

ULTRASONIC LEVEL TRANSMITTER

**FULLY SEALED AND
SUBMERSIBLE**

COMPACT SIZE

**ALL CALIBRATION HELD IN
NON-VOLATILE MEMORY**

**SIMPLE MAGNETIC KEY
CALIBRATION FOR RANGE
AND ZERO SETTING**

**INTRINSICALLY SAFE
VERSIONS AVAILABLE**



***IP68 UPVC ELECTRONICS
ENCLOSURE***

***MOUNTING
OPTIONS***

***2 WIRE 40-20mA
LOOP POWERED***

The Ultrameter family uses sophisticated echo pulse techniques to provide non-contact monitoring of the level of liquids, slurries or sludges in open or closed tanks.

For hazardous areas Intrinsically Safe versions are available.

The range is designed for the most arduous of duties. All units have integral electronics and on-board temperature compensation, fully sealed in an IP68 enclosure. The nose section is manufactured from Tefzel™ which is a Dupont material resistant to most chemicals.

The Ultrameter transmits a series of short controlled ultrasonic pulses which are reflected by the surface of the liquid being measured.

The reflected echos are conditioned to remove noise and timed in order to calculate the distance travelled, this is then converted to a 4-20mA current output, proportional either to product level (20mA when tank full), or free air space (20mA when tank empty).

The Ultrameter uses on-board LED's to confirm correct operation, and a magnetic key for simple touch calibration.

SPECIFICATION

Range

0.25 to 5 metres (0.5 to 10 metres)

Maximum Error

0.2% of max span (0.25%)

Repeatability

<3mm (4mm)

Response Rate

6m per minute

Power Supply

15 to 30Vdc loop powered

Signal Output

4-20mA dc - reversible

Fault Current

4-20 or 3.8mA - Hart Protocol

Display

2 LED displays of echo pulse condition

Temperature Compensation

Automatic across measuring range

Enclosure rating

IP68/NEMA 4X submersible

Operating Temperature

-40 to +60°C

Maximum Pressure Rating

3 bar G

Mounting

2" BSP or cable suspended optional 4" ANSI

Calibration

By magnetic key

Memory

Non-volatile EEPROM

Integral Cable Length

5 metres

Weight

0.9kg including cable

Beam Angle

12° at -3db boundary

Body Material

UPVC Ultraviolet inhibited

Nose Material

TEFZEL™

Approvals

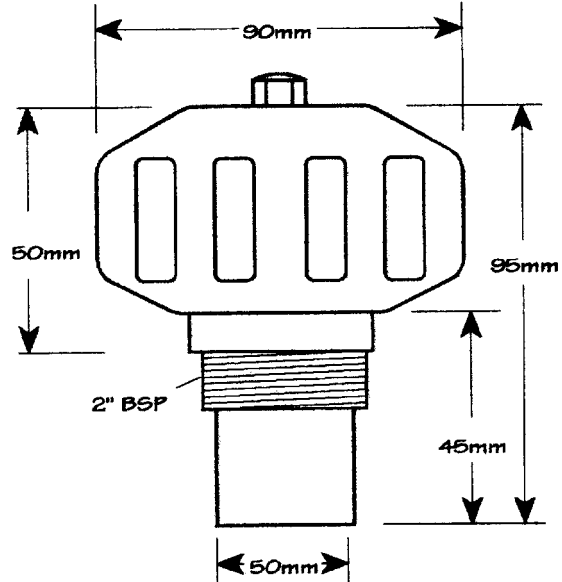
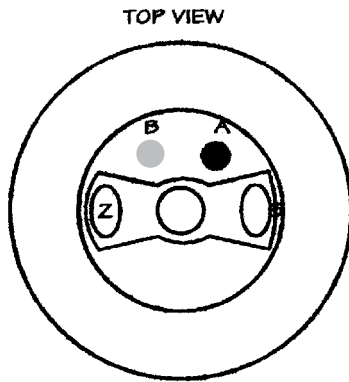
EEx ia IIC T6

Load

$R_{max} = \frac{V_{supply} - 15}{0.02} = OHMS$

ORDER CODE

ULTRAMETER	CODE	MEASUREMENT RANGE		
	5	0.25 to 5 metres		
	10	0.5 to 10 metres (Bracket values in specification)		
		CODE	INTRINSIC SAFETY APPROVAL	
		NR	Not Required	
		X	EEx ia IIC T5	
		CODE	MOUNTING	
		S	2" BSP screwed into tank top and/or suspended by 5 metres cable.	
		F	Flanged connection 4" ANSI	
ULTRAMETER	5	X	S	TYPICAL ORDER CODE



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