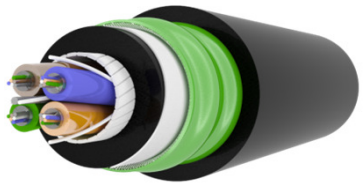
M-TEC



Fibre Optic Cable
CST double jacket rodent proof - single, multi mode or composite.

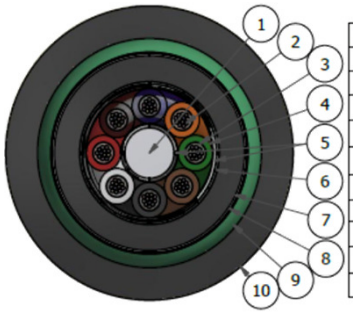
Application:
To be blown or hauled into ducting or direct buried.

Construction:
GRP, water blocking binding yarns, fibre optics in PBT tubes filled with Thixotropic gel, water blocking glass / aramid yarn, polyethylene inner sheath, double sided water swell able tape, plastic coated corrugated steel tape, Polyethylene / LSZH outer sheath.

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 (Fibre Count)	8	12	24	48	72	96	144
Fibres per Tube	4/8	6	6	12	12	12	12
Number of Elements	4	4	4	4	6	8	12
Number of Tubes	2	2	4	4	6	8	12
Number of Fillers	2	2	0	0	0	0	0
Material of Tubes	PBT (Polybutylene Terephthalate)						
Armouring (Corrugated Copolymer Steel Tape)							
Radial thickness	**Nominal 0.25mm**						
Cable							
Central Strength Member	Glass Reinforced Plastic						
Peripheral Strength Member	Water Blocking Glass/Aramid Yarn						
Filler Material	Natural Polyethylene						
Polyethylene Sheath							
Diameter (mm) Nominal	14.8	14.8	14.8	14.8	16.2	17.8	20.8
Weight (kg/km) Nominal	184	184	184	185	222	265	363
Outer Sheath	Black or Coloured (No Stripe)						
Material	Polyethylene						
Radial Thickness	Nominal 1.6mm						
Low Smoke Zero Halogen (LSZH) Sheath							
Diameter (mm) Nominal	16.0	16.0	16.0	16.0	17.4	19.0	22.0
Weight (kg/km) Nominal	254	254	254	255	299	350	462
Outer Sheath	Black or Coloured (No Stripe)						
Material	Low Smoke Zero Halogen (LSZH)						
Radial Thickness	Nominal 2.0mm						
Physical Properties							
Allowable Tension During installation (N)	2171	2171	2171	2172	2611	3123	4000
Allowable Tension After installation (N)	599	600	600	600	600	600	600
Bending Radius (4 turns x 10 Cycles)	12 x Cable Diameter						
Crush Resistance (100mm x 100mm Plates for 1min)	4000 N						
Impact Test (4Nm/25mm Anvil)	2 x 3 impacts 100mm apart						
Water Penetration (24 Hours)	3 meter						
Temperature Range	-20 / +70℃						
Fibre identification:	1. Blue 2. Orange 3. Green 4. Brown 5. Grey 6. White						
Loose Tube identification:	1. Blue 2. Orange 3. Green 4. Brown 5. Grey 6. White						
Shipping Length	(Single Mode) 2,000m to 6,000m / (Multi Mode) 2,000m to 4,000m						
Product Features							

- # M-TEC fiber fully comply with: ITU-T Specifications for the relevant fibre type used in these cable.
- The Corrugated plastic clad steel tape armoured cable is suitably protected against rodent attack and will provide protection for alternative applications where the cable is exposed to abnormal crushing or impact forces during installation or service.
- CST Provides excellent moisture barrier and the cable is further protected against moisture ingress by a water blocking tape under the CST.
- CST Provides Rodent attack resistance.
- Longitudinal CST tape prevents cable spiralling, twisting and kinking during installation.
- IBIDA, PLP or Powertel to be consulted for accessories for this type of cable.



Item	Description
1	GRP (CSM)
2	Fibres
3	Thixotropic gel
4	Tubes (PBT)
5	Water blocking binder
6	Glass or Aramid/Kevlar yarn
7	Inner sheath
8	Water blocking tape
9	(CST) Corrugated Steel Tape
10	Outer sheath

NB: Glass Yarn is M-TEC Standard, Aramid yarn is optional.
- Note: Buried cables must be surrounded with sifted backfilling compacted and the cable musty be suitably protected from sharp objects, rocks and stones, mechanical damage and extreme side wall pressures.

Customer acceptance Signature: _____

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