M-TEC



Fiber Optic Cable, ADSS

Long span self supporting aerial cable, anti-tracking : 6 & 8 Element

Application:

To be strung on poles / Structures in air, supporting its own weight over a long span of between 250 - 400m between supports.

Construction:

GRP, water blocking binder, fiber optics in tubes, water blocking binder, water blocking tape, Polyethylene inner sheath, water blocking Aramid, anti-tracking HDPE outer sheath.

Fiber Types:

 $\label{eq:generalized_states} \begin{array}{ll} \mbox{# Single-Mode} &: G652D, \mbox{ G655}(C,E,D), \mbox{ G656}(A,D,E), \mbox{ G657}.(A1,A2,B2) \mbox{ Ultra low loss.} \\ \mbox{# Multi-Mode} &: OM1(62.5/125), \mbox{ OM2}, \mbox{ OM3}, \mbox{ OM4} \end{array}$

		Construc	ction			
Number of Fibres (Fibre Count)	2-8	12	16	24	36	48
Fibres per Tube	2-8	6	8	6	6	8
Number of Elements	6	6	6	6	6	6
Number of Tubes	1	2	2	4	6	6
Number of Fillers	5	4	4	2	0	0
Material of Tubes	PBT (Polybutylene Terephthalate)					
		Cable	e			
Central Strength Member	Glass Fibre Reinforced Plastic (Non Metallic)					
Strength Member Material	Aramid Yarn					
Filler Material	Natural Polyethylene					
Polyethylene bedding / inner sheath						
Diameter (mm) Nominal	10.7	10.7	10.7	10.7	10.7	10.7
Outer Sheath	Black (No Stripe)					
Material	Polyethylene					
Radial Thickness	Nominal 1.6mm					
	Anti-tra	cking HDPE Pc	olyethylene sheat	h		
Diameter (mm) Nominal	14.9	14.9	14.9	14.9	14.9	14.9
Weight (kg/km) Nominal	180	180	180	180	180	180
Outer Sheath	Black (No Stripe)					
Material	Anti-Tracking Polyethylene					
Radial Thickness	Nominal 2.0mm					
		Physical Pro	operties			
Allowable Tensile strength						
During Installation (N)	8 000					
After Installation (N)	5 500					
Ultimate Tensile Strength (UTS) (N)	35000					
Maximum Span Length (m)	400					
Sag at Everyday Stress (EDS)	4.25					
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)	10					
Torsion (\pm 180°C for 10 cycles) (m)	1					
Water Penetration (24 Hours) (m)	3					
Temperature Range	-20 / +70°C					
Temperature Hange						
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. Aqua					
Loose Tube identification option 1: 1. Blue 2. Orange 3. Green 4. Brown 5. Grey 6. White						
	7. Red 8. Black 9. Yellow 10. Violet 11. Pink 12. Aqua 1st Red, intermediate Natural, last Green.					
Loose Tube identification option 2:	2.000m to 6.000m					
Shipping Length			2,000m to	0 6,000m		
Product Features					\bigcirc	
			(5)		(1)	Description

- # M-TEC fiber fully comply with: ITU-T Specifications for the relevant fibre type used in these cable.

- The long span loose tube aerial self supporting cable is suitable for installation on pole spans up to 400m and a vast range of other self supporting applications.

- Polyethylene is UV Stabilized.
- Low installation, low product cost and fast installation reduces the total project cost.
- The cable's non metallic construction makes it immune to lightning.
- Two layers of contra helical ARAMID Kevlar strength members enables the cable to withstand (EDS) Every Day Stress and abnormal environmental

Note: No printing on the outer sheath, bedding / inner sheath can be printed. Revision: R03 27/10/2020

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Description

Water blocking binding yarn

Item

3 2

3

4 4 Thixe 5 Fiber

7

5 6 PE Filler

7

8) 9

10)(9

1 GFRP

Tubes (PBT)

Binding tape

Aramid yarns

10 Polyethylene sheath

8 Polyethylene bedding

Thixotropic gel