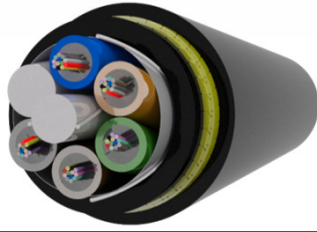


# M-TEC



## Fibre Optic Cable

Medium span all- dielectric self-supporting aerial cable, M-TEC standard

### Application:

To be strung on poles / Structures in air, supporting its own weight.  
Strung in air over a long span of up to a Maximum of 250m between supports.

### Construction:

GRP, water blocking binder, fiber optics in tubes filled with thixotropic gel, separator tape, water blocking binder, Polyethylene inner sheath, water blocking Kevlar, Polyethylene/ Anti-tracking Polyethylene outer sheath.

### Fiber Types:

Single-Mode : G652D, G655(C,E,D), G656(A,D,E), G657.(A1,A2,B2) Ultra low loss.  
Multi-Mode : OM1(62.5/125), OM2, OM3, OM4.

Construction										
Number of Fibres (Fibre Count)	2-8	12	24	48	2-8	12	24	48	72	96
Fibres per Tube	6	6/12	6/12	12	6	6/12	6/12	12	12	12
Number of Elements	5	5	5	5	6	6	6	6	6	8
Number of Tubes	1	2/1	4/2	4	1	2/1	4/2	4	6	8
Number of Fillers	4	3/4	1/3	1	5	4/5	2/4	2	0	0
Material of Tubes	PBT (Polybutylene Terephthalate)									

Cable	
Central Strength Member (GFRP)	Glass fiber reinforced plastic (non metallic)
Filler Material	Natural Polyethylene
Strength Member Material	Aramid yarn

Polyethylene outer sheath										
Diameter (mm) Nominal	13.3	13.3	13.3	13.3	14.1	14.1	14.1	14.1	14.1	15.7
Weight (kg/km) Nominal	129	129	129	129	144	144	144	144	144	180
Inner and Outer Sheath	Black (No Stripe)									
Material	Polyethylene UV stable									
Radial Thickness	Nominal 1.6mm									

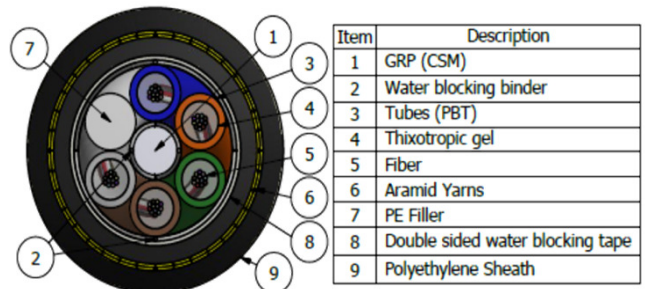
Anti-tracking high density Polyethylene outer sheath										
Diameter (mm) Nominal	14.1	14.1	14.1	14.1	14.9	14.9	14.9	14.9	14.9	16.5
Weight (kg/km) Nominal	161	161	162	162	174	174	174	174	175	214
Inner and Outer Sheath	Black (No Stripe)									
Material	Anti-Tracking Polyethylene UV stable									
Radial Thickness	Nominal 2.0mm									

Physical properties										
Allowable Tensile strength										
During Installation	7500 N									
After Installation	4000 N									
Sag at Everyday Stress @ 250m Spans	2.5m									

Bending Radius										
After Installation	10 x Cable Diameter									
During Installation	20 x Cable Diameter									
Crush Resistance (100mm x 100mm Plates for 1min)	4,000 N									
Impact Test (2Nm/25mm Anvil)	20									
Torsion (± 180°C for 10 cycles)	1 meter									
Water Penetration (24 Hours)	3 meter									
Temperature Range	-10 / +70 °C									

Fibre identification:	1. Blue 2. Orange 3. Green 4. Brown 5. Grey 6. White
Loose Tube identification:	7. Red 8. Black 9. Yellow 10. Violet 11. Pink 12. Turquoise/Aqua
Shipping Length	1. Blue 2. Orange 3. Green 4. Brown 5. Grey 6. White 7. Red 8. Black 9. Yellow 10. Violet 11. Pink 12. Turquoise/Aqua
	2,000m to 6,000m

- Product Features**
- The Medium span loose tube Aerial self supporting cable is suitable for installation on spans up to 250m and a vast range of other self supporting applications.
  - Polyethylene outer sheath is UV stabilized.
  - Low installation and product cost and fast installation reduces the total project cost.
  - The cable's non metallic construction makes it immune to lightning.
  - Two layers of helical ARAMID/ Kevlar strength members enables the cable to withstand (EDS) every day stress and abnormal environmental loading, makes the cable resistant to creep with a high modulus and eliminates torsional stress.
  - Excellent optical reliability is ensured by the gel filling in the tubes which provide protection against vibration.



**Customer acceptance Signature:** \_\_\_\_\_  
Revision: R01 13/11/2014

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