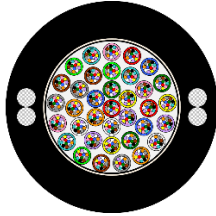


Duct optical fiber cable

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

No. of Fibers (grouped by 12)⁽¹⁾	=	432		
Tube Ø	mm (inches)	1.3 (0.05)		
Cable Dimensions	mm (inches)	15.6 (0.614)		
Cable Weight	kg / km (lb / kft)	180 (121)		
Max installation tension	daN (lbf)	280 (629,3)		
Minimum Bending Radius.	mm	Without tension: 15 x cable Ø Under maximum tension: 20 x cable Ø		
Temperature Range	°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**
Maximum Tension at installation (short term)	IEC 60794-1-21-E1	see table above	$\Delta I/I$ fiber \leq 0.5%, $\Delta\alpha \leq$ 0.5 dB/km reversible
Crush	IEC 60794-1-21-E3	200 daN / 100 mm (115 lbf/in)	$\Delta\alpha \leq$ 0.1 dB
Impact	IEC 60794-1-21-E4	5 Nm, 3 impacts, r=10 mm	$\Delta\alpha$ reversible
Torsion	IEC 60794-1-21-E7	1 m, +/- 180°, 10 cycles	$\Delta\alpha \leq$ 0.1 dB
Cable Bend	IEC 60794-1-21-E11	R = 15 x Ø cable	$\Delta\alpha$ reversible
Temperature Range	IEC 60794-1-22-F1	-30 -> +60°C	$\Delta\alpha \leq$ 0.1 dB /km
Water Penetration	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.















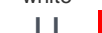

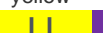











Identification

(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.

© Prysmian Group 2022, All Rights Reserved

All sizes and values without tolerances are reference values. Specifications are for product as supplied by Prysmian Group: any modification or alteration afterwards of product may give different result.

The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of Prysmian Group. The information is believed to be correct at the time of issue. Prysmian Group reserves the right to amend this specification without prior notice. This specification is not contractually valid unless specifically authorized by Prysmian Group.