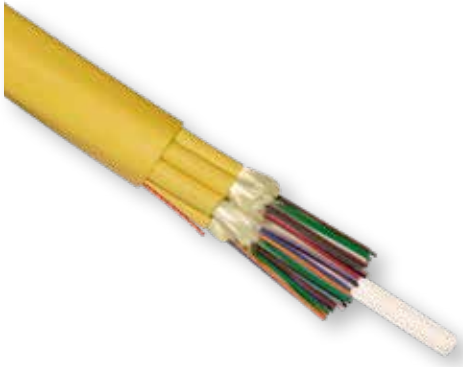# ACCUMAX® Distribution Premises Fiber Optic Cable
Versatile, High-Performance Fiber Optic Cable Helps Save on Installation Time and Expense

ACCUMAX Riser-Rated Cable featuring
AllWave *FLEX+* ZWP Single-Mode Optical Fiber

Features and Benefits:

- Available in riser, plenum and dual-rated, low smoke zero halogen (LSZH) rated designs
- Robust backbone 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® or ETL Listed and tested per OFNR or OFNP
- Available with OFS AllWave® *FLEX+* Zero Water Peak (ZWP) and LaserWave® *FLEX* Multimode Optical Fiber and other fiber types

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 dual-rated, low-smoke zero halogen (LSZH) 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 LSZH cable).
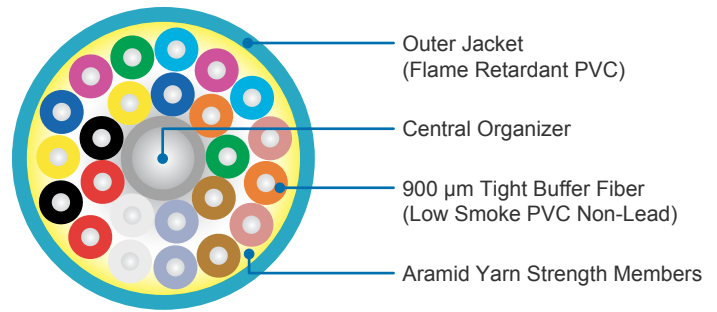
Why The ACCUMAX Cables?

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.

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.

Outer Jacket (Flame Retardant PVC)

Central Organizer

900 µm Tight Buffer Fiber (Low Smoke PVC Non-Lead)

Aramid Yarn Strength Members

Single-Tube Example: 18 or 24 fiber cable with central member

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

Fiber #	Fiber Color	Fiber #	Fiber Color	Fiber #	Fiber Color	Fiber #	Fiber Color
ACCUMAX Cable Buffered Fiber Color Code for 6- and 12-Fiber Subunits							
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 certified per OFNR FT4. These cables are also UL or ETL Listed Riser per OFNR (flame test) and tray rated under IEEE 383.

Outer Jacket (PVC Non-Lead)

Central Organizer (PVC Non-Lead)

Unit (Tube) Jacket (PVC Non-Lead)

900 µm Tight Buffer Fiber (PVC Non-Lead)

Ripcord

Aramid Yarn Strength Members
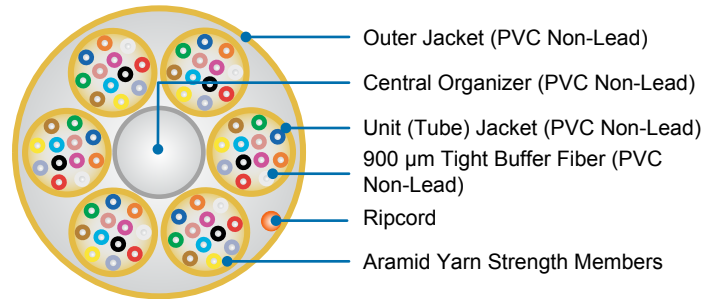
Multi-Tube Cable Example:
18 and 24 fiber cables feature 6 fibers per subunit;
36 fibers and above have 12 fibers per subunit.

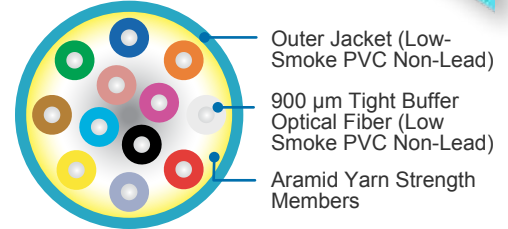| Fiber Count	Single Tube							Multi Tube						
	2	4	6	8	12	18	24	18*	24	36	48	72	96	144
ACCUMAX Riser-Rated Cable – Specifications and Handling														
Cable Outer Diameter - in. (mm)	0.16 (4.1)	0.16 (4.1)	0.17 (4.4)	0.20 (5.0)	0.22 (5.5)	0.28 (7.1)	0.29 (7.2)	0.51 (12.4)	0.51 (12.4)	0.53 (13.5)	0.63 (15.9)	0.76 (19.2)	0.88 (22.4)	0.94 (23.9)
Cable Weight - lb/kft (kgm/km)	7.9 (11.8)	9.3 (13.8)	10.9 (16.2)	13.5 (20.1)	16.5 (24.5)	32 (48)	37 (56)	73 (108.3)	73 (108.7)	83 (123.6)	122 (181.3)	206 (306.4)	291 (433)	310 (461)
Maximum Rated Cable Load (MRCL) - lb (N)	150 (667)	150 (667)	150 (667)	150 (667)	150 (667)	150 (667)	150 (667)	500 (2224)	500 (2224)	500 (2224)	600 (2700)	600 (2700)	600 (2700)	1000 (4445)
Fibers Per Tube	—	—	—	—	—	—	—	6	6	12	12	12	12	12
* 18-Fiber Multi Tube Cable has 3 subunits + 1 filler														

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® *FLEX* Multimode Optical 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. These cables are also ETL or UL Listed and tested per NFPA 262 OFNP.

ACCUMAX Plenum-Rated Cable
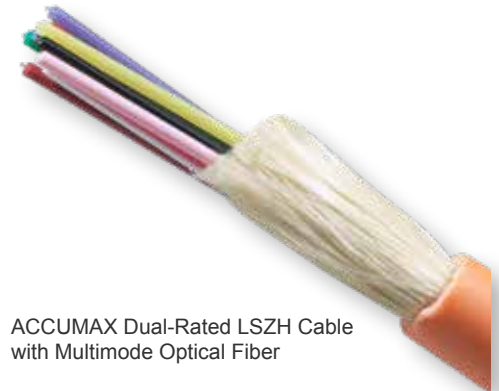with LaserWave *FLEX* Optical Fiber

Outer Jacket (Low-Smoke PVC Non-Lead)
900 µm Tight Buffer Optical Fiber (Low Smoke PVC Non-Lead)
Aramid Yarn Strength Members

Single-Tube Cable Example
12 Fibers or less with no central member

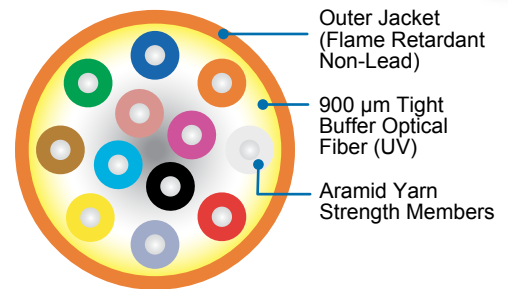| ACCUMAX Plenum-Rated Cable – Specifications and Handling														
	Single Tube							Multi Tube						
Fiber Count	2	4	6	8	12	18	24	18*	24	36	48	72	96	144
Cable Outer Diameter - in. (mm)	0.17 (4.3)	0.17 (4.3)	0.17 (4.3)	0.18 (4.6)	0.20 (5.1)	0.26 (6.7)	0.26 (6.7)	0.47 (12.0)	0.52 (13.2)	0.50 (12.6)	0.56 (15.9)	0.76 (14.2)	0.85 (21.5)	0.90 (22.8)
Cable Weight - lb/kft (kgm/km)	12 (18)	13 (20)	11 (16)	14 (21)	16 (24)	29 (44)	32 (48)	90 (135)	102 (151)	158 (234)	136 (202)	212 (316)	313 (466)	318 (474)
Maximum Rated Cable Load (MRCL) - lb (N)	150 (667)	150 (667)	150 (667)	150 (667)	150 (667)	150 (667)	150 (667)	300 (1335)	300 (1335)	300 (1335)	600 (2700)	600 (2700)	600 (2700)	1000 (4448)
Fibers Per Tube	—	—	—	—	—	—	—	6	6	12	12	12	12	12

ACCUMAX® Dual-Rated LSZH Cable

ACCUMAX Dual-Rated LSZH 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. They also carry the OFNR classification as described in the National Electrical Code (NEC) and UL Listed per UL 1666. All ACCUMAX Dual-Rated LSZH Cables and unit tubes meet new CPR ratings as noted below and UL1666.

ACCUMAX Dual-Rated LSZH Cable
with Multimode Optical Fiber

Outer Jacket (Flame Retardant Non-Lead)
900 µm Tight Buffer Optical Fiber (UV)
Aramid Yarn Strength Members

Single-Tube Cable Example
12 Fibers or less with no central member

ACCUMAX Dual-Rated LSZH Cable – Specifications and Handling					
	Single Tube (LGBC)				
Fiber Count	2	4	6	8	12
Cable Outer Diameter - in. (mm)	0.17 (4.2)	0.18 (4.6)	0.19 (4.9)	0.21 (5.3)	0.22 (5.7)
Cable Weight - lb/kft (kgm/km)	10 (15)	12 (18)	13 (20)	14 (21)	17 (25)
Maximum Rated Cable Load (MRCL) - lb (N)	150 (667)	150 (667)	150 (667)	150 (667)	150 (667)
Fibers Per Tube	—	—	—	—	—
CPR Rating	Dca-s1, d0, a1			Eca	
DoP Lookup: www.ofs-sales.com/cpr/	LGBC-XXX-E-D (XXX = Fiber Count)			LGBC-008-E-D	

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	Minium 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)

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 requirements per ICEA S-83-596 and Telcordia Technologies GR-409.

Handling

Temperature:	Installation:	0 ºF to 122 ºF (-17 ºC to 50 ºC)
	Operation:	-4 ºF to 158 ºF (-20 ºC to 70 ºC)
	Storage:	40 ºF to 185 ºF (-40 ºC to 85 ºC*)

* NOTE: (-40 ºC to 70 ºC storage temperature for LSZH Cable)

ACCUMAX Distribution Cable Ordering Information

Example: LGBC-012G-WRY-4[1]

Part Number: **LGBC**-*NNN***V** - *W X Y* - *Z*

LGBC =	ACCUMAX Distribution Cable
NNN =	Fiber Count 002, 004, 006, 008, 012, 018, 024, 036, 048, 072, 096 or 144
V =	Cable Version Riser 　**F** = Single Tube (018 and 024)[+] 　**G** = Single Tube (002 to 012) 　**G** = Multi Tube (024 to 072) 　**D** = Multi Tube (096 and 144)[+] Plenum+ 　**F** = Single Tube (002 and 024) 　**E** = Multi Tube (024 to 144) Dual-Rated LSZH 　**E** = Single Tube (002 to 012)
W =	Fiber Type (see chart)[+]
X =	Jacket Material (flame retardant) 　**R** = Riser 　**P** = Plenum 　**H** = Low Smoke, Zero Halogen (LSZH) 　**D** = Dual Rated LSZH
Y =	Jacket Color[2] 　**Y** = Yellow (Single-Mode Optical Fiber) 　**O** = Orange (50/125 µm Multimode Fiber) 　**A** = Aqua (LaserWave Optical Fiber)
Z =	Maximum Cable Attenuation (see chart)

Fiber Type[2]

Code	Description
W	AllWave *FLEX+* ZWP Bend-Optimized Single-Mode Optical Fiber (G.657.A2)
9	AllWave *FLEX* Max Bend-Optimized Single-Mode Optical Fiber (G.657.B3 & G.652.D)
K	LaserWave® *FLEX* G+ Multimode Optical Fiber (OM2)[+]
3	LaserWave *FLEX* 300 Multimode Optical Fiber (OM3)[+]
5	LaserWave *FLEX* 550 Multimode Optical Fiber (OM4)[+]

Maximum Cable Attenuation*

Single-Mode Optical Fibers (dB/km)	1310 nm	1550 nm	MCA (Z)
AllWave *FLEX+* and AllWave *FLEX* Max Single-Mode Optical Fiber (G.657.A2)[+]	0.4 0.5 0.7	0.3 0.5 0.7	4 5[+] 7[+]

Multimode Optical Fibers (dB/km)	850 nm	1300 nm	MCA (Z)
50 µm Multimode and LaserWave *FLEX* G+ Optical Fiber	3.5	1.5	G
LaserWave *FLEX* 300 and LaserWave *FLEX* 550 Optical Fiber	3.5	1.5	G*

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

\+ Higher attenuation dependent on specific cable constructions. Please contact OFS for additional details if needed.

[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 on request: **OFS ACCUMAX® ALLWAVE® *FLEX+* ZWP BIF G.657.A2 OPTICAL CABLE -C- LGBC-012G-WRY-4 9/125 E93542 OFNG FT-4 C(UL) US OFNR (MM/YY) {Lot No} {LENGTH IN FEET}**

[2] Contact OFS Order Management for information on other cable variations, including fiber types, attenuation, and custom cable print

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) USA or 1-770-798-5555 outside the USA.

FURUKAWA SOLUTIONS

For a full list of our certifications, visit our website.

RoHS Compliant EU Directive 2002/95/EC