

# Sub-unitized Premise MicroCore® 2.0

AFL Sub-unitized MicroCore 2.0 cables continue to push evolution of high performance premise cabling. Now available in Base-8 cable configurations up to 144 fibers, and Base-12 configurations up to 216 fibers. MicroCore 2.0 can support all of your high-density network needs, offering the highest density 2.0 mm fiber cables available.

Constructed of the highest quality materials to exacting industry standards, these small-diameter cables provide the solution sought out by today's structured cabling professionals. Each subcable is independently qualified and is suitable for individual routing paths within the rack/panel architecture. This enables a flexibility of design and deployment not available in comparable high-density designs. Designed for direct termination and supportive of both single-fiber and multifiber architectures, this cable family should serves as the backbone to any deployed system. Cables are constructed with AFL MicroCore technology consistent with a long line of market leading designs.

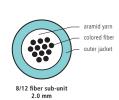
#### **Features**

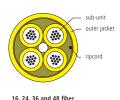
- 8-fiber sub-units with 16-144 fibers
- 12-fiber sub-units with 24-216 fibers
- Plenum flame-rated jacket
- All aramid tensile strength members within sub-units

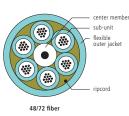
### **Applications**

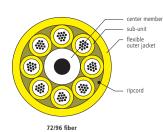
- Headend termination to a fiber "backbone"
- Termination of fiber rack systems
- Multifloor deployment where select fibers are used at each floor
- Intra-building "backbones"
- MTP/MPO or MTP to break-out terminations

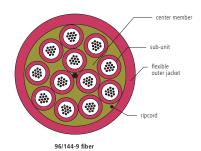
#### **Cable Components**



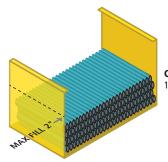




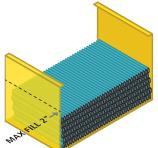




# 27% Reduction in 72ct Cable Diameter Yields Over 100% Increase in Pathway Capacity



Current 3.0 Sub-unitized Cable in Tray 120 x 72ct cables in standard 4" X 12" tray



Next Generation Sub-unitized MicroCore 2.0 Cable in Tray 250 x 72ct cables in standard 4" X 12" tray







# Sub-unitized Premise MicroCore® 2.0

#### **Mechanical Data**

TYPE	AFL NO.	FIBER	NO.OF	NO.OF	NOMINAL DIAMETER inches (mm)	WEIGHT lbs/1000 ft	TENSION lbs (N)		BENDING RADIUS inches (cm)	
ITPE	PLENUM	COUNT	SUBS	FILLERS		(kg/km)	INSTALLATION LONG TERM		INSTALLATION LONG TERM	
8-FIBER SUBUNITS	GQ016 <b>★</b> 201##B:848	16	4	2	0.27 (7.0)	32 (47)	150 (660)	45 (198)	4.1 (10.5)	2.7 (7.0)
	GQ032 <b>★</b> 201##B:848	32	4	0	0.27 (7.0)	33 (49)	150 (660)	45 (198)	4.1 (10.5)	2.7 (7.0)
	GQ048 <b>★</b> 201##B:868	48	6	0	0.32 (8.2)	42 (63)	150 (660)	45 (198)	4.8 (12.3)	3.2 (8.2)
	GQ064 <b>★</b> 201##B:888	64	8	0	0.33 (8.5)	35 (52)	150 (660)	45 (198)	5.0 (12.8)	3.3 (8.5)
	GQ072 <b>★</b> 201##B:898	72	9	0	0.40 (10.3)	81 (120)	150 (660)	45 (198)	6.0 (15.5)	4.0 (10.3)
	GQ096 <b>★</b> 201##B:8C8	96	12	0	0.41 (10.3)	66 (98)	150 (660)	45 (198)	6.1 (15.4)	4.1 (10.3)
	GQ144 <b>★</b> 201##B:8I8	144	18	0	0.50 (12.9)	104 (155)	150 (660)	45 (198)	7.5 (19.4)	5.0 (12.9)
	GQ024 <b>★</b> 201##B:C4C	24	4	2	0.27 (7.0)	33 (49)	150 (660)	45 (198)	4.1 (10.5)	2.7 (7.0)
	GQ036 <b>★</b> 201##B:C4C	36	4	1	0.27 (7.0)	33 (49)	150 (660)	45 (198)	4.1 (10.5)	2.7 (7.0)
	GQ048 <b>★</b> 201##B:C4C	48	4	0	0.27 (7.0)	33 (49)	150 (660)	45 (198)	4.1 (10.5)	2.7 (7.0)
12-FIBER SUBUNITS	GQ072 ★ 201##B:C6C	72	6	0	0.32 (8.2)	44 (66)	150 (660)	45 (198)	4.8 (12.3)	3.2 (8.2)
	GQ096 <b>★</b> 201##B:C8C	96	8	0	0.43 (10.9)	87 (130)	150 (660)	45 (198)	6.4 (16.4)	4.3 (10.9)
	GQ144 <b>★</b> 201##B:CCC	144	12	0	0.40 (10.3)	67 (100)	150 (660)	45 (198)	6.0 (15.5)	4.0 (10.3)
	GQ168 <b>★</b> 201##B:CIC	168	18	4	0.50 (12.9)	108 (160)	150 (660)	45 (198)	7.5 (19.4)	5.0 (12.9)
	GQ192 ★ 201##B:CIC	192	18	2	0.50 (12.9)	108 (160)	150 (660)	45 (198)	7.5 (19.4)	5.0 (12.9)
	GQ216 <b>★</b> 201##B:CIC	216	18	0	0.50 (12.9)	108 (160)	150 (660)	45 (198)	7.5 (19.4)	5.0 (12.9)

**<sup>★</sup>** Fiber Types — Replace asterisk (**★**) in AFL number with number in the Fiber Specifications table below.

# **Fiber Specifications**

CORE SIZE/FIBER TYPE	ISO/ IEC	MAXIMUM ATTENUATION (dB/km)		OVERFILL LAUNCH MIN. BANDWIDTH (MHz•km)		EMB <sub>C</sub> (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
(6) 62.5 Giga-Link™ 300	OM1	3.5	1.2	N/A	200	600	N/A	300	550	32	_
(5) 50 Giga-Link™ 600	OM2	3.5	1.5	N/A	500	500	N/A	600	600	82	_
(L) 50 Laser-Link 300	OM3	3.0	1.2	N/A	1,500	500	2,000	1,000	550	300	_
(C) 50 Laser-Link 550	OM4	3.0	1.2	N/A	3,500	500	4,700	1,040	550	550	_
(W) AFL Wideband Multimode	OM5	3.0	1.2	N/A	3,500	500	4,700	1,040	550	550	
(9) 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

# **Cable Jacket Color Options**

1 - Blue	6 - White	B - Rose
2 - Orange	7 - Red	C - Aqua
3 - Green	8 - Black	K - Erika Violet (RAL 4003)
4 - Brown	9 - Yellow	
5 - Slate	A - Violet	

# **Temperature Specifications**

TEMPERATURE RANGE					
<b>INSTALLATION</b> 0°C to $+60$ °C (32°F to $+140$ °F)					
OPERATION	0°C to +70°C (32°F to +158°F)				
STORAGE	-40°C to +70°C (-40°F to +158°F)				

# **Qualifications**

GOVERNING BODY	STANDARD CODE	COMPONENT	GOVERNING BODY	STANDARD CODE	COMPONENT
NFPA	262 (ONFP)	Outer Jaket	ICEA	S-104-696	Sub-units
Telcordia	GR-409-CORE	Sub-units	RoHS	2002/95/EC	Cable
EIA/TIA	568	Sub-units	IEC		

#### **Contact AFL for further details.**

<sup>#</sup> Outer Jacket Color – Replace hashtag (#) in AFL number with number in the Cable Jacket Color table below.