



Introtek's IntroFlow<sup>™</sup> non-invasive flow detection devices incorporate the latest ultrasonic technology for flow measurement. The non-invasive concept provides a platform for non-contact measurement where safety, hygiene and cleaning are of concern. This free-entry sensor is designed for easy tube installation and can be accommodated for various tube sizes.

Fully integrated electronics yield the smallest footprint with simple interface to medical and industrial applications.

The standard configuration outputs a voltage frequency that is proportional to liquid flow velocity. Absent tube and air detection are fault outputs for added value.

### PRODUCT HIGHLIGHTS

- Non-invasive ultrasonic
- Integrated electronics
- Dry coupled
- Compact, free-entry design
- Low cost
- Fast output response time
- Low power consumption
- High EMI and RFI noise immunity
- Wide range of tubing sizes (custom prototypes)
- Custom configurations & options available upon request

### APPLICATIONS

- Medical technology
- Bio-pharmaceutical industry
- Liquid dispensing
- Food & beverage industry
- Fluid handling & process technology

### GENERAL CHARACTERISTICS / Technical Data

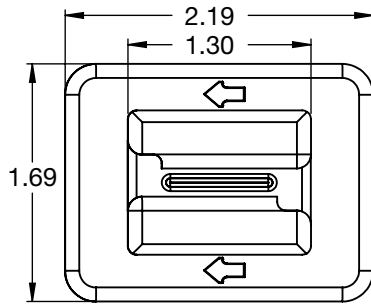
Medium / Liquid	Saline, Blood, Dialysate, Water-based Solutions
Measurement Technology	Ultrasonic
Sensor Housing	Black Delrin <sup>®</sup>
Mounting	Fixed Installation
Excitation Voltage	5 Vdc
Input Current	< 24 mA
Range: Flow Rate	100 mL/min. (tube dependent) to 2000 mL/min.
Accuracy (tube dependent)	< 1%
Air / Absent Tube	Fault Output = 35 kHz
Full Scale Output	2000 mL/min. = 20 kHz

## The Introtek Advantage

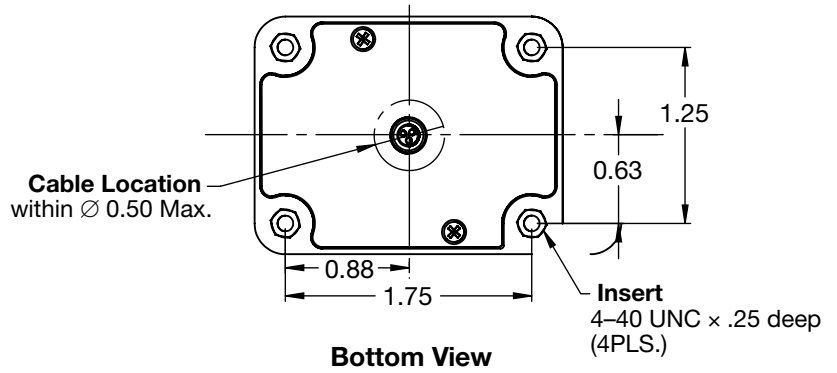
provides products of unsurpassed quality, functionality and dependability that are manufactured to the highest medical device standards and backed by a three-year warranty.

### Certifications



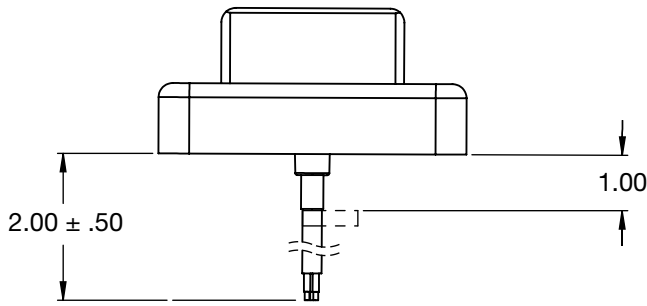


**Top View**

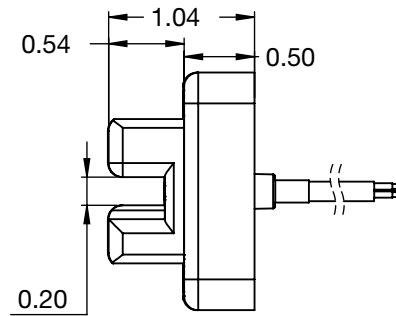


**Bottom View**

**Insert**  
4-40 UNC x .25 deep  
(4PLS.)



**Side View**



**Side View**

### IntroFlow™ Sensor Dimensions (inches)

#### Detector Part Number

Please contact an INTROTEK Application Specialist to determine the optimal configuration for your application.

#### Options

- Alternative slot sizes (subject to engineering evaluation)
- Custom housing configurations
- Electronics available (subject to engineering evaluation)

#### Three-Year Warranty

All INTROTEK systems are warranted free of defects in materials or workmanship for three full years from the date of original factory shipment.

If returned within the warranty period, with no modifications to the sensor; the original manufacturing label intact; and, upon factory inspection of the unit, the cause of the malfunction is determined to be defective material or workmanship; Introtek will repair or replace the system at no cost to the purchaser (or owner) other than transportation. **If a unit is returned without an original label, the warranty is void.**

INTROTEK shall not be liable for misapplication, labor claims, direct or consequential damage or expense arising from the installation or use of the equipment. There are no other warranties expressed or implied except special written warranties covering some Introtek products.



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Performance specifications are effective with date of issue and are subject to change without notice

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