2. Bei Behältern mit zylindrischem oder ovalem Querschnitt

Zur Ermittlung des %-Anteils des Gesamtinhaltes, der einem bestimmten %-Wert der Höhe entspricht, ist die folgende Tabelle zu benutzen. Sie gibt an, wieviel % der Höhe einem bestimmten %-Anteil des Gesamtinhaltes entsprechen.

Beispiel:

20 % der Höhe=

14,2 % des Gesamtinhaltes bei zylindrischem, bzw.

16,8 % des Gesamtinhaltes bei ovalem Behälter.

% des Gesamtinhalts multipliziert mit Gesamtfassungsvermögen = Füllmenge in Litern.

Beispiel: $\dfrac{14,2}{100}$ X 5200 l = 738 l

Anzeige in %	% des Gesamtinhalts bei zylindrischen Behälter	% des Gesamtinhalts bei ovalem Behälter
10	5,2	6,6
15	9,3	11,6
20	14,2	16,8
25	19,4	22,2
30	25,2	27,8
35	31,1	33,3
40	37,2	38,9
45	43,6	44,5
50	50	50
55	56,4	55,5
60	62,8	61,1
65	68,9	66,7
70	74,8	72,2
75	80,6	77,8
80	85,8	83,2
85	90,7	88
90	94,8	93,4

3.

Der Füllstand in cm ist wie folgt zu berechnen:

Höhe in cm = angezeigte Höhe in % multipliziert mit der Behälterhöhe in cm = Höhe des Flüssigkeitsstandes in cm.

Adressen

Die Adressen unserer Niederlassungen im Ausland finden Sie unter www.afriso.de im Internet.

The UNIMES universal mechanical level gauge with continuous readout can be installed on any tank of any shape with a height or diameter between 90 and 200 cm.

Only a G1½ or G2 connection nozzle ist required.

Technical Data

1. CONTINUOUS READOUT
2. INDICATION: in percentage of total height (or in litres, with a special scale which is available to order)
3. TANKS: installed in cellar, any shape, height 90 to 200 cm
4. FUEL: fuel oil
5. MOUNTING: double thread, G2 - G1½

Commissioning

Commissioning consists of three stages:
- float adjustment
- instrument adjustment
- installation on tank

1. Float adjustment

The float line ist fitted with three weights. Two of the weights are fixed, one (1) at the end of the line and one (2) 15 cm above the end. An adjustable weight (3), which ist used to fix the float in position, ist fitted between the two fixed weights.

For tanks without manholes or flanged nozzles:

Push the float up to weight 2 and press weight 3 tight. The float is then fixed in position.
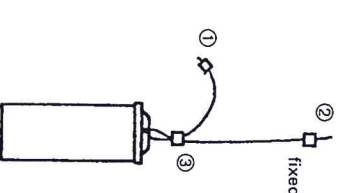
For tanks with manholes or flanged nozzles:

The distance by which the manhole or flanged nozzle projects above the tank must be taken into consideration with reference to the length of the line.

Measure this distance from weight 2 in the direction of weight 1 and mark it on the line. Push the float up to this mark and fix it in position using weight 3.

fixed

2. Instrument adjustment

During production, the UNIMES universal mechanical level gauge is set to its maximum useful measuring range, corresponding to a tank with a height or diameter of 200 cm.

- To adjust the gauge to the size of the tank, proceed as follows (see diagramm below):

Height of flange nozzle
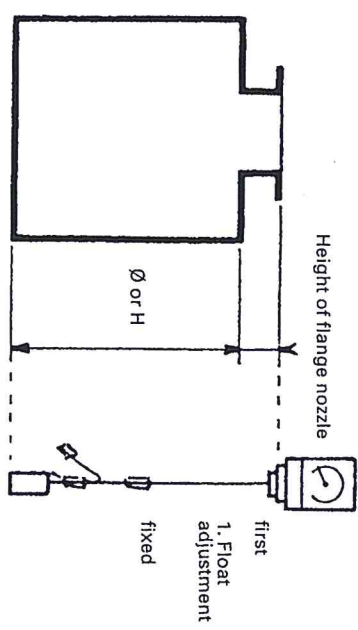
Ø or H

first

fixed

1. Float adjustment

Fig. 1: Instrument Adjustment

- Pull out a length of float line corresponding to the height of the tank plus the projection of the manhole or flange nozzle, if applicable. Measure the lenght from the top to the bottrom of the G2 thread.
- Turn the adjustment screw to the right to set the pointer to zero. The UNIMES gauge ist now correctly set for the size of the tank.

Fig. 2: Setting to Zero
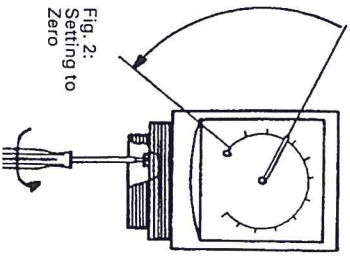
3. Installation of an interchangeable scale

Remove the protective glass (using a screwdriver). Turn the pointer from right to left up to the centre of the scale.

Hold the pointer in this position and push the cutout in the interchangeable scale over the pointer. Release the pointer, which will then jump bach to the 100 % position.

Install the protective glass by simply pressing it bach into position.

Conversion Table % to litres

Using this table, the percentage readout of the gauge can be converted into a fuel oil volume in litres.

1. For tanks with a rectangular cross section

The percentage values indicated correspond to percentages of the total volume. The volume of oil in the tank can be calculated by multiplying the percentage indicated by the total volume of the tank.

Example: $\dfrac{23}{100} \times 5200\,l = 1196\,l$

2. For tanks with a cylindrical or oval cross section

The percentage of the tank volume which corresponds to a certain percentage of the height must be calculated using the following table. The table converts a percentage of the height into a percentage of the total volume.

Examples:

20 % of height=

14.2 % of total volume in the case of a cylindrical tank or

16.8 % of total volume in the case of a tank of oval cross section.

To calculate the volume of oil in the tank, multiply the percentage of the total volume by the total volume:

Example: $\dfrac{14.2}{100} \times 5200\,l = 738\,l$

Reading in %	% ot total volume cylindrical tank	% ot total volume oval tank
10	5,2	6,6
15	9,3	11,6
20	14,2	16,8
25	19,4	22,2
30	25,2	27,8
35	31,1	33,3
40	37,2	38,9
45	43,6	44,5
50	50	50
55	56,4	55,5
60	62,8	61,1
65	68,9	66,7
70	74,8	72,2
75	80,6	77,8
80	85,8	83,2
85	90,7	88
90	94,8	93,4

To calculate the liquid level in cm, proceed as follows:

liquid level in cm = reading in % multiplied by tank height in cm.

Adresses

The Adresses of our worldwide representations and offices can be found on the internet at www.afriso.de.