NETSYS

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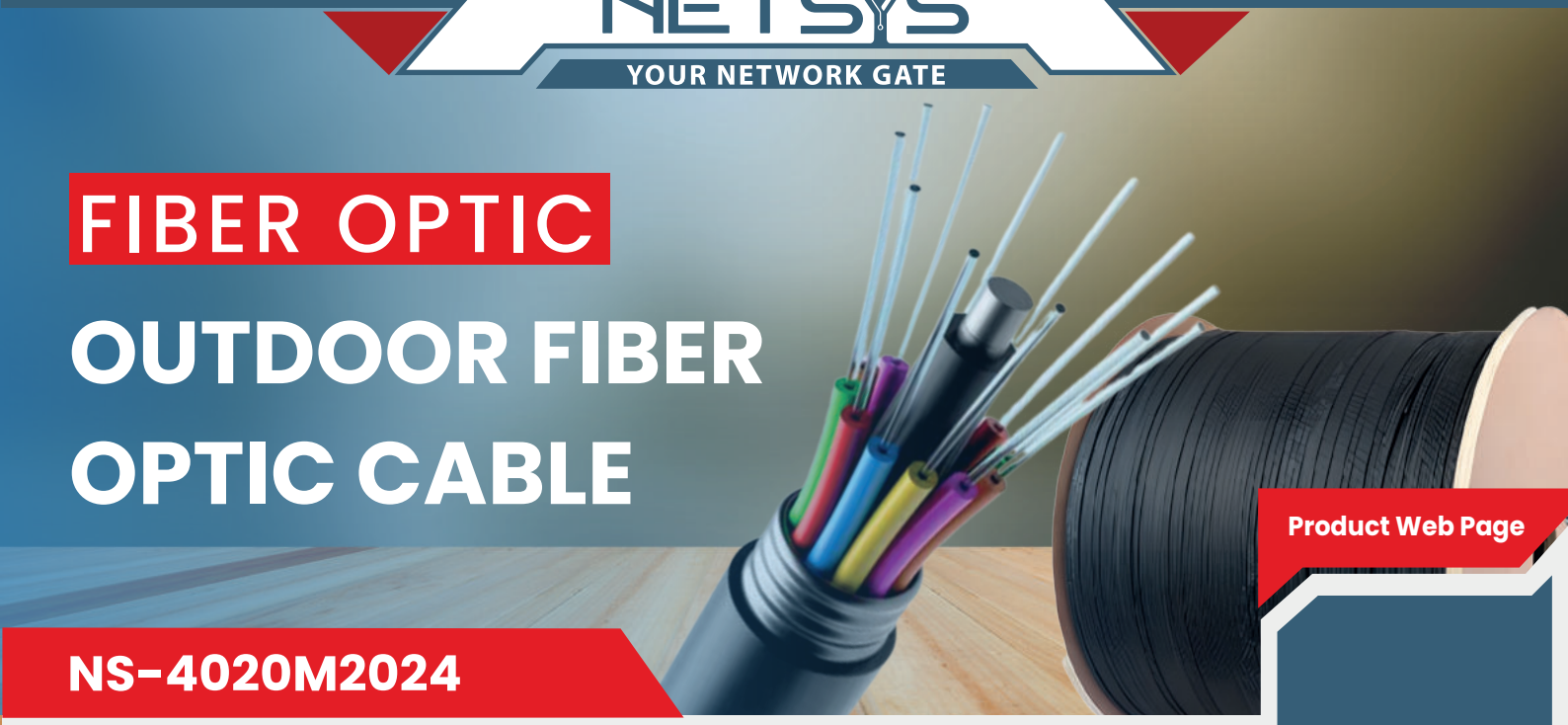
FIBER OPTIC

OUTDOOR FIBER OPTIC CABLE



Product Web Page

NS-4020M2024

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 24 CORE MULTI MODE OM2 50/125 — GYTS

DESCRIPTION

The bers, 250µm, are positioned in a loose tube made of a high modulus plastic.

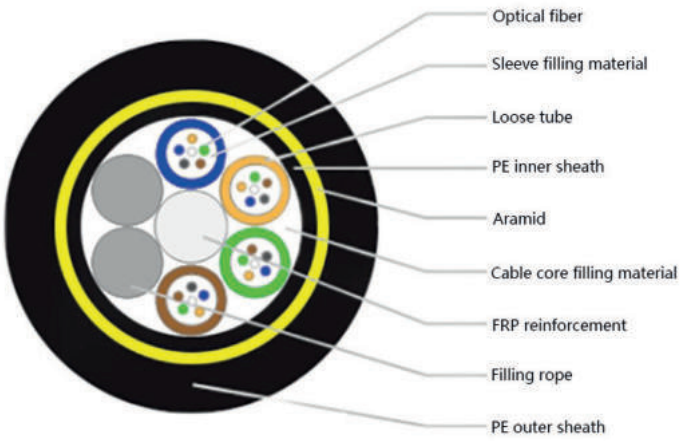
The tubes are lled with a water-resistant Ring compound.

A steel wire, sometimes sheathed with polyethylene (PE) for cable with high fiber count, locates in the center of core as a metallic strength member.

Tubes (and Hers) are stranded around the strength member into a compact and circular cable core.

The PSP is longitudinally applied over the cable core, witch is flled with the Ring compound to protect it from water ingress.

Then, the cable is completed with a PE sheath



THE FOLLOWING MEASURES ARE TAKEN TO ENSURETHE CABLE WATERTIGHT:

Steel wire used as the central strength member.

Loose tube filling compound.

100% cable core filling.

PSP enhancing moisture-proof.

FEATURES

Good mechanical and temperature performance.

High strength loose tube that is hydrolysis resistant.

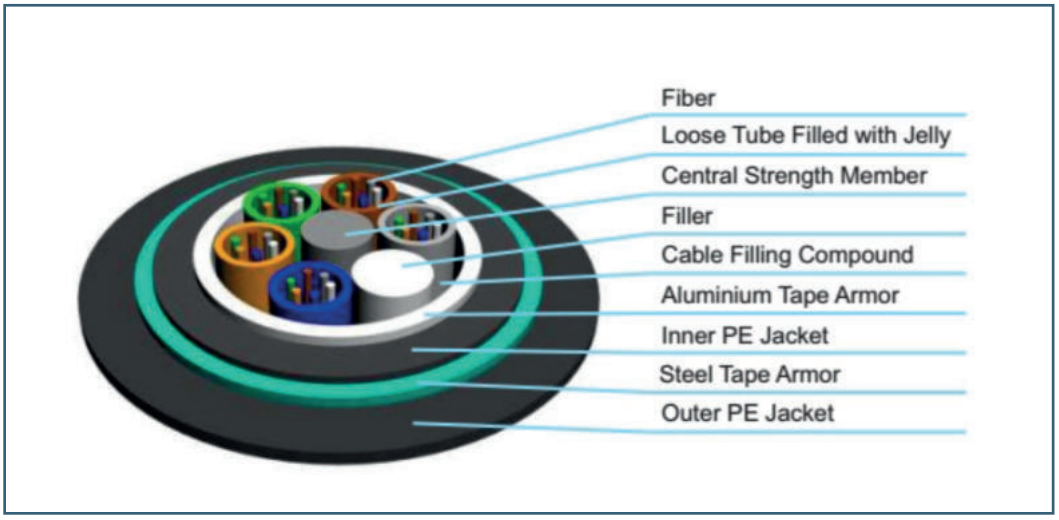
Special tube filling compound ensure a critical protection of fiber.

Special designed compact structure is good at preventing loose tubes from shrinking.

Crush resistance and flexibility.

PE sheath protects cable from ultraviolet radiation

TECHNICAL SPECIFICATION



Technical Parameters

Cable Type 2 (Increased by 2 bers)	Fiber Count	Tubes	Fillers	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)
GYTS-2-6	2~6	1	4	9.5	100	600/1500	300/1000	10D/20D
GYTS-8~12	8~12	2	3	9.5	100	600/1500	300/1000	10D/20D
GYTS-14~18	14~18	3	2	9.5	100	600/1500	300/1000	10D/20D
GYTS-20~24	20~24	4	1	10.5	100	600/1500	300/1000	10D/20D
GYTS-26~30	26~30	5	0	10.5	100	600/1500	300/1000	10D/20D
GYTS-32~36	32~36	6	0	10.5	119	1000/3000	300/1000	10D/20D
GYTS-38-48	38-48	4	1	11.0	136	1000/3000	300/1000	10D/20D
GYTS-50~60	50~60	5	0	11.0	136	1000/3000	300/1000	10D/20D
GYTS-62-72	62~72	6	0	12.0	155	1000/3000	300/1000	10D/20D
GYTS-74-84	74~84	7	1	13.6	192	1000/3000	300/1000	10D/20D
GYTS-86-96	86-96	8	0	13.6	192	1000/3000	300/1000	10D/20D
GYTS-98~108	98~108	9	1	15.0	227	1000/3000	300/1000	10D/20D
GYTS-110~120	110~120	10	0	15.0	227	1000/3000	300/1000	10D/20D
GYTS-122~132	122~132	11	1	16.9	227	1000/3000	300/1000	10D/20D
GYTS-134~144	134~144	12	0	16.9	227	1000/3000	300/1000	10D/20D

TECHNICAL SPECIFICATION

Optical Characteristics

Characteristics		Conditions	Specified values	Units
Attenuation		1310nm	≤0.36	[dB/km]
		1383nm(after H2-aging)	≤0.36	[dB/km]
		1550nm	≤0.24	[dB/km]
		1625nm	≤0.24	[dB/km]
Attenuation vs. Wavelength Max. a 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 (20)		--	1300-1324	[nm]
Zero Dispersion Slope(So)		--	≤0.092	[ps/(um² 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 (cc)		--	≤1260	[nm]
Mode Field Diameter (MFD)		1310nm	8.7-9.5	[μπ]
		1550nm	9.8-10.8	[μm]
Effective Group Index of Refraction (Nett)		1310nm	1.466	--
		1550nm	1.467	--
Point Discontinuities		1310nm	≤0.05	[dB]
		1550nm	≤0.05	[dB]

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]

Geometrical Characteristics

Characteristics	Conditions	Specified values	Units
Cladding Diameter	--	125 ± 0.7	[μm]
Cladding Non-Circularity	--	≤ 1	[%]
Coating Diameter	--	235-250	[μm]
Coating-Cladding Concentricity Error	--	≤12	[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]

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(na)		--	≥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
Color	Blue	Oranage	Green	Brown	Gray	White	Red	Black

TECHNICAL SPECIFICATION

Fiber count		/	4	8	12
Structure		/	Uni tube		
Fiber type		/	G652D		
Central strength en 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	°C	- 10/60		
	Operation		- 30/70		
	Storag		- 40/70		