ACCUMAX® Distribution Cable Riser Rated

ofs
Leading Optical Innovations

Non-Plenum, Non-Lead Cables Suitable for Zone Wiring

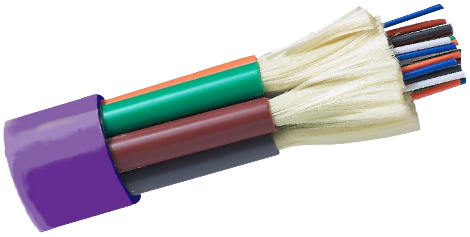
Product Description

OFS' ACCUMAX fiber optic distribution, riser rated cables have the flexibility to handle virtually any application between the building entrance and the desktop — in most environments from office to factory floor. ACCUMAX riser rated, non lead cable is especially suitable for installation in riser shafts, above drop ceilings, under raised floors, or in conduits. This robust cable is available in a variety of fiber counts and offers all the advantages associated with the ACCUMAX cable product family — including easier, faster, and lower installation cost.

Features

The OFS quality design and installation features of the ACCUMAX distribution cable offers a choice of fiber and prime fiber counts:

- ACCUMAX distribution cable is available with OFS' high-quality AllWave® fiber, 62.5/125 micron multimode fiber, single-mode depressed clad fiber, single-mode matched clad fiber, or TrueWave® fiber.
- Cable fiber counts are 2, 4, 6, 8, 12, 24, 36, 48, and 72.
- Hybrid composite cables are available in this ACCUMAX cable design.
- Standard jacket colors are violet for the AllWave fiber cables, slate for the multi-mode 62.5/125 micron fiber cables, yellow for single-mode fiber cables, and green for the TrueWave fiber cables. Other colors are available.
- Each 125 micron fiber comes with a first in class coating, bringing the diameter to 250 microns, and is proof-tested at 100 kpsi.
- The coated fiber is buffered to 900 microns with high quality non-lead PVC, and the buffer is color-coded for easy identification.
- The buffered fibers are surrounded by aramid yarn for strength and are over-jacketed with a non-lead proprietary PVC formulation for protection.
- The 24 and 36 fiber count cables are composed of multiple riser-rated units each containing 6 fibers. The 48 and 72 fiber count cables are composed of 12 fiber riser-rated units. These units are similar to the standard 6 and 12 fiber ACCUMAX cables, and are color-coded for easy identification.



ACCUMAX AllWave Cable

The buffered fibers in ACCUMAX distribution cables have a bending radius of 19 mm (0.75 in), permitting installation in wall or pedestal outlets. Buffered fibers may be bent to a radius of 38 mm (1.5 in) during moderate pull installation without concern for damage.

The guideline for bend radius in permanent cable or unit placement is 10 times the cable diameter. This allows for easier installation in tight places and corners found in office panels.

The fibers contained in ACCUMAX distribution cables meet or exceed all standards established or proposed for LAN, premises, or intrabuilding cables in ISO/IEC 11801, also ANSI-FDDI, EIA/TIA 568A, and IEEE 802. Other advantages include:

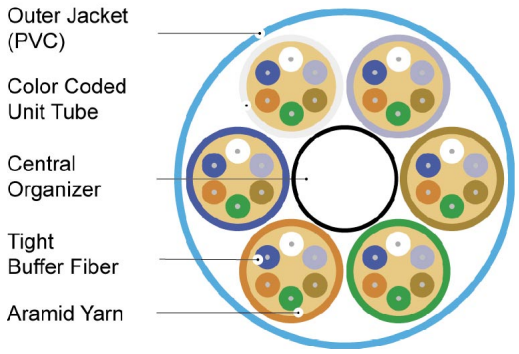
- Mechanical and optical attributes meet or exceed industry-accepted requirements ICEA S-83 596 and Telcordia GR-409.
- ACCUMAX distribution cables are tested and qualified in accordance with the industry standard EIA/TIA 455 (IEC/60794).
- ACCUMAX distribution cables and units are UL* listed and tested per UL 1666.
- All ACCUMAX riser cables and unit tubes carry the OFNR classification as described in the National Electrical Code (NEC†), and are CSA** certified per CSA OFN FT4.

High-quality materials and ACCUMAX cable's unique ROL manufacturing process are two of the reasons why these cables set the industry standard for quality and reliability.

Benefits:

The unique ACCUMAX HFC cable design features individual tight buffer fibers inside riser rated unit tubes. The design offers these benefits:

- **Faster, easier cable preparation** - The ACCUMAX cable design eliminates both the extra steps required to remove the jacket and the risk of broken fibers. Each flexible riser rated jacket or unit can be ringed and slipped off with a simple tool, no ripcords or razor blades are required.
- **Lower installation costs** - The dimensional reliability of OFS fiber (e.g., cladding diameter of 125 ± 1 micron) reduces labor and equipment costs by eliminating the need to redo terminations and splices.
- **Faster installation** - The high-quality buffer and first in class coating allow the fibers to be stripped to the glass in a single pass, saving time and eliminating the risk of broken fibers during connector installation.
- **Improved cabling efficiencies** - Small diameter, lightweight cables occupy less space in trays and conduits, reduce loads, and contribute to greater efficiency during installation.
- **No Lead** - ACCUMAX cable is the first in the industry with non-lead PVC riser-rated cables. Absolutely lead free cables.



Typical ACCUMAX HFC Cable Cross Section

Applications

ACCUMAX fiber optic riser rated distribution cables are ideal for almost any application between the building entrance splice and the user's desktop, in both the horizontal distribution and vertical. In many applications, splices can be eliminated because ACCUMAX cables are suitable for installation both inside and outside the building (in dry conduits, and below the frost line within operating temperature range).

ACCUMAX riser cables are a wise choice for most fiber-to-the-workstation applications described in the ANSI or EIA/TIA specification for premises distribution systems.

They are also designed for central office vault to frame installations and prewired shelves, as well as other applications that require fiber optic transmission. There's no need to install any other cable, just select the fiber count you need from the ACCUMAX cable product line.

Capabilities include:

- Robust enough to withstand typical abuse that occurs between the wall outlet and desktop equipment.
- Versatile enough to meet the durability needs of harsh and abusive environments like factory and trading floors, the flexibility needs of a business office, the safety standards of a hospital, and the multiple application needs of a college campus.
- Suitable for use in a wide range of systems, including data processing, telecommunications, CAD/CAM, fire alarm, HVAC, security, video, or equipment electronics.

Technical Specifications

Fiber Type	AllWave fiber 62.5/125 micron multimode fiber Depressed clad single-mode 8.3 micron fiber Matched clad single-mode 8.3 micron fiber TrueWave fiber
Fiber Dimensions	125 micron Cladding 250 micron coating 900 micron buffering
Fiber Proof Stress	689 N/mn^2 (100 kpsi)
Buffer Material	PVC - Flame Retardant
Unit Material	PVC - Flame Retardant
Jacket Material	PVC - Flame Retardant
Strength Material	Aramid Yarn
Operating Temperature	-4° F to 158° F (-20° C to 70° C) 0 dB added
Operating Temperature	-40° F to 185° F (-40° C to 85° C) ≤ 1.0 dB added
Installation Temperature	0° F to 122° F (-17° C to 50° C)
Storage Temperature	-40° F to 185° F (-40° C to 85° C)
Normal Reel Length	2 -12 Fiber 13,000 ft (4.0 km) approximately 24 - 36 Fiber 6,000 ft (1.8 km) approximately 48 - 72 Fiber 4,000 ft (1.2 km) approximately
Maximum Length	2 - 12 Fiber 29,500 ft (9.0 km) 24 - 36 Fiber 15,000 ft (4.6 km) 48 - 72 Fiber 11,000 ft (3.4 km)

Cable Performance Summary

Test	Reference
Impact	EIA-RS-455,FOTP-25 (IEC60794-1-E4)
Compression	EIA-RS-455,FOTP-41 (IEC60794-1-E3)
Flexure	EIA-RS-455,FOTP-104 (IEC60794-1-E6)
Tensile Bending	EIA-RS-455,FOTP-33 (IEC60794-1-E1)
Temperature Bending	EIA-RS-455,FOTP-37 (IEC60794-1-E11)
Twist Testing	EIA-RS-455,FOTP-85 (IEC60794-1-E7)
Flame Test	Ul 1666 and CSA OFN-FT4
Tray Rated Test	IEEE 383

Transmission Characteristics

Fiber Type	Operating Wavelength	Maximum Attentuation	Minimum Bandwidth
AllWave Single-mode Fiber	1310 nm	0.50 dB/km	3.5 ps/nm-km
	1383 nm	0.50 dB/km	-
	1550 nm	0.50 dB/km	3.5 ps/nm-km
	1625 nm	0.50 dB/km	-
Mode Field Diameter	9.2 microns @ 1310 nm 10.4 microns @ 1550 nm	Cut-off Wavelength - 1280 nm Max.	
Multimode 62.5/125 microns	850 nm	3.4 dB/km	200 MHz-km
	1300 nm	1.0 dB/km	500 MHz-km
Fiber Type	**Operating Wavelength**	**Maximum Attentuation**	**Minimum Dispersion**
Depressed Clad Single-Mode 8.3/125 microns	1310 nm	0.4 dB/km	2.8 ps/nm-km
	1550 nm	0.4 dB/km	18.0 ps/nm-km
(Mode Field Diameter - 8.8 microns)		Cut-off Wavelength - 1260 nm Max.	
Fiber Type	**Operating Wavelength**	**Maximum Attentuation**	**Minimum Dispersion**
Matched Clad Single-Mode	1310 nm	0.5 dB/km	3.5 ps/nm-km
	1550 nm	0.5 dB/km	18.0 ps/nm-km
(Mode Field Diameter - 9.3 microns)		Cut-off Wavelength - 1280 nm Max.	
Fiber Type	**Operating Wavelength**	**Maximum Attentuation**	**Minimum Dispersion**
TrueWave Fiber	1550 nm	0.30 dB/km	-

Fiber and Unit Identification

Color Code	Buffer Fiber Position	Unit Position
Blue	1	1
Orange	2	2
Green	3	3
Brown	4	4
Slate	5	5
White	6	6
Red	7	
Black	8	
Yellow	9	
Violet	10	
Rose	11	
Aqua	12	

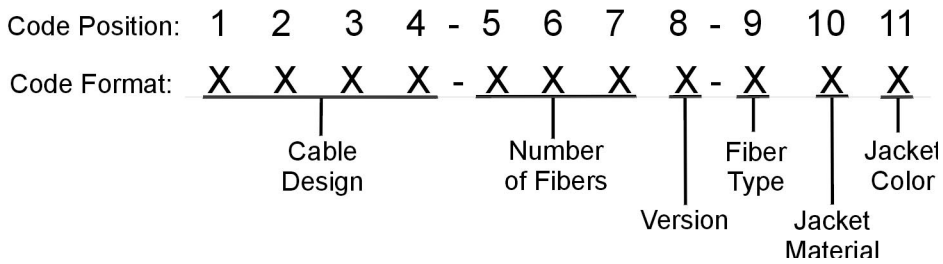
Cable Color Identification

Jacket Color Code	
Color	**Type of Fiber**
Slate	62.5/125 micron Multimode
Yellow	Single-mode
Violet	AllWave Single-mode Fiber
Green	TrueWave Fiber
Other colors are available upon request.	

How to Order

A special ACCUMAX riser cable code is needed when this type of cable is ordered.

A customer specifies a particular design and fiber count by a 11-character cable code. The general format and description of the code are as follows:



Example: LGBC-002D-LRX

Position	Description	Options
1-2	Cable Design	Lightguide (LG) - Position 1-2 (LG) to be eliminated from future codes
3-4	Cable Design	Building Cable (BC) for ACCUMAX cable
5-7	Number of Fibers	002, 004, 006, 012, 024, 036, 048, 072
8	Cable Version	A - Original - DA'd B - Enhanced - DA'd D - Fiber-to-the-Desktop design - ACCUMAX cable
9	Fiber Type	L - Multimode 62.5/125 micron core S - Single-mode 8.3 micron core - depressed clad V - Single-mode 8.3 micron core - matched clad A - *AllWave*® Fiber T - TrueWave® Fiber H - *LaserWave*™ 150 Fiber Z - *LaserWave* 300 Fiber
10	Jacket Material and Safety Performance	R - (Riser Type) - Flame retardant PVC P - (Plenum Type) - Low-smoke PVC H - Non-Halogen material
11	Jacket Color	X - Default color - Slate - 62.5/125 microns - Yellow - Single-mode - Violet - *AllWave* Fiber - Green - *TrueWave* Fiber - Aqua - *LaserWave* 300 and 150 Fiber O - Orange B - Blue

Note:
Other fiber type combinations are available upon request.

Ordering Information

Comcode	Product Code	Fiber Count	Cable Diameter mm (in)	Unit Fibers	Tensile Rating N (lbs)	Cable Weight kg/km (lb/100 ft)
AllWave Zero Water Peak Single-Mode Fiber						
108 527 011	LGBC-006D-ARX	6	4.7 (0.185)	-	1223 (275)	18.1 (1.21)
108 526 161	LGBC-012D-ARX	12	5.6 (0.220)	-	1334 (300)	26.4 (1.77)
108 521 915	LGBC-024D-ARX	24	15.7 (0.620)	6	2224 (500)	215 (14.4)
108 521 923	LGBC-036D-ARX	36	15.7 (0.620)	6	2224 (500)	217 (14.5)
108 521 931	LGBC-048D-ARX	48	18.5 (0.730)	12	2669 (600)	273 (18.3)
108 521 949	LGBC-072D-ARX	72	18.5 (0.730)	12	2669 (600)	282 (18.9)
62.5/125 Multimode Fiber						
106 290 943	LGBC-002D-LRX	2	4.6 (0.180)	-	1223 (275)	15.1 (1.01)
106 291 008	LGBC-004D-LRX	4	4.7 (0.185)	-	1223 (275)	17.0 (1.14)
106 291 024	LGBC-006D-LRX	6	5.3 (0.210)	-	1223 (275)	20.5 (1.38)
106 291 073	LGBC-012D-LRX	12	6.4 (0.250)	-	1334 (300)	29.3 (1.96)
107 508 335	LGBC-024D-LRX	24	15.8 (0.620)	6	2224 (500)	120 (8.04)
107 508 350	LGBC-036D-LRX	36	15.8 (0.620)	6	2224 (500)	181 (12.2)
107 531 360	LGBC-048D-LRX	48	18.5 (0.730)	12	2669 (600)	156 (10.5)
107 531 378	LGBC-072D-LRX	72	18.5 (0.730)	12	2669 (600)	171 (11.5)
Single-Mode Depressed Clad Fiber						
106 290 976	LGBC-002D-SRX	2	4.6 (0.180)	-	1223 (275)	15.1 (1.01)
106 291 016	LGBC-004D-SRX	4	4.7 (0.185)	-	1223 (275)	17.0 (1.14)
106 291 057	LGBC-006D-SRX	6	5.3 (0.210)	-	1223 (275)	20.5 (1.38)
106 291 081	LGBC-012D-SRX	12	6.4 (0.250)	-	1334 (300)	29.3 (1.96)
107 508 327	LGBC-024D-SRX	24	15.8 (0.620)	6	2224 (500)	120 (8.04)
107 508 343	LGBC-036D-SRX	36	15.8 (0.620)	6	2224 (500)	181 (12.2)
107 531 345	LGBC-048D-SRX	48	18.5 (0.730)	12	2669 (600)	156 (10.5)
107 531 352	LGBC-072D-SRX	72	18.5 (0.730)	12	2669 (600)	171 (11.5)
Single-Mode Matched Clad Fiber						
107 560 328	LGBC-004D-VRX	4	4.7 (0.185)	-	1223 (275)	17.0 (1.14)
107 560 336	LGBC-006D-VRX	6	5.3 (0.210)	-	1223 (275)	20.5 (1.38)
107 560 351	LGBC-012D-VRX	12	6.4 (0.250)	-	1334 (300)	29.3 (1.96)
107 531 717	LGBC-024D-VRX	24	15.8 (0.620)	6	2224 (500)	120 (8.04)
107 531 725	LGBC-036D-VRX	36	15.8 (0.620)	6	2224 (500)	181 (12.2)
107 531 733	LGBC-048D-VRX	48	18.5 (0.730)	12	2669 (600)	156 (10.5)
107 531 741	LGBC-072D-VRX	72	18.5 (0.730)	12	2669 (600)	171 (11.5)
TrueWave Non Zero Dispersion Optical Fiber						
109 163 873	LGBC-024D-TRX	24	15.8 (0.620)	6	2224 (500)	120 (8.04)

Note:
Specifications are subject to change without notice.
The data given is subject to normal manufacturing tolerances.
Performance specifications are measured in accordance with EIA Fiber Optic Test Procedures.

For additional information please contact your OFS sales representative. You can also visit our website at http://www.ofsoptics.com or call 1-888-fiberhelp.

You can also visit the Optical Connectivity website at http://ocdstore.ofsoptics.com

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