

Variable Low Level Tank Alarm Instructions

Formula for working out how long probe cable needs to be.

x = tank volume in litres
y = height of tank in inches
z = volume in litres per inch

a = required low level volume
b = height of oil level low level warn.
c = length of cable required from top of tank.

$$\text{Part 1} \quad \frac{x}{y} = z$$

$$\text{Part 2} \quad \frac{a}{z} = b$$

$$\text{Part 3} \quad y - b = c$$

example:-

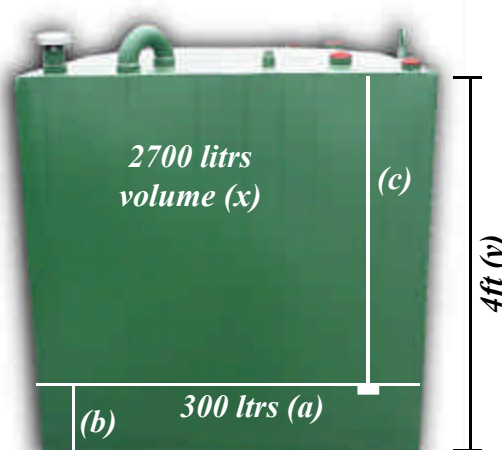
If a tank is 4ft tall with a volume of 2700 litres and a low level warning is required when level reaches 300 litres, the calculation is as follows.

$$\frac{(x)2700}{(y)48''} = (z)56.25 \text{ litres per inch}$$

$$\frac{(a)300}{(z)56.25} = (b)5.3 \text{ inches}$$

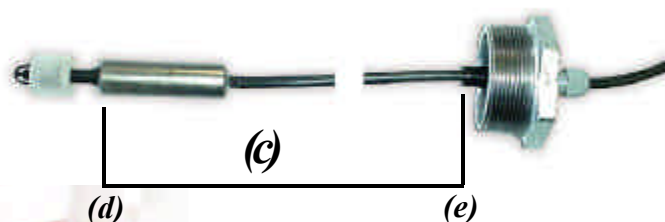
$$(y)48'' - (b)5.3'' = (c)42.7''$$

This example shows us that the required length of cable from the top of a 4ft tank for a 300 litre low level warning is 42.7 inches.



Implementing Measurement (c)

Diagram on the right shows where to measure from (d) and to (e) with desired length of cable so that alarm goes off at required oil volume.



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a = required High level volume
b = height of oil level High level warn.
c = length of cable required from top of tank.

$$\text{Part 1} \quad \frac{x}{y} = z$$

$$\text{Part 2} \quad \frac{a}{z} = b$$

$$\text{Part 3} \quad y - b = c$$

example:-

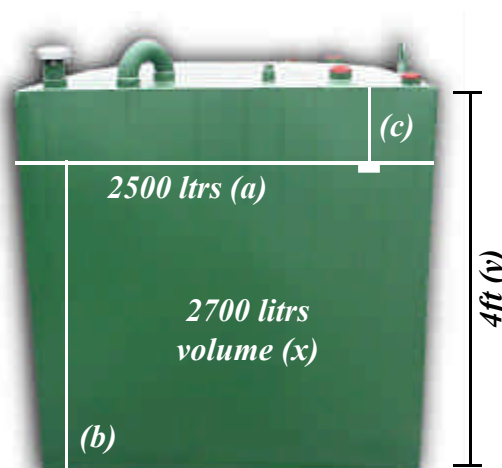
If a tank is 4ft tall with a volume of 2700 litres and a high level warning is required when level reaches 2500 litres, the calculation is as follows.

$$\frac{(x)2700}{(y)48''} = (z)56.25 \text{ litres per inch}$$

$$\frac{(a)2500}{(z)56.25} = (b)44.45 \text{ inches}$$

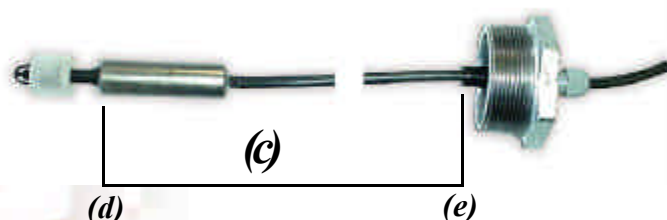
$$(y)48'' - (b)44.45'' = (c)3.55''$$

This example shows us that the required length of cable from the top of a 4ft tank for a 2500 litre high level warning is 3.71 inches.



Implementing Measurement (c)

Diagram on the right shows where to measure from (d) and to (e) with desired length of cable so that alarm goes off at required oil volume.



Please Note: Float on probe will need turning over depending in whether warning is high or low level. Test float before inserting into tank.



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