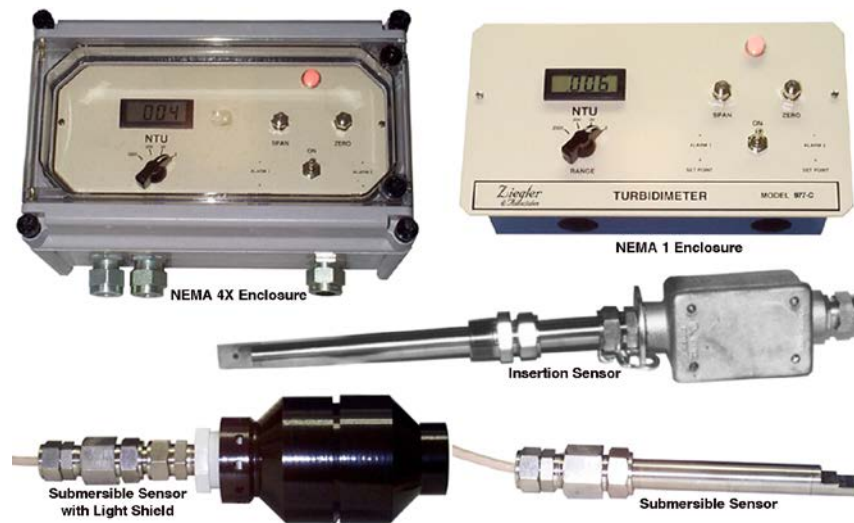


# TURBIDIMETER

## MODEL 977-C



## PRODUCT DESCRIPTION

This innovative turbidimeter uses an insertion-type sensor that can be inserted in any size pipe, thus avoiding costly bypass systems. A submersible sensor is available for open channel applications. The design eliminates the effects of fluid color. In-situ measurements provide instantaneous accurate readings and the instrument comes standard with a choice of isolated linear outputs. A 4-position calibrated range dial allows for the selection of four NTU ranges.

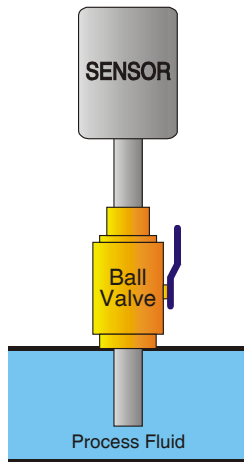
## FEATURES

- Wide dynamic range
- In-line measurements assure maximum accuracy
- Hot-tap installation permits uninterrupted flow
- Linear-isolated output
- Optional alarms, battery power
- Use in any size pipe
- High accuracy and reliability
- Insensitive to visible colors, flow, temperature & pressure
- One-year limited warranty

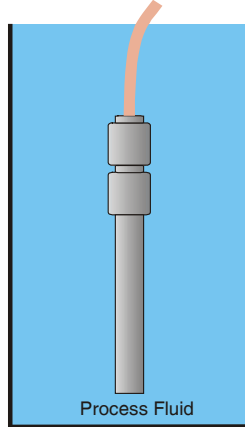
## PRINCIPLE OF OPERATION

This turbidimeter uses a prefocused incandescent lamp to direct a beam of light through the process fluid. Particulate matter in the fluid scatters light in proportion to particulate concentration. The scattered light is received by a silicon detector which generates a current signal proportional to the particulate concentration. The electronic signal converter amplifies and scales the current signal to provide a linear readout on a digital meter with an isolated output signal.

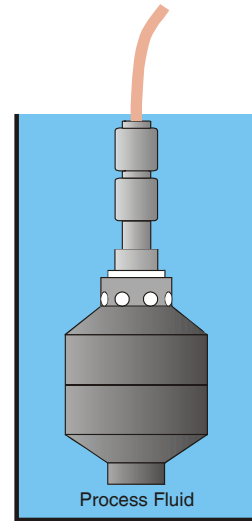
## MODEL 977-C TYPICAL SENSOR MOUNTING



INSERTION  
SENSOR



SUBMERSIBLE  
SENSOR



SUBMERSIBLE  
WITH LIGHT SHIELD

## SPECIFICATIONS

### SENSORS

#### Type

#### Size

#### Wetted Parts

#### Process Temp.

#### Pressure

#### Mounting

#### Dimensions

##### Probe Diameter

##### Probe Length

##### Junction Box

#### Insertion Probe

Pipes greater than 2 inches

316 Stainless, glass

15°F to 230°F (-10°C to 110°C)

0 to 150 psig

1" NPT male

0.875"

12"

2" X 4" X 2"

#### Submersible Probe

Open channel/tanks

316 Stainless, glass

15°F to 140°F (-10°C to 60°C)

0 to 50 psig(110 feet of water)

Cable or rigid mount

0.875"

8"

None

### TRANSMITTER

#### Display

#### Range

#### Input

#### Output

#### Resolution

#### Repeatability

#### Accuracy

#### Ambient Temperature

#### Alarms

#### Enclosure

#### Dimensions

##### NEMA 1

##### NEMA 4X

#### Mounting

##### NEMA 1

##### NEMA 4X

#### Power

#### Shipping Weight

3.5 digit LCD indicator

0 to 2,000, 0 to 20.00, 0 to 200.0, 0 to 2000 NTU switch-selectable

Model 977-C Sensor

4 to 20 mA into 600 ohms max. isolated, other outputs available

0.05% of full scale

0.01% of full scale

2% or reading

32°F to 120°F (0°C to 50°C)

Optional dual alarms

NEMA 1 or NEMA 4X

11" wide x 6" high x 4" deep

11.875" wide x 7.25" high x 6.75" deep

Panel or wall mount

Wall or pipe mount

115 or 230 VAC @ 50/60 Hz, 5 Watts

Optional 12 & 24 VDC etc.

16-24 lbs. depending on options

## ZIEGLER & ASSOCIATES

11180 Ranchette Dr.

Jackson CA 95642 USA

Phone : 209-223-1090

Fax : 209-223-1090

Email: [info@zieglerassociates.com](mailto:info@zieglerassociates.com)

Web: [www.zieglerassociates.com](http://www.zieglerassociates.com)