

FIXED TYPE DOPPLER ULTRASONIC FLOWMETER

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We Measure



DOPPLER OPEN CHANNEL FLOWMETER

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The flow calculator can calculate the cross-sectional area of partially filled pipe, open channel stream or river for stream or river, it can input up to 20 coordinate points describing the river's shape of cross section. It is suitable for various applications.

Velocity and Level Transducer is a unique combination of water velocity, depth and temperature instruments integrated with a solid state logger. It is a new generation of intelligent flowmeasurement systems.

Features:

- ▶ Measure flow in partially filled pipes and open channels.
- ▶ No flume or weir required.
- ▶ Display the velocity, level, flow rate and flow totalizer.
- ▶ 4-20mA, RS485 (Modbus) /GPRS outputs are available.
- ▶ 16GB SD card data logger can be optional.
- ▶ 20 coordinate points to describe the river's shape of cross section.

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Flow Meter consists of flow calculator, and the integrated transducer to measure velocity and level at the same time.

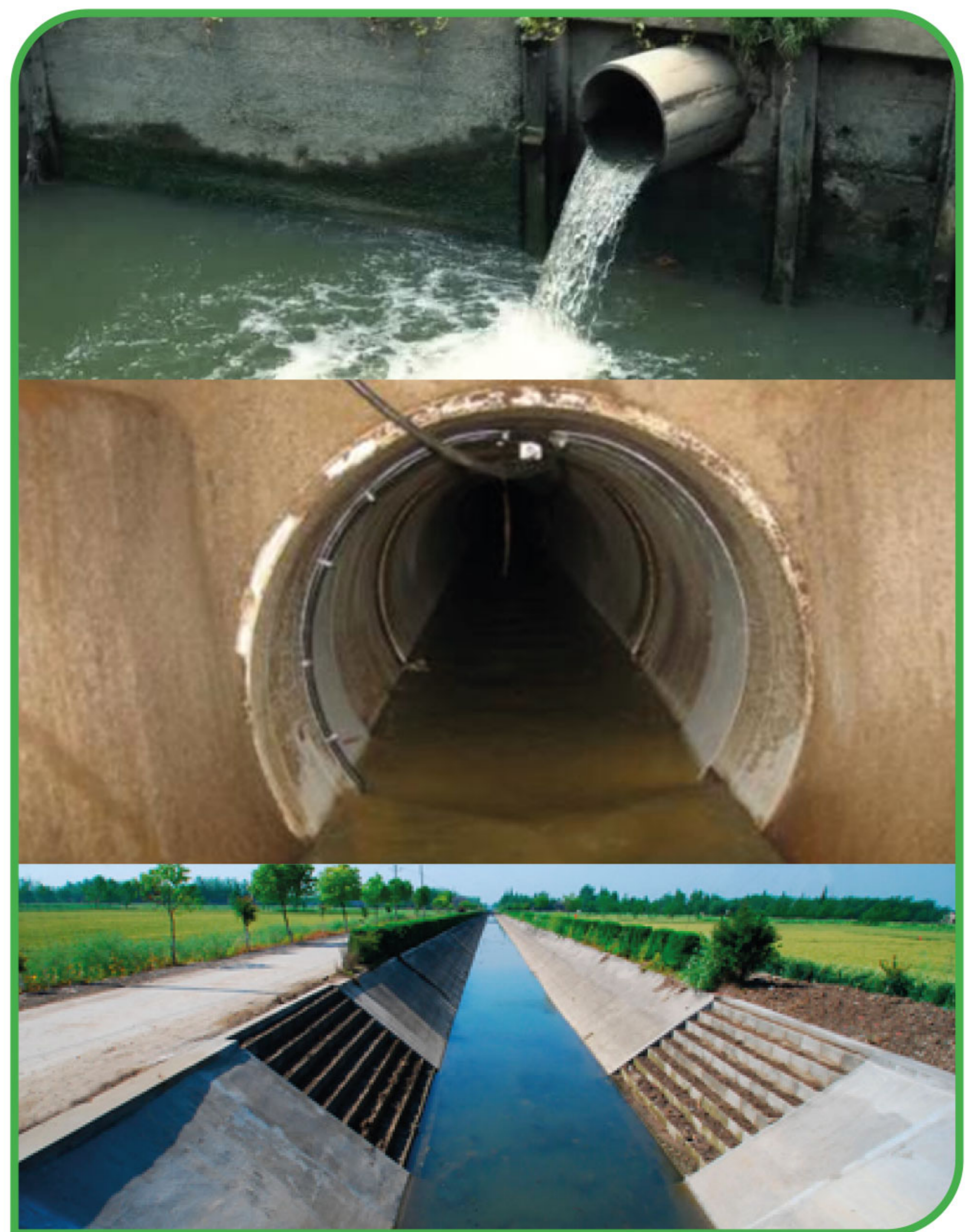
The flow calculator can display the velocity, level, flow rate and flow totalizer. It also can be available with 4-20mA, RS232, RS485 (Modbus) /GPRS and SD card logger outputs. It can record data of flow rate and total flow with a SD card up to 16GB.

Advantages of Doppler Ultrasonic Flowmeter

Doppler counters can be used when other counters are not working. It can be a little or a large amount of liquid on liquid slurries, gaseous liquids or suspended solids.

The advantages can be summarized as follows:

- Blocking less flow.
- It can be installed outside the pipes.
- The pressure drop is equal to the equivalent length of a straight pipe.
- It is corrosion resistant.
- Low power consumption.
- They measure the flow of fluid in partially filled pipes and open channels.
- Does not require a sluice.
- Shows speed, level, instantaneous and total flow.
- Output signals, 4-20mA, RS485 (Modbus) /GPRS Optional, 16GB SD card. 20 coordinate points can be specified.



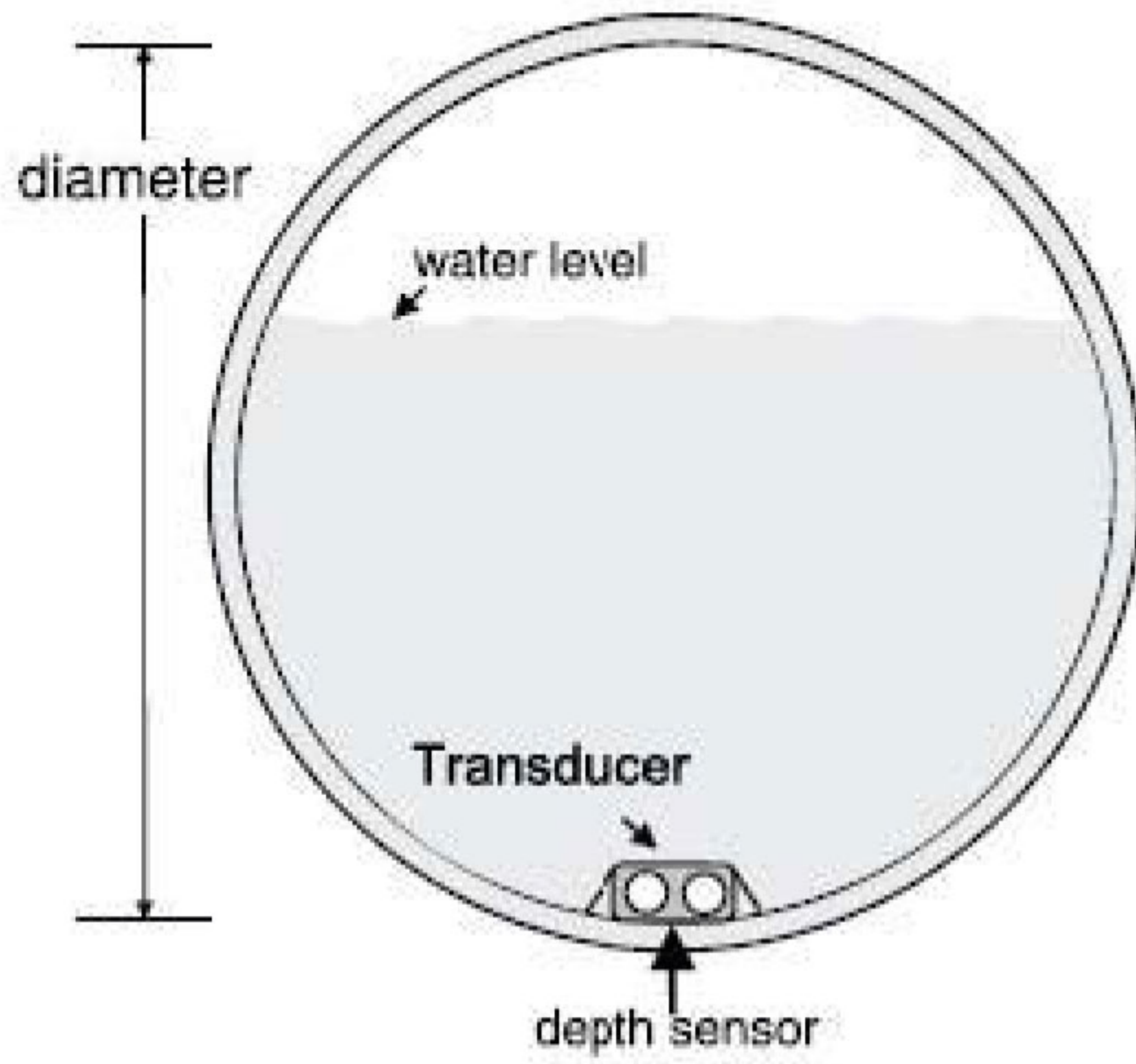
Limitations of Doppler Ultrasonic Flowmeters

Doppler flowmeter performance, sonic conductivity, It is dependent on the physical properties of the liquid, such as particle density and flow profile. The irregularity of the particle distribution in the pipe section can be miscalculated, a can result in average speed. Flowmeter accuracy, speed profile variations and sensitive to the distribution of acoustic reflectors.

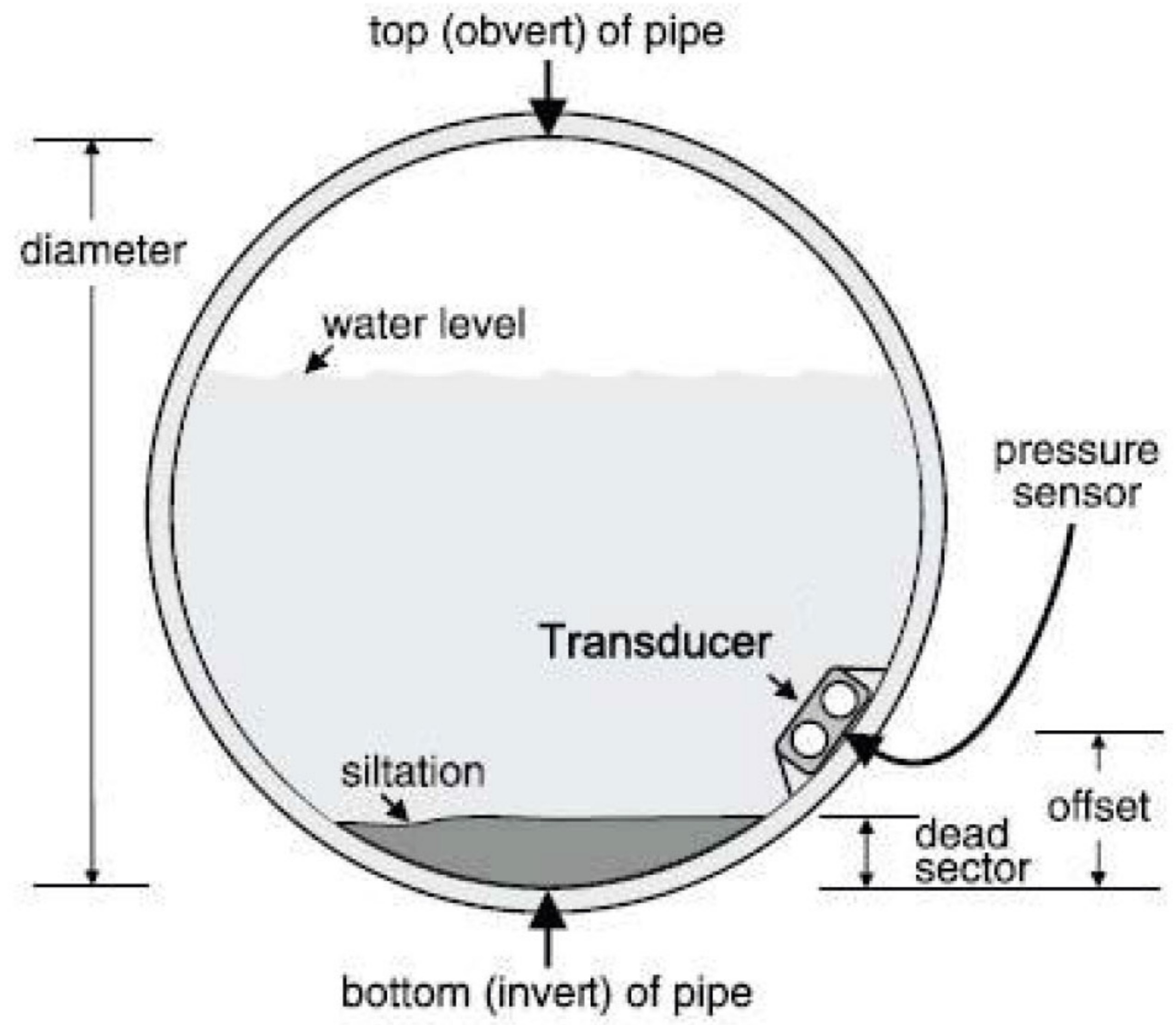
Unlike other acoustic flow meters, Doppler meters are affected by changes in the sonic velocity of the fluid. As a result, the meter is also sensitive to density and temperature changes. These problems are not suitable for applications with Doppler flow meters.

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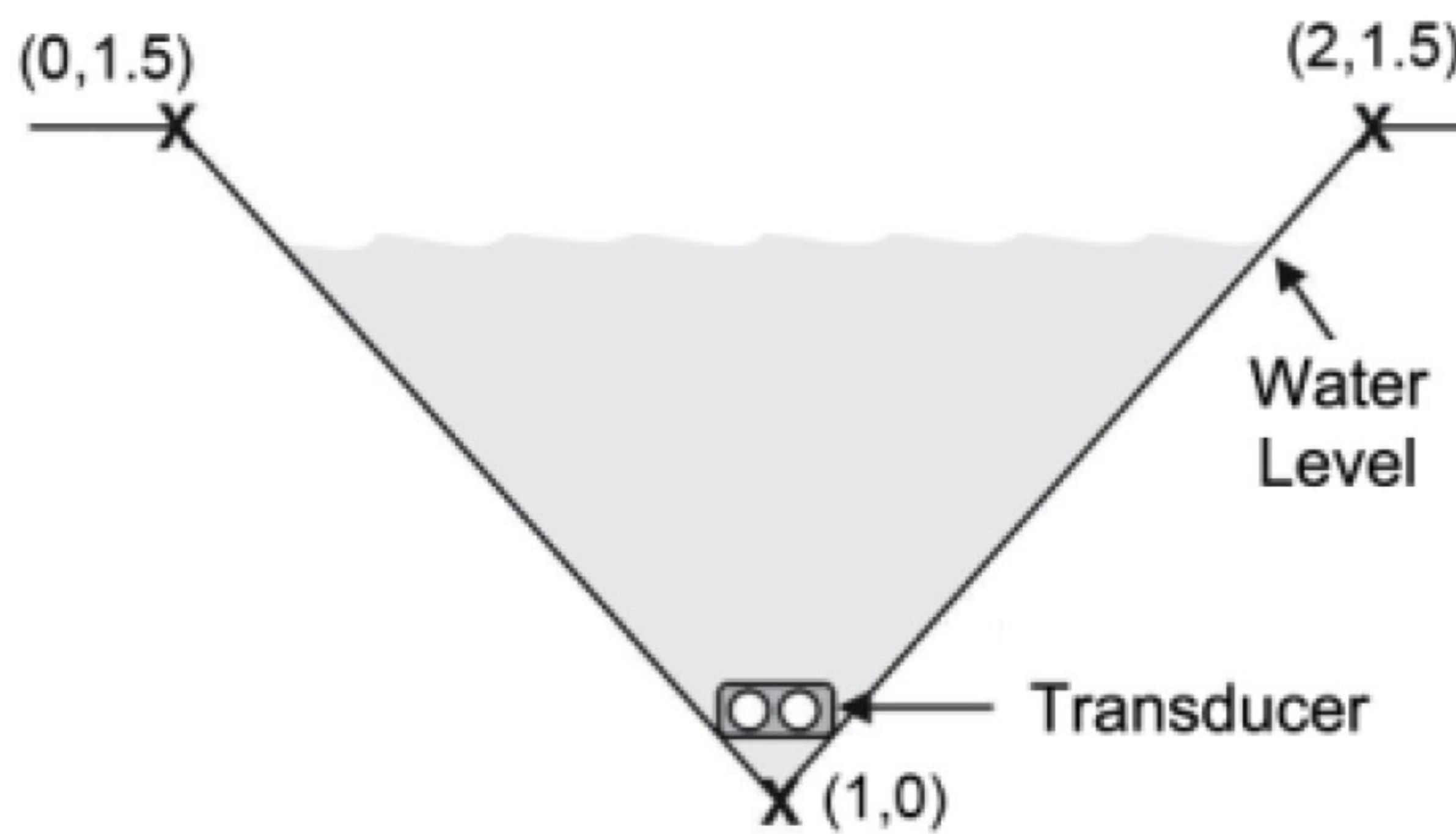
Installation Details:



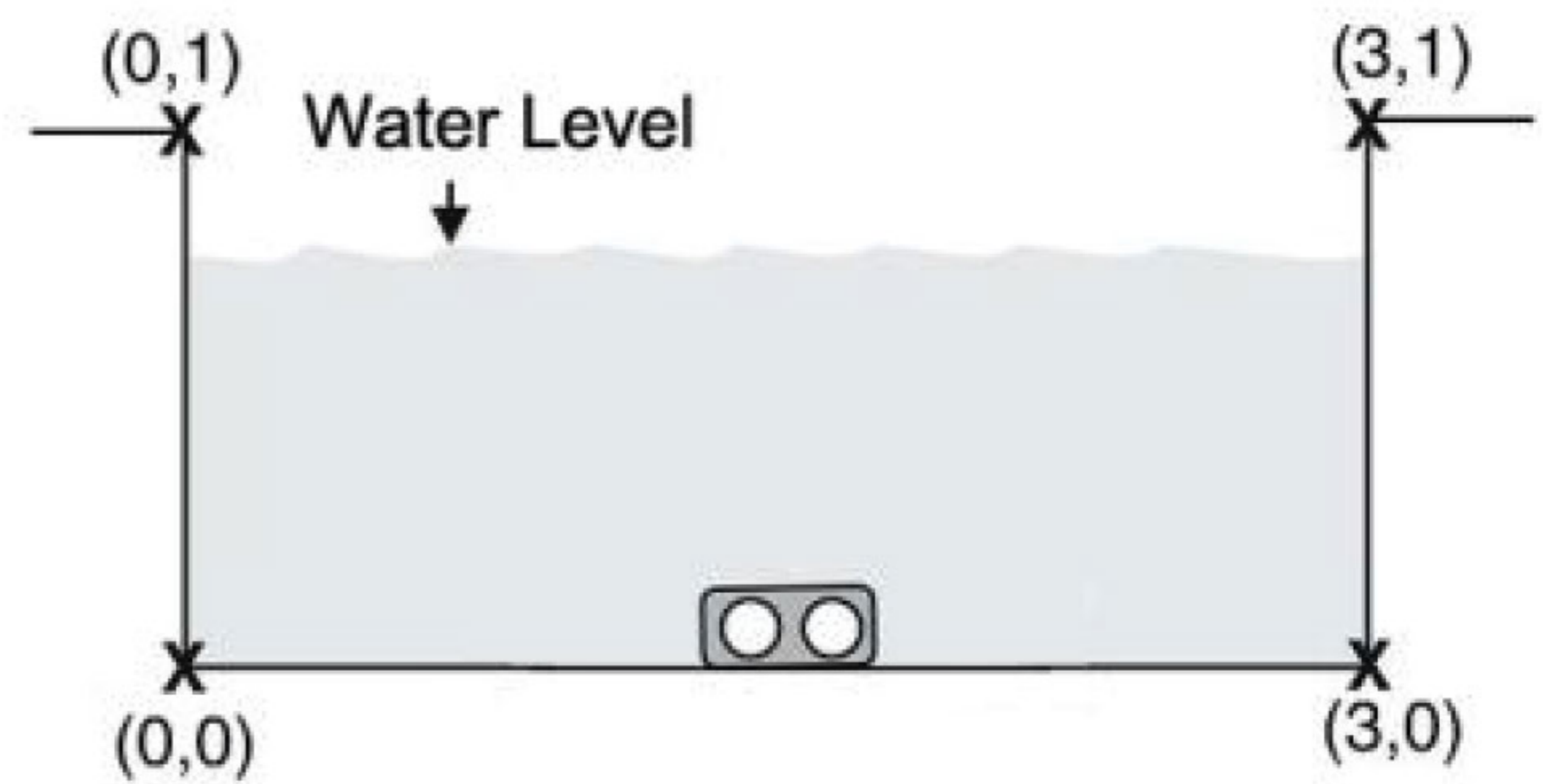
Partially pipe



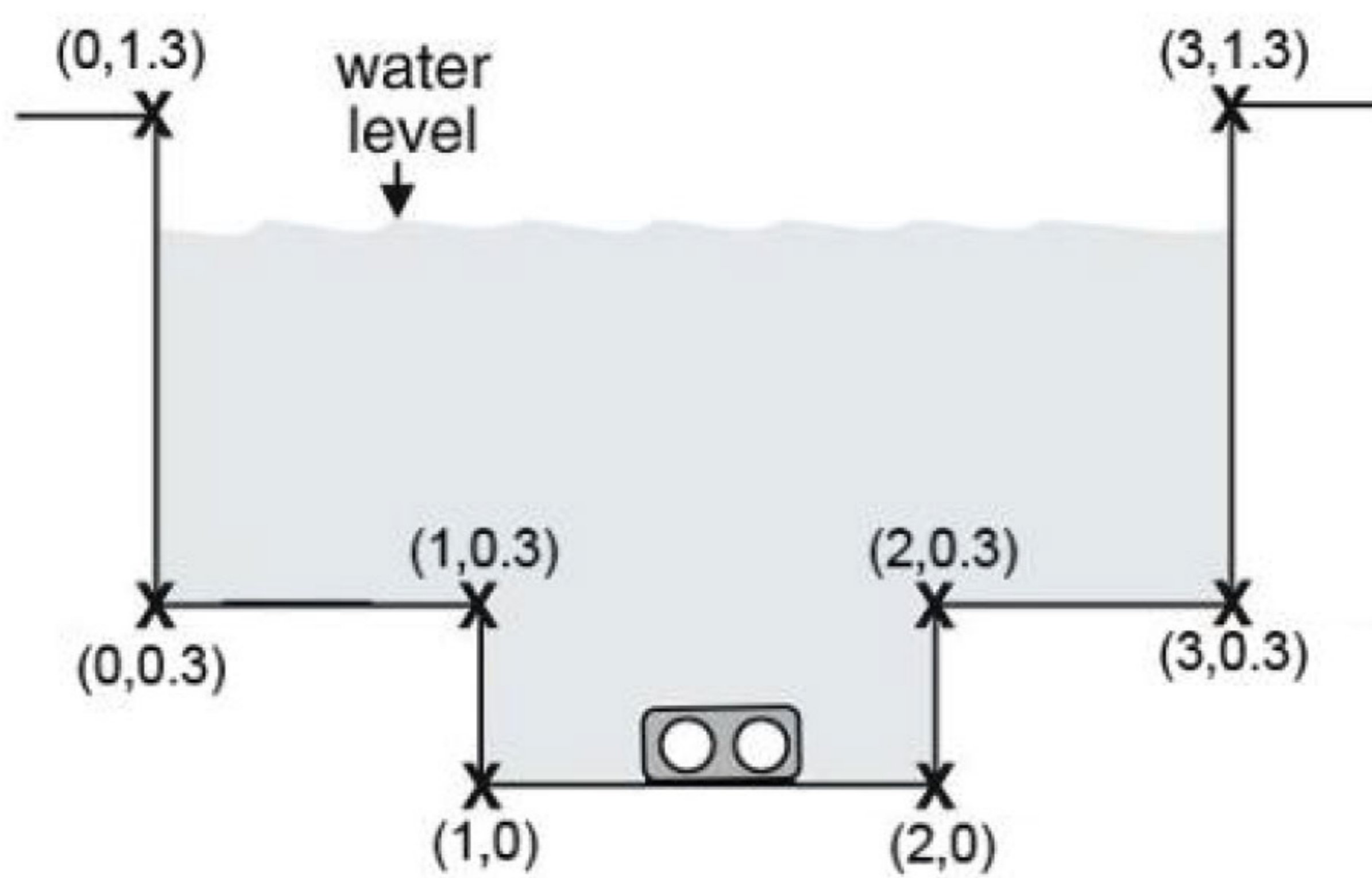
Pipe with siltation on bottom



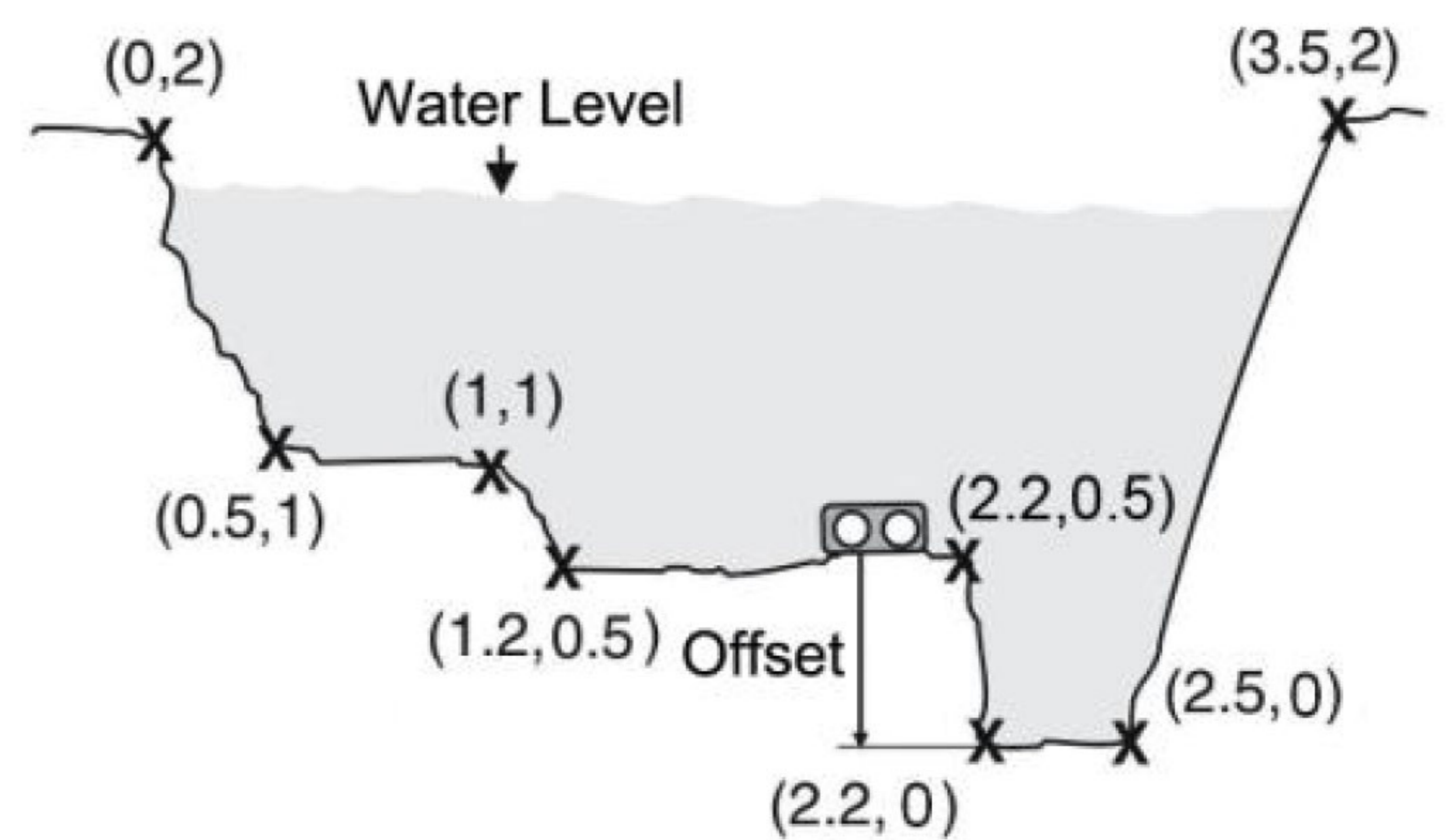
Triangle Channel



Rectangular channel



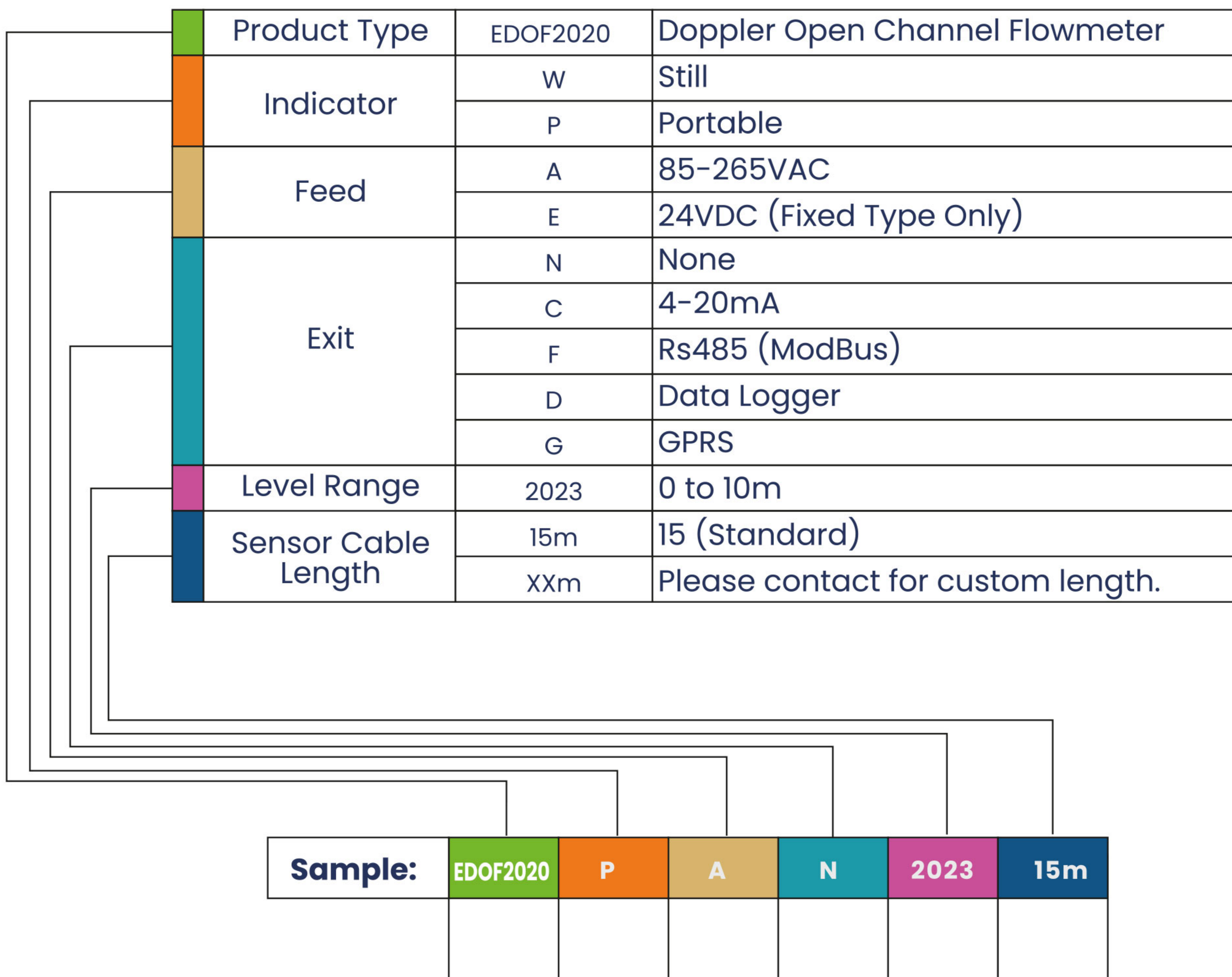
Polygonal channel



Irregular-shaped channel

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Fixed Type Doppler Ultrasonic Open Channel Flowmeter Selection Chart



Fill in the option table according to the requested product type.

