

LEVEL MEASUREMENT

Ultrasonic Level Transmitter

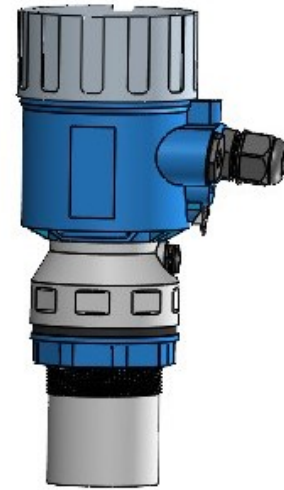
136 ULT

INTRODUCTION

The Ultrasonic Level Transmitter operates based on the Time of Flight principle, This device offers high accuracy and reliability, with a typical measurement range up to 15 meters. It supports 2-wire and 4-wire configurations, providing flexibility for different applications. Communication options include 4-20mA, 4-20mA + HART, and RS485 protocols, allowing seamless integration into existing control systems with no major modifications required.

WORKING PRINCIPLE

The ultrasonic level transmitter emits an ultrasonic pulse directed towards the surface of the material. The pulse propagates through the air, reflects off the material's surface, and returns to the sensor. The sensor measures the time interval between pulse emission and reception, known as the time-of-flight. By applying the speed of sound in air and this time-of-flight data, the transmitter calculates the distance between the sensor and the material's surface. This calculated distance is then used to determine the material's level, which is subsequently transmitted to a controller or monitoring system for further processing.



AREAS OF APPLICATIONS

The Model 136 Ultrasonic Level Transmitter is specially designed to provide convenience of non-contact measurement of Level. Graphical Display visible in bright sunlight.

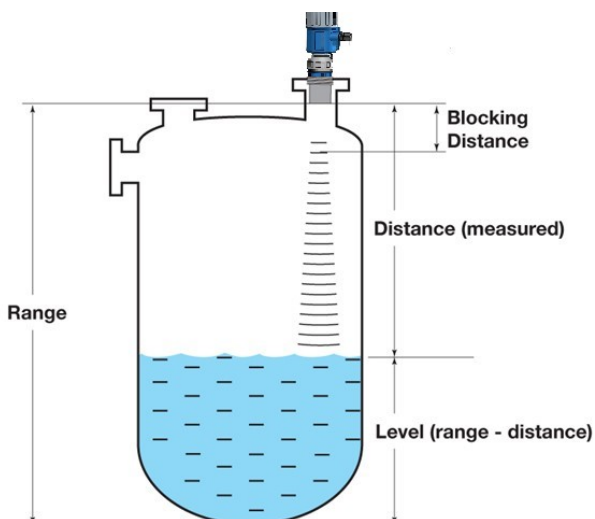
- Water and Wastewater Treatment
- Food and Beverage
- Pulp and Paper Industry
- Power Plants
- Marine and Shipping
- Storage Tank

FEATURES

- Weatherproof - Rugged Construction.
- Easy to install.
- Unaffected by product properties.
- No site calibration required.
- Cost Saving.
- HART version 7 compatible

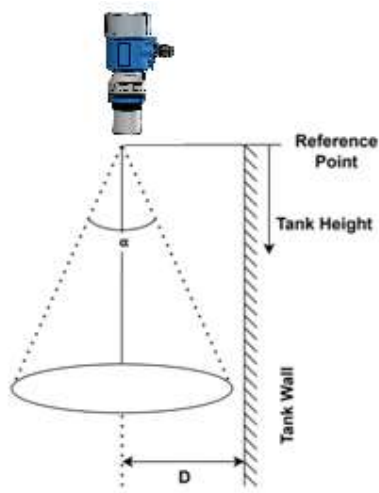
OPTIONS

- Optional Remote Indicator (96X96), Model 176 suitable for panel mounting may be added with up to 4 set points for control purpose and MODBUS output for real time field information at control room.
- *24 VDC supply can be made available through 176 / 176 LPI.



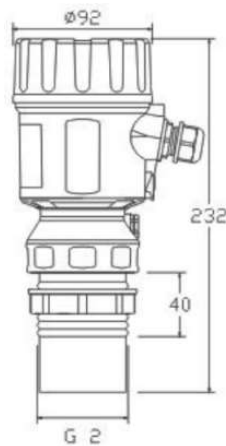
17	Ambient Temperature	10°C to 60°C	10°C to 60°C	10°C to 60°C	10°C to 60°C
18	Pressure	Normal Condition	Normal Condition	Normal Condition	Normal Condition
19	Humidity	0 to 95%	0 to 95%	0 to 95%	0 to 95%
20	Installation Mounting	Top	Top	Top	Top

SONIC CONE



Tank Height (m)	tank wall "D" mm
	$\alpha = 9^\circ$
1	158
2	317
3	475
4	634
5	792
6	950
7	1109
8	1267
9	1425
10	1584
11	1742
12	1901
13	2059
14	2217
15	2376

MECHANICAL DETAILS



***Continuous development may necessitate changes without notice

SBEM Pvt. Ltd.

Head Office & Works - Gat No.326, Shriram Nagar, Gaud
Dara Road, Khedshivapur, Pune-412205

Email: sales@sbem.co.in

Website: www.sbem-india.com

Pune

pune@sbem.co.in

Mumbai

mumbai@sbem.co.in

New Delhi

newdelhi@sbem.co.in

Chennai

chennai@sbem.co.in

