ACCUMAX® Premises Cable Distribution

ofs
A Furukawa Company

Versatile, High-Performance Fiber Optic Cable Helps Save on Installation Time and Expense

Product Description

When you need a high-performance cabling solution for premises distribution or fiber backbone applications, look to the OFS ACCUMAX® Family of Premises Cables. Whether your installation requires riser, plenum or low-smoke, zero halogen (LS0H) products, OFS has an ACCUMAX cable solution to meet your needs.

ACCUMAX Cables have the flexibility to handle virtually any application between the building entrance and the desktop – in most environments from the office to factory floor. High-quality materials and a patented reverse oscillating lay (ROL) manufacturing process are two reasons why ACCUMAX Cables help set the industry standard for quality and reliability.

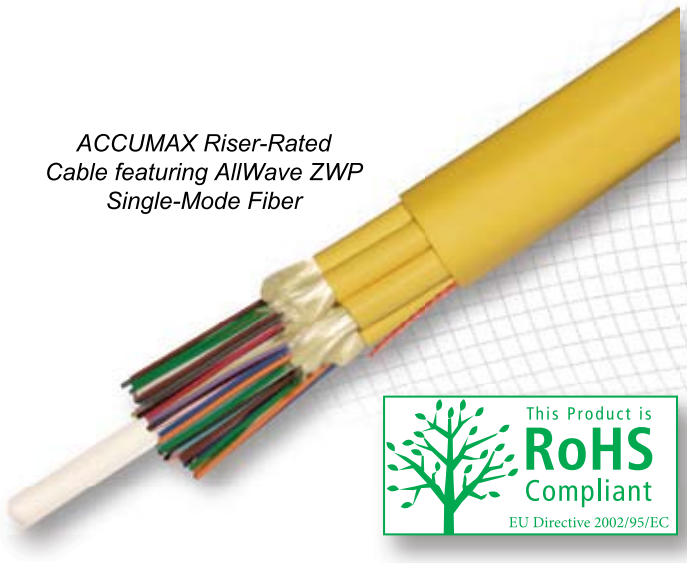
To construct an ACCUMAX Cable, coated optical fibers are first buffered with colored 900 micron (µm) protective coatings. For cables with 12 fibers or less, the buffered fibers are then surrounded by aramid yarn for added strength and are overjacketed for protection with a proprietary PVC sheath (for riser and plenum cable) or a flame-retardant non-halogen jacket (for LS0H cable). ACCUMAX Cables with fiber counts of 18 to 144 feature three to 12 ACCUMAX subunits, with each subunit containing six or 12 fibers.

Why the ACCUMAX Cables?

ACCUMAX Cables offer flexible and robust cabling solutions for virtually any indoor premises application, in both the horizontal and vertical distribution environments. In fact, these versatile cables can eliminate the cost of installing any other inside cable; simply select the design and fiber count that you need from the ACCUMAX product line.

The ACCUMAX cable design helps save time and money on installation by allowing faster, easier cable preparation. The best-in-class OFS fiber coating and high-quality tight buffered fibers ensure minimal termination effort, saving time and eliminating the risk of damaged or broken fibers during connector installation.

The compact, yet rugged ACCUMAX cable design has proven itself in the confined spaces of data centers, central offices and CATV head ends, and is especially suitable for installation in riser shafts, above drop ceilings, under raised floors or in conduits.



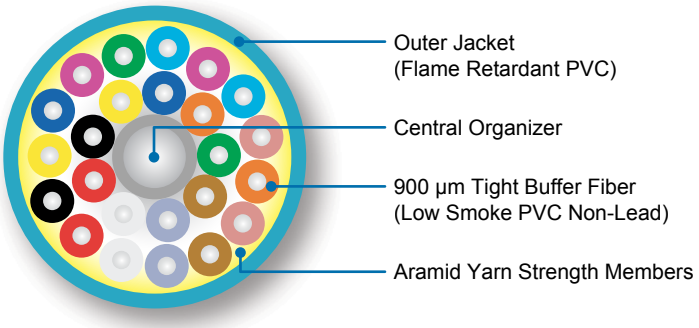
ACCUMAX Riser-Rated Cable featuring AllWave ZWP Single-Mode Fiber

Features and Benefits:

- Available in riser, plenum and low smoke, zero halogen (LS0H) rated designs
- Robust cable withstands typical indoor abuse
- Eases installation in space-constrained areas
- Superior tight buffering over a proprietary coating ensures minimal termination effort
- Enables faster, easier cable preparation and installation, for reduced installation time and cost
- Highly versatile and suitable for use in a wide range of systems and applications
- Cabled fiber counts of 2 to 144
- Smaller and lighter 18- and 24-fiber single-tube designs reduce installation preparation time
- Cable outer jacket color-coded to easily identify fiber type
- Hybrid composite cables with multiple fiber types available
- Meets or exceeds ICEA S-83 596 and Telcordia GR-409 Standards
- UL® Listed and tested per UL 1666
- Available with OFS AllWave® *FLEX* Zero Water Peak (ZWP) and AllWave ZWP Single-Mode Fiber, LaserWave® Multimode Fiber and other fiber types

Single-Tube and Multi-Tube Design Options

Unlike many other premises cables, ACCUMAX 18- and 24-Fiber Cables are available in both single-tube and multi-tube design options. No matter what your premises installation requirements or preferences may be, OFS offers an ACCUMAX Cable to meet your needs.



Single-Tube ACCUMAX Plenum-Rated Cable with LaserWave Fiber

ACCUMAX Cable Buffered Fiber Color Code for Single-Tube Design (2-24 Fibers)

Fiber #	Fiber Color	Fiber #	Fiber Color	Fiber #	Fiber Color	Fiber #	Fiber Color
1	Blue (BL)	7	Red (RD)	13	Blue (BL) with hash mark	19	Red (RD) with hash mark
2	Orange (OR)	8	Black (BK)	14	Orange (OR) with hash mark	20	Black (BK) with hash mark
3	Green (GR)	9	Yellow (YL)	15	Green (GR) with hash mark	21	Yellow (YL) with hash mark
4	Brown (BR)	10	Violet (VI)	16	Brown (BR) with hash mark	22	Violet (VI) with hash mark
5	Slate (SL)	11	Rose (RS)	17	Slate (SL) with hash mark	23	Rose (RS) with hash mark
6	White (WH)	12	Aqua (AQ)	18	White (WH) with hash mark	24	Aqua (AQ) with hash mark

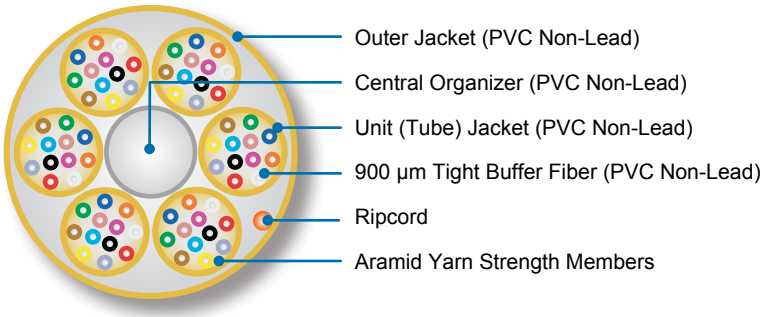
ACCUMAX Cable Buffered Fiber Color Code for 6- and 12-Fiber Subunits

Fiber #	Fiber Color	Fiber #	Fiber Color	Fiber #	Fiber Color	Fiber #	Fiber Color
1	Blue (BL)	4	Brown (BR)	7	Red (RD)	10	Violet (VI)
2	Orange (OR)	5	Slate (SL)	8	Black (BK)	11	Rose (RS)
3	Green (GR)	6	White (WH)	9	Yellow (YL)	12	Aqua (AQ)

ACCUMAX Riser-Rated Cable

ACCUMAX Riser-Rated Distribution Cable (pictured on first page) was the first 100% lead-free riser cable available in the optical fiber industry. This cable is suitable for zone wiring, and is a smart choice for most fiber-to-the-workstation applications (as described in the ANSI or EIA/TIA specifications for premises distribution systems). ACCUMAX Riser-Rated Cable is also well-suited for central office vault to frame installations and prewired shelves, as well as a wide range of other optical network applications.

All ACCUMAX Riser-Rated Cables and unit tubes carry the OFNR classification as described in the National Electrical Code (NEC), and are CSA certified per CSA OFN FT4. These cables are also UL Listed Riser per UL 1666 (flame test) and tray rated under IEEE 383.



ACCUMAX Riser-Rated Cable with AllWave ZWP Fiber

ACCUMAX Riser-Rated Cable – Specifications and Handling

		Single Tube							Multi Tube						
Fiber Count		2	4	6	8	12	18	24	18	24	36	48	72	96	144
Cable Outer Diameter – in.		0.18	0.185	0.21	0.228	0.245	0.279	0.335	0.555	0.555	0.555	0.625	0.760	0.880	0.940
	(mm)	(4.6)	(4.7)	(5.3)	(5.8)	(6.2)	(7.1)	(8.5)	(14.1)	(14.1)	(14.1)	(15.88)	(19.3)	(22.4)	(23.9)
Cable Weight –	lb/kft	10	11	14	19	20	32	41	89	80	109	105	115	355	310
	(kgm/km)	(15.1)	(17.0)	(20.5)	(28.5)	(29.3)	(48)	(61)	(133)	(120)	(163)	(156)	(171)	(528)	(461)
Maximum Rated Cable Load (MRCL)	lb	275	275	275	275	300	300	300	500	500	500	600	600	600	1000
	(N)	(1223)	(1223)	(1223)	(1223)	(1334)	(1334)	(1334)	(2224)	(2224)	(2224)	(2700)	(2700)	(2700)	(4445)
Fibers Per Tube		—	—	—	—	—	—	—	6	6	12	12	12	12	12

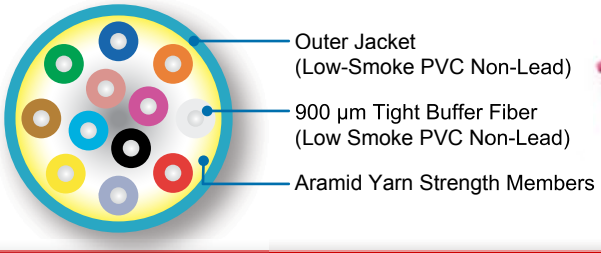
ACCUMAX Plenum-Rated Cable

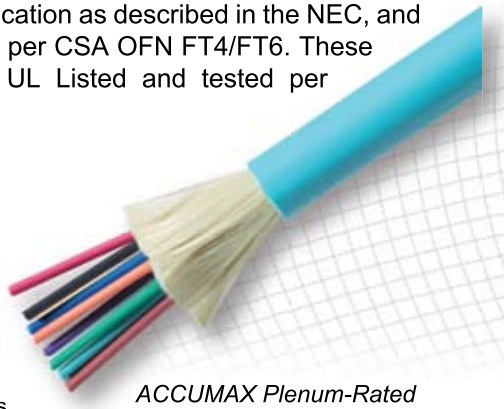
The ACCUMAX Plenum-Rated Distribution Cable offers an ideal choice for plenum applications including fiber-to-the-desktop. ACCUMAX Cable featuring LaserWave® Multimode Fiber is specifically designed for:

- **Seamless Migration** – Supports continuous migration from 10 Mbps to 10 Gbps with no cabling system changes up to 300 meters
- **Lower Installation Costs** – Enables lowest cost for legacy through 10-GBps applications, helping to reduce total system cost by 25% or more
- **Improved Cabling System Administration** – Saves time, using a single cable type which speeds cabling system administration
- **Reduced Hardware Costs** – Saves specialty hardware costs and administration problems by eliminating cumbersome and expensive mode conditioning patch cords required for 1300-nm laser operation on traditional multimode fibers

All ACCUMAX Plenum-Rated Cables and unit tubes carry the OFNP classification as described in the NEC, and are CSA certified per CSA OFN FT4/FT6. These cables are also UL Listed and tested per NFPA 262.

Note: Other elements specific to multi-tube cables not depicted here
[Unit (Tube) Jacket (PVDF) and Organizers (PVDF)]





ACCUMAX Plenum-Rated Cable with LaserWave Fiber

ACCUMAX Plenum-Rated Cable – Specifications and Handling

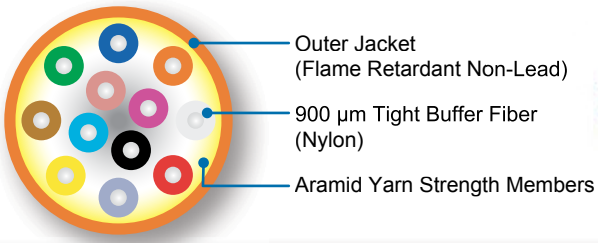
		Single Tube							*Multi Tube*						
Fiber Count		*2*	*4*	*6*	*8*	*12*	*18*	*24*	*18*	*24*	*36*	*48*	*72*	*96*	*144*
Cable Outer Diameter – in.		0.156	0.177	0.197	0.20	0.22	0.264	0.283	0.544	0.544	0.65	0.601	0.73	0.865	0.921
	(mm)	(4.0)	(4.5)	(5.0)	(5.1)	(5.6)	(6.7)	(7.2)	(13.82)	(13.82)	(16.5)	(15.27)	(18.54)	(22)	(23.4)
Cable Weight –	lb/kft	8.5	10.8	12.1	17	17.7	29	37	112	143.9	145.4	133.5	139.8	329	318
	(kgm/km)	(12.6)	(16.2)	(18.1)	(25.6)	(25.8)	(43)	(55)	(166)	(215)	(217)	(199)	(208)	(490)	(474)
Maximum Rated	lb	275	275	275	275	300	150	400	500	500	500	600	600	600	1000
Cable Load (MRCL)	(N)	(1223)	(1223)	(1223)	(1223)	(1334)	(660)	(1780)	(2224)	(2224)	(2224)	(2700)	(2700)	(2700)	(4445)
Fibers Per Tube		—	—	—	—	—	—	—	6	6	6	12	12	12	12

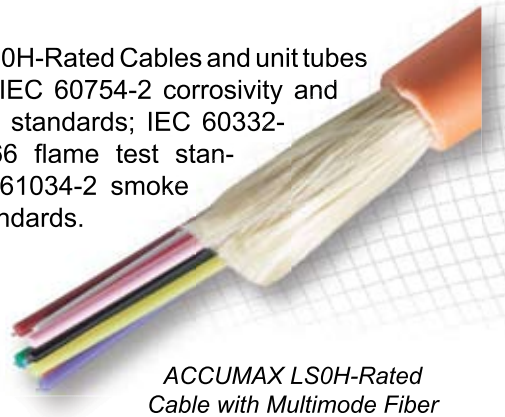
ACCUMAX LS0H-Rated Cable

ACCUMAX LS0H-Rated Distribution Cables are especially well suited for installation in riser shafts, above drop ceilings, under raised floors or in conduits. These cables contain absolutely no lead or heavy metals such as mercury, chromium or cadmium and are R0HS compliant.

All ACCUMAX LS0H-Rated Cables and unit tubes meet or exceed IEC 60754-2 corrosivity and NES 713 toxicity standards; IEC 60332-3C and UL 1666 flame test standards, and IEC 61034-2 smoke emission test standards.

Note: Other elements specific to multi-tube cables not depicted here
[Unit (Tube) Jacket (Flame Retardant Non-Lead) and Organizers (Flame Retardant Non-Lead)]





ACCUMAX LS0H-Rated Cable with Multimode Fiber

ACCUMAX LS0H-Rated Cable – Specifications and Handling

		Single Tube							*Multi Tube*						
Fiber Count		*2*	*4*	*6*	*8*	*12*	*18*	*24*	*18*	*24*	*36*	*48*	*72*	*96*	*144*
Cable Outer Diameter – in.		0.156	0.173	0.197	0.213	0.238	0.311	0.339	0.582	0.582	0.555	0.803	0.803	0.88	0.94
	(mm)	(4.0)	(4.4)	(5.0)	(5.4)	(6)	(7.9)	(8.6)	(14.78)	(14.78)	(14.1)	(20.4)	(20.4)	(22.35)	(23.87)
Cable Weight –	lb/kft	10	12	15	19	21	32	55	115	112	109	210	223	355	308
	(kgm/km)	(14.3)	(17.1)	(22.5)	(28.5)	(30.8)	(48)	(82)	(171)	(166)	(163)	(313)	(332)	(528)	(458)
Maximum Rated	lb	275	275	275	275	300	300	300	500	500	500	600	600	600	1000
Cable Load (MRCL)	(N)	(1223)	(1223)	(1223)	(1223)	(1334)	(1334)	(1334)	(2224)	(2224)	(2224)	(2700)	(2700)	(2700)	(4445)
Fibers Per Tube		—	—	—	—	—	—	—	6	6	12	12	12	12	12

Additional Specifications – All Cables

	AllWave ZWP and Multimode			*AllWave FLEX ZWP*		
	Minimum Bend Radius With Load	***Minimum Bend Radius With No Load***	***Minimum Bend Radius Storage Coils***	***Minimum Bend Radius With Load***	***Minimum Bend Radius With No Load***	***Minimum Bend Radius Storage Coils***
≤ 18 Fibers (No Subunits)	15 x Cable OD*	10 x Cable OD	10 x Cable OD	15 x Cable OD	8 x Cable OD	8 x Cable OD
≥ 18 Fibers (With Subunits)	15 x Cable OD	10 x Cable OD	10 x Cable OD	15 x Cable OD	8 x Cable OD	8 x Cable OD
Individual Subunits**	15 x Subunit Diameter	10 x Subunit Diameter	10 x Subunit Diameter	15 x Subunit Diameter	8 x Cable OD	8 x Cable OD
900 µm Buffered Fiber	0.25 in (0.635 cm)	0.75 in. (1.9 cm)	0.75 in. (1.9 cm)	0.25 in. (0.635 cm)	0.40 in. (1.0 cm)	0.40 in. (1.0 cm)

* OD = Outer Diameter

** Subunit O.D. for 24 fiber cables with 6 fiber subunits: 0.19 in. (4.7 mm)
Subunit O.D. for cables with > 24 fibers with 12 fiber subunits: 0.22 in. (5.6 mm)

Performance Standard

Tested per Applicable Requirements of EIA/TIA 455 and IEC 60794. See section on each cable design for additional test standards. Mechanical and optical attributes meet or exceed industry-accepted requirements per ICEA S-83 596 and Telcordia Technologies GR-409.

Handling

Temperature:
Installation: 0° F to 122° F (-17°C to 50° C)
Operation: -4° F to 158° F (-20°C to 70° C)
Storage: 40° F to 185° F (-40°C to 85° C*)
***Note:** (-40°C to 70°C storage temp for LS0H Cable)

Maximum Cable Attenuation*

Single-Mode Fibers (dB/km)	***1310 nm***	***1385 nm***	***1550 nm***
AllWave ZWP Single-Mode Fiber	0.5	0.5	0.5
AllWave *FLEX* ZWP Single-Mode Fiber	0.4	0.4	0.3

Multimode Fibers (dB/km)	***850 nm***	***1300 nm***
62.5 µm Multimode Fiber	3.4	1.0
50 µm Multimode and LaserWave® G+ Fibers	3.5	1.5
LaserWave 300 and LaserWave 550 Fibers	3.0	1.0

* ***Note:*** Installed attenuation values shall be at or below those listed above

ACCUMAX Distribution Cable Ordering Information

Example: **LGBC-012D-WRY**[1]

Part Number: **LGBC-***NNNX***-***YWZ*

LGBC = ACCUMAX Distribution Cable
NNN = Fiber Count: 002, 004, 006, 008, 012, 018, 024, 036, 048, 072, 096, or 144
X = Cable version:
D = Default Version
F = 18 and 24 Fiber Single Tube Design
Y = Fiber Type (see chart)
W = Jacket Material
R = Riser
P = Plenum
H = Low Smoke, Zero Halogen
Z = Jacket Color[2]:
Y = Yellow (Single-Mode Fiber)
O = Orange (50/125 µm and 62.5/125 µm Multimode Fiber)
A = Aqua (LaserWave Fiber)

Fiber Type

Code	***Description***
W	AllWave® *FLEX* ZWP Bend-Optimized Single-Mode Fiber
A	AllWave ZWP Single-Mode Fiber
T	TrueWave® *RS* LWP Single-Mode Fiber
R	TrueWave *REACH* Single-Mode Fiber
U	UltraWave® Terrestrial Single-Mode Fiber
E	LaserWave® 600 Multimode Fiber
F	LaserWave 550 Multimode Fiber
Z	LaserWave 300 Multimode Fiber
H	LaserWave G+ Multimode Fiber
J	Laser-Optimized 50/125 XL Multimode Fiber
M	50/125 µm Multimode Fiber
P	Laser-Optimized 62.5/125 XL Multimode Fiber
L	62.5/125 µm Multimode Fiber
G	Laser-Optimized 50 µm Multimode Fiber
I	Laser-Optimized 62.5/125 µm Multimode Fiber

[1] Part number shown is for an ACCUMAX Riser-Rated Distribution Cable with 12 AllWave *FLEX* ZWP Fibers and standard cable print and yellow jacket. Alternate cable print is available upon request:
OFS ACCUMAX ALLWAVE FLEX ZWP OPTICAL CABLE – C – LGBC – 012D – WRY C (UL) US TYPE OFNR [CSA OFN FT4] ***[LOT NUMBER] [LENGTH IN FEET]***

[2] Contact OFS for availability of alternative outer jacket and subunit jacket colors.
Note: Subunit color will be the same as the outer jacket color.

For additional information please contact your sales representative. You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) from inside the USA or 1-770-798-5555 from outside the USA.

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prem-117-0609

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