



PLOT#A-4,BSCIC INDUSTRIAL ESTATE,CUMILLA-3500, BANGLADESH

TECHNICAL SPECIFICATION

04 Core GYXY

Category	DESCRIPTION	UNIT	ABS OFFER
1. General Requirements: As per BS EN 60793-2-50:2008 & IEC 60794-3-11:2007			
Optical	Attenuation		Before/After Cabling
	at 1310 nm	dB/km	≤0.34
	at 1550 nm		≤0.20
	Zero dispersion wavelength	nm	1300 to 1324
	Zero dispersion slope(ps/nm ² .km)	-	≤0.092
	Chromatic dispersion(ps/nm.km)		
	@ 1288-1339 nm		≤ 3.5
	@ 1271-1360 nm		≤ 5.3
	@ 1550 nm		≤ 18
	PMD Individual Value(ps/vkm)	-	≤0.20
	Cable Cut-off Wavelength	nm	≤1260
	Macrobanding loss		
	(100 turns;Φ 60 mm) @ 1550 nm	dB	≤0.05
(100 turns;Φ 60 mm) @ 1625 nm	≤0.10		
Dimensional	Mode Field Diameter@ 1310 nm	μm	9.2 ±0.4
	Cladding Diameter	μm	125±1
	Cladding Non Circularity	%	≤1.0
	Core/ Cladding Concentricity error	μm	≤0.6
Mechanical	Proof Stress	Gpa	≥0.69
2. Specific Requirements:			
Physical	Fiber Count	-	4 - G 652D SM
	Strength member	mm x no.	1.0 x 2
	Cable OD	mm	6.4±5%
	Outer Jacket	-	HDPE
	Cable Color	-	BLACK
	Cable weight	kg/km	35 ± 10%
	Operation temperature range	°C	(-)20°C→+70°C
	Installation temperature range	°C	(-)10°C→+70°C
	Transport and storage temperature	°C	(-)20°C→+70°C
Mechanical	Max. Tensile strength	N	400

	Crush resistance	N/10cm	500
	Minimum installation bending radius	mm	20 x OD
	Minimum operation bending radius	mm	10 x OD
3. Test Requirements: As per IEC 60794-1-2-E-1 & IEC 60794-2-E-2.1-98-08			
3.1 Torsion	Standard	-	IEC 60794-1-2-E-1
	Sample length	m	≥50
	Load	N	45
	Duration time on load	m	1
	Test Results		Fiber strain ≤ 60% Ad. Att. ≤ 0.1dB No damage
3.2 Crush	Standard	-	IEC 60794-1-2-E-1
	Test number	-	1 point at 1 place
	Duration time on load	m	1
	Test Results		Fiber strain ≤ 60% Ad. Att. ≤ 0.1dB No damage
3.3 Impact	Standard	-	IEC 60794-1-2-E-1
	Impact energy	J	1
	Radius	mm	300
	Impact point	-	3
	Impact number	no.	1
	Test Results		Ad. Att. ≤ 0.1dB No damage
3.4 Repeated Bending	Standard	-	IEC 60794-1-2-E-1
	Radius	mm	20 x OD
	Cycles	no.	30
	Impact number	no.	1
	Test Results		Ad. Att. ≤ 0.1dB No damage
3.5 Twist	Standard	-	IEC 60794-1-2-E-1
	Sample length	m	2
	Angles	deg	±90
	Cycles	no.	10
	Impact number	no.	1
	Test Results		Ad. Att. ≤ 0.1dB No damage
3.6 Bending	Standard	-	IEC 60794-1-2-E-1
	Mandrel diameter	mm	20 x OD
	Turn number	no.	4

	No. of cycle	no.	1
	Test Results		Ad. Att. $\leq 0.1\text{dB}$
			No damage
3.7 Temp. Cycling	Standard	-	IEC 60794-1-2-E-1
	Temp. step	-	-
			-
	Time per each step	hrs	-
	No. of cycle	no.	-
	Test Results		-
3.8 Water penetration	Standard	-	IEC 60794-1-2-E-1
	Height of water column	m	1
	Sample length	m	3 (Only loose tube)
	Test time	hrs	24
	Test Results	-	No water leakage in tube