# FRP Armoured Loose Tube Cable 6-144f



FOS nylon jacket dielectric armoured rodent proof loose tube fibre cable is suited to external underground installations in ducts by pulling, jetting or floating techniques or by direct burial in open-cut trenches. FRP armoured loose tube is particularly suited to areas where rodents are an issue.

Loose tube cable offers a cost-effective and rugged solution for medium and long distance external fibre runs.

FOS nylon jacket dielectric rodent proof loose tube cable is available in OM1, OM3, OM4 and Singlemode.<sup>1</sup>

# **Applications**

- Underground ducts
- Direct buried fibre links
- Inter-building links
- Campus fibre networks
- Infrastructure and industrial fibre links

# Features & Benefits

- Bonded double jacketed construction
- Protective peripheral fibreglass reinforced polymer strength members provide excellent strength and complete protection from rodents
- Insect resistant nylon outer and UV stabilised polyethelene inner jacket for long life in a wide range of installations
- Water swellable yarns provide protection against water ingress (dry core construction)
- Non-metallic construction
- Fibreglass reinforced polymer central strength member
- Flexible buffer tubes provide easy handling within termination enclosures
- Single layer SZ stranding limits stress on fibre tubes
- Fibre friendly thixotropic gel in tubes ensures fibre protection
- TIA 598 standard colour code
- 12 fibre tube construction<sup>2</sup>

<sup>1</sup>G652.D Standard, G655, G656, G657 available <sup>2</sup>Excludes 6f cable



### Fibre Performance

Fibre type	OM1	OM3	OM4	OS1/2 (G652.D)
Attenuation at 850nm (db/km)	≤3.1	≤3.0	≤3.0	n/a
Attenuation at 1300/1310nm (db/km)	≤1.0	≤1.0	≤1.0	≤0.35
Attenuation at 1550nm (db/km)	n/a	n/a	n/a	≤0.21
Attenuation at 1625nm (db/km)	n/a	n/a	n/a	<0.24
Bandwidth at 850nm [1300nm] (MHz.km)	≥200 [≥500]	≥1500 [≥500]	≥3500 [≥500]	n/a



# **Technical Specifications**

Temperature Range (°C)	Operating: -20 to +70 Storage: -20 to +70 Install: -20 to +70	(IEC 60794-1-2-F1)
Cable bend radius	Install: 20 x cable diameter Operation: 15 x cable diameter	(IEC 60794-1-2-E11A)
Repeated bending	30 cycles: radius 20 X cable diameter, 10 Kg Load	(IEC 60794-1-2-E6)
Max tensile force (N)	6000	(IEC 60794-1-2-E1)
Torsion resistance	10 Cycles (± 360°) 10 Kg weight, 2m length	(IEC 60794-1-2-E7)
Crush resistance (N/100mm²)	4000 for 60 seconds	(IEC 60794-1-2-E3)
Impact resistance	0.5m height, 5kg weight, 3 impact	(IEC 60794-1-2-E4)
Kink resistance	10 x cable diameter	(IEC 60794-1-2-E10)
Water penetration	1m head, 3m cable, 24 hours	(IEC 60794-1-2-F5B)

Change in attenuation after testing shall be <0.1dB

## **Cable Characteristics**

Fibre Count	6 - 72	96	144
Nominal diameter (mm)	16.8	19.3	21.8
Nominal weight (kg/km)	260	350	440
Minimum bend radius installation (cm)	33.6	38.6	43.6
Min. bend radius long term (cm)	25.2	29.0	32.7

Active | Passive | Test Equipment | Tooling | Cable | Fibre Management

For further information: www.fibreoptic.com.au +61 3 9757 3000

