

#### **Ultrasonic Level Transmitters BULT200**

- Non-contacting measurement with no moving parts
- Output 4-20mA + HART
- Integral LCD and push-buttons as standard for on-site programming
- Continuous measurement of level or distance-to-surface.
- · Easy to install and configure
- Rugged aluminum housing, and ABS/PVC/PTFE wetted material **Protection IP67**
- Two-wire direct current loop-powered

### **MEASUREMENT PRINCIPLE**

The BASI BULT200 Series is a liquid level transmitter based on ultrasonic technology that is suitable for many liquid and solid applications. Ultrasonic pulse signals are transmitted and reflected from the liquid or solid surface. The transmitter 'listens' for reflected signals (echoes) and measures the time-delay between transmitting and receiving. The distance to the liquid surface is automatically calculated using the computed timedelay. An integral temperature sensor continuously measures the air temperature around the transmitter. It then computes the speed of sound in air, automatically compensating the Distance for temperature effects. The distance measurement can be sent through the 4-20 mA output.

### TECHNICAL SPECIFICATIONS

: 0-4, 0-6, 0-8, 0-10, 0-15, 0-20 and 0-30m (1) Range

Dead zone : 0,2, 0,25,0,3, 0,4, 0,6, 1,2 and 1,4m : 8°(3db) for range :4m 6m 8m Beam Angle

5°(3db) for range:12m 15m 20m 30m

Measuring cycle: 1 second **Damping** : 1 Adjustable

Output signal : Two-wire 4-20 + HART Power supply : 20 - 32 VDC 30mA **Load limitation** :  $0 - 500\Omega$  for 24VDC : LCD indicator Indicator Protection : IP67 weather-proof Zero and span : Push button adjustment

Ambient temp : -40 to 80 °C Temp. Comp. : whole range Pressure : ±0,1Mpa (1bar) Humidity limits : 0 - 100% RH

Configuration: By 3 pushbutton on the transmitter

### **Performance Specifications**

Resolution : 1mm

: 0.2% FS (in air) Inaccuracy

Power supply effect: Negligible between 20 and 32 VDC **EMC** : EN 50081-1, EN 50082-2, 89/336/EEC

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### **Physical Specifications**

Electrical connection: PG13,5

Process connection : G2", M95 or flange : ABS/PVC/PTFE Wetted parts

Electronic housing : Aluminum with polyester painting

: 304 SST Identification plate

Approximate weight : 1,8 to 5kg depending of model

Mounting : Directly supported by piping or flange







ExialICT6 4, 6 & 8m

4,6 & 8m 10 & 12m 15, 20,30 & 40m

Note 1: When using to measuring solid level, the most energy of ultrasonic is absorbed or scattered by solid level, so the back wave is very little, the valid measuring range of solid level is about 50% of liquid level. And the valid measuring range of solid level is determined by the installing location and rang.

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Two Wire Smart Ultrasonic Level Transmitters BULT200

No. **DS 7:2-E** Issue: **5** 4/10/18



# **Order Information**

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RANGE	SENSOR MATERIAL	PROCESS CONNECTION
4 0-4m	S ABS & PVC	1 G 1 ½"
6 0-6m	F PTFE	2 G 2"
8 0-8m	Q Other specify	3 DN50
10 0-10m		4 DN65
12 0-12m		5 DN80
15 0-15m		6 DN100
20 0-20m		7 DN150
30 0-30m		8 DN200
40 0-40m		X Specify
X Specify		

### **TYPE**

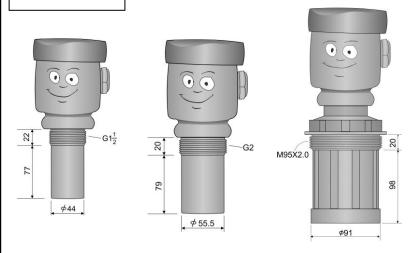
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Eg: BULT200-4S3S Level transmitter 0-4m, PVC sensor, Process connection DN50, Standard 2-wire 4-20mA

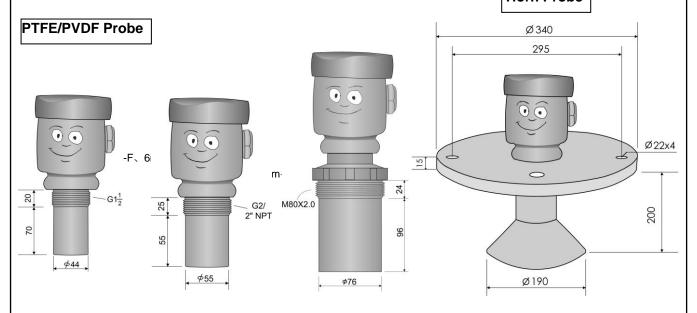
# **Mechanical Specifications**

## **Mounting dimensions**

## ABS/PVC Probe



### **Horn Probe**



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