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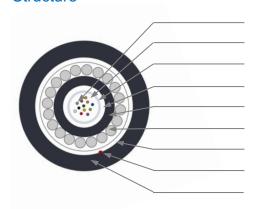
Uni-Tube SWA Armored Fiber Cable

Description

The laying environment conditions of underwater fiber optic cable are much stricter than those of direct buried optical cables, and the techniques and measures for repairing faults are also much more difficult. Therefore, the reliability requirements for underwater optical cables are higher than those of direct buried optical cables.

So underwater fiber optic cable must adopt a steel wire armor, which is also known as SWA. And the sheath must be considered comprehensively according to the hydrogeological conditions of the river.

Structure



- Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- Water-blocking Glass Yarn
- Inner Sheath
- 6 Steel Wire Armoring
- Water-blocking Tape
- 8 Ripcord
- Outer Sheath

Optical Characteristics

	Unit	Specification	
Item		G. 652D	
	1310nm	μm	9.2 ± 0.4
Mode field diameter	1550nm	μm	10.4 ± 0.8
Cladding diameter	μm	125.0 ± 1	
Cladding non-circularity	%	≤1.0	
Core concentricity error	μm	≤0.5	
Coating diameter	μm	242 ± 7	
Coating/cladding concentricity error	μm	≤12	
Cable cut-off wavelength	nm	≤ 1260	
	1310nm	dB/km	≤0.4
Attenuation Coefficient	1550nm	dB/km	≤0.3
Proof stress level		kpsi	≥100

ITU-T G.652 (Other parameters meet standard ITU-T G.652)



Cable Performance

ltem		Parameters	
	Material	РВТ	
Loose tube	Color	Natural	
Non-metal reinforced pieces	Material	Waterblocking glass yarn	
	Material	LDPE	
Inner jacket	Color	Black	
	Material	Hot-dip galvanized steel wire	
Wire armoured	Diameter	0.9mm	
Outer jacket	Material	LSZH	
	Color	Black	
	Static	12.5 times cable diameter	
Min. bending radius	Dynamic	25 times cable diameter	
Repeating bending	Load: 150N; number of cycles:30 No obvious addition attention, no fiber break and no cable damage.		
Tensile performance	Short term	4000N The addition attention≤0.1dB,fiber strain ≤0.15%	
Crush	Short term	4000N/100mm the addition attention≤0.1dB.	
Torsion	Load: 150N; number of cycles:10; twist angle: ±180° No obvious addition attention, no fiber break, and no cable damage.		

Cable Constructions

Fiber count	Structure	Fibers per tube	Loose tube diameter (mm)	Thickness of Inner jacket (mm)	Thickness of outer jacket (mm)	Cable diameter (mm)	Cable weight (kg/km)
4	Uni-Tube	4	3.0±0.1	1.0±0.1	1.5±0.1	11.3±0.5	227
8	Uni-Tube	8	3.0±0.1	1.0±0.1	1.5±0.1	11.3±0.5	228
12	Uni-Tube	12	3.0±0.1	1.0±0.1	1.5±0.1	11.3±0.5	228
16	Uni-Tube	16	3.0±0.1	1.0±0.1	1.5±0.1	11.3±0.5	228

Environmental Performance

Item	Standard	Parameters
Operation temperature	IEC 60794-1-2 F1	-40°C∼+70°C
Water penetration	IEC 60794-1-2-F5	Water level: 1m, sample: 3m, After24h, no water ingress.



Packing Drum

	Drum		
Cable type	Height	Width	Inner diameter
GYFXY36	900mm	760mm	400mm

Ordering Information

Model No.	Description	Remark
SWA Fiber Cable	□ Fiber count□ Fiber type□ Sheath material□ Sheath color	Contact our sales or technical dept for more information: Sales: sales@honecable.com Technical: tony@honecable.com