

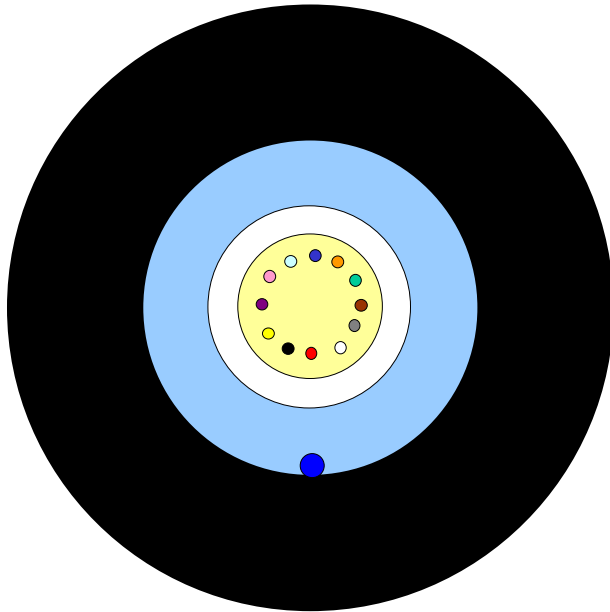
Central Loose Tube Fiber Optic Indoor/Outdoor Cable

All Dielectric Design



Standard Monotube SAFE

Issue October 2018
according to **OFS Generic Specification**



Application

Mainly used in outside plant to building transitions and inter-building installations

Design

- Optical Fibers
- Gel-filled Buffer Tube (Natural colored)
- Non-metallic Strength Elements
- Ripcord
- Flame Retardant-Jacket

Features

- Non-metallic Cable Construction
- Central Loose Tube
- Individual colored Fibers
- Individual colored Tube optional
- Single-mode and Multimode Fibers
- Low smoke/zero halogen (LS0H) rated
- Meets the requirements of IEC 60332-1-2
- Meets CPR Euro Class Eca according to EN 13501-6

Version illustrated is the 12 Fiber Cable

Fiber Count	Outer Diameter [mm]	Cable Weight [kg/km]	Standard Length [m]	Cable- Code*
Single Mode Fibers				
4	6.5	45	2000 / 4000 / 6000 / 8000	KTS1-4[]EK-[]E
6	6.5	45	2000 / 4000 / 6000 / 8000	KTS1-6[]EK-[]E
8	6.5	45	2000 / 4000 / 6000 / 8000	KTS1-8[]EK-[]E
12	6.5	45	2000 / 4000 / 6000 / 8000	KTS1-T[]EK-[]E
Multi Mode Fibers				
4	6.5	45	2000 / 4000 / 6000 / 8000	KTM1-4[]EK-[]E
6	6.5	45	2000 / 4000 / 6000 / 8000	KTM1-6[]EK-[]E
8	6.5	45	2000 / 4000 / 6000 / 8000	KTM1-8[]EK-[]E
12	6.5	45	2000 / 4000 / 6000 / 8000	KTM1-T[]EK-[]E

*Please refer to the OFS Cable- Code. The blanks specify the fiber type.

Identification

Fiber Color Code:

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

Sheath Marking

OFS OPTICAL CABLE STANDARD MONOTUBE SAFE
[ID] [MM/YYYY] [Handset-Sign]
XXXF [Meter Marking]

Alternative Sheath printing available on request

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Mechanical Properties and Environmental Behaviour

Tests according to IEC 60794

	Parameter	Requirement	Value
Tensile Performance: IEC 60794-1-21-E1A and E1B	Long term load	- No attenuation increase*	Load: 400 N
	Short term load, during installation	- No changes in attenuation before versus after load* - Max. fiber strain 0.5%	Load: 1000 N
Crush Performance: IEC 60794-1-21-E3A	Long term load	- No attenuation increase*	Load: 500 N
	Short term load	- No changes in attenuation before versus after load* - No damage**	Load: 1000 N
Bending Performance: IEC 60794-1-21-E11	Handling fixed installed	- No attenuation increase*	Bend radius: 10 x D
	During installation (under load)	- No changes in attenuation before versus after load*	Bend radius: 15 x D <i>D is the cable diameter</i>
Temperatures: IEC 60794-1-22-F1	Operation	Single-mode Fibers:	-30 to +60°C
	Installation	- No attenuation increase*	- 5 to +50°C
	Storage/Shipping		-30 to +60°C
	Operation	Multimode Fibers:	-20 to +60°C
Installation	- No attenuation increase***	- 5 to +50°C	
Storage/Shipping		-20 to +60°C	

*No changes in attenuation means that any changes in measurement value, either positive or negative within the uncertainty of measurement shall be ignored. The total uncertainty of measurement shall be less than or equal to 0.05 dB for Single-mode Fibers and 0.2 dB for Multimode Fibers.

** Mechanical damage – when examined visually without magnification, there shall be no evidence of damage to the sheath. The imprint of plates will not be considered as damage.

*** No changes in attenuation means that any changes in measurement value, either positive or negative within the uncertainty of measurement shall be ignored. The maximal allowance for attenuation changes shall be less than or equal to +/- 0.2 dB/km for 90 % and +/- 0.3 dB/km for 100 % of the fibers.

Shipping Information

Cable Length	Small Drum Dimensions (approx.)		Shipping Weight (calc.)	
	Diameter(battened)	Width	Without lagging	With lagging
2000 m	1050 mm	790 mm	145 kg	170 kg
4000 m	1050 mm	790 mm	235 kg	260 kg
6000 m	1050 mm	790 mm	325 kg	350 kg
8000 m	1250 mm	790 mm	440 kg	470 kg

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Cable Ordering Information

Example: KTS1-T3EK-BE¹

Part Number: PREFIX – X1X2X3X4 – X5X6

PREFIX

Pos.1: K= Central Loose Tube FRNC
Pos.2: T= Standard Monotube Safe
Pos.3: S= Single Mode
M= Multi Mode
Pos.4: 1= Single Jacket

X1= Fiber Count

4= 4 fibers per tube
6= 6 fibers per tube
8= 8 fibers per tube
T= 12 fibers per tube

X2= Fiber Selection

3= 1310/1550 nm (AllWave® ZWP Fiber)
1310/1550 nm (AllWave® + ZWP Fiber)
1310/1550 nm (AllWave® One ZWP Fiber)
1310/1550 nm (AllWave® Low Loss ZWP Fiber)
5= 1310/1550 nm (AllWave® FLEX ZWP Fiber)
7= 1310/1550 nm (AllWave® FLEX + ZWP Fiber)
8= 1310/1550 nm (AllWave® FLEX 200µm ZWP Fiber)
9= 1310/1550 nm (AllWave® FLEX + 200µm ZWP Fiber)
L= 850/1300 nm 50µm MMF(LaserWave® FLEX G+) (OM2+)
850/1300 nm 50µm MMF(LaserWave® FLEX 300) (OM3)
850/1300 nm 50µm MMF(LaserWave® FLEX 550) (OM4)
R= 850/1300 nm 62.5µm MMFLaser Optimized (OM1+)

X3= Fire Performance

E= EuroClass E_{ca}

X4= Sheath Color

K= Black

X5= Fiber Transmission Performance

B= 0.35/0.31/0.27/0.25/0.27 dB/km @
1310/1385/1490/1550/1625 nm
(AllWave® ZWP Fiber)
E= 0.36/0.31/0.27/0.25/0.27 dB/km @
1310/1385/1490/1550/1625 nm
(AllWave® FLEX ZWP Fiber)
(AllWave® FLEX + ZWP Fiber)
(AllWave® FLEX 200µm ZWP Fiber)
(AllWave® FLEX + 200µm ZWP Fiber)
C= 0.35/0.31/0.27/0.25/0.27 dB/km @
1310/1385/1490/1550/1625 nm (AllWave® + ZWP Fiber)
F= 0.33/0.31/0.25/0.19/0.20 dB/km @
1310/1385/1490/1550/1625 nm (AllWave® One ZWP Fiber)
A= 0.33/0.31/0.25/0.19/0.20 dB/km @
1310/1385/1490/1550/1625 nm (AllWave® Low Loss ZWP Fiber)
D= 2.4/0.7 dB/km and 700/500 MHz-km @
850/1300 nm MMF (LaserWave® FLEX G+) (OM2+)
F= 2.4/0.7 dB/km and 1500/500 MHz-km @
850/1300 nm MMF (LaserWave® FLEX 300) (OM3)
H= 2.4/0.7 dB/km and 3500/500 MHz-km @
850/1300 nm MMF (LaserWave® FLEX 550) (OM4)
A= 2.9/0.7 dB/km and 220/500 MHz-km @
850/1300 nm MMF (Laser Optimized 62,5µm) (OM1+)
X= Specific

X6= Fiber Type²

E= AllWave® ZWP Single Mode
2= 50/125 µm Multimode

1 Part Number shown is for Central Loose Monotube Safe with black FRNC sheath and 12 x 250 µm Single Mode AllWave ZWP Fibers. It meets CPR Euro Class Eca according EN 13501-6.

2 Contact OFS sales representative for information on other cable variations, including additional fiber types and attenuation.

Fire Performance

EuroClass E_{ca}

For DoP, please visit <https://www.ofs-sales.com/cpr> DoP Code :

Singlemode	Multimode
KTS1-001-E-A	KTM1-001-E-C

The information is believed to be accurate at time of issue.
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