



Cable Construction						
- Number of fibers	12	24	36	48	60	72
- Number of loose tubes x Number of fibers per tube	1x12	2x12	3x12	4x12	5x12	6x12
- Central strength member						
- Diameter	2,4 ± 0,05 mm					
- Material	FRP					
- CSM diameter with swellable yarn	2,50 ± 3% mm					
- Loose tube						
-Material	PBT or PC+PBT					
-Diameter	2,3 ± 3% mm					
-Type of filling compound	Thixotropic jelly					
- Filler (if required)						
-Material	PE					
- Tube assembly	Tubes and fillers (if required) are SZ stranded around a central strength member					
- Longitudinal water blocking	DRY core with water swellable elements					
- Core wrapping						
-Material	Water blocking tape					
- Armor & Rodent protection						
-Material	Both sides copolymer coated corrugated steel tape					
- Outer Sheath						
- Material	HDPE					
- Thickness	1,5 mm ± 0,1					
- Cable diameter	12,0 mm ± 0,2					
- Cable weight	130 kg/km ± 10%					

(Optical measurements at 1550 nm)			
- Mechanical characteristics			
Test	Test Standard	Specified Value	Acceptance Criteria
- Tensile Force Installation Operation	IEC 60794-1-2-E1	Max. 2000 N Max. 1000 N	$\Delta\alpha \leq 0,05$ dB, Fiber strain 0,33% $\Delta\alpha \leq 0,05$ dB, no fiber strain
- Crush Resistance	IEC 60794-1-2-E3	Max. 3000 N/100 mm.	$\Delta\alpha \leq 0,05$ dB, no damage
- Impact	IEC 60794-1-2-E4	30 Nm, 3 impacts at different points, R= 300 mm,	$\Delta\alpha \leq 0,05$ dB, no damage
- Repeated bending	IEC 60794-1-2-E6	R= 20 x D, 20 N load, 30 cycles.	$\Delta\alpha \leq 0,05$ dB, no damage
- Torsion	IEC 60794-1-2 E7	2 meter specimen, load is 50 N, 1 turn 180 ° each directions, 5 cycles	$\Delta\alpha = <0,05$ dB after the test, no damage on cable jacket
- Cable Bend	IEC 60794-1-2-E11	R= 20 x D, 4 turns, 3 cycles	$\Delta\alpha \leq 0,05$ 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	Installation -5 to + 50 °C operating -30 to + 70 °C transportation -40 to + 80 °C	$\Delta\alpha \leq 0,05$ dB/km at 1550 nm

- Identification	
- Cable Marking	1m \pm 1% Intervals in white color with hot print.
- Identification of cable ¹	<number of fibers> F <fiber type> CENKABLO <year of manufacture> <length marking in meter>
- Color of filler	Natural
- Color of loose tube ²	1.Red, 2.Green, others natural or white.
- Color of fibers ²	1.Red, 2.Green, 3.Blue, 4.Yellow ,5.White, 6.Grey, 7.Brown, 8. Violet, 9.Turquoise, 10.Black. 11.Orange, 12.Pink
- Color of outer sheath ²	Blue

¹ This inscription is standard imprint. It can be changed according to request.

² The other tube, fiber and sheath colors are optional.

- Delivery Information	
- Drum length/Tolerance ³	2000 m \pm 5%
- Drum Flange diameter ³	1100 mm
- Drum core diameter ³	580 mm
- Outside width ³	780 mm
- Central hole diameter	85 mm

³ Drum dimensions can change depends on cable length on a drum. Standard delivery length is 2 km. Other delivery lengths (4 or 6 km/drum) are optional.

- Transmission characteristics
-Refer to fiber data