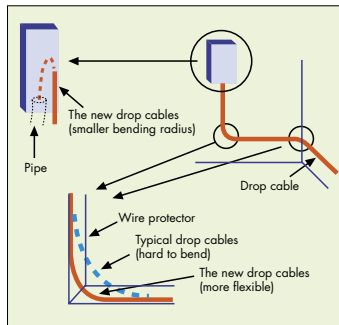




### Product Application

**INDOFINE** is a family of di-electric rods which have been specially developed for the upcoming Fiber to the home (FTTH/FTTP) cables where a very fine diameter rod with very low bend radius and good adhesion to jacket is required. These are used for peripheral reinforcement embedded in a PE/PVC jacket. An excellent adhesion of rods to jacket materials facilitates maximum transfer of load to the rod, hence protecting the fiber. The cables manufactured with Indofine would be very small in diameter, lightweight and would have good bending properties to facilitate installation even in very small bends. These rods are suitable for both aerial and underground cables.



Typical FTTH Cable installation

### Description

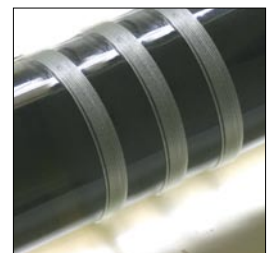
**INDOFINE** rods are available in diameters ranging from **0.25** to **1.0** mm and have three main variants, namely, Indofine RR, Indofine SR and Indofine AR.

**INDOFINE RR** is manufactured using E-glass fiber and proprietary resin system to provide reasonably low bending radius with good anti-buckling properties. It has an added advantage of high heat resistance with high tensile & torsional strength.

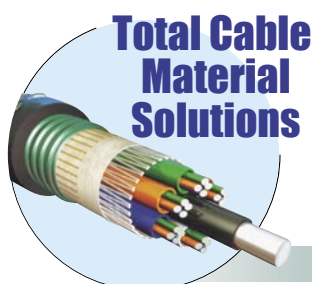
**INDOFINE FLX** is manufactured using E-glass fiber and proprietary flexible resin system to provide low bending radius with reasonable anti-buckling properties. It has an added advantage of very high flexibility and high strength.

**INDOFINE AR** is manufactured using Aramid fiber and proprietary resin system to provide low bending radius, good anti-buckling property with very high modulus. These rods are also very light weight.

These rods are supplied with special coatings to provide very good adhesion with standard jacketing materials. Long continuous lengths with very close diameter tolerances makes them suitable for trouble free high cable productivity.



Actual Size



## Typical Product Characteristics

Physical properties	Units	INDOFINE RR	INDOFINE FLX	INDOFINE AR	Test Method
Diameter Tolerance	mm	+/- 0.05	+/- 0.05	+/- 0.05	WI/QC/011
Ovality	%	< 5	< 5	< 5	WI/QC/011
Density	gms/ Km	1.9	1.9	1.4	ICPL/QS/012
Tensile Strength at Break	Kg/mm <sup>2</sup>	> 125	> 125	> 150	ASTM D3916
Elongation at Break	%	> 2.5	> 2.5	> 2.5	ASTM D3916
Tensile Modulus	Kg/mm <sup>2</sup>	> 4500	> 4500	> 6500	ASTM D3916
Minimum Bend Dia @ 25°C	mm	< 25 D	< 18 D	< 10 D	ICPL/QS/009
Heat Stress, @80°C, 24 hrs,	mm	50 D	NA	50 D	ICPL/QS/008
Water Absorption	%	< 0.1	< 0.1	< 0.1	ASTM D570
Coefficient of Thermal Expansion	cm/cm/°C	5.6x 10 <sup>-6</sup>	5.6x 10 <sup>-6</sup>	5.6x 10 <sup>-6</sup>	ASTM D696

## Typical Packaging

### Spools

Spool Code	S-A40	S-A35
Flange, mm	400	355
Traverse, mm	300	160
Width, mm	330	200
Barrel, mm	250	225
Central Bore, mm	40	38
C-C Pin Distance, mm	59	80
Pallet Dimensions LxWxH, mm	915 x 865 x 865	765 x 585 x 790
No. of Spools Per Pallet, Nos	8	8

\* Other customised spools can be made available on request.

Rod Diameter in mm	Lengths Per Spool (Kms)	
0.25	25.2	
0.40	25.2	
0.50	25.2	
0.60		25.2
0.70		25.2
0.80		
1.00		

Limited Warranty: This product has been tested prior to dispatch and Indore gives warranty that it is 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

Sethna, 4th Floor, 55, Maharshi Karve Road, Marine Lines, Mumbai - 400002. India  
Tel: ++91-22-22090333. Fax: ++91-22-22088988. Website: www.indore.co.in

#### Manufacturing Sites

**Plant 1:** Pithampur, M.P. - 454775. India.  
**Plant 2:** Umbergaon, GUJ. - 396171. India.