



The visual level gauges TL series allow the liquid level to be checked in a clear and precise way at any time.

PRINCIPLE OF OPERATION:

The principle used is that of communicating vessels: the liquid goes through the level gauge by means of hollow screws, showing the user the exact point inside the tank.

OPTIONS:

- C/C distance 76, 127, 254 mm interchangeable with almost every level visual marketing
- Body Transparent polyamide based TR 55 LX (Grilamid™) or polycarbonate.

CHEMICAL RESISTANCE:

The polymer used is a compound based on polyamide 12.

The **Top Level** electric visual level gauge offers visual signalling as well as a **minimum level electric signal** which can be N.O. or N.C. or EXCHANGE.

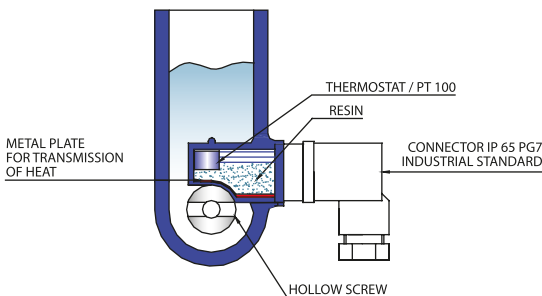
The many advantages include:

- just one purchase
- just one installation
- savings in costs and work
- total safety: the electrical part is completely separate from the liquid and insulated with respect to the outside.

ELECTRICAL CONTACT	SPST N.C. IN ABSENCE	SPST N.C. IN PRESENCE	SPDT
ELECTRICAL CHARACTERISTICS			
POWER COMMUTABLE IN DC	40 W	20 W	20 W
POWER COMMUTABLE IN AC	40 V.A.	20 V.A.	20 V.A.
CURRENT STRENGTH IN DC - AC	2 A.	1 A.	1 A.
COMMUTABLE VOLTAGE	230 VDC / VAC	150 VDC / VAC	150 VDC / VAC
TEMPERATURE RANGE	- 20°C + 80°C		

TL/T - TL/P

CHARACTERISTICS OF LEVEL GAUGE WITH THERMOSTAT / PT 100



In addition to the electric level gauge, the Top Level can provide temperature signalling by means of a PT 100 (-50°C +150°C) or the insertion of a preset thermostat.

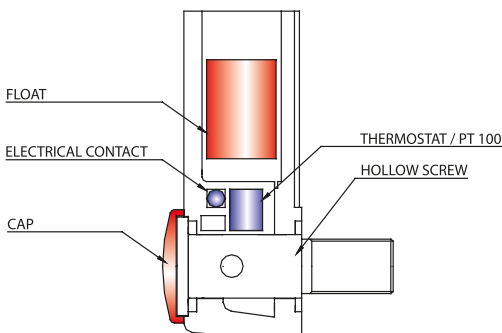
To facilitate the passage of heat, from the tank through the hollow screw to the thermostat / PT 100, a metal plate is inserted inside the level gauge to conduct the heat of the liquid faster and with less dissipation.

In conjunction with the thermostat / PT 100, a cap is fitted standard on the bottom screw to prevent heat loss to the outside.

Complete resin coating in the cavity containing the thermostat provides better heat and electrical insulation safety.

TL/TE - TL/PE

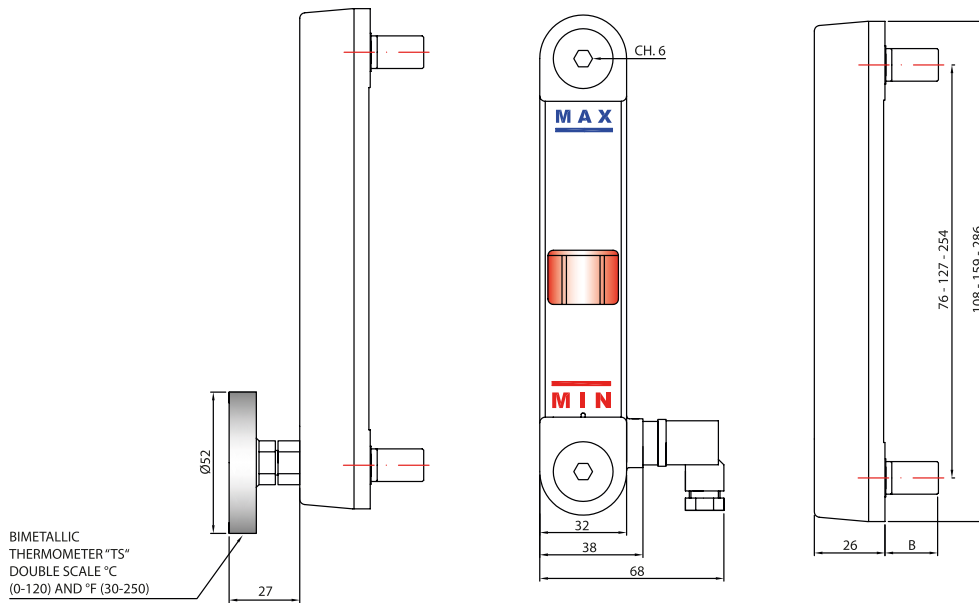
CHARACTERISTICS OF LEVEL GAUGE WITH THERMOSTAT / PT 100



In addition to the already mentioned qualities of the TOP LEVEL, there is also the possibility of having a minimum electric signal together with the temperature signal of a thermostat or a PT 100, all in a single level gauge, and on a single connector.

THERMOSTAT ELECTRICAL CHARACTERISTICS	
VOLTAGE	250 V. COMMUTABLE
FREQUENCY	50 Hz
LOAD VALUES	4,0 A. cos φ = 0,6 (I M OT) 6,3 A. cos φ = 1,0 (I N)
MAX. LOAD	10 A. cos φ = 1
COMMUTATING TEMPERATURE	50°C - 60°C - 70°C - 80°C
CONTACTS	N.CH. = NORMALLY CLOSED N.A. = NORMALLY OPEN
TOLERANCE	± 5°C

TL/E - TL/T - TL/P - TL/TE - TL/PE



MODEL	LEVEL CHARACTERISTICS	C/C DISTANCE	SCREWS MATERIAL	ELECTRICAL CONTACT IN ABSENCE OF LIQUID	COVER	THERMOSTAT CHARACTERISTICS	BODY MATERIAL		OR MATERIAL		DEVICES			
							TEMP. (°C)	TEMP. (°C)	TEMPEROMETER	LOCKNUT				
TL	E ELECTRICAL	76	A NICKEL PLATED BRASS M10 (ONLY FOR E)	0 WITHOUT CONTACT (ONLY P-T)	A YES	0 WITHOUT THERMOSTAT (SOLO P-T)	A TR 55	-30...+80	1 NBR	-30...+100	0 NO	S NO		
			1 50° N.O.			2 FKM (VITON)			-25...+200					
	2 60° N.O.	3 SI (SILICONE)	-60...+200											
	3 70° N.O.	4 HNBR	-40...+130											
	T BIMETALLIC THERMOMETER	127	C STAINLESS STEEL M10	1 OPEN		B NO	4 80° N.O.	B POLYCARBONATE	-40...+85	5 EPDM	-45...+155	R1 WITH LOWER BIMETALLIC THERMOMETER (WITH NICKEL PLATED BRASS M12)	1 GALVANIZED STEEL	
			5 50° N.C.				6 FEP (FKM-SILICONE)			-60...+205				
	6 60° N.C.	7 MFQ (FLUOROSILICONE)	-65...+175											
	7 70° N.C.	8 80° N.C.												
TE THERMOSTAT + ELECTRICAL	254	D STAINLESS STEEL M12	2 CLOSE	3 EXCHANGE SPDT										
		E 1/2" GAS INOX S/STAINLESS + NICKEL PLATED BRASS SCREWS												
P PT100	254	F 1/2" GAS INOX AISI316 + STAINLESS STEEL SCREWS												
PE PT100 + ELECTRICAL														
TL	TE	127	D	1	B	3	A		1	R1	S			

Maximum pressure: see chart last catalog page

Maximum tightening torque: 10 Nm