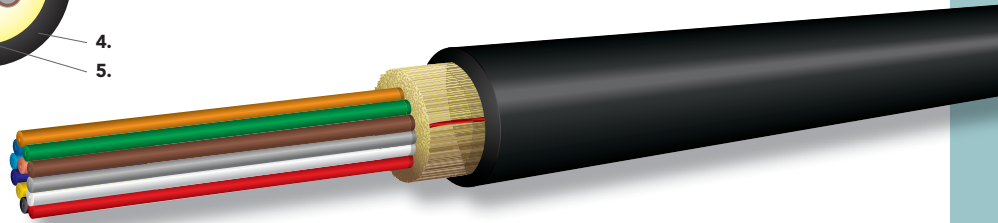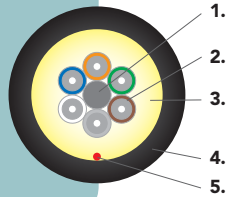# INDOOR/OUTDOOR CABLES

(3.2c) D-Series Distribution – LSZH OFN-LS and IEC Rated Cables

OCC®

1. Central Filler/Strength Member
2. Tight-Buffer Optical Fiber
3. Aramid Strength Member
4. Outer Jacket
5. Ripcord

1.
2.
3.
4.
5.

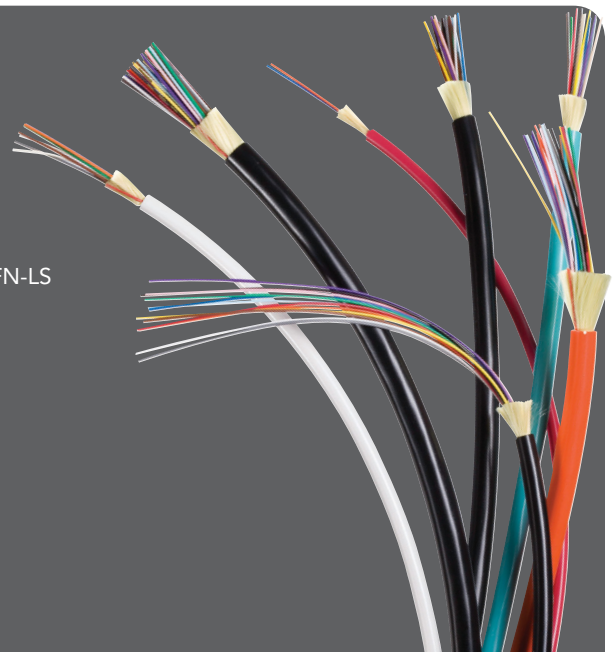## Applications

- Indoor/outdoor tight-buffered cable design for use in installations requiring a flame-retardant, low-smoke and zero-halogen cable

Features

- Zero-halogen construction meets IEC 60754-2
- Meets low-smoke requirements of UL-1685, OFN-LS and IEC 61034-2
- Flame-retardant per the requirements of IEC 60332-3-24 and UL 1685, OFN-LS
- Suitable for indoor or outdoor applications
- Jacket is UV, fungus and moisture resistant
- Round cable construction for easy handling and termination
- Includes ripcord for easy outer jacket removal
- Distribution-style cable with 2 to 24 fibers
- Suitable for indoor/outdoor confined spaces including:
  - Building risers
  - Cable trays
  - Central offices
  - Mass-transit rail systems
  - Nuclear plants
  - Underground subway stations and tunnels

Applicable Standards

OCC indoor/outdoor tight-buffered fiber optic cables meet the functional requirements of the following standards:

- TIA-568
- TIA-598
- IEC 60332-3-24
- IEC 60754-2
- IEC 61034-2
- UL 1685
- UL 1651
- ICEA-S-104-696

Mechanical and Environmental Performance

	INDOOR/OUTDOOR
Operating temperature	-40°C to +70°C
Storage temperature	-40°C to +70°C
Installation temperature (cable temp.)	-20°C to +60°C
Flame retardancy	UL listed type OFN-LS (UL 1685), FT4 (CSA C22.2 No.232) and IEC 60332-3-24
Impact resistance	1,500 impacts (EIA/TIA-455-25A)
Crush resistance	1,800 N/cm (TIA/EIA-455-41A)
Flex resistance	2,000 cycles (TIA/EIA-455-104A)

Cable Characteristics: D-Series Distribution OFN-LS and IEC Rated Cables

FIBER COUNT	DIAMETER MM (IN)	WEIGHT KG/KM (LBS/1,000')	TENSILE LOAD		MINIMUM BEND RADIUS	
			INSTALLATION N (LBS)	OPERATIONAL N (LBS)	INSTALLATION CM (IN)	LONG-TERM CM (IN)
2	5.4 (0.21)	30 (20)	1,400 (310)	450 (100)	8.1 (3.2)	5.4 (2.1)
4	5.6 (0.22)	32 (22)	1,400 (310)	450 (100)	8.4 (3.3)	5.6 (2.2)
6	5.9 (0.23)	38 (26)	1,800 (400)	540 (120)	8.9 (3.5)	5.9 (2.3)
8	6.4 (0.25)	47 (32)	1,800 (400)	540 (120)	9.6 (3.8)	6.4 (2.5)
10	6.9 (0.27)	56 (38)	2,500 (560)	750 (165)	10.4 (4.1)	6.9 (2.7)
12	7.6 (0.30)	64 (43)	2,900 (650)	870 (195)	11.4 (4.5)	7.6 (3.0)
18	7.6 (0.30)	61 (41)	2,900 (650)	870 (195)	11.4 (4.5)	7.6 (3.0)
24	9.2 (0.36)	84 (56)	4,700 (1,050)	1,410 (315)	13.8 (5.4)	9.2 (3.6)

Other fiber counts available upon request.

Ordering Information

D	X				Z				9	K	E
1	2	3	4	5	6	7	8	9	10	11	12

Digit No:

1 – 2	Distribution Series Low-Smoke Zero-Halogen Ultra-Fox = **DX**
3 – 5	Fiber count: (see cable characteristics chart) = **002–024**
6	Jacket type: Indoor/Outdoor Zero-Halogen = **Z**
7 – 9	Fiber type: (see Laser Ultra-Fox Fiber Performance Table, p. 23)
10	Ultra-Fox fiber with 900µm tight-buffer = **9**
11	Standard jacket color: Black = **K**
12	Rating: Flame-Retardent Zero-Halogen = **E**

Example: 12-fiber LSZH distribution cable using 62.5µm standard laser Ultra-Fox fiber; black jacket –

D	X	0	1	2	Z	W	L	S	9	K	E