

## PRODUCT DESCRIPTION

The Model 951 Suspended Solids Sensor is a rugged DC-powered insertion-type probe that measures suspended solids as a standalone unit. Since the sensor can be inserted in any size pipe, costly bypass systems are not required. The design eliminates the effects of fluid color. In-situ measurements provide instantaneous, accurate readings and the sensor has an isolated linear 4-20mA output for connection to control/monitoring systems.

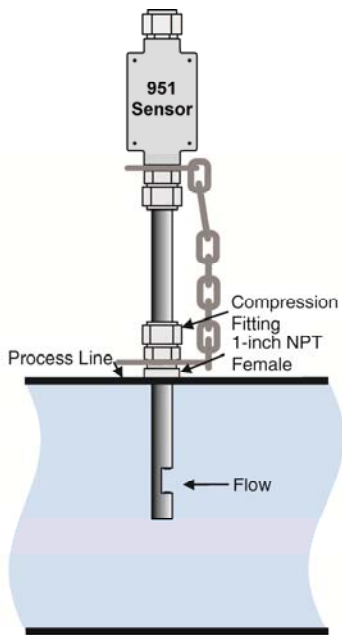
## FEATURES

- **Wide dynamic range**
- **Rugged and reliable**
- **Inline measurements assure maximum accuracy**
- **Low cost**
- **Hot-tap installation permits uninterrupted flow**
- **Linear-isolated output compatible with 4-20mA control/monitoring systems**
- **Use in any size pipe**
- **Insensitive to visible colors, flow, temperature & pressure**
- **One-year limited warranty**

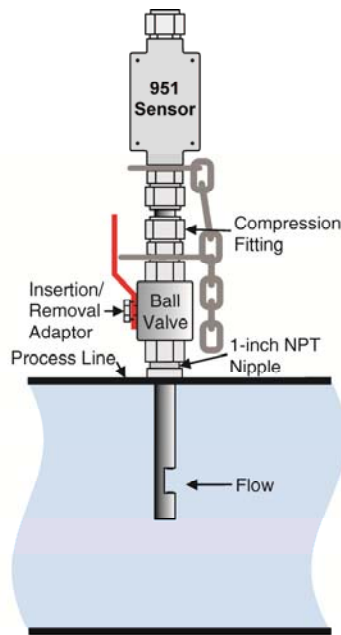
## PRINCIPLE OF OPERATION

The Model 951 suspended solids sensor uses a pre-focused incandescent lamp to direct a beam of light through the process fluid. Particulate matter in the fluid absorbs light in proportion to particulate concentration. The transmitted light is received by a silicon detector that generates a current signal proportional to the particulate concentration. The current signal is converted, amplified and scaled to provide a linear, isolated 4-20mA output signal.

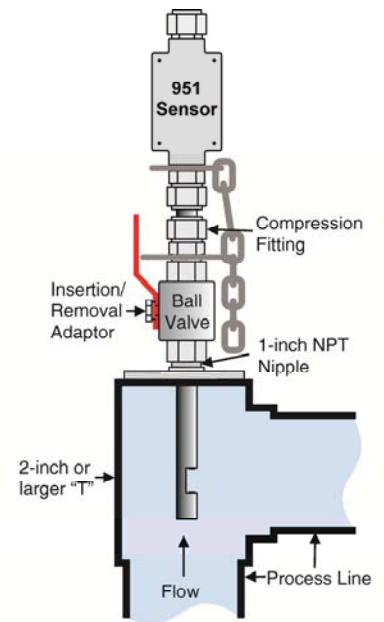
## MODEL 951 TYPICAL SENSOR MOUNTING



Large Pipe or Tank Installation



Large Pipe or Tank Installation with Insertion/Removal Assembly



Pipe "T" Installation with Insertion/Removal Assembly

### SPECIFICATIONS

<b>Type</b>	Insertion Sensor
<b>Range</b>	Adjustable from 0 to 2,000ppm up to 0 to 50% solids
<b>Power</b>	24 VDC @ 120mA or 12 VDC @ 240mA
<b>Output</b>	4-20mA DC into 600 ohms max. isolated, other outputs available
<b>Pipe Size</b>	Greater than 2 inches
<b>Wetted Parts</b>	316 Stainless, glass
<b>Process Temperature</b>	15°F to 230°F (-10°C to 110°C)
<b>Pressure</b>	0 to 150 psig
<b>Mounting</b>	1" NPT male
<b>Resolution</b>	1 ppm
<b>Repeatability</b>	1 ppm
<b>Accuracy</b>	1% of scale
<b>Ambient Temperature</b>	32°F to 120°F (0°C to 50°C)
<b>Enclosure</b>	Dust Proof, Waterproof
<b>Shipping Weight</b>	6-10 lbs. depending on cable length
<b>Dimensions</b>	
<b>Tube Diameter</b>	7/8"
<b>Tube Length</b>	12"
<b>Junction Box</b>	2.5" X 3" X 6"
<b>Overall Length</b>	21-22" depending on light gap

  
 11180 Ranchette Drive  
 Jackson, CA 95642  
 USA  
 209-223-1090  
 E-Mail: [info@confabinstrumentation.com](mailto:info@confabinstrumentation.com)  
[www.confabinstrumentation.com](http://www.confabinstrumentation.com)

Represented By: