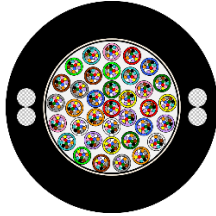


## Duct optical fiber cable

### TC05997



-not to scale-

#### Cable Design

- **Micro-module:** Thin wall tubing (FlexTube®), filled with a suitable compound, housing the single-mode optical fibers.
- **Water tightness:** dry core with swellable elements.
- **Strength members:** glass fiber reinforced plastic material embedded in the outer sheath.
- **Outer Sheath:** HDPE.

#### Cable Application

This High Fiber Count dielectric optical cable is designed for outdoor installation in duct by pulling, jetting or floating technics.

Please refer to our Installation Guides, please ask to our sales office.

The FlexTube® design provides easier storage & faster installation. Finger access to the fibers: no specific tools to open the FlexTube®.

#### Technical Data

<b>No. of Fibers (grouped by 12) <sup>(1)</sup></b>	=	<b>432</b>		
<b>Tube Ø</b>	mm (inches)	1.3 (0.05)		
<b>Cable Dimensions</b>	mm (inches)	15.6 (0.614)		
<b>Cable Weight</b>	kg / km (lb / kft)	180 (121)		
<b>Max installation tension</b>	daN (lbf)	280 (629,3)		
<b>Minimum Bending Radius.</b>	mm	Without tension: 15 x cable Ø   Under maximum tension: 20 x cable Ø		
<b>Temperature Range</b>	°C (°F)	Installation: * -5 -> +40 (+23 ->+104)	Transport/Storage: -40 -> +70 (-40 -> +158)	Operation: -30 -> +60 (-22 -> +158)

\* after Storage 24 h @20°C (68°F) for temperatures -5 to 5°C (+23 to +41 °F)

(1) other configurations upon specific request.

#### Main Characteristics

Test	Standard	Specified Value	Acceptance Criteria**
<b>Maximum Tension at installation (short term)</b>	IEC 60794-1-21-E1	see table above	$\Delta I/I$ fiber $\leq$ 0.5%, $\Delta\alpha \leq$ 0.5 dB/km reversible
<b>Crush</b>	IEC 60794-1-21-E3	200 daN / 100 mm (115 lbf/in)	$\Delta\alpha \leq$ 0.1 dB
<b>Impact</b>	IEC 60794-1-21-E4	5 Nm, 3 impacts, r=10 mm	$\Delta\alpha$ reversible
<b>Torsion</b>	IEC 60794-1-21-E7	1 m, +/- 180°, 10 cycles	$\Delta\alpha \leq$ 0.1 dB
<b>Cable Bend</b>	IEC 60794-1-21-E11	R = 15 x Ø cable	$\Delta\alpha$ reversible
<b>Temperature Range</b>	IEC 60794-1-22-F1	-30 -> +60°C	$\Delta\alpha \leq$ 0.1 dB /km
<b>Water Penetration</b>	IEC 60794-1-22-F5B	Sample=3 m, water=1 m	No water leakage after 168 h

\*\* values for single-mode fibers, all optical measurements performed at 1550 nm. All measurements in accordance with ITU-T G650 recommendations.













#### Optical Characteristics

See the attached cabled optical fiber data sheet.





































## Identification

(order of assignment in case of intermediate capacity: from left to right)

### Fiber Colors

No.	1 -> 12											
Color	blue	orange	green	brown	grey	white	red	black	yellow	violet	pink	aqua
												

### FlexTube Colors

No.	1 -> 12											
Color	blue	orange	green	brown	grey	white	red	black	yellow	violet	pink	aqua
												
No.	13 -> 24											
Color	blue	orange	green	brown	grey	white	red	black	yellow	violet	pink	aqua
												
No.	25 -> 36											
Color	blue	orange	green	brown	grey	white	red	black	yellow	violet	pink	aqua
												

### Sheath Color:

The outer sheath color is black

### Sheath Marking:

The outer sheath is marked in 1-meter intervals as follows:

[length marking] [hysm1] ALTICE US [USTC reference] /// OPTICAL CABLE #Fibers Fiber Type [date2] (lo)

## Logistic

Packing: Wooden drums.

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