

# Armored 2 through 144 fibers

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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.
- 900 um buffered design recommended for easy termination.
- Eliminates need for inner duct or conduit.
- Aluminum interlock armor.
- Each fiber is color coded for easy identification.
- Ideal intra-building cable solution.
- Flexible and easy to handle.
- Lightweight, flexible aramid yarns enhance strength.

### Options

- Cables with up to 144 fibers available.
- Enhanced bend insensitive OS2 optical fiber is available (ITU-T G.657.B3 & G.657.A2).
- Standard jacket colors are:  
Yellow: OS2  
Orange: OM1 & OM2  
Aqua: OM3 & OM4  
*Note: Violet for OM4 is available*
- OM4+ optical fibers with extended 10 gigabit Ethernet distances are available.

### Applications

- Applications include 10, 40 & 100 gigabit Ethernet, Fibre Channel, Video, Security, Automation.
- OM5 supports applications utilizing Short Wave Division Multiplexing (SWDM).

### Standards

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

## Armored Tight Buffered (Riser) (UL) OFCR c(UL) OFCR FT4

### PART NUMBERS BY FIBER COUNT

FIBERS	62.5 UM OM1	50 UM OM2	50 UM OM3	50 UM OM4	50 UM OM5	8.3 UM OS2
2	61486-2	61542-2	61421-2	61896-2	62811-2	61540-2
4	61486-4	61542-4	61421-4	61896-4	62811-4	61540-4
6	61486-6	61542-6	61421-6	61896-6	62811-6	61540-6
8	61486-8	61542-8	61421-8	61896-8	62811-8	61540-8
10	61486-10	61542-10	61421-10	61896-10	62811-10	61540-10
12	61486-12	61542-12	61421-12	61896-12	62811-12	61540-12
24	61486-24	61542-24	61421-24	61896-24	62811-24	61540-24
48	62016-48	62017-48	62018-48	62019-48	62812-48	61541-48
72	62016-72	62017-72	62018-72	62019-72	62812-72	61541-72
96	62016-96	62017-96	62018-96	62019-96	62812-96	61541-96
144	62016-144	62017-144	62018-144	62019-144	62812-144	61541-144

### SPECIFICATIONS BY FIBER COUNT

FIBERS	CABLE O.D.		RECOMMENDED MAXIMUM LOADS				CABLE WEIGHT	
			INSTALL		OPERATION			
			lbs-f	N	lbs-f	N		
2	0.520	13.21	128	570	38	171	93.4	139.2
4	0.520	13.21	128	570	38	171	94.9	141.4
6	0.520	13.21	128	570	38	171	96.4	143.6
8	0.520	13.21	160	712	48	214	109.9	163.8
10	0.520	13.21	160	712	48	214	111.4	166.0
12	0.520	13.21	160	712	48	214	112.9	168.2
24	0.643	16.33	288	1282	86	385	164.1	244.5
48	0.960	24.38	640	2849	192	855	283.7	422.2
72	1.095	27.81	960	4273	288	1282	422.7	629.1
96	1.299	32.99	1280	5697	384	1709	609.2	906.6
144	1.454	36.93	1920	8546	576	2564	670.5	997.8

### Cable Characteristics

Note: Part number rows in upper table directly correspond to cable characteristic rows in the same location of the lower table.

# Multimode and Singlemode **Armored**

## Armored Tight Buffered (Riser) (UL) OFCR c(UL) OFCR FT4

### 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	3.0	1.0	700	500	950	N/A	750	550	150	N/A
OM3	3.0	1.0	1500	500	2000	N/A	1000	550	300	N/A
OM4	3.0	1.0	3500	500	4700	N/A	1100	550	550	N/A
OM5*	3.0	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: -10° to 60°C (14° to 140°F)  
 Operating: -20° to 70°C (-4° to 158°F)

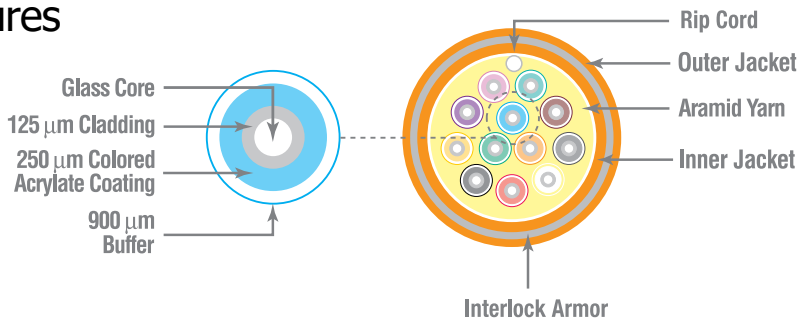
### Mechanical Specifications

- Bend radius, no load = 15x cable overall diameter
- Bend radius, load = 20x cable overall diameter



FIBER

### Features



DIELECTRIC MATERIALS  
 Overall Jacket: RISER  
 Flame-retardant thermoplastic

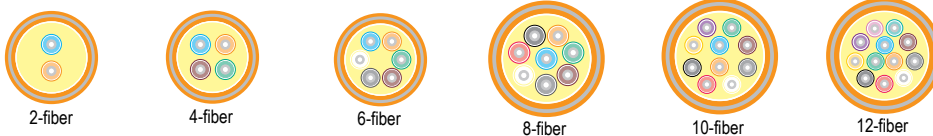


Diagram scale approx. 2:1

