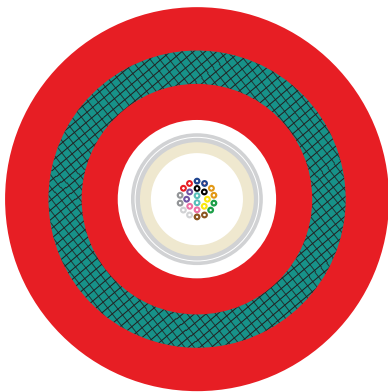


Unitube Fire-Survival Cables

APPLICATION

Unitube Fire-Survival cables offer up to 24 fibers in a compact cable construction. Cables are specially designed to withstand the strict flammability tests of IEC 60331-25. Suitable for areas where critical data transmission must continue when the building or structure in which it is installed is on fire. Ideal for large public buildings such as data centers, airports, railway stations, stadia, and onshore/offshore industrial structures.



FEATURES & BENEFITS

- 2-24 Fiber counts – color-coded according to TIA-598-D
- Customizable fiber selection including single-mode, multimode and hybrid versions to suit a variety of applications
- Single gel-filled loose-tube to block the ingress of water
- Glass yarn armoring in the form of high-tensile yarns to offer strength
- Layer of fire-retardant tapes to protect the fibers against fire damage
- Corrugated steel-tape armor for superior mechanical crush and impact resistance and optimum rodent protection
- Twin-sheath design offering additional flame-retardant material and mechanical protection

STANDARDS & REGULATIONS

- ISO/IEC 11801
- IEC 60794
- BS EN 50173-1
- IEC 60794-1-21
- IEC 60794-1-22
- IEC 60794 -1-22-F5C (up to inner sheath only)

COUNTRY OF ORIGIN

UK

WARRANTY INFORMATION

For Leviton product warranties, go to [Leviton.com/ns/warranty](https://leviton.com/ns/warranty)

PRODUCT SPECIFICATIONS

Unitube Fire-Survival Cables

TECHNICAL SPECIFICATIONS

Construction

Type of cable	Loose tube
Jacket material	HFFR-LS

Usage Characteristics

Temp. (Storage):	-20 °C to +60 °C (-4 °F to +140 °F)
Temp. (Installation):	-10 °C to +60 °C (+14 °F to +140 °F)
Temp. (Operating):	-20 °C to +60 °C (-4 °F to +140 °F)

OPTICAL PERFORMANCE

Fiber Identifier	108	208	062	OM3	OM4	OM5
IEC 60793 Reference	2-50-B6_a	2-50-B6_a	2-10-A1b	2-10-A1a.2	2-10-A1a.3	2-10-A1a-OM5
ITU-T Recommendation	G.657.A1	G.657.A2	—	G.651.1	G.651.1	G.651.1
ISO/IEC 11801 Category	OS1/OS2	OS1/OS2	OM1	OM3	OM4	OM5
Effective Modal Bandwidth @850nm (MHz.km)	—	—	—	≥2000	≥4700	≥4700
Overfilled Launch Bandwidth @850nm (MHz.km)	—	—	—	≥1500	≥3500	≥3500
Attenuation @850nm (dB/km)	—	—	—	≤2.80	≤2.80	≤2.80
Attenuation @1300nm (dB/km)	—	—	—	≤0.80	≤0.80	≤0.80
Attenuation @1310nm (dB/km)	≤0.38	≤0.38	—	—	—	—
Attenuation @1550nm (dB/km)	≤0.25	≤0.25	—	—	—	—

REACTION TO FIRE

Characteristics	IEC Standard	EN Standard	CPR Rating
Single Cable Flame Rating	IEC 60332-1-2	EN 60332-1-2	Pass
Bundled Cable Flame Rating	IEC 60332-3-24	EN 60332-3-24	Pass
Resistance to Fire	IEC 60331-25	—	Pass
Resistance to Fire	—	EN 50200	Pass- PH120

TECHNICAL SPECIFICATIONS

Fiber Count	Max. Long Term Load (N)	Max. Short Term Load (N)	Min. Static Bend Radius (mm)	Min. Dynamic Bend Radius (mm)	Max. Crush (N)	Max. Impact (Nm)	Max. Torsion (Turns ± 180°)	Nom. Tube Diameter (mm)	Nom. Cable Diameter (mm)	Nom. Cable Weight (kg/km)
2-24	230	700	10x Cable Diameter	15x Cable Diameter	2500	30	5	4.0	13.45	212.9

PRODUCT SPECIFICATIONS

Unitube Fire-Survival Cables

FIBER OPTIC CABLE PART NUMBERING PLATFORM

Sample Part Number: [EF](#) [108](#) [UNI](#) [24](#) [L](#) [STA](#) [LU](#) - [FS](#)

DESIGN	FIBER TYPE		CONSTRUCTION		FIBER COUNT	INNER SHEATH		ARMORING	OUTER SHEATH		RATING
EF	108	SM G657A1	UNI	Unitube	02	L	HFFR-LS	STA Corrugated Steel Tape Armor	LU	HFFR-LS	FS
	208	SM G657A2			04						
	062	MM OM1			06						
	OM3	MM OM3			08						
	OM4	MM OM4			12						
	OM5	MM OM5			16						
	OM5	MM OM5			24						

PART NUMBERS - CPR RATED

Description	Part No.
4 Fiber Single-mode G657A1, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EF108UNI04LSTALUFS
6 Fiber Single-mode G657A1, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EF108UNI06LSTALUFS
8 Fiber Single-mode G657A1, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EF108UNI08LSTALUFS
12 Fiber Single-mode G657A1, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EF108UNI12LSTALUFS
16 Fiber Single-mode G657A1, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EF108UNI16LSTALUFS
24 Fiber Single-mode G657A1, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EF108UNI24LSTALUFS
4 Fiber Multimode OM3, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM3UNI04LSTALUFS
6 Fiber Multimode OM3, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM3UNI06LSTALUFS
8 Fiber Multimode OM3, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM3UNI08LSTALUFS
12 Fiber Multimode OM3, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM3UNI12LSTALUFS
16 Fiber Multimode OM3, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM3UNI16LSTALUFS
24 Fiber Multimode OM3, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM3UNI24LSTALUFS
4 Fiber Multimode OM4, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM4UNI04LSTALUFS
6 Fiber Multimode OM4, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM4UNI06LSTALUFS
8 Fiber Multimode OM4, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM4UNI08LSTALUFS
12 Fiber Multimode OM4, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM4UNI12LSTALUFS
16 Fiber Multimode OM4, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM4UNI16LSTALUFS
24 Fiber Multimode OM4, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM4UNI24LSTALUFS
4 Fiber Multimode OM5, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM5UNI04LSTALUFS
6 Fiber Multimode OM5, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM5UNI06LSTALUFS
8 Fiber Multimode OM5, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM5UNI08LSTALUFS
12 Fiber Multimode OM5, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM5UNI12LSTALUFS
16 Fiber Multimode OM5, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM5UNI16LSTALUFS
24 Fiber Multimode OM5, Unitube Fire Survival Cable, LSHF/LSZH- IEC 60331-25 - EN50200 PH120	EFOM5UNI24LSTALUFS

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