

# Optical Fibre Cable

**Part No:** GLT- AZB Series

## Communication / Optical / Loose Tube

### Description

Up to 12 fibres in jelly filled loose tubes, stranded around a central strength member with dry blocking elements and additional glass yarn strength members, overall taped, PE inner jacket, nylon termite barrier, helical FRP rod rodent barrier, PE outer jacketed, overall low friction nylon jacketed optical fibre cable for use in ducts or direct burial applications.

### Applicable Standards

AS/CA S-008, IEC 60794-1-21, AS 1049, AS/NZS 11801, MRTS234

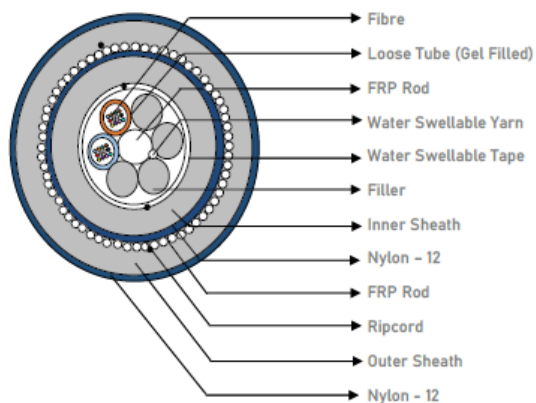
### Suitable Applications

For use as trunk or spur lines in telecommunications systems.

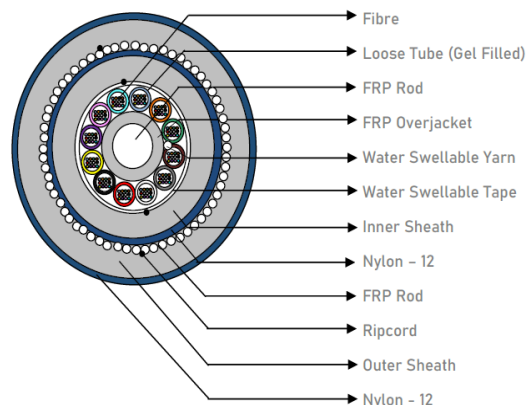
The low friction outer jacket aids installation and the rodent barrier has been qualified for rodent resistance as per MRTS234 for communications cables.

## Images

**06/12/24F Multitube GRP Armoured Optical Fibre Cable**



**96/144F Multitube GRP Armoured Optical Fibre Cable**



48 fibre cable shown. Other fibre counts are of similar construction.

Image for Illustration purposes only.



# Optical Fibre Cable

## Features

- Outdoor Cable
- UV Stabilized
- Underground/Direct Burial
- Water Blocked
- Rodent Resistant
- Termite Resistant
- Low Friction Outer Coating
- TMR Certificate 23-15

## Construction

Tube Details	Material	PBT											
	OD	2 mm											
	Water blocking	Jelly											
Fibre and Tube Colors EIA/TIA 598	1	2	3	4	5	6	7	8	9	10	11	12	
	BE	OE	GN	BN	GY	W H	RD	BK	YW	VT	PK	AQ	
Stranding	Configuration	Multiple tubes and fillers around a central strength member											
	No. of tubes and fillers	Refer to Ordering Information											
	Peripheral strength member	Glass yarns wrapped around central core.											
	Water Blocking	Water swellable threads, tapes, and aramid as necessary to meet requirements											
Rip Cords	Material	2 x high strength polyester											
Inner Jacket	Material	UV Stabilized HDPE											
	Colour	Black											
	Nominal Thickness (mm)	1.3											
Termite Barrier	Material	UV stabilized Nylon 12											
	Colour	Blue											
	Nominal Thickness (mm)	0.45 mm											
Rodent Barrier	Material	Round FRP rods											
	Application	Helical											

Garland's Pro Series range is the experts' choice for high quality cables.

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# Optical Fibre Cable

Construction		
Rip Cords	Material	2 x high strength polyester
	Material	UV stabilized HDPE
Outer Jacket	Colour	Black
	Nominal Thickness (mm)	1.5 mm
	Material	UV stabilized Nylon
Low Friction Layer	Colour	Blue
	Nominal Thickness	0.45 mm
	Nominal Overall Diameter	Refer to Ordering Information
	Cable Weight	Refer to Ordering Information
Drum Lengths <sup>1</sup>	Standard	2 and 4 km Wooden Drums
	Tolerance	± 5%

Mechanical/Environmental Properties			
Property	Limit		Standard
Tensile Strength	Nos Fibres	Tensile	IEC 60754-1-2-E1
	6, 12, 24 & 48	7.5 KN	
	96 & 144	14.5 KN	
Crush Resistance	2000 N/100mm		IEC 60794-1-2-E3
Impact Strength	10 N.m		IEC 60794-1-2-E4
Torsion	± 180°		IEC 60794-1-2-E7
Kink	10 x OD		IEC-60794-1-2-E10
Minimum Bend Radius – Loaded	20 x Diameter under load		IEC 60794-1-2-E11
Water Penetration Test	1 meter water head 3-meter cable sample 24-hour duration No Water leaks		IEC 60794-1-2-F5B
Temperature Range	Storage	-40°C to +70°C	IEC 60794-1-2-F1

<sup>1</sup> Non-standard drum lengths subject to negotiation.

# Optical Fibre Cable

Installation -40°C to +70°C

Operation -40°C to +70°C

Fibre Properties		
Property	Wavelength	Limit
Attenuation (G652.D)	1310 nm	≤ 0.36 dB/km
	1550 nm	≤ 0.23 dB/km

Ordering Information						
Part Number	Fibre type	Total number of Fibres	Fibres per tube	Number of Fillers/tubes	Nom OD (mm)	Cable Weight (kg/km)
GLTSM1AZB006BE	G652D	6	6	1/5	16.5	250
GLTSM1AZB012BE	G652D	12	12	1/5	16.5	250
GLTSM1AZB024BE	G652D	24	12	2/4	16.5	250
GLTSM1AZB048BE	G652D	48	12	4/4	16.5	250
GLTSM1BZB096BE	G652D	96	12	8/4	20.5	380
GLTSM1BZBI44BE	G652D	144	12	12/0	20.5	380

- Madison reserves the right to make changes to the products described in this specification without prior notice.
- All values subject to tolerances.

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