

# NanoCore<sup>®</sup> 24 through 288 fibers

FIBER

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### Product Highlights

- REACH & RoHS 2 compliant.
- Made in USA.
- All multimode, and singlemode cables (except OM1) utilize bend-insensitive optical fibers.
- Small, lightweight construction suitable for installations where space is at a premium.
- Ideal for MPO (MTP™) style connectors.
- Each fiber is color coded for easy identification.
- Flexible and easy to handle.

### Options

- 8 fibers per tube available up to 96 & 16 fibers per tube up to 144.
- Standard jacket colors are:  
Yellow: OS2  
Orange: OM1 & OM2  
Aqua: OM3 & OM4  
*Note: Erika Violet for OM4 is available*
- 16 Fiber colors are available.
- Enhanced bend insensitive OS2 optical fiber is available (ITU-T G.657.B3).

### Applications

- Ideal for high-density installations like data centers, central offices and overall premise applications where current or future data rates include 40 and 100 gigabits per second.
- For additional applications, visit the HCA website.
- OM5 supports applications utilizing Short Wave Division Multiplexing (SWDM).

### Standards

- TIA/EIA-568-C.3
- ISO/IEC 11801, 2nd edition
- Telcordia GR-409-CORE
- OS2 glass is compliant to ITU-T G.657.A1

## NanoCore<sup>®</sup> Multi-Unit Micro Distribution (Plenum) (UL) OFNP c(UL) OFNP FT6

### PART NUMBERS BY FIBER COUNT

FIBER COUNT	FIBERS PER TUBE	TUBE LAYOUT	TUBE OD mm	CABLE OD mm	62.5 UM OM1	50 UM OM2	50 UM OM3	50 UM OM4	50 UM OM4+	50 UM OM5	8.3 UM OS2
24	12	2+2FxCSM	2.0	6.4	62220-24	62214-24	62216-24	62218-24	62413-24	62668-24	62205-24
24	12	2+2FxCSM	3.0	9.1	62593-24	62594-24	62595-24	62596-24	62597-24	62650-24	62598-24
36	12	3+1FxCSM	2.0	6.4	62220-36	62214-36	62216-36	62218-36	62413-36	62668-36	62205-36
36	12	3+1FxCSM	3.0	9.1	62593-36	62594-36	62595-36	62596-36	62597-36	62650-36	62598-36
48	12	4xCSM	2.0	6.4	62220-48	62214-48	62216-48	62218-48	62413-48	62668-48	62205-48
48	12	4xCSM	3.0	9.1	62593-48	62594-48	62595-48	62596-48	62597-48	62650-48	62598-48
72	12	6xCSM	2.0	7.5	62220-72	62214-72	62216-72	62218-72	62413-72	62668-72	62205-72
72	12	6xCSM	3.0	10.4	62593-72	62594-72	62595-72	62596-72	62597-72	62650-72	62598-72
96	12	8xCSM	2.0	8.7	62220-96	62214-96	62216-96	62218-96	62413-96	62668-96	62205-96
96	12	8xCSM	3.0	12.2	62593-96	62594-96	62595-96	62596-96	62597-96	62650-96	62598-96
144	12	9x3xCSM	2.0	9.9	62220-144	62214-144	62216-144	62218-144	62413-144	62668-144	62205-144
144	12	9x3xCSM	3.0	14.4	62593-144	62594-144	62595-144	62596-144	62597-144	62650-144	62598-144
192*	24	8+4FxCSM	3.0	15.9	62544-192	62545-192	62546-192	62547-192	62548-192	62941-192	62549-198
288*	24	9x3xCSM	3.0	15.9	62544-288	62545-288	62546-288	62547-288	62548-288	62941-188	62549-288

### SPECIFICATIONS BY FIBER COUNT

FIBER COUNT	FIBERS/TUBE	TUBE LAYOUT	RECOMMENDED MAXIMUM LOADS									
			TUBE OD		CABLE OD		INSTALL		OPERATION		CABLE WEIGHT	
			in.	mm	in.	mm	lbs	N	lbs	N	lbs/kft	kg/km
24	12	2+2FxCSM	0.079	2.0	0.251	6.4	150	668	45	200	25.45	37.9
24	12	2+2FxCSM	0.118	3.0	0.357	9.1	150	667.6	45	200.3	43.45	64.7
36	12	3+1FxCSM	0.079	2.0	0.251	6.4	150	668	45	200	26.03	38.7
36	12	3+1FxCSM	0.118	3.0	0.357	9.1	150	667.6	45	200.3	43.98	65.5
48	12	4xCSM	0.079	2.0	0.251	6.4	150	668	45	200	26.61	39.6
48	12	4xCSM	0.118	3.0	0.357	9.1	150	667.6	45	200.3	44.51	66.3
72	12	6xCSM	0.079	2.0	0.295	7.5	150	668	45	200	36.0	53.6
72	12	6xCSM	0.118	3.0	0.411	10.4	150	667.6	45	200.3	63.61	94.7
96	12	8xCSM	0.079	2.0	0.344	8.7	150	668	45	200	48.5	72.2
96	12	8xCSM	0.118	3.0	0.482	12.2	150	667.6	45	200.3	89.95	133.9
144	12	9x3xCSM	0.079	2.0	0.390	9.9	150	668	45	200	54.1	80.5
144	12	9x3xCSM	0.118	3.0	0.568	14.4	150	667.6	45	200.3	95.26	141.8
192*	24	8+4FxCSM	0.118	3.0	0.624	15.8	150	668	45	200	157.36	234.18
288*	24	9x3xCSM	0.118	3.0	0.624	15.8	150	668	45	200	157.36	234.18

### Cable Characteristics

F = Filler  
CSM = Central Strength Member.

Notes: Part number rows in upper table directly correspond to cable characteristic rows in the same location of the lower table.  
\*These cable designs utilize a colored thread to separate fibers into bundles of 12.

# Micro Distribution Multimode and Singlemode

## NanoCore® Multi-Unit Micro Distribution (Plenum) (UL) OFNP c(UL) OFNP FT6

### Optical Specifications

TIA/EIA-568-C.3 | ISO/IEC 11801, 2nd edition | Telcordia GR-409-CORE

Fiber type	Max. Attenuation (dB/km)		Min OFL Bandwidth (MHz-km)		Min EMBc Bandwidth (MHz-km)		Gb Ethernet distance (m)		10 Gb Ethernet distance (m)	
	850nm (MM)	1300nm (MM)	850nm (MM)	1300nm (MM)	850nm (MM)	1300nm (MM)	850nm (MM)	1300nm (MM)	850nm (MM)	1300nm (MM)
OM1	3.5	1.0	200	500	220	N/A	300	550	33	N/A
OM2	2.8	1.0	700	500	950	N/A	750	550	150	N/A
OM3	2.8	1.0	1500	500	2000	N/A	1000	550	300	N/A
OM4	2.8	1.0	3500	500	4700	N/A	1100	550	550	N/A
OM4+	2.8	1.0	3500	500	5350	N/A	N/A	N/A	600	N/A
OM5*	2.8	1.0	3500	500	4700	N/A	1100	550	550	N/A
	1310nm (SM)	1550nm (SM)	1310nm (SM)	1550nm (SM)	1310nm (SM)	1550nm (SM)	1310nm (SM)	1550nm (SM)	1310nm (SM)	1550nm (SM)
OS2	0.5	0.5	N/A	N/A	N/A	N/A	> 25,000	> 40,000	10,000 - 25,000	40,000

Hitachi Cable America reserves the right to revise any specifications.

\*OM5 optical fiber tested by glass manufacturer and exceeds the requirements of all applicable industry standards.

### Cable Temperature Ranges

Storage: -40° to 70°C (-40° to 158°F)  
 Installation: 0° to 60°C (32° to 140°F)  
 Operating: 0° to 70°C (32° to 158°F)

### Mechanical Specifications

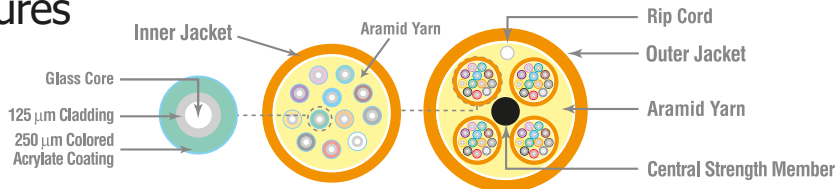
- Bend radius, no load = 10x cable overall diameter
- Bend radius, load = 15x cable overall diameter
- Compliant to TIA 568-C.3, ISO/IEC 11801 & Telcordia GR-409



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### Features



DIELECTRIC MATERIALS

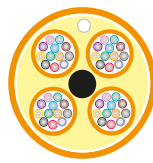
PLENUM

Overall Jacket

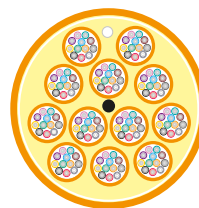
Flame-retardant thermoplastic



24 fibers



48 fibers



144 fibers