

PRODUCT DESCRIPTION

Fibreglass reinforced Plastic (FRP) rods are used as strength Members in optical fibre cables. The FRP rod produced by pultrusion process. Fibre glass reinforcements are pultruded with unique resin formulations to produce a final thermoset FRP rod.

The round rods located in the centre of fibre optic cab combine the high performance properties of glass reinforcements with unique resin formulation to produce strong and cost efficient cable reinforcement. **The long, splice-free lengths enhance productivity in cabling operations.** Central strength members are common outdoor cables and some high fibre counts indoor cables.



FEATURES

- Superior dimensional stability
- High tensile modules
- Designed for all-dielectric or metallic cable application
- Provides anti-bucking properties and protection during installation
- Inexpensive way to increase diameter to accommodate designs with high fibre counts increases equipment uptime and productivity.
- Long splice-free length.
- Consistent diameter and shape
- Adhesion to upjacketing materials

Standard Lengths

- >50 kms splice free lengths

Manufacturing Capability

- 0.4 mm to 4.0 mm with very close diameter tolerance
- Matches desired length specification

Typical product characteristics

- Glass content: >80% by weight
- Diameter stability : +0.05mm
- Density : 2.1 gm/cc
- Ovality : < 0.05mm

MECHANICAL PROPERTIES

| | | |
|------------------------------------|-------------------------|-------------|
| Ultimate tensile strength | ≥1.50 GPa | ASTM D 3916 |
| Tensile modules | ≥50 GPa | ASTM D 3916 |
| Elongation @ Break | ≥2.5% | ASTM D 638 |
| Min. Bend radius | 25xD @ 23 °C | |
| Heat Stress Tolerance(Bend Radius) | 8 Days @ 100 °C, 50 x D | |
| Co-efficient of Thermal Expansion | 5.2 x 10-06/°C | ASTM D 696 |
| Shrinkage | 0% | |
| Flexural Modules | ≥ 50 GPa | ASTM D790 |
| Water Absorption after 24 Hrs | ≤ 0.1 % | ASTM D 570 |

