

## Stainless Steel Fiber Optic Tubes

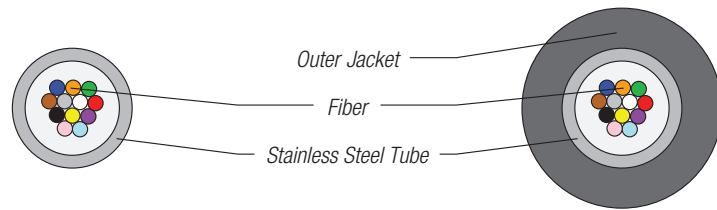
As the inventor and owner of the technology for placing optical fibers into stainless steel tubes, AFL offers a range of tube sizes and fiber counts for a variety of applications. Each tube is flooded with a thixotropic filling compound and hermetically sealed to protect the enclosed fibers from environmental degradation. This product is sometimes referred to as FIST (Fiber in Steel Tube) or FIMT (Fiber in Metal Tube).

### Jacket Options

AFL can encapsulate any of our stainless steel tubes with any of the following polymers:

- Hytrel™
- Santoprene™
- Polyethylene
- Polypropylene
- Nylon
- PVDF

### Cable Components



### Applications

- Umbilical Cables
- Downhole Cables for Oil & Gas
- Towed Arrays
- High Temperature Cables
- Hybrid Cables
- Sensor Cable
- OPGW

### Specifications (without jacketing)

OPTION NUMBER	MAXIMUM FIBER COUNT	OUTSIDE DIAMETER inches (mm)	INSIDE DIAMETER inches (mm)	WALL THICKNESS inches (mm)
1	3	0.046 (1.17)	0.036 (0.91)	0.005 (0.127)
2	4	0.052 (1.32)	0.042 (1.07)	0.005 (0.127)
3	4	0.055 (1.40)	0.039 (1.00)	0.008 (0.200)
4	4	0.065 (1.65)	0.049 (1.25)	0.008 (0.200)
5	6	0.071 (1.80)	0.055 (1.40)	0.008 (0.200)
6	8	0.074 (1.88)	0.058 (1.47)	0.008 (0.200)
7	8	0.078 (1.98)	0.062 (1.57)	0.008 (0.200)
8	8	0.079 (2.00)	0.063 (1.60)	0.008 (0.200)
9	12	0.092 (2.33)	0.076 (1.93)	0.008 (0.200)
10	16	0.094 (2.38)	0.078 (1.98)	0.008 (0.200)
11	16	0.095 (2.40)	0.079 (2.00)	0.008 (0.200)
12	16	0.098 (2.49)	0.082 (2.08)	0.008 (0.200)
13	16	0.106 (2.69)	0.090 (2.29)	0.008 (0.200)
14	24	0.118 (3.00)	0.102 (2.60)	0.008 (0.200)
15	36	0.125 (3.20)	0.109 (2.80)	0.008 (0.200)
16	48	0.134 (3.40)	0.119 (3.00)	0.008 (0.200)
17	60	0.142 (3.60)	0.126 (3.20)	0.008 (0.200)
18	72	0.150 (3.80)	0.134 (3.40)	0.008 (0.200)
19	72	0.156 (3.96)	0.140 (3.56)	0.008 (0.200)
20	72	0.158 (4.00)	0.142 (3.60)	0.008 (0.200)
21	72	0.165 (4.20)	0.150 (3.80)	0.008 (0.200)

Available in Stainless Steel 304, 316 and Incoloy 825. Others sizes and materials available on request.