



Not to scale

<b>Cable Construction</b>						
- Number of fibers	24	48	72	96	120	144
- Number of loose tubes x Number of fibers per tube	6x12			8x12	10x12	12x12
- Central strength member						
- Diameter (mm)	2,4 ± 0,05			3,0 ± 0,05	3,0 ± 0,05	
- Material				FRP		
- CSM Oversheathing diameter (mm)	---			3,9 ± 3%	5,5 ± 3%	7,1 ± 3%
- Loose tube						
-Material				PBT		
-Diameter (mm)				2.3 ± 3%		
-Type of filling compound				Thixotropic jelly		
- Filler (if required)						
-Material				PE		
- Flooding compound						
-Material				Petroleum gel		
- Core wrapping						
-Material				Polyester tape		
- Outer Sheath						
- Material				MDPE		
- Thickness (mm)				1,3 (nominal)		
- Cable diameter (mm)	10,0 ± 0,2			11,5 ± 0,2	13,1 ± 0,2	14,7 ± 0,2
- Cable weight (approx.) (kg/km)	75			105	135	165

- Mechanical characteristics							(All optical measurements at 1550 nm)	
Test	Test Standard	Specified Value				Acceptance Criteria		
- Max. Tensile Force Installation Operation	IEC 60794-1-2-E1	12-72F	84-96F	108-120F	132-144F	$\Delta\alpha$ reversible $\Delta\alpha = <0,05$ dB		
		1500N	2000N	3000N	3500N			
		900N	1000N	1500N	2000N			
- Cable Bend	IEC 60794-1-2-E11	R= 20 x D, 4 turns, 3 cycles				$\Delta\alpha = <0,05$ dB, no damage		
- Impact	IEC 60794-1-2-E4	3 Nm, 3 impacts at different points, R= 10 mm,				$\Delta\alpha = <0,05$ dB, no damage on tubes		
- Repeated bending	IEC 60794-1-2-E6	R= 20 x D, 20 N load, 30 cycles, t $\leq$ 2 min/10 cycles				No damage		
- Crush Resistance	IEC 60794-1-2-E3	Max. 2000 N/100 mm.				$\Delta\alpha = <0,05$ dB, no damage		

- Environmental Characteristics			
Test	Test Standard	Specified Value	Acceptance Criteria
- Water penetration	IEC 60794-1-2-F5B	3 meter specimen, 1 m water altitude	No leaked from the opposite end of the cable in 24 hours.
- Temperature cycling	IEC 60794-1-2-F1	-30 to + 70 °C	$\Delta\alpha = <0,05$ dB/km at 1550 nm

- Identification	
- Cable Marking	1m $\pm$ 1% Intervals in white color with hot print.
- Identification of cable <sup>1</sup>	<number of fibers> F <fiber type> CENKABLO <year of manufacture> <length marking in meter>
- Color of filler	Black
- Color of loose tube <sup>2</sup>	According TIA598
- Color of fibers	According TIA598
- Color of outer sheath	Black

<sup>1</sup>This inscription is standard imprint. It can be change according to request.

<sup>2</sup>The other tube and fiber colors are optional.

- Delivery Information			
-Number of fibers	24 to 72	84 to 120	132 to 144
- Drum length/Tolerance <sup>3</sup> (m)	2000 $\pm$ 5%		
- Drum Flange diameter <sup>3</sup> (mm)	1000	1100	1200
- Drum core diameter <sup>3</sup> (mm)	500	580	
- Outside width <sup>3</sup> (mm)	780		
- Central hole diameter (mm)	85		

<sup>3</sup>Drum dimensions can change depends on cable length on a drum. Standard delivery length is 2 km. Other lengths are optional.

- Transmission characteristics
-Refer to fiber data