

# Opti-Core® LSZH Indoor-Outdoor All-Dielectric Fiber Optic Cable

## specifications

The fiber cable shall have a loose tube, all-dielectric (non-conductive) construction with 6, 12, 24 or 48 fibers and comply with common industry standards for indoor and outdoor applications. To withstand harsh outdoor environments, the cable shall have UV resistance and gel-free water-blocking features. To meet indoor safety requirements, the cable shall use materials that comply with IEC standards for low smoke and zero halogen content. The cable shall have options for singlemode (OS2) or multimode fibers (OM3, OM4) to support 10 Gb/s network transmission.



## standards and flame rating

- ✓ TIA/EIA-568 (Telecommunications Cabling)
- ✓ ANSI/ICEA S-83-596 (Indoor Fiber Cable)
- ✓ ANSI/ICEA S-104-696 (Indoor-Outdoor Fiber Cable)
- ✓ Outer jacket material complies with IEC 61034 and IEC 60754-2 (Low Smoke and Zero Halogen)
- ✓ Telcordia GR-409 and GR-20 (Indoor and Outside Plant Fiber Cable)
- ✓ IEC 60332-3-24 Category C (Vertical Flame Spread)
- ✓ CE RoHS Compliant













## key features and benefits

Black outer jacket is UV-resistant	Withstands exposure to outdoor sunlight and meets light absorption requirement defined by GR-20
Dry water-blocking technology	Swells to prevent moisture ingress and allows rapid cable preparation without messy gel
Flame retardant LSZH jacket	Provides life safety benefits, is halogen free and meets industry standards for low smoke generation
Indoor-Outdoor all-dielectric cable construction	Provides life safety benefits, is halogen free and meets industry standards for low smoke generation
Robust outer sheath and strength members	Provide mechanical durability
Flexible, kink-resistant buffer tubes	Reduces hassle with routing and storage
Highest quality OM3 and OM4 laser optimized fiber	Supports 10 Gb/s applications while maintaining compatibility with existing 50µm multimode systems

## applications

- For outdoor environments including aerial lashed, duct and direct burial
- For entrance facilities, confined spaces and indoor spaces that require the additional safety of low smoke and flame retardance without the use of halogenated materials
- Also suitable for industrial applications with cable trays and spaces where robust mechanical durability are key attributes: industrial complexes, transportation systems, tunnel networks
- Supports network transmission speeds up to 10 Gb/s for link lengths up to 300 meters for OM3 and up to 550 meters for OM4 with an 850nm source per IEEE 802.3ae 10 GbE standard

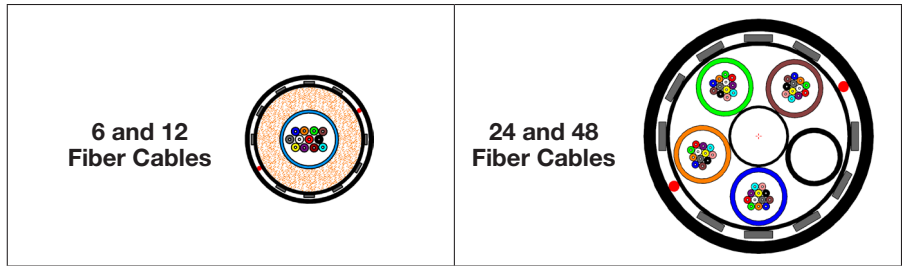
## fiber color sequence

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Pink	Aqua
											

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## PHYSICAL AND MECHANICAL PROPERTIES

<b>Cable Construction</b>	250µm coated fibers in a central loose tube that is dry water-blocked, water-blocking strength members, outer strength member, ripcords, LSZH outer jacket	Twelve 250µm coated fibers per dry water-blocked loose tube, central strength member, filler tube(s), aramid strength members, water-blocking yarns, outer strength member, ripcords, LSZH outer jacket
<b>Outside Diameter (Nominal)</b>	7.9mm (0.31 in.)	11mm (0.43 in.)
<b>Bend Radius (Installation / Short Term)</b>	16cm (6.2 in.)	22cm (8.7 in.)
<b>Bend Radius (Operation / Long Term)</b>	8cm (3.1 in.)	11cm (4.3 in.)
<b>Weight</b>	64 kg/km (43 lb/kft)	115 kg/km (77 lb/kft)
<b>Tensile Strength (Installation / Short Term)</b>	1335 N (300 lbf)	2670 N (600 lbf)
<b>Tensile Strength (Operation / Long Term)</b>	400 N (90 lbf)	800 N (180 lbf)
<b>Temperature Range</b>	Installation: -10°C to +60°C (+14°F to +140°F) Operation: -40°C to +70°C (-40°F to +158°F) Storage: -40°C to +70°C (-40°F to +158°F)	-30°C to +60°C (-22°F to +140°F) -50°C to +70°C (-58°F to +158°F) -50°C to +70°C (-58°F to +158°F)

## OPTICAL PROPERTIES: MAXIMUM ATTENUATION

<b>OS2 Singlemode (ITU-T G.652.D)</b>	0.40dB/km @1310nm, 0.30dB/km @ 1550nm
<b>OM3 Multimode</b>	3.5dB/km @ 850nm, 1.5dB/km @ 1300nm
<b>OM4 Multimode</b>	3.5dB/km @ 850nm, 1.5dB/km @ 1300nm

## ordering information

Fiber Type	Part Number	Part Description
50µm OM3	FOCLX06	50µm OM3 6 Fiber Indoor-Outdoor Central Tube Cable, LSZH, 250µm Fibers
	FOCLX12	50µm OM3 12 Fiber Indoor-Outdoor Central Tube Cable, LSZH, 250µm Fibers
	FONLX24Y	50µm OM3 24 Fiber Indoor-Outdoor Stranded Tube Cable, LSZH, 250µm Fibers
	FONLX48Y	50µm OM3 48 Fiber Indoor-Outdoor Stranded Tube Cable, LSZH, 250µm Fibers
50µm OM4	FOCLZ06	50µm OM4 6 Fiber Indoor-Outdoor Central Tube Cable, LSZH, 250µm Fibers
	FOCLZ12	50µm OM4 12 Fiber Indoor-Outdoor Central Tube Cable, LSZH, 250µm Fibers
	FONLZ24Y	50µm OM4 24 Fiber Indoor-Outdoor Stranded Tube Cable, LSZH, 250µm Fibers
	FONLZ48Y	50µm OM4 48 Fiber Indoor-Outdoor Stranded Tube Cable, LSZH, 250µm Fibers
9µm OS2	FSCL906	9µm OS2 6 Fiber Indoor-Outdoor Central Tube Cable, LSZH, 250µm Fibers
	FSCL912	9µm OS2 12 Fiber Indoor-Outdoor Central Tube Cable, LSZH, 250µm Fibers
	FSNL924Y	9µm OS2 24 Fiber Indoor-Outdoor Stranded Tube Cable, LSZH, 250µm Fibers
	FSNL948Y	9µm OS2 48 Fiber Indoor-Outdoor Stranded Tube Cable, LSZH, 250µm Fibers

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