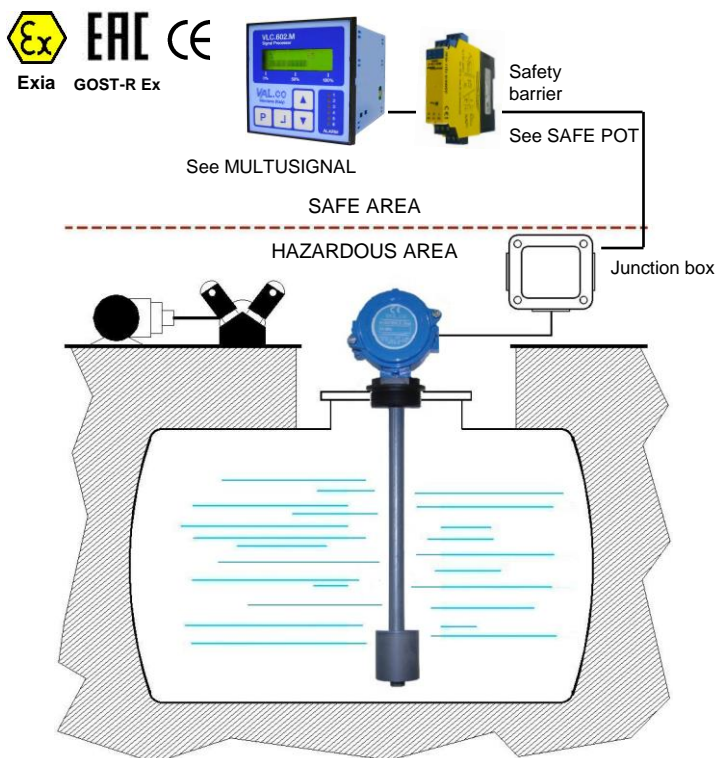


**APPROVED IN ACCORDANCE WITH THE EUROPEAN
STANDARD 2014/34/EU - ATEX**

These instruments, intrinsically safe certified:

CESI 03 ATEX 265 Ext.2 II 1G Exia IIC T4/T5/T6 Ga,
CESI 03 ATEX 265 Ext.2 II 1/2G Exia IIC T4/T5/T6 Ga/Gb,
are used to control the level of liquids or fuels inside tanks, both
underground and outdoors, installed in hazardous areas where
flammable products are treated.

The principle of operation is potentiometric type, based on the gradual shutdown of a chain of resistors and reed contacts, placed inside of the measuring rod by a magnetic float.



GENERAL CHARACTERISTICS

- **PVC – PP – PVDF**
- Measuring resolution 5 mm.
- Potentiometric signal output **(LC)**.
- 4-20mA analog output **(LCT)**.
- 0-10V analog output via safety barrier SAFE POT.
- Up to 5 m length.
- Maximum working pressure 6 Bar.
- Working ambient temperature.
-40/+40°C = T6, -40/+55 °C = T5, -40/+80 °C = T4
- Standard working temperature up to 130°C.
- Minimum degree of protection IP65

FLOATS

Tab.1



F49
Ø49x53



P49
Ø49x53



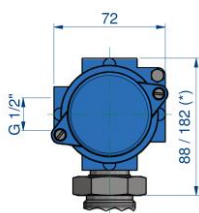
V49
Ø49x53

Material	PVDF	PP - Polypropylene	PVC
Specific gravity	0,8	0,45	0,7
Measuring resolution - mm	5	5	5
Max. pressure – Bar	6	3	6
Max. temperature – Class	L = 100°C (T5) - N = 130°C (T4)	D = 90°C (T6)	B = 60°C (T6)
On request	N = 130°C (T5) (T6)	-	-

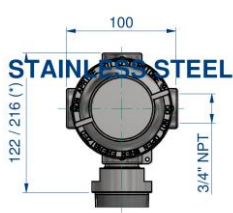
ELECTRICAL OUTPUT

Tab.2

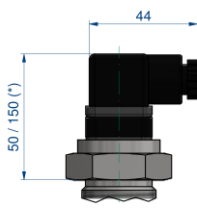
I1	I3	IS1	IS1	IP1 - IP2	IP1 - IP2
IP65 Housing (2G)	IP66/67 Housing (1G)	DIN 43650 IP65 (1G)	DIN 43650 IP65 (1G)	Cable gland (1G)	Cable gland (1G)
LC = 3 terminals CT = 2 terminals	LC = 3 terminals CT = 2 terminals	DIN 43650 29x29	DIN 43650 29x29	IP1 Brass IP68 IP2 Polyamide IP67	IP1 Brass IP68 IP2 Polyamide IP67



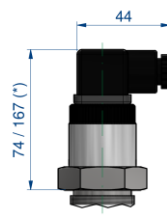
LC – LCT



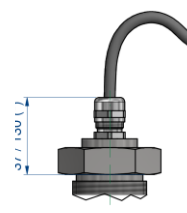
LC – LCT



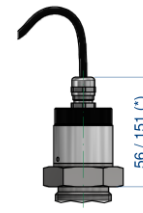
LC



LCT



LC



LCT

With heatsink – see dimension (*)

LCT = Temperature class **N (T5) (T6)**

PROCESS CONNECTIONS

Tab.3

Installation from inside only LC = IP1-2		Float type	Installation from outside - available thread and flanges			
10 3/8"	15 1/2"		50 2"	DN65 Flange	DN80 Flange	DN100 Flange
All type of floats All type of thread		F49	•	•	•	•
		P49	•	•	•	•
		V49	•	•	•	•

Male thread

G	C	N
Parallel UNI 228/1	Conical UNI 7/1	Conical NPT

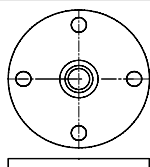
Available materials

F	P	V
PVDF	PP	PVC

DN = Available materials

V	S
PVC	AISI 316 On request

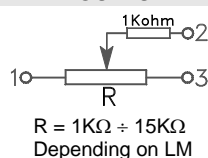
FLANGES



DN = UNI - DIN - ANSI Flanges

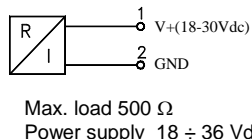
WIRING

POTENTIOMETRIC OUTPUT



LC

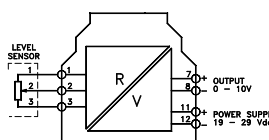
4-20 mA OUTPUT



LCT

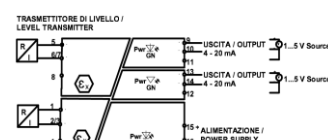
0-10 V output

Available on SAFE POT barrier



1-5 V output

Available on SAFE ANG barrier



SAFETY BARRIER

All Exia level controls must be electrically connected to the active or passive barriers according to the European Standard EN 50020. See technical bulletin SAFE POT e SAFE ANG.

DIMENSIONS mm.

Tab.4

The dimensions L0 and LM are referred to the stop of the fitting (A1) or flange (A) connection.
Tolerance on dimension L0 and LM ± 3 mm.

	F49	P49	V49
A	25	25	25
A1	45	45	45
B	35	35	35

Damping tube

On request

—

— V

PVC

— S

AISI-316

NOMENCLATURE

LC	V49	05	1300 / 1380	V	— V	50	G	V	I1	B	1,5 M
•											
	•										
		•									
			•								
				•							
					•						
						•					
							•				
								•			
									•		
										•	
											•

Type : LC - LCT

Tab.1 Float

Tab.1 Measuring resolution (mm).

Tab.4 Measuring length LM / Total length L0 (mm).

Tab.3 Rod material.

Tab.4 Presence and material of damping tube (option).

Tab.3 Process connection dimension.

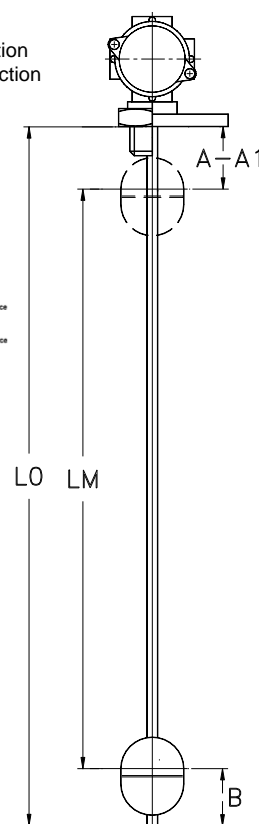
Tab.3 Process connection thread.

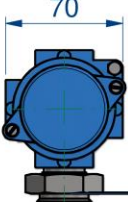
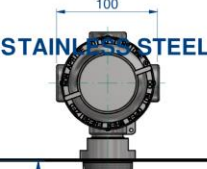








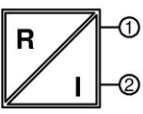
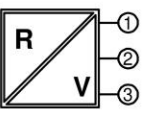
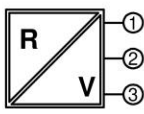
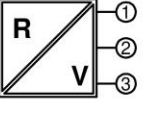
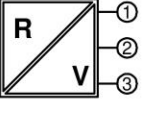
Tab.3 Process connection material.

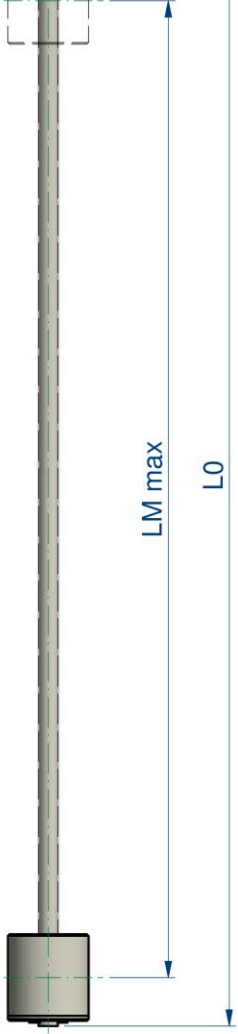
Tab.2 Electrical output.

Tab.1 Temperature class.

Tab.2 Cable length (IP1 - IP2) 1,5m / 3m. Other on request.



External mounting				Internal mounting	
I1	I3	IS1	IP1	IP2	IC
Electrical housing IP 65 LC= 3 terminals LCT= 2 terminals	Electrical housing IP 66/67 LC= 3 terminals LCT= 2 terminals	Plug DIN 43650	IP1 Cable-gland brass IP68 IP2 Cable-gland polyamide IP67 L cable.....mm		Only internal mounting Cable L.....mm
LC/LCT	LC/LCT	LC	LCT	LCT	LC
					
<div> <div> Liquid under control: Specific gravity: Maximum pressure: Maximum temperature: </div> <div> Approvals:  Exia  GOST-R Ex </div> </div>					
Measuring resolution: <input type="checkbox"/> 5 mm <input type="checkbox"/> 10 mm <input type="checkbox"/> 20 mm					
Process connection: <input type="checkbox"/> Threaded: <input type="checkbox"/> Flanged:					
Material: <input type="checkbox"/> Brass <input type="checkbox"/> AISI-316 <input type="checkbox"/> PVC <input type="checkbox"/> PP <input type="checkbox"/> PVDF					
Electrical output:					
<input type="checkbox"/> 3-wires potentiometer 		<input type="checkbox"/> 2-wires potentiometer 		<input type="checkbox"/> Calibrated potentiometer Empty tank =ohm Full tank =ohm	
<input type="checkbox"/> 4 ÷ 20 mA output 		<input type="checkbox"/> 0.5 ÷ 4.5 V output 		<input type="checkbox"/> 1 ÷ 5 V output 	
<input type="checkbox"/> 0 ÷ 5 V output 		<input type="checkbox"/> 0 ÷ 10 V output 			



Total length
L0 (mm)

Measuring length
LM (mm)