

## Ultra HD MicroCore® Riser Fiber Optic Cable

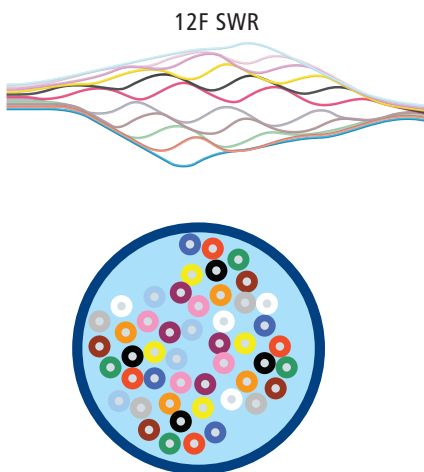
The Ultra HD MicroCore Riser fiber optic cable is the latest development in AFL's sub-unitized MicroCore cable family that uses SpiderWeb Ribbon® (SWR®) technology. Designed to support high fiber density deployments in data center and central office installation environments, the ultra HD sub-unit designs optimize splicing efficiency when interconnected with AFL's Wrapping Tube Cable (WTC).

With continued requirements for higher bandwidth, higher fiber density cabling products are critical to support that demand. Ultra HD MicroCore cable designs feature 72-fiber and 144-fiber sub-units that result in maximum fiber counts up to 864 and 1,728 respectively. The cable consists of an OFNR/FT4 (UL1666) flame-rated outer jacket with an installation tension rating of 150 lbs., qualified to meet and exceed the requirements of the latest Telcordia GR-409-CORE inside plant cabling requirements.

### Features

- SpiderWeb Ribbon**  
 Collapsible ribbon reduces size of cable compared to other encapsulated or pliable ribbon technologies
- OFNR Riser Rating**  
 Can be routed within designated riser spaces within build structures
- Small Diameter**  
 Because of the smaller diameter, more optical fibers can be placed into crowded or limited-space pathways

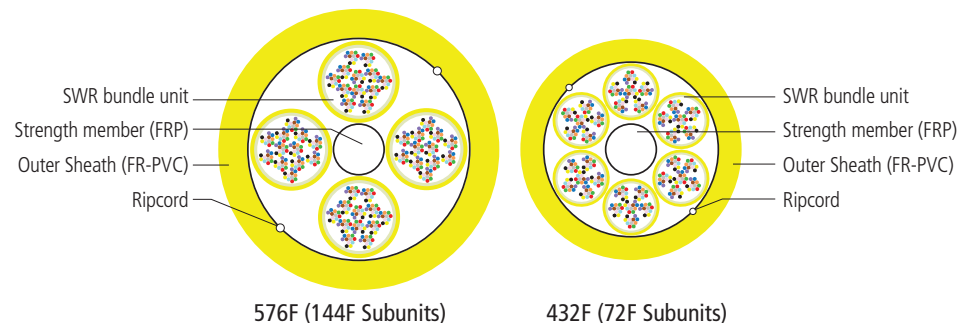
### SWR Technology



Multiple 12F SWR subunits

72F OR 144F subunits depending on cable fiber count

### Cable Components





# Ultra HD MicroCore® Riser Fiber Optic Cable

## Mechanical Data

CABLE TYPE	AFL NO.	FIBER COUNT	NO. OF SUBS	NO. OF FILLERS	SINGLE-MODE		MAXIMUM TENSILE LOAD		MINIMUM BEND RADIUS	
					NOMINAL DIAMETER	WEIGHT	INSTALL	LONG TERM	INSTALL	LONG TERM
					inches (mm)	lbs/1,000 ft (kg/km)	lbs (N)	lbs (N)	inches (mm)	inches (mm)
72F Subunits	GR144P45199R:T4C	144	2	2	0.551 (14.0)	103 (153)	150 (660)	45 (200)	8.27 (210)	5.51 (140)
	GR216P45199R:T4C	216	3	1	0.551 (14.0)	107 (159)	150 (660)	45 (200)	8.27 (210)	5.51 (140)
	GR288P45199R:T4C	288	4	0	0.551 (14.0)	115 (165)	150 (660)	45 (200)	8.27 (210)	5.51 (140)
	GR432P45199R:T6C	432	6	0	0.650 (16.5)	165 (240)	150 (660)	45 (200)	9.75 (248)	6.50 (165)
	GR864P50199R:TCC	864	12	0	0.925 (23.5)	339 (505)	150 (660)	45 (200)	13.88 (353)	9.25 (235)
144F Subunits	GR144P70199R:U4C	144	1	3	0.787 (20.0)	177 (264)	150 (660)	45 (200)	11.81 (300)	7.87 (200)
	GR288P70199R:U4C	288	2	2	0.787 (20.0)	194 (288)	150 (660)	45 (200)	11.81 (300)	7.87 (200)
	GR432P70199R:U4C	432	3	1	0.787 (20.0)	165 (240)	150 (660)	45 (200)	11.81 (300)	7.87 (200)
	GR576P70199R:U4C	576	4	0	0.787 (20.0)	210 (300)	150 (660)	45 (200)	11.81 (300)	7.87 (200)
	GR1728P60199R:UCC	1728	12	0	1.09 (27.8)	410 (605)	150 (660)	45 (200)	16.35 (605)	10.09 (278)

## Fiber Specifications

CORE SIZE/FIBER TYPE	ISO/IEC	MAXIMUM ATTENUATION (dB/km)			OVERFILL LAUNCH MIN. BANDWIDTH (MHz•km)		EMBC (MHz•km)	GIGABIT ETHERNET MAX. LINK DISTANCE (meters)		10 GIGABIT ETHERNET MAX. LINK DISTANCE (meters)	
		850 nm	1300 nm	1550 nm	850 nm	1300 nm		850 nm	1300 nm	850 nm	1300 nm
(P) AFL Single-mode (ITU G.652.D/G.657.A1)	OS2	N/A	0.5	0.5	N/A	N/A	N/A	N/A	5,000	N/A	10,000

## WTC to Ultra HD MicroCore Pairing Chart

FIBER COUNT	WTC BINDER UNIT CONFIGURATION	RECOMMENDED ULTRA HD MICROCORE CABLE DESIGNS											
288F	4 Binder Units <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table>	1	2	3	4	1-6 Ring Marking (72F Subunits)  Ultra HD MicroCore 144F up to 864F (72F subs)							
1	2	3	4										
432F	6 Binder Units <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr></table>	1	2	3	4		5	6					
1	2	3	4	5	6								
576F	8 Binder Units <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr></table>	1	2	3	4	5	6	7	8				
1	2	3	4	5	6	7	8						
864F	12 Binder Units <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td></tr></table>	1	2	3	4	5	6	7	8	9	10	11	12
1	2	3	4	5	6	7	8	9	10	11	12		
1152F	8 Binder Units <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr></table>	1	2	3	4	5	6	7	8	1-12 Ring Marking (144F Bundles)  Ultra HD MicroCore 144F up to 1,728F (144F subs)			
1	2	3	4	5	6	7	8						
1728F	12 Binder Units <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td></tr></table>	1	2	3	4	5	6	7	8	9	10	11	12
1	2	3	4	5	6	7	8	9	10	11	12		

## Qualifications

GOVERNING BODY	STANDARD CODE	COMPONENT
UL	1666	Listed Riser
ANSI/ICEA	S-83-596	Fiber
Telcordia	GR-409-CORE Issue 2	Indoor Fiber Optic Cable

## Temperature Specifications

TEMPERATURE RANGE	
OPERATION	0°C to +70°C
STORAGE	-40°C to +70°C
INSTALLATION	0°C to +60°C

Contact AFL for your Ultra HD MicroCore cable solution.

Fiber Optic Cable