

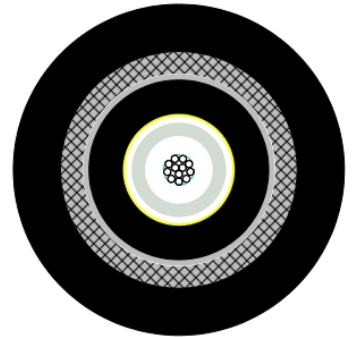
ARMOR TUBE FIBRE OPTIC CABLE (Corrugated steel tape)

Applications

- Direct buried ,trench and duct installation
- Backbone and Access
- Rodent resistant

Construction

Mono or Single tube	PBT(polybutylene terephthalate) filled with thixotropic gel.
Fibers	Max 12 color coated fibers per tube
Water blocking	Core wrapping
Peripheral strength members	Aramid
Sheathing	PVC (Polyvinyl chloride)
Armor	Corrugated steel tape
Sheathing	Polyethylene (Black sheath and UV resistance is standard)



Mechanical properties

Fibre count	Number of elements	Cable diameter nominal (mm)	Cable weight (kg/km)	Maximum installation load (N)	Operation Temperature Range	Bending radius		Suitable duct size
						Long term	Short term	
12	1	11.2	135	2000	-10°C to 70° C	20 x OD	12 x OD	32/26

Fibre and tube colours as TIA/EIA

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

Ordering information

Fibre count	Cable type	Fibre type ITU-T	Drum quantity(m)	Customer
24	Corrugated steel tape(CST)	G657. A1	4000	CBI

Optical properties (Bend tolerant Multi Mode)

Characteristics		ITU-T G.651 OM2	ITU-T G.651 OM3	ITU-T G.651 OM4
Fibre core diameter (µm)		50.0 ± 2.5	50.0 ± 2.5	50.0 ± 2.5
Cabled Attenuation (dB/km)	850nm	≤ 3	≤ 2.5	≤ 2.5
	1300nm	≤ 1	≤ 0.7	≤ 0.7
Macro-bend loss	850nm	∅15mm, 2turn, ≤ 0.2dB	∅15mm, 2turn, ≤ 0.2dB	∅15mm, 2turn, ≤ 0.2dB
		∅30mm, 2turns, ≤ 0.1dB	∅30mm, 2turns, ≤ 0.1dB	∅30mm, 2turns, ≤ 0.1dB
		∅75mm, 100turns, ≤ 0.05dB	∅75mm, 100turns, ≤ 0.05dB	∅75mm, 100turns, ≤ 0.05dB
	1300nm	∅15mm, 2turn, ≤ 0.5dB	∅15mm, 2turn, ≤ 0.5dB	∅15mm, 2turn, ≤ 0.5dB
		∅30mm, 2turns, ≤ 0.3dB	∅30mm, 2turns, ≤ 0.3dB	∅30mm, 2turns, ≤ 0.3dB
	∅75mm, 100turns, ≤ 0.15dB	∅75mm, 100turns, ≤ 0.15dB	∅75mm, 100turns, ≤ 0.15dB	
Bandwidth	High Performance EMB* (MHz.km)	950@850nm	2000@850nm	4700@850nm
		-	-	-
	Legacy Performance EMB** (MHz.km)	700@850nm	1500@850nm	3500@850nm
		500@1300nm	500@1300nm	500@1300nm
Optimised data Rate over distance		-	40/100 Gb/s over 140m***	40/100 Gb/s over 170m***
		10 Gb/s over 150m	10 Gb/s over 300m	10 Gb/s over 550m
		1Gb/s over 750m	1Gb/s over 1000m	1Gb/s over 1100m
Cladding diameter (µm)		125 ± 1	125 ± 1	125 ± 1
Cladding non circularity (%)		≤ 1	≤ 1	≤ 1
Core-Clad concentricity (µm)		≤ 1.5	≤ 1.5	≤ 1.5
Cable cut-off wavelength (nm)			≤ 1260	≤ 1260
* Ensured via minEMBC, per TIA 455-22A and IEC 60793-1-49, for high performance laser-based systems (up to 100Gb/s)				
** OFLW, per TIA/EIA 455-2-4 and IEC 60793-1-41, for legacy and LED-based systems (typically up to 100Mb/s)				
*** Distances specified in the 40G/100G per IEEE 802.3ba standard are 150m for OM4 and 100m for OM3. (For these distances cabled attenuation ≤ 3.0dB/km and 1.0dB of connector loss is assumed.)				

Optical properties

Characteristics		ITU-T.652D	ITU-T.657A1
Modefield diameter (µm)	1310nm	9.2 ± 0.4	9.2 ± 0.4
	1550nm	10.4 ± 0.5	10.4 ± 0.5
Cabled Attenuation (dB/km)	1310nm	≤ 0.34	± 0.34
	1550nm	≤ 0.20	± 0.20
Polarization Mode Dispersion (ps/vkm)	Link (PMDQ)	≤ 0.04	≤ 0.04
	Individual PMDmax	≤ 0.1	≤ 0.1
Chromatic dispersion (ps/nm.km)	1285-1330nm	3	3
	1550nm	≤ 18	≤ 18
	1625nm	≤ 22	≤ 22
Macro-bend loss	1550nm	∅32mm, 1turn, ≤ 0.03dB	∅10mm, 1turn, ≤ 0.5dB
		∅50mm, 100turns, ≤ 0.03dB	∅15mm, 10turns, ≤ 0.05dB
			∅25mm, 100turns, ≤ 0.01dB
	1625nm		∅10mm, 1turn, ≤ 1.5dB
			∅15mm, 10turns, ≤ 0.3dB
		∅50mm, 100turns, ≤ 0.03dB	∅25mm, 100turns, ≤ 0.01dB
Cladding diameter (µm)		125 ± 0.7	125 ± 0.7
Cladding non circularity (%)		≤ 0.7	≤ 1
Core-Clad concentricity (µm)		≤ 0.5	≤ 0.6
Cable cut-off wavelength (nm)		≤ 1260	≤ 1260
Local variations: cabled (dB)		≤ 0.1@1550nm	≤ 0.1@1550nm