

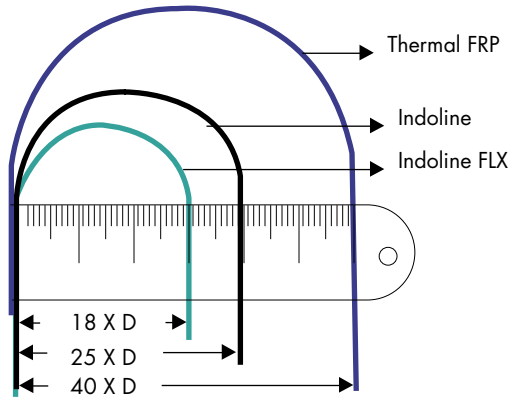


### Product Application

**INDOLINE FLX**, Low Bend FRP Rods have been specially developed for the upcoming Fiber to the home (FTTH/FTTP) cables, where FRP rods with very low bend radius and good adhesion to jacket are required. These are used for peripheral reinforcement embedded in a PE/PVC jacket. Very Good adhesion of rods to jacket materials facilitates maximum transfer of load to the rod and hence protecting the fiber. The cables manufactured with **INDOLINE FLX**, have good bending properties to facilitate installation even in very small bends. These rods are suitable for Aerial, Drop, Riser and Micro-duct cables.

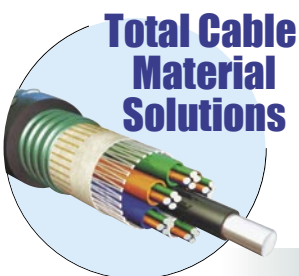
### Description

**INDOLINE FLX** is manufactured using glass fiber and proprietary resin system to provide low bending radius, good anti-buckling property with high modules. These rods are supplied with special coatings to provide very good adhesion with standard jacket materials long continuous lengths with very close diameter tolerance, makes it suitable for trouble free high cable productivity. **INDOLINE FLX**, Low Bend FRP Rods are available in diameter ranging from **0.25 to 2.5 mm**.



### Typical Product Characteristics - Nominal Values

Physical Property	Unit	Value	Test Method
Density	gm/cc	1.9 to 2.15	ICPL/QS/012
Dimension Tolerance	mm	+ \- 0.05	Micrometer
Ovality	%	< 5%	Micrometer
Tensile Strength @ Break	Kg/mm <sup>2</sup>	>130	ASTM D3916
Flexural strength @ Break	Kg/mm <sup>2</sup>	>120	ASTM D790
Elongation @ Break	%	>3.0%	ASTM D3916
Tensile Modulus	Kg/mm <sup>2</sup>	>4500	ASTM D3916
Minimum Bending Dia @ 25°C	mm	16D	ICPL/QS/010
Heat Stress @ 70°C, 24 Hrs,	mm	50D	ICPL/QS/009
Water Absorption	%	<0.1	ASTM D570
Coefficient of Thermal expansion	cm/cm/°C	5.9 x 10 <sup>-6</sup>	ASTM D 696



## Typical Packaging

Spool Code	S061	S083	S935
Flange, mm	630	800	935
Traverse, mm	450	550	550
Width, mm	510	610	610
Barrel, mm	315	400	400
Central Bore, mm	80	80	80
C-C Pin distance, mm	120	120	120
Pallet Dimension, LXWXH, mm	660X610X851	940X749X1067	1041 x 635 x 1245
No. of Spool Per Pallet, Nos.	3	2	2

• Other customized spools can be made available on request .

Std Bore Size is 80 mm (+2 .0 mm)

Meter marking available on request

Rod diameter in mm	Length per spool, Kms (max)		
1.00		90	100
1.20		90	100
1.50		70	90
1.60		63	90
1.80	25	50	78
2.00		40	65
2.10		38	58
2.30		32	50
2.50		27	41

SHIPPING No. of Spools			
Truck Eicher (LCV)	21	15	12
Truck Tata 1210	27	18	15
20' Container	27 / 54 / 81	18 / 36	18 / 36

Note: Other packaging options available on request.

Limited Warranty: This product has been tested prior to dispatch and Indore gives warranty that tis free from any manufacturing defects.

However Indore disclaims any liabilities for incidental or consequential damages arising out of breach of this warranty or any implied warranty.

## INDORE COMPOSITE PVT. LTD. [Cable Materials Div.]

### Corporate & Marketing Office

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### Manufacturing Sites

**Plant 1:** Pithampur, M.P. - 454775. India.

**Plant 2 :** Umbergaon, GUJ. - 396171. India.