

# Cable Reinforcement Solutions for the World

- **UNCOATED FRP ROD**

Central strength member provide tensile strength to OFC

- **EAA COATED FRP ROD**

Ethylene Acrylic Acid is coated over FRP to provide better adhesion with PE

- **PE UP COATED FRP ROD**

PE is coated over FRP to achieve higher diameter with low cost and better flexibility.

- **WATER BLOCKING FRP ROD**

Water blocking material is used for FRP to protect from water ingress.

- **FRP ROD WITH STEEL WIRE**

Steel Tracer wire is embedded inside FRP

- **FRP ROD WITH COPPER WIRE**

Copper tracer wire is embedded inside FRP

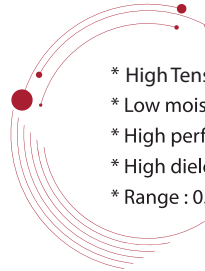
- **ARAMID FRP ROD**

Provided high tensile strength even at lower diameter



## FRP STRENGTH MEMBER

### FIBER REINFORCED PLASTIC ROD



- \* High Tensile strength
- \* Low moisture absorption
- \* High performance capabilities
- \* High dielectric strength
- \* Range : 0.4 - 11.0 mm

#### PRODUCT DETAILS

Central or Peripheral strength member in Optical fiber cable

#### PHYSICAL PROPERTIES

PROPERTIES	TEST METHOD	UNIT	VALUE
Glass Content	DIN EN ISO1172	%	≥80
Diameter Tolerance	Micrometer	mm	± 0.05
Ovality	Micrometer	mm	± 0.05
Density	Water Immersion	gm/cc	2.05 to 2.15
Splices	None		

#### MECHANICAL PROPERTIES

PROPERTIES	TEST METHOD	UNIT	VALUE
Tensile modulus	ASTM D3916	GPa	≥ 50
Tensile strength at break	ASTM D3916	GPa	≥ 1.50
Fexural Modulus	ASTM D790	GPa	>50
Elongation at break	ASTM D3916	%	≥2.5
Coefficient of thermal expansion	ASTM D696	cm/°c	5.9x 10 <sup>-5</sup>
Water absorption	ASTM D570	%	< 0.1
Minimum bend radius at 25°C			≤ 25 D
Resistance to bending	ASTM D3916	N/Sq mm	≥1500
Resistance to compression	DIN 53455	N/Sq mm	≥ 300

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## FRP STRENGTH MEMBER (EAA)

FIBER REINFORCED PLASTIC ROD EAA COATED

- \* High Tensile strength
- \* Low moisture absorption
- \* High performance capabilities
- \* High dielectric strength
- \* Range : 0.4 - 11.0 mm

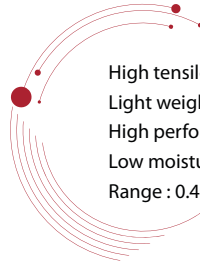
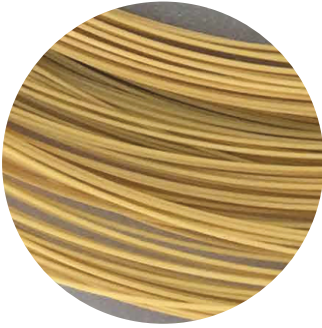
### PRODUCT DETAILS

Central or Peripheral strength member in Optical fiber cable

PHYSICAL PROPERTIES			
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Glass Content	DIN EN ISO1172	%	≥80
Diameter Tolerance	Micrometer	mm	± 0.05
Ovality	Micrometer	mm	± 0.05
Density	Water Immersion	gm/cc	2.05 to 2.15
Splices	None		
EAA Coating Thickness		Micron	Min 20 & Max 60

MECHANICAL PROPERTIES			
PROPERTIES	TEST METHOD	UNIT	VALUE
Tensile modulus	ASTM D3916	GPa	≥ 50
Tensile strength at break	ASTM D3916	GPa	≥ 1.50
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Minimum bend radius at 25°C			≤ 25 D
Resistance to bending	ASTM D3916	N/Sq mm	≥1500
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## ARP STRENGTH MEMBER ARAMID REINFORCED PLASTIC ROD



High tensile strength  
Light weight  
High performance capabilities  
Low moisture absorption  
Range : 0.4 - 1.0 mm

### PRODUCT DETAILS

Strength member in optical fiber cable  
Suitable for FTTH / Drop / Ariel cable

#### PHYSICAL PROPERTIES

PROPERTIES	TEST METHOD	UNIT	VALUE
Diameter Tolerance	Micrometer	mm	±0.05
Aramid content	DIN EN ISO1172	%	67±3
Ovality	Micrometer	mm	≤ 0.05

#### MECHANICAL PROPERTIES

PROPERTIES	TEST METHOD	UNIT	VALUE
Tensile modulus	ASTM D3916	GPa	≥ 50
Tensile strength	ASTM D3916	GPa	≥ 1.50
Minimum bend radius at 25°C	mandrel bend	mm	<8 for 0.4mm <10 for 0.5mm
Elongation at break	ASTM D3916	%	≥ 2.5
Moisture content	Over 150°C, 30 Min.	%	≤ 2.0

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