

## How to identify and test a Wema Sender

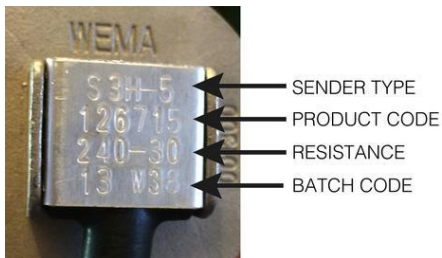
To supply a replacement fuel or water sender we just need to know:

- What type of sender do you have?
- What resistance is it?
- How long is it?
- What type of tank is it being fitted into?

OR

- What is the Wema product code?

If your sender has information stamped on the head then we can identify your sender from the product code:



### Do you have an S3 or S5 sender?

The S3 has a screw in head with a 1.25" BSP thread like this:



The S5 has a bolt down head with 5 holes like this:



## What resistance is your current sender and gauge?

The sender and gauge must have the same resistance values or the gauge will read incorrectly.

You can either test the gauge or the sender to find this out.

### To test the sender:

- Disconnect the two wires on top of the sender.
- Remove the sender from the tank.
- Connect the wires on the sender to a multimeter.
- Set the multimeter to resistance [ $\Omega$  ohms]



- Move the float to the top of the sender and take a reading on the multimeter:
  - At the top of the sender (full) the resistance should be:
    - European specification - 190 ohms
    - American specification - 30 ohms
- Move the float to the bottom of the sender and take a second reading:
  - At the bottom of the sender (empty) the resistance should be:
    - European specification - 0 ohms
    - American specification - 240 ohms

### To test the gauge:

If you have access to the wires on the back of the gauge;

- Power the gauge off
- Disconnect the black wire (sender)

- Power the gauge on
- If it's an American gauge the needle will show EMPTY
  - Touch the black wire to earth, the needle will go to FULL
- If it's a European gauge the needle will show FULL
  - Touch the black wire to earth, the needle will go to EMPTY

If you don't have access to the back of the gauge;

- Disconnect the two wires in the loom that attach to the sender.
  - If it's an American gauge the needle will show EMPTY
  - If it's a European gauge the needle will show FULL
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### How long is it?

To measure an S3 or S3H sender (with screw in head) measure from the top of the thread to the bottom of the stem.



To measure an S5 sender (with bolt down head) measure from the underside of the flange to the bottom of the stem



**What are the contents of your tank?**

For fuel or water then you can fit the maximum length of sender for your tank.

For a black water holding tank we recommend leaving at least 50mm from the bottom of the tank regardless of the material the tank is made from.

If your tank does not contain fuel, fresh water, grey water or black water then please contact us for more specific information. For very thick liquids like oil or grease we may need to know the viscosity.