SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

An Autonomous Institution

Accredited by NAAC – UGC with 'A' Grade

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

COURSE NAME :19EE603 IoT for Electrical Engineers

III YEAR /VI SEMESTER

Unit 2-Sensors

Fuel Sensor

Applications of Fuel Sensors

- Automotive Vehicles
- Aircraft
- Marine and Boating
- Generators and Power Systems
- Construction and Mining Equipment
- Railway and Locomotives
- Off-Road Vehicles and Agricultural Machinery
- Telematics and Fleet Management
- Environmental Monitoring
- Remote Monitoring and IoT

What is Fuel Sensor???

Fuel Sensor

Fuel sensor is a device designed to make accurate measurements of fuel level in vehicle tanks. According to these measurements a GPS tracking and telematics platform features the following data:

- fuel level in the tank of a vehicle
- fuel consumption per time period
- average fuel consumption. e.g. miles per gallon (mpg)
- fuel refills or drains

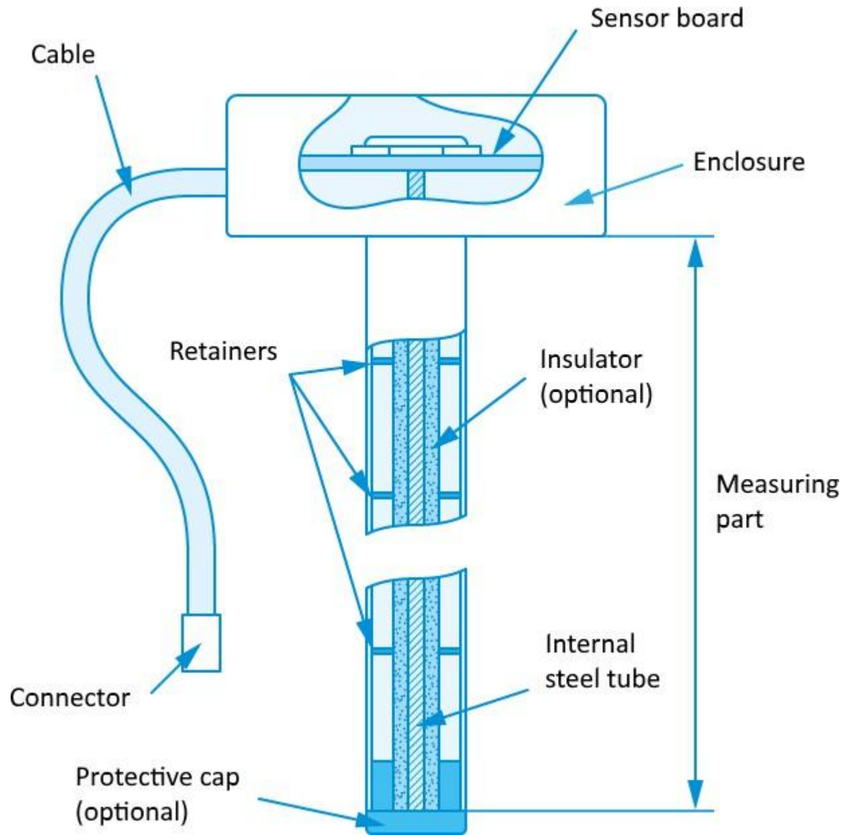
TYPES OF FUEL SENSORS

- Factory-installed sensors
- Float fuel sensor
- Additionally Installed sensors
- Capacitive fuel sensor
- Ultrasonic sensor

Float fuel sensor

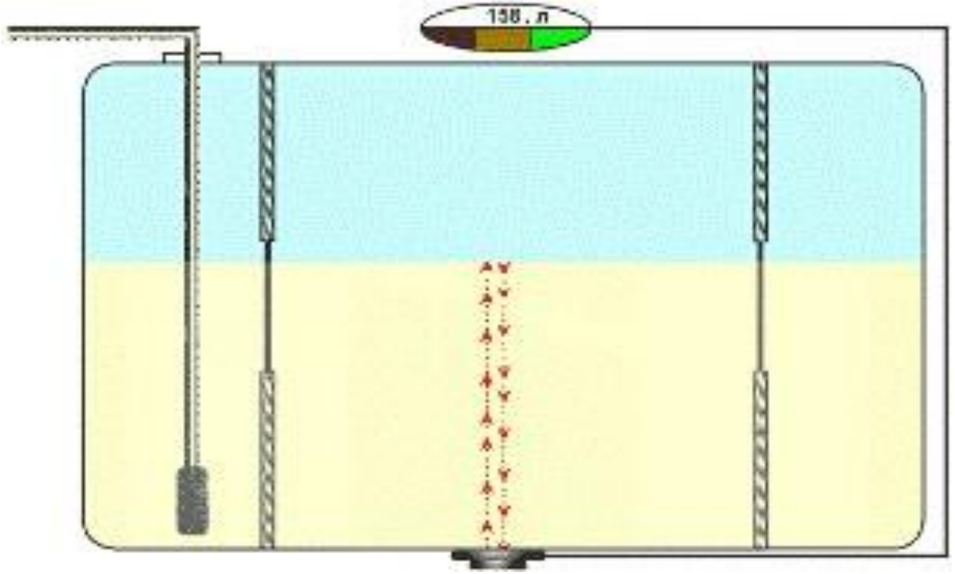
CAPACITIVE FUEL SENSOR

- Capacitive Fuel Sensor is an actual electric capacitor.



ULTRASONIC FUEL SENSOR

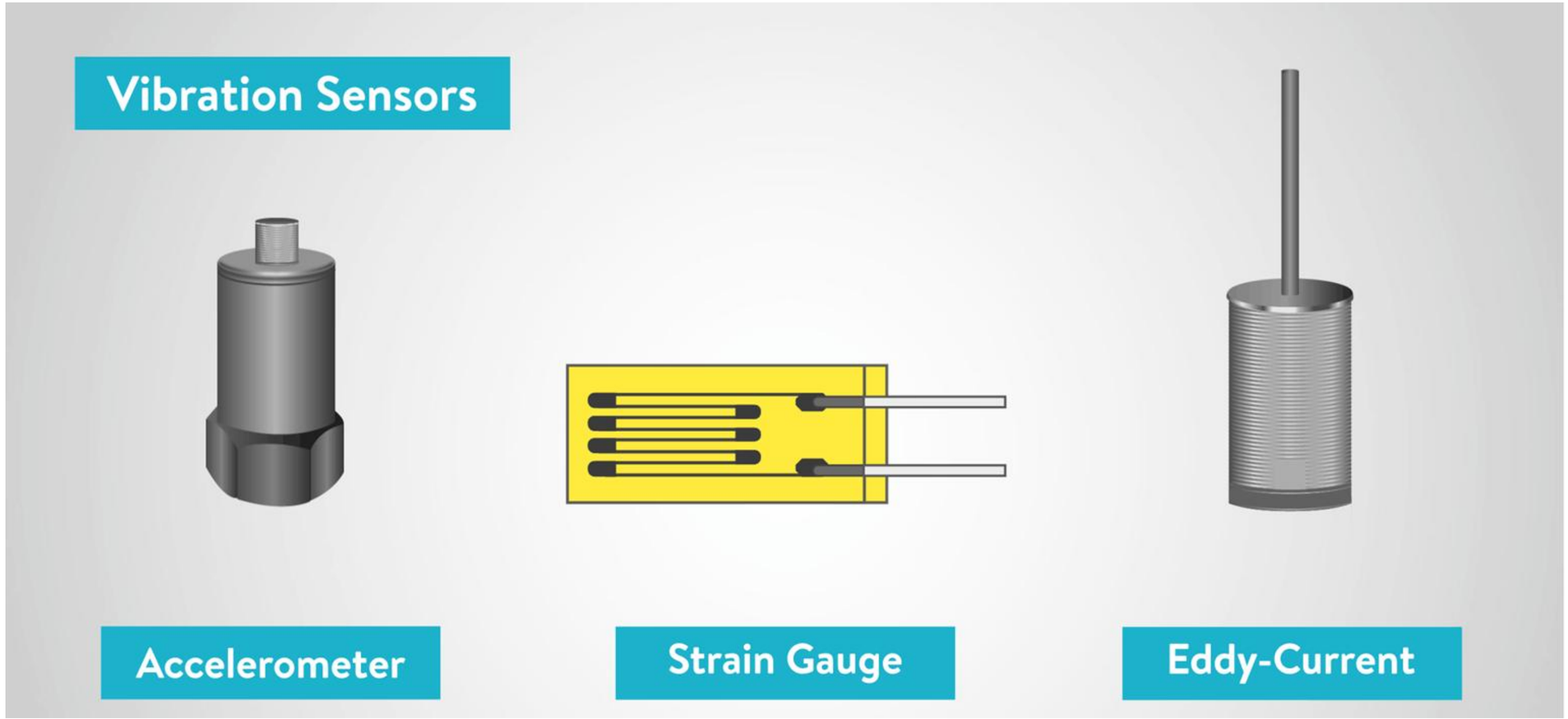
- Ultrasonic sensor has a wire connection with a GPS tracker and works as an ultrasonic transmitter.



VIBRATION SENSORS

- A vibration sensor is a measuring device. As the name implies it senses the vibration or to-and-fro movement of any equipment or system at the location where it is applied.
- The most widespread application of vibration sensors is found to measure the vibration of rotating equipment and machines like pumps, compressors, steam turbines, and connected lines.
- These measured outputs are then studied to detect any imbalance or issues in the asset or equipment under investigation to predict the condition of the system.
- Vibration sensors are very important components of a vibration-measuring tool.

VIBRATION SENSOR TYPES



Assessment

Where can be the fuel sensors used??

References

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