MOUNTING

The TELEVAR pneumatic level indicator is fastened to the wall via the 3 external mounting slots with screws and wall plugs. Plastering and decorating should be finished before proceeding to mount the indicator on the wall to avoid risk of damage to the instrument.
If it is really necessary to mount the instrument before such work, protect it properly against knocks or deposits of foreign matter.

CALIBRATION

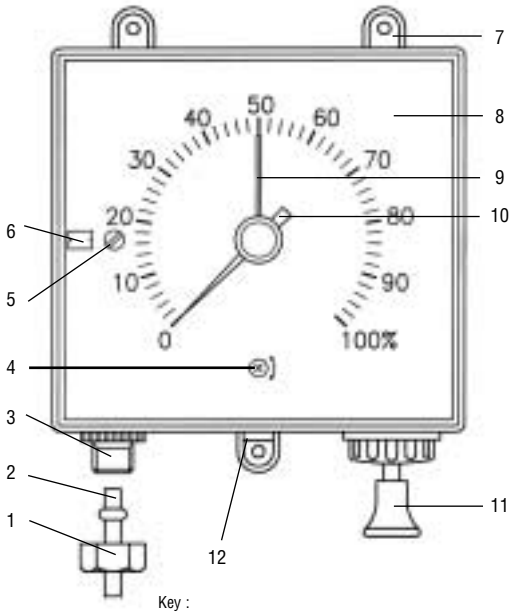
To calibrate the level indicator, proceed as follows:

1. Remove the transparent cover by pressing the opening tab (12).
2. Make sure that the instrument is at atmospheric pressure (nut 1 loosened).
3. Calibrate the instrument by turning calibration screw (5) until index K appears in the sight window (6). Index K corresponds to the tank diameter (or height) in metres.
4. Reset pointer (10) by turning resetting screw (4).
5. Refit the transparent cover.
6. Insert pipe (2) fully home in connection (3), then securely tighten nut (1).

THE TELEVAR LEVEL INDICATOR IS CALIBRATED FOR MEASURING THE CONTENTS OF A FUEL OIL TANK

To measure contents of other liquids:

1. Identify the K coefficient corresponding to the specific gravity of the liquid concerned in relative chart.
2. Calibrate the instrument as described in previous point 3 with reference to the K coefficient deduced from the chart.



Key :

1. Lock nut
2. Connecting tube
3. Tube connection
4. Pointer resetting screw
5. Calibration screw
6. K coefficient index
7. Mounting slot
8. % reading dial
9. Manual reference index
10. Indicating pointer
11. Pump
12. Cover opening tab

TLM

TELEVAR.
Universal remote pneumatic level indicator. For tanks of any shape and height between 900 and 3000 mm (Item ...103)), and between 3000 and 5000 mm (Item ... 105).

Part No.	Tank
0101103	**h = 3 m**
0101105	**h = 5 m**

DESIGN FEATURES

Dimensions	170 x 160 x 65 mm
Casing	High impact plastic with wall mounting slots
Cover	Transparent high impact plastic with opening tab
Connections	With O-ring and nut suitable for any tube OD 6 mm
Diaphragm	Brass sheet, with pneumatic linear expansion
Transmission mechanism	Type with precision clock mechanism
Internal connections	Silicone tubing
Pressure protection	Air metering capillary with mechanical stop

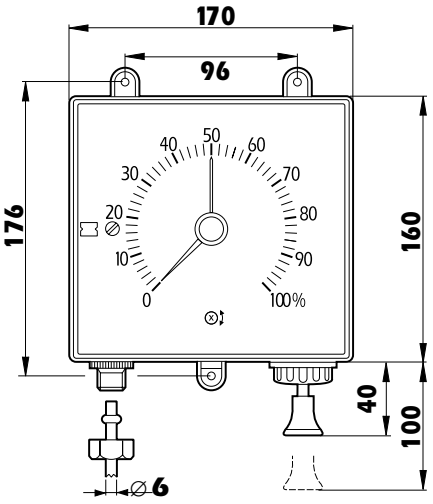
TECHNICAL CHARACTERISTICS

Range of adjustment of the measurable height	From 900 mm to 3.000 mm fuel oil column column (d = 0,84 kg/dm3)
Dial	Graduated in % cylindrical tank volume
Accuracy	±2%
Max. measuring distance	50 metres

It is possible to superimpose a dial in litres, for cylindrical, parallelepiped and spherical tanks, without any modification to the instrument or the calibration. Complete with compensating screw for resetting the pointer.

Overall dimensions (mm)

TLM



K COEFFFICENT CHART

TANK DIAMETER OR HEIGHT (mm)	SPECIFIC GRAVITY OF THE LIQUID															
	0,70	0,72	0,74	0,76	0,78	0,80	0,82	0,84	0,86	0,88	0,90	0,92	0,94	0,96	0,98	1,00
900								0,90	0,92	0,94	0,96	0,99	1,01	1,03	1,05	1,07
950								0,95	0,97	1,00	1,02	1,04	1,06	1,08	1,11	1,13
1000						0,95	0,98	1,00	1,02	1,05	1,07	1,10	1,12	1,14	1,17	1,19
1100				1,00	1,02	1,05	1,07	1,10	1,13	1,15	1,18	1,20	1,23	1,26	1,28	1,31
1200	1,00	1,03	1,06	1,08	1,11	1,14	1,17	1,20	1,23	1,26	1,29	1,31	1,34	1,37	1,40	1,43
1300	1,08	1,11	1,14	1,18	1,21	1,24	1,27	1,30	1,33	1,36	1,39	1,42	1,45	1,48	1,52	1,55
1400	1,17	1,20	1,23	1,27	1,30	1,33	1,37	1,40	1,43	1,47	1,50	1,53	1,57	1,60	1,63	1,65
1500	1,25	1,26	1,32	1,36	1,39	1,43	1,46	1,50	1,54	1,57	1,60	1,64	1,70	1,70	1,75	1,80
1600	1,33	1,37	1,41	1,45	1,48	1,52	1,56	1,60	1,64	1,67	1,70	1,75	1,80	1,80	1,85	1,90
1700	1,42	1,46	1,50	1,54	1,58	1,62	1,65	1,70	1,75	1,80	1,80	1,85	1,90	1,95	2,00	2,00
1800	1,50	1,54	1,59	1,63	1,67	1,70	1,75	1,80	1,85	1,90	1,90	1,95	2,00	2,05	2,10	2,15
1900	1,58	1,63	1,67	1,72	1,75	1,80	1,85	1,90	1,95	2,00	2,05	2,10	2,10	2,15	2,20	2,25
2000	1,67	1,70	1,75	1,80	1,85	1,90	1,95	2,00	2,05	2,10	2,15	2,20	2,25	2,30	2,35	2,40
2100	1,75	1,80	1,85	1,90	1,95	2,00	2,05	2,10	2,15	2,20	2,25	2,30	2,35	2,40	2,45	2,50
2200	1,85	1,90	1,95	2,00	2,05	2,10	2,15	2,20	2,25	2,30	2,35	2,40	2,45	2,50	2,55	2,60
2300	1,95	2,00	2,05	2,10	2,15	2,20	2,25	2,30	2,35	2,40	2,45	2,50	2,55	2,60	2,65	2,70
2400	2,00	2,05	2,10	2,15	2,20	2,30	2,35	2,40	2,45	2,50	2,55	2,60	2,70	2,75	2,80	2,85
2500	2,10	2,15	2,20	2,52	2,30	2,40	2,45	2,50	2,55	2,60	2,70	2,75	2,80	2,85	2,90	3,00
2600	2,20	2,25	2,30	2,35	2,40	2,50	2,55	2,60	2,65	2,70	2,80	2,85	2,90	2,95	3,00	
2700	2,25	2,30	2,40	2,45	2,50	2,55	2,65	2,70	2,75	2,85	2,90	2,95				
2800	2,35	2,40	2,45	2,55	2,60	2,65	2,75	2,80	2,85	2,95	3,00					
2900	2,45	2,50	2,55	2,60	2,70	2,75	2,85	2,90	2,95							
3000	2,50	2,55	2,65	2,70	2,80	2,85	2,95	3,00								

CAUSES OF INCORRECT OR MISSING INDICATION :

Incorrect indication :

1. Coefficient K appearing in sight window (6) does not correspond to the actual tank diameter (or height): if tank contents differ from fuel oil, is the specific gravity correct ?
2. The probe immersed in the tank does not reach the bottom: the bottom part is not measured.
3. There is a small leak in the connecting tube or tube fitting.
4. Connecting tube clogged.

No indication :

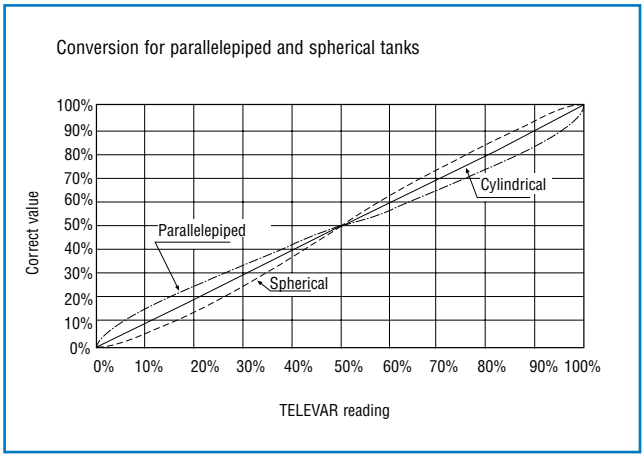
1. There are appreciable air leaks in the tube connecting to the tank thus preventing formation of the measuring pressure.
2. Connection fittings to the indicator or tank have not been made correctly thus causing considerable air leaks.
3. The tank is empty or the probe is incorrectly immersed in the liquid.

The pointer exceeds 100%:

1. The connecting tube between the indicator and tank is clogged thus preventing the air from flowing.
2. The end of the probe immersed in the liquid is clogged (e.g. because of sludge) thus preventing air from flowing out.

CALCULATION OF CONTENTS FOR TANKS OF DIFFERENT SHAPES

It is possible to deduce from the graph below at what percentage volume of parallelpiped or spherical tanks does the value indicated on the standard equipment (cylindrical tank)correspond to.



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