Specification

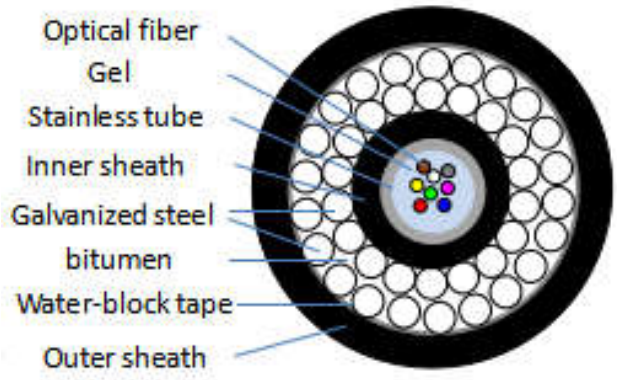
FOR

DA SUBACUTICA FO cable

Option C

1. CABLE CONSTRUCTION

1.1. CROSS SECTIONAL DIAGRAM



1.2. TECHNICAL SPECIFICATION

Fiber Type		**G652D**
Fiber count		**24**
FIMT Tube	**OD(mm)**	**3.0**
	Thickness（mm）	**0.25**
	Filling Compound	**Hydrogen absorption gel**
	Material	**Stainless tube**
PE Inner Sheath Thickness（mm）		**3.0**
Strength Member galvanized steel wires	**First Layer**	**(2.0±0.05)mm* 16**
	Second Layer	**(2.0±0.05)mm* 22**
	Tensile strength of wire grade	**145 grade in EN257**
	Filling	**bitumen**
Water blocking material		**Water-Blocking Tape**
PE outer sheath Thickness（mm）		**2.0**
Cable Diameter（mm）		**21.8mm ±1**
Weight（kg/m）	**in air**	**1300±50**
	in seawater	**935±50**

2. FIBER AND IDENTIFICATION

NO.	1	2	3	4	5	6	7	8	9	10	11	12
Fiber Color	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Pink	Aqua
No.	13-24				25-36				37-48			
Fiber Color	S100				S150				D150			

3. Performance parameters of fiber optic core

LTEMS	UNITS	SPECIFICATION
Fiber type		**G652D**
Attenuation	**dB/km**	**≤ 0.35 at 1310nm ≤ 0.21 at 1550nm**
Zero Dispersion Wavelength	**nm**	**1300 ~ 1324**
Zero Dispersion Slope	**ps/nm².km**	**≤ 0.092**
Chromatic Dispersion	**ps/nm.km**	**1288～1339nm ≤ 3.5 1271～1360nm ≤ 5.3 1550nm≤ 18**
Polarization Mode Dispersion (PMD)	**ps/√km**	**≤ 0.15**
Cable Cutoff Wavelength (dcc)	**nm**	**≤ 1260**
Macro bending Loss (100 turns; @6O mm) @155O nm (100 turns; @6O mm) @1625 nm		**≤ 0.05**
Mode Field Diameter @131O nm @155O nm	**μm**	**9.2 ± 0.4 at 1310nm 10.4±0.5 at 1550nm**
Fiber Curl Radius	***m***	**≥4**
Cladding Diameter	**μm**	**125±1.0**
Core /Clad Concentricity	**μm**	**≤ 0.6**
Cladding Non-Circularity	**%**	**≤ 1.0**
Coating Dia meter	**μm**	**245±10**
Coating / Cladding Concentricity	**μm**	**≤12**
Coating Non-Circularity	**%**	**≤6.0**
Proof Test Level	***kpsi***	**200**
Fatigue Resistance Parameter (Nd)	***N***	**≥ 20**
Peak Coating Strip Force (average)		**1.0~5.0**

4. Mechanical and Environmental Performance of the Cable

No.	LTEMS	UNITS	SPECIFICATION
1	Minimum Breaking Load,(UTS)	kN	160
2	Nominal Transient Tensile Load, (NTTS)	kN	105
3	Nominal Operating Tensile Load, (NOTS)	kN	65
4	Nominal Permanent Tensile Load, NPTS	kN	40
5	Minimum Bending Radius (</>)NPTS	m	1.0/1.5
6	Operating Temperature Range	℃	-30~+50
7	Storage Temperature Range	℃	-30~+50
8	Handling Temperature Range	℃	-10~+40
9	Deployment Ocean Depth	m	600
10	Crush (IEC-794-1- E3)	kN/100mm	20
11	Impact (IEC-794-1-E4)	J	200
12	Tensile Strength (IEC-60794-1-2-E1)	/	-
13	DC resistance @20º C.	Ω/km	-
14	Insulation resistance, conductor-water/armouring	GΩ•km	10
15	Operating Voltage DC	V	5000
16	Operating Voltage AC ¢1-60 HzJ	V	5000,50Hz
17	Water penetration		performance: 5MPa water pressure, 14 days, single direction water penetration length, <200m

5. Packing

Plan A: Using the Open top Container 40GP

Length: 21km for 24F / 20km for 48F

Plan B: Using the Customized Packing

Length: 30km for 24F/48F