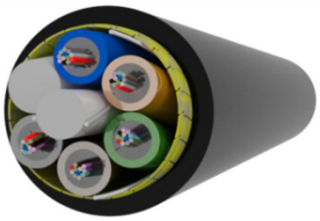
M-TEC

Fiber Optic Cable
ADSS Aerial Cable Short Span, M-TEC Standard



Application:
To be strung on poles / structures in air, supporting its own weight.
Strung in air over a short span of up to a Maximum of 100m between supports.

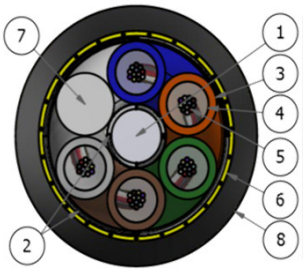
Construction:
GFRP, Fibre optics in PBT tubes filled with Thixotropic gel, binder, Aramid / Kevlar yarn, Polyethylene/ Anti-tracking outer sheath.
Also available in a water blocked version.

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

Construction										
Number of fibres	2-8	12	16	18	24	36	48	72	96	144
Fibres per tube	2-8	6/12	4/8	6	6/12	12	12	12	12	12
Number of elements	4	4	4	4	4	4	4	6	8	12
Number of tubes	1	2/1	4/2	3	4/2	3	4	6	8	12
Number of fillers	3	2/3	2/0	1	0/2	1	0	0	0	0
Material of tubes	PBT (Polybutylene Terephthalate)									
Cable										
Central strength member	Glass fibre reinforced plastic (non metallic)									
Filler material	Natural Polyethylene									
Polyethylene outer sheath										
Diameter (mm) Min.	9.0	9.0	9.0	9.0	9.0	9.0	9.0	10.2	11.8	14.8
Nom.	9.3	9.3	9.3	9.3	9.3	9.3	9.3	10.6	12.0	15.0
Max.	9.6	9.6	9.6	9.6	9.6	9.6	9.6	11.0	12.2	15.2
Weight (kg/km) Nominal	61	61	61	61	61	61	61	81	105	177
Outer sheath colour	Black (No Stripe)									
Material	Polyethylene									
Radial Thickness	Nominal 1.7mm									
Anti-tracking high density Polyethylene outer sheath										
Diameter (mm) Min.	9.4	9.4	9.4	9.4	9.4	9.4	9.4	10.8	12.4	15.4
Nom.	9.8	9.8	9.8	9.8	9.8	9.8	9.8	11.2	12.8	15.8
Max.	10.2	10.2	10.2	10.2	10.2	10.2	10.2	11.6	13.2	16.2
Weight (kg/km) Nominal	67	67	67	67	67	67	67	90	120	195
Outer sheath colour	Black (No Stripe)									
Material	Anti-tracking Polyethylene UV stable									
Radial thickness	Nominal 2.0mm									
Physical properties outer sheath										
Allowable tensile strength										
During installation	4 000N									
After installation	1 200N									
Sag at everyday stress @ 100m spans	0.5m									
Maximum span length	100m									
Minimum bending radius										
During installation	20 x Cable Diameter									
After installation	10 x Cable Diameter									
Crush resistance (50mm x 50mm plates for 1min)	1 000 N									
Impact Test (1Nm/25mm Anvil)	2 x 3 impacts 100mm apart									
Torsion (± 180° for 10 cycles, (1 Cycle clock and counter-clock wise)	1 meter cable sample									
Water penetration (24 Hours)	1 meter water head, 3 meter cable length									
Temperature range	-10 / +70℃									
Fibre identification:	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									
Loose tube identification:	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									
Shipping length	Up to 12 000m									

Product features

- # M-TEC fiber fully comply with: ITU-T Specifications for the relevant fibre type used in these cable.
-The all dielectric self support short span loose tube aerial self supporting cable is suitable for installation on pole spans up to 100m and a vast range of other self supporting applications.
-Low installation and product cost and fast installation reduces the total project cost.
-The cable's non metallic construction makes it immune to Lightning.
- A layer 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.
- Polyethylene Sheath is UV Stabilized if black.
- IBIDA, PLP or Powertel to be consulted for accessories for this type of cable.



Item	Description
1	GRP (CSM)
2	Binder (water blocking if required)
3	Tubes (PBT)
4	Thixotropic gel
5	Fiber
6	Aramid / Kevlar Yarns (water blocking if required)
7	PE Filler
8	Polyethylene Sheath

Revision: R02 28/06/2017

Customer acceptance Signature: _____