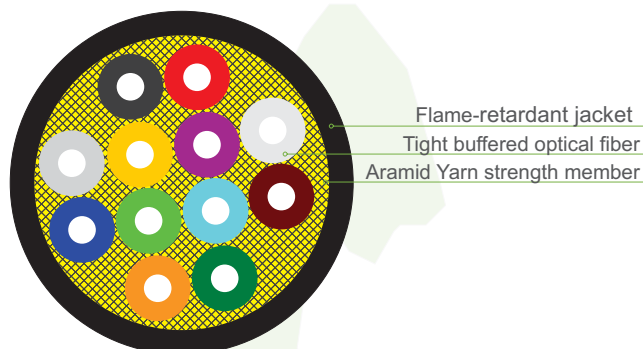


PRODUCT DATA SHEET

Indoor / Outdoor Distribution Cable

Introduction

In the Nitrotel Indoor Distribution Cable 900µm Buffered Fibers are surrounded by aramid yarn as strength members and a PVC/LSZH flame-retardant jacket.

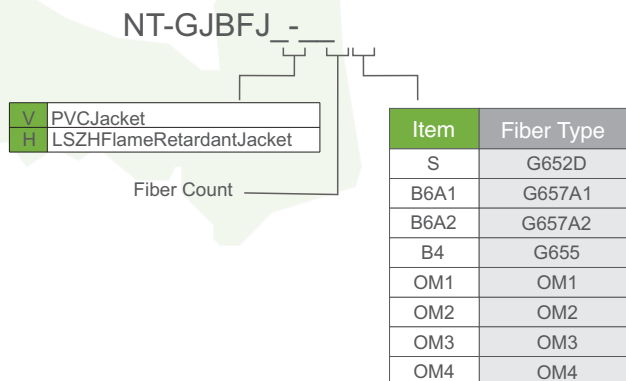


Cable Dimensions and Constructions

Items		Descriptions
Optical Fiber	Fiber count	4/8/12/24
Tight buffer fibers	Material	LSZH/PVC
	Diameter	0.85±0.05mm
Strength Member	Material	Aramid yarn
Sheath	Material	LSZH/PVC
	Thickness	0.8mm±0.15mm (≤ 12Core) 1.0mm±0.10mm (>12core)
	Color	Yellow/Orange/Aqua
Cable Diameter		5.0 ± 0.2 mm (4Core)
		6.0 ± 0.2 mm (8Core)
		6.5 ± 0.2 mm (12Core)
		7.5 ± 0.2 mm (18Core)
		8.5 ± 0.2 mm (24Core)
Cable Weight		Approx 16.2 kg/km
		Approx 27.0 kg/km
		Approx 38.0 kg/km
		Approx 45.0 kg/km
		Approx 65.0 kg/km
Tight buffer Color Code	blue/orange/green/brown/grey/white/red/black/ yellow/purple/pink/aqua	
Colors of 2 nd group of 12 tight buffers	With black tracer blue/orange/green/brown/grey/white/red/ yellow/purple/pink/aqua	
	With white tracer black	

Mechanical and Environmental Characteristics

Items		Descriptions	
Tensile Strength	IEC60794 -2-E1	short-term	600N
		long-term	200N
		short-term	1000N (>12core)
		long-term	500N (>12core)
Crush Resistance	IEC60794 -2-E3	short-term	1000N
		long-term	300N



Packing

Wooden Drums Protection

Marking

- Cable Marker every Meterby
- Project name or Project owner
- Year of manufacture
- Tape of Cable
- Number of fiber
- Cable length



Fiber Optic Glass "Zero Peak Water" G652D

Characteristics	Conditions	Specified Values	Units
Optical Characteristics			
Attenuation	1310 nm 1383 nm (after H2-aging) 1460 nm 1550 nm 1625 nm	≤ 0.35 ≤ 0.35 ≤ 0.25 ≤ 0.21 ≤ 0.23	[dB/km] [dB/km] [dB/km] [dB/km] [dB/km]
Attenuation vs. Wavelength Max. α difference	1285~1330 nm 1525~1575 nm	≤ 0.03 ≤ 0.02	[dB/km] [dB/km]
Dispersion coefficient	1285~1340 nm 1550 nm 1625 nm	$\geq -3.4 \leq 3.4$ ≤ 18 ≤ 22	[ps/(nm·km)] [ps/(nm·km)] [ps/(nm·km)]
Zero dispersion wavelength		1300 1324	[nm]
Zero dispersion slope Typical value		≤ 0.092 0.086	[ps/(nm ² ·km)] [ps/(nm ² ·km)]
PMD Maximum Individual Fibre Link Design Value (M=20,Q=0.01%) Typical value		≤ 0.1 ≤ 0.06 0.04	[ps/ km] [ps/ km] [ps/ km]
Cable cutoff wavelength λ_{cc}		≤ 1260	[nm]
Mode field diameter (MFD)	1310 nm 1550 nm	8.4 9.2 9.3 10.3	[μ m] [μ m]
Effective group index of refraction (N_{eff})	1310 nm 1550 nm	1.466 1.467	
Point discontinuities	1310 nm 1550 nm	≤ 0.05 ≤ 0.05	[dB] [dB]
Geometrical Characteristics			
Cladding diameter		125.0 $\pm$ 0.7	[μ m]
Cladding non-circularity		≤ 0.7	[%]
Coating diameter		245 $\pm$ 5	[μ m]
Coating-cladding concentricity error		≤ 12.0	[μ m]
Coating non-circularity		≤ 6.0	[%]
Core-cladding concentricity error		≤ 0.5	[μ m]
Curl (radius)		≥ 4	[m]
Delivery length		2.1 to 50.4	[km/reel]
Environmental Characteristics (1310 nm, 1550 nm & 1625 nm)			
Temperature dependence Induced attenuation at	-60 to +85	≤ 0.05	[dB/km]
Temperature-humidity cycling Induced attenuation at	-10 to +85 , 98% RH	≤ 0.05	[dB/km]
Watersoak dependence Induced attenuation at	23 , for 30 days	≤ 0.05	[dB/km]
Damp heat dependence Induced attenuation at	85 and 85% RH, for 30 days	≤ 0.05	[dB/km]
Dry heat aging at	85 , for 30 days	≤ 0.05	[dB/km]
Mechanical Specification			
Proof test	off line	≥ 9.0 ≥ 1.0 ≥ 100	[N] [%] [kpsi]
Coating strip force	average force (typical) peak force	1.7 $\geq 1.3 \leq 8.9$	[N] [N]
Dynamic stress corrosion susceptibility	parameter nd (typical)	20	

