25 years ago we didn't just start a company, we started an industry.

They said it would never last. "They" were wrong. In 1983 tight-buffered fiber optic cable was considered somewhat of a novelty...but one brash company said they had a better way. Over the last 25 years we haven't stopped believing that.

Companies all around the world have come to agree — from our clients to our competitors. And one thing no one can deny is that Optical Cable Corporation makes the most rugged, reliable cable in the world. Don't agree? Just take it up with the U.S. Department of Defense. Ours is the only cable in the world to currently carry the U.S. military's highest rating for ground tactical fiber optic cable.

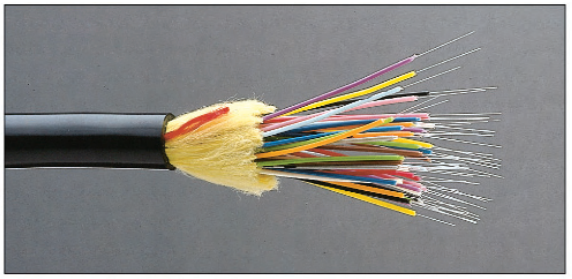
Our 25th year promises many new things, as well as the continuation of the legacy we proudly carry. Optical Cable Corporation — from the battlefield to the football field™ — for 25 years.

OPTICAL CABLE CORPORATION

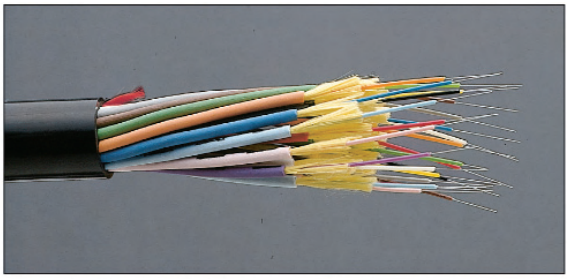
800-622-7711 | occfiber.com

SECTION 14 OPTICAL CABLE CORPORATION

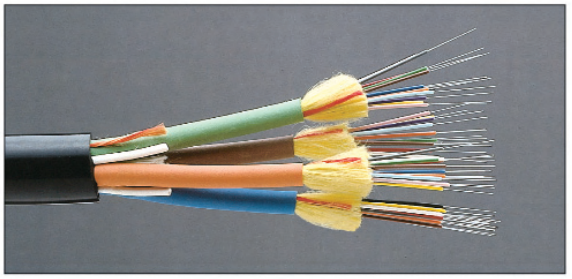
FEATURED PRODUCTS



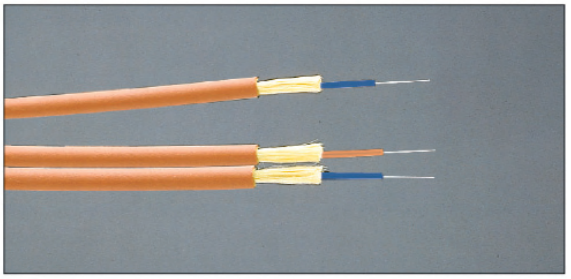
DX-Series Distribution Cables,
Riser-Rated and Plenum-Rated



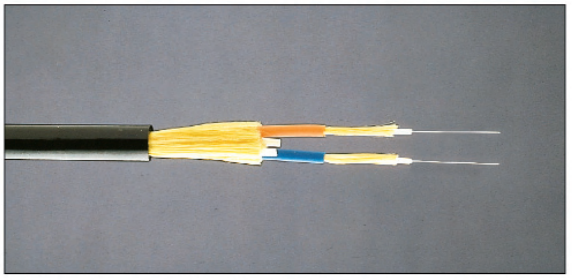
BX-Series Breakout Cables,
Riser-Rated and Plenum-Rated



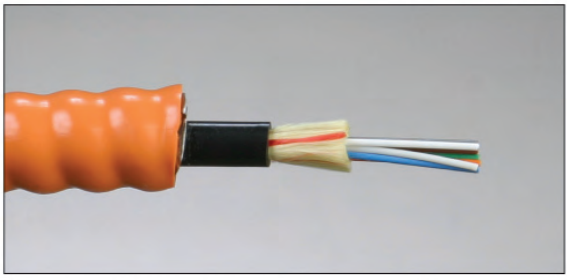
GX-Series Subgrouping Cables,
Riser-Rated and Plenum-Rated



AX-Series Assembly Cables,
Riser-Rated and Plenum-Rated



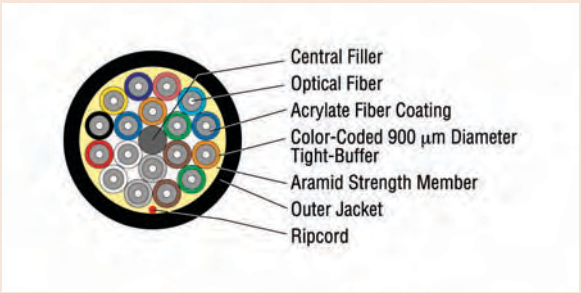
Military Tactical Cables D-Series Distribution and B-Series Breakout Cables



Interlocked Armored Cables

OPTICAL CABLE CORPORATION

DX-Series Distribution Cables

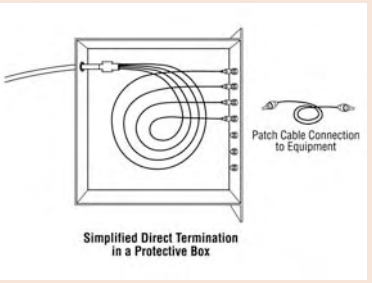


FEATURES AND APPLICATIONS

- Used in trunking, LAN, and distribution applications where small size, lightweight, and versatile installation capability are required
- Suitable for both indoor and outdoor use - no need to splice outdoor cable to indoor cable at the building entrance
- Flame-retardant for indoor installations
- Fungus-resistant, water-resistant, and UV-resistant for outdoor use
- Cable can be armored for additional protection in direct burial and aerial installations
- Highest specific strength-to-weight ratio and compact cable design for limited conduit space and tight bends in long cable pulls
- Helically stranded cable core for flexibility, survival in difficult pulls, and mechanical protection for the optical fibers
- Lower total installed costs
- Economical for longer distance runs where size and cable cost are more significant
- High performance tight-buffered coating on each optical fiber for environmental and mechanical protection
- 2 to 144 fibers without subgrouping for the most size efficient tight-buffered fiber optic cable available. Higher fiber counts are available upon request
- Water-blocked D-Series and DX-Series Distribution Cables are available

IN A TYPICAL INSTALLATION, DX-SERIES DISTRIBUTION CABLES:

- Allow direct termination with connectors
- Reduce installation cost—
  - eliminate breakout/fanout kits and tubing, splicing of pigtails
  - reduce material cost
  - reduce labor cost
- Improve link budget—
  - eliminate splice loss
- Can be used both indoors and outdoors—
  - eliminate splices and discontinuities
  - improve reliability
  - reduce cost



DX-SERIES DISTRIBUTION CABLES—RISER

PART No.	*NO. OF FIBERS*	*CABLE DIAMETER (IN.)*	*WEIGHT (LBS/1,000 FT)*
DX06-055D-■■■/900-OFNR	6	0.22	19
DX12-065D-■■■/900-OFNR	12	0.26	25
DX24-085D-■■■/900-OFNR	24	0.33	44
DX48-105D-■■■/900-OFNR	48	0.41	69
DX144-210D-■■■/900-OFNR	144	0.83	212

Other fiber counts available.

DX-SERIES DISTRIBUTION CABLES—PLENUM

PART No.	*NO. OF FIBERS*	*CABLE DIAMETER (IN.)*	*WEIGHT (LBS/1,000 FT)*
DX06-050K-■■■/900-OFNP	6	0.20	15
DX12-060K-■■■/900-OFNP	12	0.24	19
DX24-075K-■■■/900-OFNP	24	0.30	36
DX48-095K-■■■S/900-OFNP	48	0.37	62
DX72-125K-■■■/900-OFNP	72	0.49	83

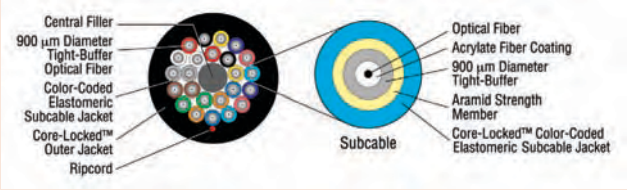
Other fiber counts available.

■■■ = Fiber Type
Examples:
For standard 62.5/125 multimode, use **WLS**
For standard 50/125 multimode, use **ALS**
For low water-peak single-mode, use **SLX**
For additional fiber types and specifications, see page 14-9 or contact your Accu-Tech sales rep.

For updated part number information, call your Accu-Tech sales rep or visit **www.occfiber.com**.

OPTICAL CABLE CORPORATION

BX-Series Breakout Cables



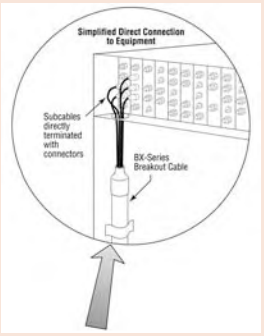
FEATURES AND APPLICATIONS

- Most rugged and "installer friendly" cable design for Local Area Networks
- For installations where ease of termination and termination costs are important factors
- Subcables are designed for direct termination with standard connectors
- Suitable for both indoor and outdoor use – no need to splice outdoor cable to indoor cable at the building entrance
- Flame-retardant for indoor installations
- Fungus-resistant, water-resistant, and UV-resistant for outdoor use
- High performance tight-buffered coating on each optical fiber for environmental and mechanical protection
- Elastomeric jacket encases each optical fiber and surrounding aramid strength members to provide a ruggedized subcable
- 2 to 60 fibers, higher fiber counts are available upon request
- Water-blocked B-Series and BX-Series Breakout Cables are available

For updated part number information, call your Accu-Tech sales rep or visit **www.occfiber.com**.

IN A TYPICAL INSTALLATION, BX-SERIES BREAKOUT CABLES:

- Allow direct termination of subcables with connectors—
  - full mechanical termination to subcable strength members
  - total environmental protection from connector end to connector end
- Reduce installation cost—
  - eliminate breakout/fanout kits and tubing, splicing of pigtails
  - eliminate patch panels, patch cords, and connector losses
  - reduce material cost
  - reduce labor cost



- Ideal for use in point-to-point runs in adverse environments
- Improve link budget—
  - eliminate splice loss
- Can be used both indoors and outdoors—
  - eliminate splices and discontinuities
  - improve reliability
  - reduce cost

BX-SERIES BREAKOUT CABLES—RISER

PART No.	*NO. OF FIBERS*	*CABLE DIAMETER (IN.)*	*WEIGHT (LBS/1,000 FT)*
BX06-095D-■■■/900-OFNR	6	0.37	55
BX12-125D-■■■/900-OFNR	12	0.49	101
BX24-175D-■■■/900-OFNR	24	0.69	183
BX48-235D-■■■/900-OFNR	48	0.93	264

Other fiber counts available.

BX-SERIES BREAKOUT CABLES—PLENUM

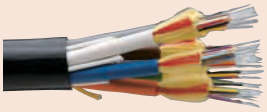
PART No.	*NO. OF FIBERS*	*CABLE DIAMETER (IN.)*	*WEIGHT (LBS/1,000 FT)*
BX06-070K-■■■/900-OFNP	6	0.28	32
BX12-100K-■■■/900-OFNP	12	0.39	63
BX24-130K-■■■/900-OFNP	24	0.51	99
BX48-185K-■■■/900-OFNP	48	0.73	184

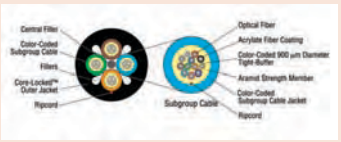
Other fiber counts available.

■■■ = Fiber Type
Examples:
For standard 62.5/125 multimode, use **WLS**
For standard 50/125 multimode, use **ALS**
For low water-peak single-mode, use **SLX**
For additional fiber types and specifications, see page 14-9 or contact your Accu-Tech sales rep.

OPTICAL CABLE CORPORATION

GX-Series Subgrouping Cables





FEATURES AND APPLICATIONS

- Tight-buffered multifiber cable design allows subcables to be routed to multiple locations such as in wiring racks or wiring closets
- Core-Locked™ outer jacket surrounds the subcables for excellent crush resistance, survivability, and use in long vertical installations
- Multifiber color-coded subcables, each similar to the DX-Series Distribution Cable
- Suitable for both indoor and outdoor use – no need to splice outdoor cable to indoor cable at the building entrance
- Flame-retardant for indoor installations. Fungus-resistant, water-resistant, and UV-resistant for outdoor use
- 12 to 144 fibers in various subgroup cable sizes, higher fiber counts available upon request
- Best design for multimode and single-mode fiber hybrid cables
- Helically stranded cable core for flexibility, survival in difficult pulls, and mechanical protection for the optical fibers

IN A TYPICAL INSTALLATION, GX-SERIES SUBGROUPING CABLES:

- Provide efficient, economical cabling to multiple destinations without further protection, splicing or retermination for distribution
- Allow separation and identification of groups of different fibers, such as single-mode and multimode, each in different subgroup cables
- Permit direct termination with connectors, reducing material and installation cost
- Can be used both indoors and outdoors—
  - eliminate splices and discontinuities
  - improve reliability
  - reduce cost

GX-SERIES SUBGROUPING CABLES—RISER

6-Fiber Subgroups

PART No.	NO. OF FIBERS	CABLE DIAMETER (IN.)	WEIGHT (LBS/1,000 FT)
GX12-145D-■■■/900-OFNR	12	0.57	125
GX24-145D-■■■/900-OFNR	24	0.57	125
GX36-170D-■■■/900-OFNR	36	0.67	158

Other fiber counts available.

GX-SERIES SUBGROUPING CABLES—RISER

12-Fiber Subgroups

PART No.	NO. OF FIBERS	CABLE DIAMETER (IN.)	WEIGHT (LBS/1,000 FT)
GX24-165D-■■■/900-OFNR	24	0.65	158
GX48-165D-■■■/900-OFNR	48	0.65	158
GX72-205D-■■■/900-OFNR	72	0.81	205
GX144-280D-■■■/900-OFNR	144	1.10	400

Other fiber counts available.

GX-SERIES SUBGROUPING CABLES—PLENUM

6-Fiber Subgroups

PART No.	NO. OF FIBERS	CABLE DIAMETER (IN.)	WEIGHT (LBS/1,000 FT)
GX12-125K-■■■/900-OFNP	12	0.49	93
GX24-145K-■■■/900-OFNP	24	0.49	97
GX36-170K-■■■/900-OFNP	36	0.59	124

Other fiber counts available.

GX-SERIES SUBGROUPING CABLES—PLENUM

12-Fiber Subgroups

PART No.	NO. OF FIBERS	CABLE DIAMETER (IN.)	WEIGHT (LBS/1,000 FT)
GX24-140K-■■■/900-OFNP	24	0.55	106
GX48-140K-■■■/900-OFNP	48	0.55	146
GX72-175K-■■■/900-OFNP	72	0.69	172
GX144-270K-■■■/900-OFNP	144	1.06	378

Other fiber counts available.

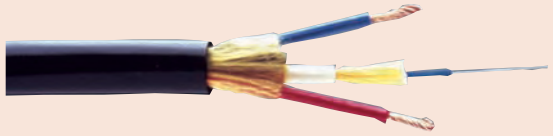
■■■ = Fiber Type

Examples:
For standard 62.5/125 multimode, use **WLS**
For standard 50/125 multimode, use **ALS**
For low water-peak single-mode, use **SLX**
For additional fiber types and specifications, see page 14-9 or contact your Accu-Tech sales rep.

For updated part number information, call your Accu-Tech sales rep or visit **www.occfiber.com**.

OPTICAL CABLE CORPORATION

Composite Fiber/Copper Cables



Many combinations of optical fibers and wires can be manufactured to your specific requirements. Please contact your Accu-Tech sales rep for the composite Fiber/Copper Cable design that meets all your special application requirements.

FEATURES AND APPLICATIONS

- Various combinations of copper conductors and optical fibers in a single composite cable
- Other data and voice grade, or power conductors are available
- Copper and fiber individually subcabled for ease of separation, handling, and termination
- Round cable design for easy installation and survivability
- Many combinations available with riser-ratings or plenum-ratings
- Excellent chemical-resistant outer cable jacket available for inside/outside plant environments

CX-SERIES COMPOSITE CABLES—PLENUM—18 AWG

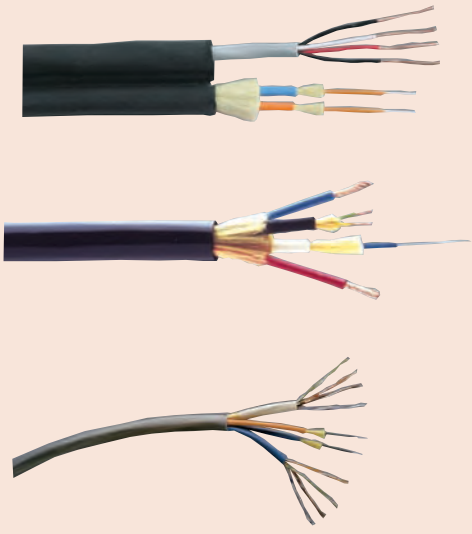
PART No.	*NO. OF FIBERS*	*CABLE DIA. (IN.)*	*WEIGHT (LBS /1,000 FT)*
CX03-065K-1▮▮▮-2AWG18/900-CL2P-OF	1	0.26	37
CX04-065K-2▮▮▮-2AWG18/900-CL2P-OF	2	0.26	37
CX06-080K-4▮▮▮-2AWG18/900-CL2P-OF	4	0.32	47
CX08-100K-6▮▮▮-2AWG18/900-CL2P-OF	6	0.39	62

CX-SERIES COMPOSITE CABLES—RISER—18 AWG

PART No.	*NO. OF FIBERS*	*CABLE DIA. (IN.)*	*WEIGHT (LBS /1,000 FT)*
CX03-070D-1▮▮▮-2AWG18/900	1	0.28	44
CX04-070D-2▮▮▮-2AWG18/900	2	0.28	44
CX06-080D-4▮▮▮-2AWG18/900	4	0.32	50
CX08-095D-6▮▮▮-2AWG18/900	6	0.37	64

Also available in 16, 14 and 12 AWG.

Other fiber counts available.



▮▮▮ = Fiber Type
Examples:
For standard 62.5/125 multimode, use **WLS**
For standard 50/125 multimode, use **ALS**
For low water-peak single-mode, use **SLX**
For additional fiber types and specifications, see page 14-9 or contact your Accu-Tech sales rep.

For updated part number information, call your Accu-Tech sales rep or visit **www.occfiber.com**.

Interlocked Armored Cables

FEATURES AND APPLICATIONS

- Greater flexibility, cut resistance, and crush resistance than standard corrugated steel armored cables
- Available for riser-rated and plenum-rated environments
- Ideal cable construction for industrial and other applications requiring metallic armor
- May eliminate the need for conduit

INTERLOCKED ARMORED CABLES—RISER

PART No.	NO. OF FIBERS	CABLE DIAMETER (IN.)	WEIGHT (LBS/1,000 FT)
DX06-055D-■■■/900-OFCR-IAD	6	0.54	101
DX12-065D-■■■/900-OFCR-IAD	12	0.60	117
DX24-085D-■■■/900-OFCR-IAD	24	0.64	146
DX48-105D-■■■/900-OFCR-IAD	48	0.74	258

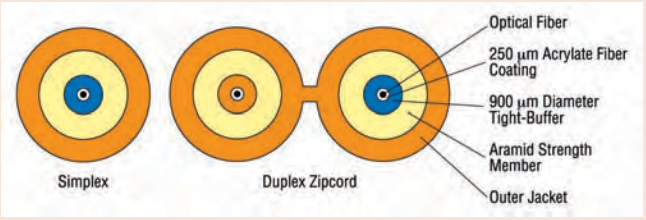
Other fiber counts available

INTERLOCKED ARMORED CABLES—PLENUM

PART No.	NO. OF FIBERS	CABLE DIAMETER (IN.)	WEIGHT (LBS/1,000 FT)
DX06-050K-■■■/900-OFCP-IAK	6	0.55	119
DX12-060K-■■■/900-OFCP-IAK	12	0.55	134
DX24-070K-■■■/900-OFCP-IAK	24	0.60	153
DX48-095K-■■■/900-OFCP-IAK	48	0.70	201

Other fiber counts available.

AX-Series Assembly Cables



FEATURES AND APPLICATIONS

- Resilient and flexible for jumpers, patch cords, and pigtails
- Suitable for general purpose indoor use, such as routing connections in patching systems

AX-SERIES ASSEMBLY CABLES—RISER

PART No.	NO. OF FIBERS	CABLE DIAMETER (IN.)	WEIGHT (LBS/1,000 FT)
AX01-029N-■■■/900-OFNR	1	0.11	5
AX02-029N-■■■/900-OFNR	2	0.11 x 0.23	11

AX-SERIES ASSEMBLY CABLES—PLENUM

PART No.	NO. OF FIBERS	CABLE DIAMETER (IN.)	WEIGHT (LBS/1,000 FT)
AX01-029S-■■■/900-OFNP	1	0.11	6
AX02-029S-■■■/900-OFNP	2	0.11 x 0.23	12

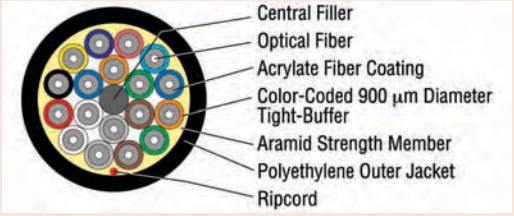
AX-SERIES ASSEMBLY CABLES—ZERO HALOGEN

PART No.	NO. OF FIBERS	CABLE DIAMETER (IN.)	WEIGHT (LBS/1,000 FT)
AX01-029Z-■■■/900-OFNR	1	0.11	5
AX02-029Z-■■■/900-OFNR	2	0.11 x 0.23	11

■■■ = Fiber Type
Examples:
For standard 62.5/125 multimode, use **WLS**
For standard 50/125 multimode, use **ALS**
For low water-peak single-mode, use **SLX**
For additional fiber types and specifications, see page 14-9 or contact your Accu-Tech sales rep.

For updated part number information, call your Accu-Tech sales rep or visit **www.occfiber.com**.

Aerial DX-Series Polyethylene Distribution Cables



FEATURES AND APPLICATIONS

- Tight-buffered construction with no messy gel to clean for termination or splicing
- Polyethylene outer cable jacket for excellent UV and weather resistance
- Ideal for conventional lashing techniques
- High performance tight-buffer on the optical fibers for excellent environmental and mechanical protection
- Suitable for use outdoors in wet environments
- Applications include:
  - Cable TV
  - Fiber in the Loop
  - Fiber to the Curb
  - Drop Cable
- Any other lower fiber count applications where ease of termination, handling, and rugged construction is a benefit
- Water-blocked Aerial DX-Series Polyethylene Distribution Cables are available

AERIAL DX-SERIES PE DISTRIBUTION CABLES

PART No.	*NO. OF FIBERS*	*CABLE DIAMETER (IN.)*	*WEIGHT (LBS/1,000 FT)*
DX06-060A-■■■/900	6	0.24	28
DX12-075A-■■■/900	12	0.30	34
DX24-095A-■■■/900	24	0.37	44
DX48-110A-■■■/900	48	0.43	75

■■■ = Fiber Type
Examples:
For standard 62.5/125 multimode, use **WLS**
For standard 50/125 multimode, use **ALS**
For low water-peak single-mode, use **SLX**
For additional fiber types and specifications, see page 14-9 or contact your Accu-Tech sales rep.

OptiReel™

OptiReel™ is a self-contained payout box to facilitate storage, handling and pulling of the cables. The packaging greatly reduces set-up time for each pull. Therefore, the box is ideally suited for cable pulls through building duct systems, walls, and ceilings where multiple cables may be pulled together and many relatively short runs need to be installed.

OptiReel™ cable packaging is available for Optical Cable Corporation's simplex and duplex AX-Series Assembly and DX-Series Distribution types of cables, either riser-rated or plenum-rated, with 62.5/125, 50/125, and single-mode fibers.

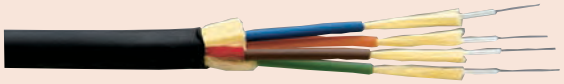
FEATURES AND APPLICATIONS

OptiReel™ cable box saves installers time:

- Always know remaining cable length
- AT-A-GLANCE decreasing cable length markings
- Faster installation for multiple fiber optic cable drops
- Easy cable handling and storage, and excellent protection at job sites
- Available in popular fiber types and up to 12-fiber cables
- Can be stacked with other boxes containing data cables
- Contains optimum performance fiber optic cable

For updated part number information, call your Accu-Tech sales rep or visit **www.occfiber.com**.

Zero Halogen Cables



FEATURES AND APPLICATIONS

- LSZH (Low-Smoke/Zero Halogen)
- Meets low-smoke, low-toxicity standards
- Round cable construction for easy handling and termination, and includes a ripcord for easy outer jacket removal
- Indoor/outdoor cable jacket is free of halogens
- Essentially similar to the cable design of the DX-Series Distribution, BX-Series Breakout, and AX-Series Assembly riser-rated cables.
- The low-smoke, zero halogen outer cable jacket material meets the requirements of NES 713 (toxicity index), NES 711 (smoke index) and MIL-C-24643 (acid gas test).
- Available in riser-rated OFNR for use in vertical runs in building riser shafts or from floor to floor
- Suitable for indoor/outdoor confined spaces including:
  - Building risers
  - Cable trays
  - Central offices
  - Mass-transit rail systems
  - Nuclear plants
  - Oil refineries
  - Petrochemical facilities
  - Ships
  - Underground subway stations and tunnels
- -40°C to +85°C operating temperature

For updated part number information, call your Accu-Tech sales rep or visit **www.occfiber.com**.

Rugged, Harsh Environment Military Style Cable Products

FEATURES AND APPLICATIONS

- Rugged, tight-buffered fiber optic cable construction for the highest possible survivability in severe crush, impact, vehicle runover, deployment, and retrieval conditions
- Tested to the most demanding military tactical cable qualification standards
- Ideally suited for:
  - Field video broadcast
  - Fixed or mobile communication shelters connectivity
  - Manufacturing, mining, oil rigs, and petrochemical environments
- Can be used with tactical/harsh environment connectors such as TFOCA, TFOCA II*, 38999, 28876, F-LINK™, etc. or standard commercial optical connectors
- High tensile load capability for excellent termination strength with military tactical connectors
- Available with radiation hardened or non-radiation hardened optical fibers
- Specifically designed for extreme environmental conditions—temperature, humidity, ice, fungus, and fluid immersion
- Cables are used in DOD and MOD projects worldwide
- For more Rugged, Harsh Environment Military Style Cable Product options, please call Optical Cable Corporation at 800-622-7711 and ask for the Military Sales Department, or contact your Accu-Tech sales rep.

TFOCA II is a registered trademark of Amphenol Fiber Systems International.

OPTICAL CABLE CORPORATION

Fiber Specifications Guide

62.5/125 μm Multimode Laser Ultra-FoxTM	WLS 62.5/125 Standard (850/1310)	WLX 62.5/125 XL (850/1310)
Industry Standard Designation	OM1	OM1
Gigabit Ethernet Distance (m)	300/600	500/1000
10-Gigabit Ethernet Distance (m)	—	—
Maximum Attenuation (dB/km)	3.5/1.5	3.0/1.0
Minimum Laser Bandwidth (MHz-km)	220/500	385/500
Minimum LED Bandwidth* (MHz-km)	200/500	200/500
Fiber Part Number Code	WLS	WLX

Standards Compliance	62.5/125 Std and XL WLS and WLX	50/125 Std and XL ALS and ALX	50/125 10 Gb/s ALT and ALE
TIA-568-	B.3	B.3	B.3-A-1
TIA-492	AAAA	AAAB	AAAC
ISO/IEC 11801	OM1	OM2	OM3

50/125 μm Multimode Laser Ultra-FoxTM	ALS 50/125 Standard (850/1310)	ALX 50/125 XL (850/1310)	ALT 50/125 10 Gb/s (850/1310)	ALE 50/125 10 Gb/s (850/1310)
Industry Standard Designation	OM2	OM2	OM3	OM3
Gigabit Ethernet Distance (m)	600/600	750/600	1000/600	1040/600
10-Gigabit Ethernet Distance (m)	—	150/300	300/300	550[1]/300[2]
Maximum Attenuation (dB/km)	3.5/1.5	3.0/1.0	3.0/1.0	3.0/1.0
Minimum Laser Bandwidth (MHz-km)	510/500	950/500	2000/500	4700/500
Minimum LED Bandwidth* (MHz-km)	500/500	700/500	1500/500	3000/500
Fiber Part Number Code	ALS	ALX	ALT	ALE

Single-Mode	SLX Single-Mode Low Water-Peak (1310/1550)	SLA Single-Mode Bend Insensitive (1310/1550)
Industry Standard Designation	ITU-T G652.D	ITU-T G.657.A
Gigabit Ethernet Distance (m)	Far exceeds distance requirements of TIA-568-B.1-3	
10-Gigabit Ethernet Distance (m)	Far exceeds distance requirements of TIA-568-B.1-3	
Maximum Attenuation (dB/km)	0.5/0.5	0.5/0.5
Fiber Part Number Code	SLX	SLA

* For backward compatibility to LED based systems, overfilled launch bandwidth measurement, minimum.

[1] Reach assuming 3.0 dB maximum cabled attenuation at 850 nm and 1.3 dB total connection and splice loss.

[2] Supports 220 meter 10GBASE-LRN distance, or 300 meter 10GBASE-LRN distance with 300 meter capable equipment

Many other fiber types, fiber bandwidths, and attenuation performances are available.