)	MIN BEND RADIUS	MAX TENSILE (N)	MIN BEND RADIUS	
N5D1LFWB144xx	SWR WTC 250micron SM 144F PE/NY/GC/PE	144	1 x 144F	16.6	210	2700	30 x OD	810	15 x OD	2.2
N5D1LFWB288xx	SWR WTC 250micron SM 288F PE/NY/GC/PE	288	4 x 72F	18.1	245					
N5D1LFWB432xx	SWR WTC 250micron SM 432F PE/NY/GC/PE	432	6 x 72F	19.6	287					
N5D1LFWB576xx	SWR WTC 250micron SM 576F PE/NY/GC/PE	576	8 x 72F	21.1	311					
N5D1LFWB720xx	SWR WTC 250micron SM 720F PE/NY/GC/PE	720	10 x 72F	22.6	369					
N5D1LFWB864xx	SWR WTC 250micron SM 864F PE/NY/GC/PE	864	12 x 72F	23.6	403					

xx = PE Outer Jacket Colour (**BK** - Black, **BE** - Blue, **YW** - Yellow) *Other colours on request

Note: High fibre count options verified upon request.

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Optical Fibre

FIBRE COUNT	FIBRE DESIGNATOR	MFD (@1310nm)	MAXIMUM ATTENUATION (CABLED) dB/km		
			1310 NM	1383 NM	1550 NM
144, 288, 432, 576, 720, 864, 1152	LF (ITU-T G.652D/G.657.A1) FutureGuide® SR15E-250	8.6 ± 0.4 µm	≤0.40	≤0.40	≤0.30
1728, 3456, 6912	LM (ITU-T G.652D/G.657.A1) FutureGuide® SR15E-200	8.6 ± 0.4 µm	≤0.40	≤0.40	≤0.30

Stripe Ring Fibre Identification

SWR NO.1	SWR NO.2	SWR NO.3	SWR NO.4	SWR NO.5	SWR NO.6
SWR NO.7	SWR NO.8	SWR NO.9	SWR NO.10	SWR NO.11	SWR NO.12
SWR NO.13	SWR NO.14	SWR NO.15	SWR NO.16	SWR NO.17	SWR NO.18
SWR NO.19	SWR NO.20	SWR NO.21	SWR NO.22	SWR NO.23	SWR NO.24

Each block denotes '5' and each bar denotes '1'

The order of the block and bar for SWR may be reversed in each bundle unit (eg. No.6 may be  or )

FIBRE 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					
720F	10 Binder Units	1	2	3	4	5	6	7	8	9	10			
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
6912F	24 Binder Units	1	2	3	4	5	6	7	8	9	10	11	12	1-24 Ring Marking
		13	14	15	16	17	18	19	20	21	22	23	24	1-24 Ring Marking

For binder units 13 - 24 the second binder unit is clear.