

# **HiTECH**

Technologies, Inc.

## **Pipeline *PIG* Detection with SONOCONTROL 20**

### ***Penetrating Pulse Technology***

Model SC-20-PIG

***provides through the wall measurement  
presence or absence detection***



#### **External Transducer**

Non-Hazardous  
Maintenance Free

#### **Liquid Characteristics**

Aggressive  
Corrosive  
Hazardous

#### **Unaffected by**

Pressure  
Vapors

#### **Installation**

Easy - No welding required

This revolutionary system was developed and field proven in Europe. Now available in the USA, exclusively from **HiTECH**, this proprietary approach, referred to as “**Penetrating Pulse Technology**”, enables “**Through the Wall**” level measurement.

The fundamental measurement principle is easy to understand. The transducer emits a brief penetrating acoustic pulse. This pulse is transmitted through the wall of the vessel into the pipe. The unit monitors the pulse transit time, which is different for oil than it is with the PIG present, and provides a signal (switch contact) indicative of PIG’s presence or absence.

Media monitored may be abrasive, corrosive, or toxic, and/or at high temperatures. Also eliminated are the concerns of affecting pipeline integrity, contamination, or sensor wear.



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## SPECIFICATIONS

### Type

Penetrating Pulse Technology  
pipeline PIG detection  
Single or Dual Channel

- Pulse-echo - lateral
- Pulse-echo - vertical
- Ultrasonic transmission
- Dying down

### Measurement Range

Max. transmission time: 32 ms  
(approx. 23 m with water)

### Resolution

Gate beginning/ gate width: 1  $\mu$ s

### Frequency

Measurement Cycle  
Approx. 20 HZ

### Sensor Cable Length

Max. 1,000 feet

### Maximum Wall Thickness

1.2" (30 mm)  
(metal, glass, fiberglass, or plastic)  
(with or without lining)

### Electrical Connection

Electronics  
IP65 cable gland, internal: plug-in  
screw terminals

Sensors  
permanently installed cable  
or water-tight plug connector

### Parameter Setting

- Digital buttons via display panel
- Via serial interface
- Access control by code number

### Interface

RS-485

### Output Signal

Relay contact, 500 ma, 50 V

### Power Requirements

18 ... 30 VDC, 100 mA

### Operating Temperature

Electronics -4<sup>o</sup> F to +158<sup>o</sup> F  
Sensors -4<sup>o</sup> F to +176<sup>o</sup> F

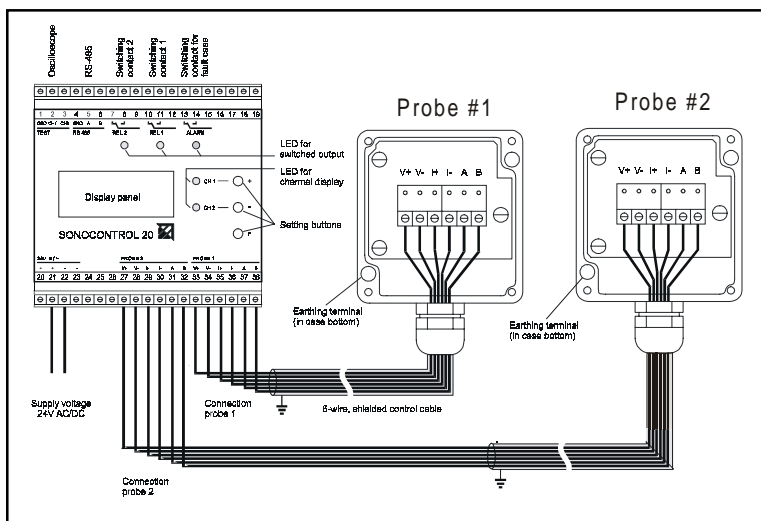
### Housing

Electronics - Plastic, IP20  
L x W x H: 100 x 75 x 110 mm,  
Sensors - Aluminum, IP65  
4.06" L x 2.95" W x 3.62" H

### Mounting

Electronics -  
standard DIN rail mounting (35 mm)  
Sensors -  
mounting ring /mtg. plate on vessel

**Approvals** CE Conformity



## PERFORMANCE GUARANTEE

Since 1986, every instrument sold by **HITECH** has been guaranteed to perform in the application it originally was engineered and recommended for. Our company policy remains the same, every product sold comes with a **written performance guarantee**.

Should the equipment be unable to perform satisfactorily in your application and we are not able to correct the problem, we will accept the instrument in return and issue full credit.

This performance guarantee is valid for 60 days. Thereafter, our standard limited two years factory warranty goes into effect.