NETSYS
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FIBER OPTIC

OUTDOOR FIBER OPTIC CABLE

OUTDOOR FIBER OPTIC CABLE IS A TYPE OF OPTICAL CABLE THAT IS SPECIFICALLY DESIGNED FOR OUTDOOR USE. IT IS TOUGH, CAN WITHSTAND WIND AND SUN EXPOSURE, AND HAS A ROBUST OUTER JACKET TO PROTECT THE CABLE.

FIBER CABLE 8 CORE MULTI MODE OM2 50/125 GYXTW

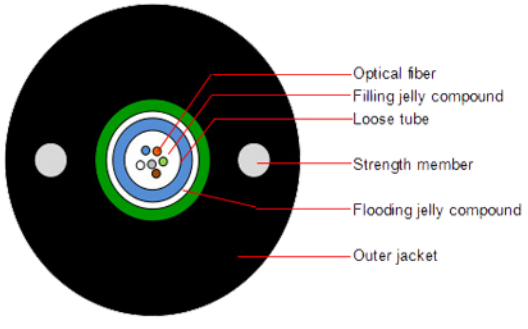
NS-402OM2008

DESCRIPTION

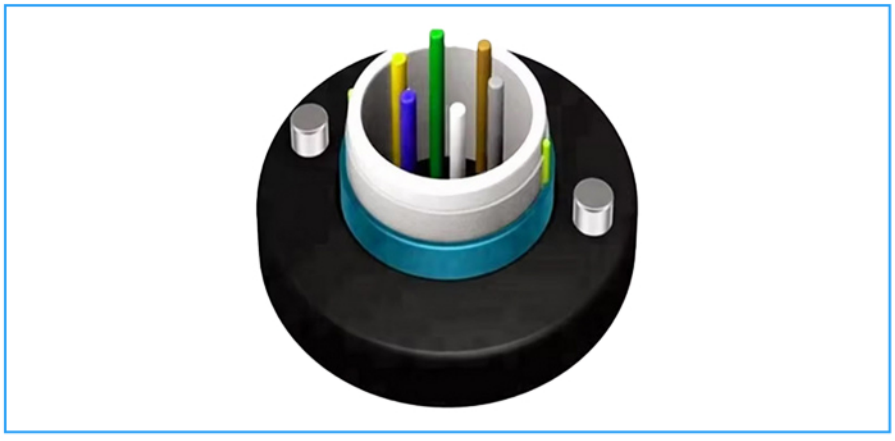
- The bers, 250µm, are positioned in a loose tube made of a high modulus plastic.
- The tubes are lled with a water-resistant Ring compound.
- The tube is wrapped with a layer of PSP longitudinally.
- Between the PSP and the loose tube water-blocking material is applied to keep the cable compact and watertight.
- Two parallel steel wires are placed at the two sides of the steel tape.
- The parallel steel wires are placed at the two sides tape.
- The cable is completed with a polyethylene (PE) sheath.

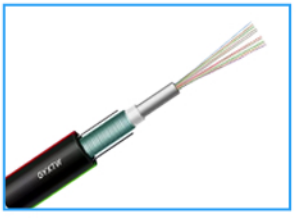
FEATURES

- Good mechanical and temperature performance.
- High strength loose tube that is hydrolysis resistant.
- Special tube filling compound ensure a critical protection of fiber.
- Crush resistance and flexibility.
- PSP enhancing moisture-proof.
- Two parallel steel wires ensure tensile strength.
- Small diameter light weight and friendly installation.
- Long delivery length.



TECHNICAL SPECIFICATION





1.Technical Parameters

Cable Type 2 (Increased by 2 bers)	Fiber Count	Cable Diameter (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short term (N)	Crush Resistance Long/Short term (N/100mm)	Bending Radius Static/Dynamic (mm)
GYXTW-2~12	2~12	8.9	100	600/1500	300/1000	10D/20D
GYXTW-2-12	2~12	10.6	124	1000/3000	1000/3000	10D/20D
GYXTW-14~24	14~24	12.0	147	1000/3000	1000/3000	10D/20D
GYXTW-26~36	26~36	12.0	150	1000/3000	1000/3000	10D/20D
GYXTW-38~48	38~48	15.0	207	1000/3000	1000/3000	10D/20D

TECHNICAL SPECIFICATION

2. Optical Characteristics

Characteristics		Conditions	Specified values	Units
Attenuation		1310nm	≤0.36	[dB/km]
		1383nm(after H_2-aging)	≤0.36	[dB/km]
		1550nm	≤0.24	[dB/km]
		1625nm	≤0.24	[dB/km]
Attenuation vs. Wavelength Max. α difference		1285-1330nm, in reference to 1310nm	≤0.03	[dB/km]
		1525-1575nm, in reference to 1550nm	≤0.02	[dB/km]
Dispersion Coefficient		1285-1340nm	-3.5 to 3.5	[ps/(nm·km)]
		1550nm	≤18	[ps/(nm·km)]
		1625nm	≤22	[ps/(nm·km)]
Zero Dispersion Wavelength(λ_0)		--	1300-1324	[nm]
Zero Dispersion Slope(S_0)		--	≤0.092	[ps/(nm²·km)]
Typical Value		--	0.086	[ps/(nm²·km]
PMD	Maximum Individual Fibre	--	≤0.1	[ps/√km]
	Link Design Value（M=20, Q=0.01%）	--	≤0.06	[ps/√km]
	Typical Value	--	0.04	[ps/√km]
Cable Cutoff Wavelength (λ_{CC})		--	≤1260	[nm]
Mode Field Diameter（MFD）		1310nm	8.7-9.5	[μm]
		1550nm	9.8-10.8	[μm]
Effective Group Index of Refraction（N_{eff}）		1310nm	1.466	--
		1550nm	1.467	--
Point Discontinuities		1310nm	≤0.05	[dB]
		1550nm	≤0.05	[dB]

3. Environmental Characteristics

1310nm, 1550nm & 1625nm			
Characteristics	Conditions	Specified values	Units
Temperature Dependence Induced Attenuation	-60°C to +85°C	≤0.05	[dB/km]
Temperature-Humidity Cycling Induced Attenuation	-10°C to +85°C, 98% RH	≤0.05	[dB/km]
Water Immersion Dependence Induced Attenuation	23°C，for 30 days	≤0.05	[dB/km]
Damp Heat Dependence Induced Attenuation	85°C and 85% RH，for 30 days	≤0.05	[dB/km]
Dry Heat Aging	85°C, for 30 days	≤0.05	[dB/km]

TECHNICAL SPECIFICATION

4. Geometrical Characteristics

Characteristics	Conditions	Specified values	Units
Cladding Diameter	--	125.0±0.7	[μm]
Cladding Non-Circularity	--	≤1.0	[%]
Coating Diameter	--	235-250	[μm]
Coating-Cladding Concentricity Error	--	≤12.0	[μm]
Coating Non-Circularity	--	≤6.0	[%]
Core-Cladding Concentricity Error	--	≤0.6	[μm]
Curl(radius)	--	≥4	[m]
Delivery Length	--	Up to 50.4	[km/reel]

5. Mechanical Specifications

Characteristics		Conditions	Specified values	Units
Proof Test		--	≥9.0	[N]
		--	≥1.0	[%]
		--	≥100	[kpsi]
Macro-bend Induced Attenuation	100 Turns Around a Mandrel of 30 mm Radius	1625nm	≤0.05	[dB]
	100 Turns Around a Mandrel of 25 mm Radius	1310nm and 1550nm	≤0.05	[dB]
	1 Turn Around a Mandrel of 16 mm Radius	1550nm	≤0.05	[dB]
Coating Strip Force		typical average force	1.5	[N]
		peak force	1.3-8.9	[N]
Dynamic Fatigue Parameter(n_d)		--	≥20	--

Fiber color:								
NO.	1	2	3	4	5	6	7	8
Color	Blue	Oranage	Green	Brown	Gray	White	Red	Black

Loose tube color:												
NO.	1	2	3	4	5	6	7	8	9	10	11	12
Color	Blue	Oranage	Green	Brown	Gray	White	Red	Black	Yellow	Violet	Pink	Aqua

TECHNICAL SPECIFICATION

Fiber count		/	4	8	12
Structure		/	Uni tube		
Fiber type		/	G652D		
Central strengthen member	Material	mm	Steel		
	OD（Average）		2*1.2mm		
Loose tube	Material	mm	PBT		
	OD（Average）		2.0±0.1		
	Thickness（Average）		0.30±0.1		
	Fiber max/tube		4	8	12
	Loose tube color		Standard color		
	Extra fiber length	%	0.2~0.4		
Water blocking	Material	/	Flooding Compound + Water blocking tape + Steel armor tape		
Outer jacket	Material		HDPE		
	Thickness	mm	2.35mm		
OD		mm	9.0	9.0	9.0
Cable weight（Average）		Kg/km	75	75	75
Tension strength	Long term	N	400		
	Short term		1200		
Crush resistance	Long term	N/100mm	600		
	Short term		2000		
Bending Ridus	Static	mm	10D		
	Dynamic		20D		
Environment Temperature	Installation	℃	-10/+60		
	Operation		-30/+70		
	Storage		-40/+70		