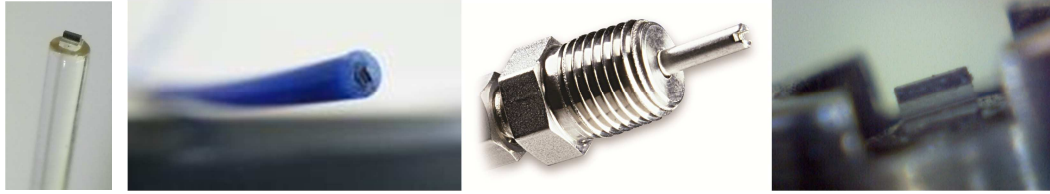




FRI Refractive Index Sensor



Description

The FRI is a fiber optic refractive index sensor, ideal for refractive index measurement of fluids in chemical and food processing industry applications. It can be used for in-situ applications under microwave conditions and in other hazardous environments.

The FRI is a miniature sensor that provides in-situ refractive index measurements and allows continuous monitoring of any process, whether chemical or food engineering, thus eliminating manual sampling and repeatability problems. These sensors are also designed to withstand variable temperature, EMI and vibration conditions.

Our unique design is based on the variation of a liquid-filled Fabry-Perot optical cavity length to precisely determine the refractive index of the liquid. The liquid-filled optical cavity length varies in direct proportion with the refractive index of the liquid sample. The refractive index measurement is achieved by measuring the Fabry-Perot cavity length using white light interferometer technology.

The FRI fiber optic refractive index sensors are available in a miniature package (FRI-BA model) or in PTFE tube (FRI-PK model) or in a rugged stainless steel package (FRI-NP model), suitable for industrial applications.

Key Features

- From 1.0000 to 1.7000 RI range
- Resolution of 0.0001 RI
- Accuracy ± 0.0005 RI
- Intrinsically safe
- Immune to EMI/RFI
- High accuracy
- Easy to use

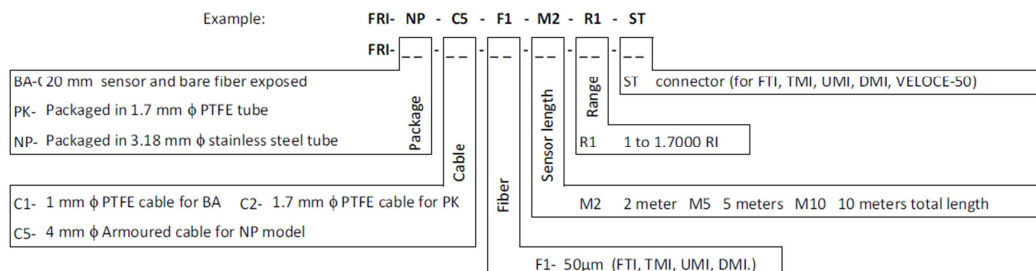
Applications

- Industrial environments
- In-situ process monitoring
- Chemical applications
- Harsh and hazardous environments
- Research and development
- Quality control

Specifications

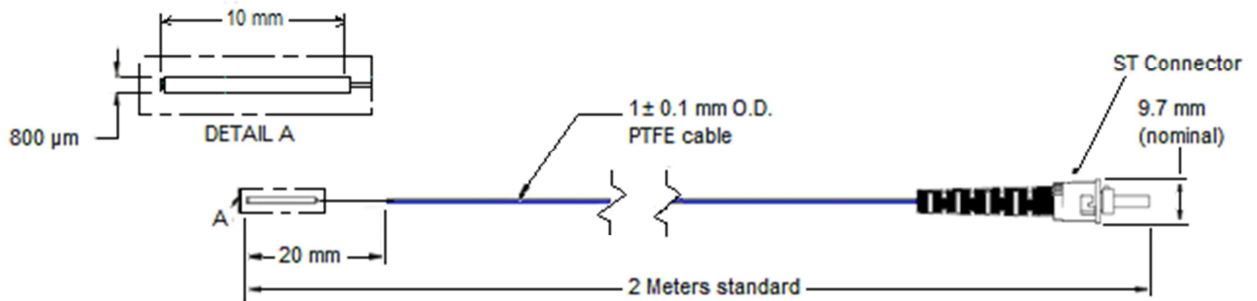
Performance	FTI-10, UMI, DMI,
Refractive Index Range:	1 to 1.7000 RI
Resolution	0.0001 RI
Accuracy	± 0.0005 RI
Connector type	ST connector
Operating temperature ⁵	0°C to 100°C (-4°F to 572°F)

Ordering informations

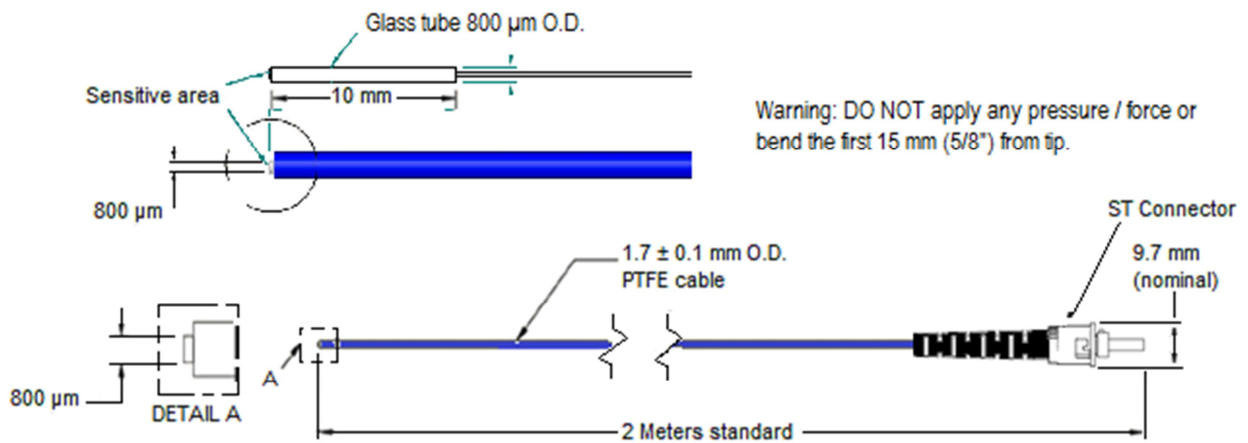


Dimensions

FRI-BA Model



FRI-PK Model



FRI-NP Model

