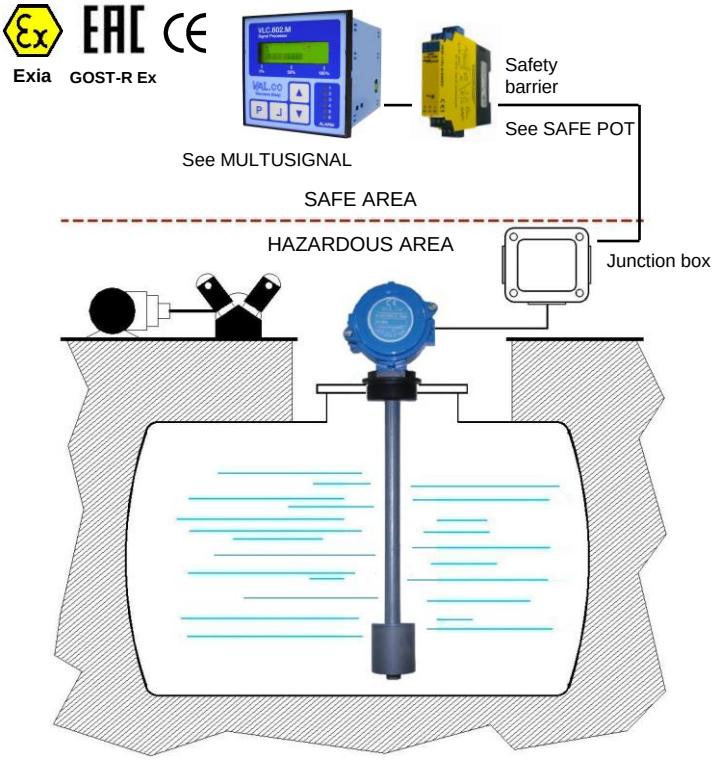
APPROVED IN ACCORDANCE WITH THE EUROPEAN STANDARD 2014/34/EU - ATEX

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.

Exia GOST-R Ex



GENERAL CHARACTERISTICS

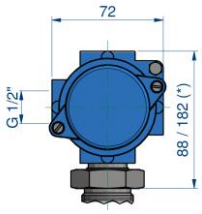
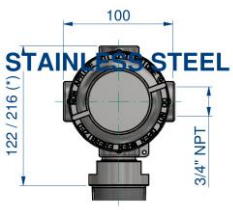
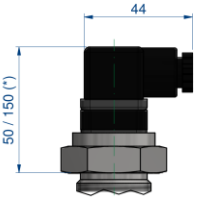
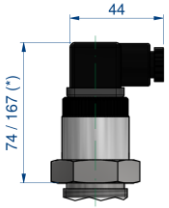
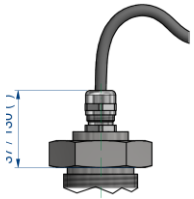
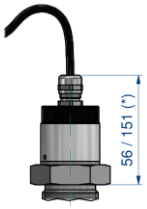
- **PVC – PP – PVDF**

- 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 ∅49x53	**P49** ∅49x53	**V49** ∅49x53
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 IP65 Housing (2G)	**I3** IP66/67 Housing (1G)	**IS1** DIN 43650 IP65 (1G)	**IS1** DIN 43650 IP65 (1G)	**IP1 - IP2** Cable gland (1G)	**IP1 - IP2** Cable gland (1G)
LC = 3 terminals LCT = 2 terminals	LC = 3 terminals LCT = 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	15		50	DN65	DN80	DN100
3/8”	1/2”		2”	Flange	Flange	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

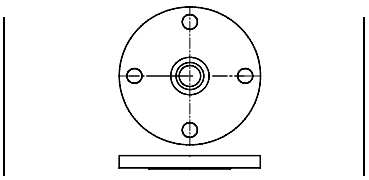
Available materials

F	P	V
PVDF	PP	PVC

DN = Available materials

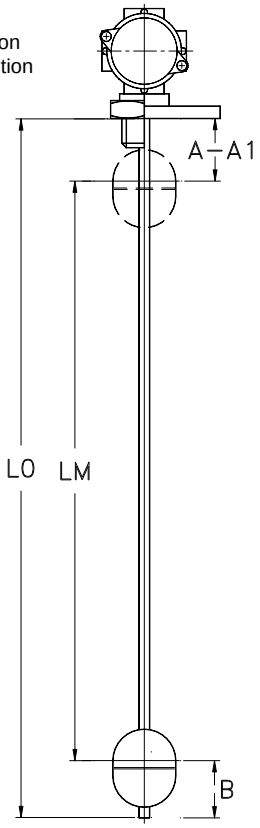
V	S
PVC	AISI 316 On request

FLANGES



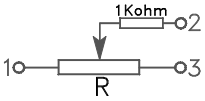
DN = UNI – DIN – ANSI Flanges

A Flanged connection
A1 Threaded connection



WIRING

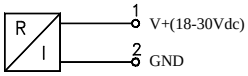
POTENTIOMETRIC OUTPUT



R = 1KΩ ÷ 15KΩ
Depending on LM

LC

4-20 mA OUTPUT

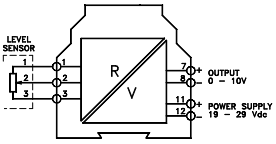


Max. load 500 Ω
Power supply 18 ÷ 36 Vdc

LCT

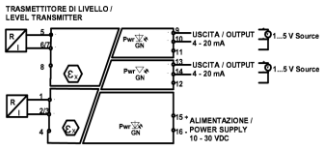
0-10 V output

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	– S
		PVC	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.

LINEAR VF - ATEX I

Request form

External mounting | Internal mounting

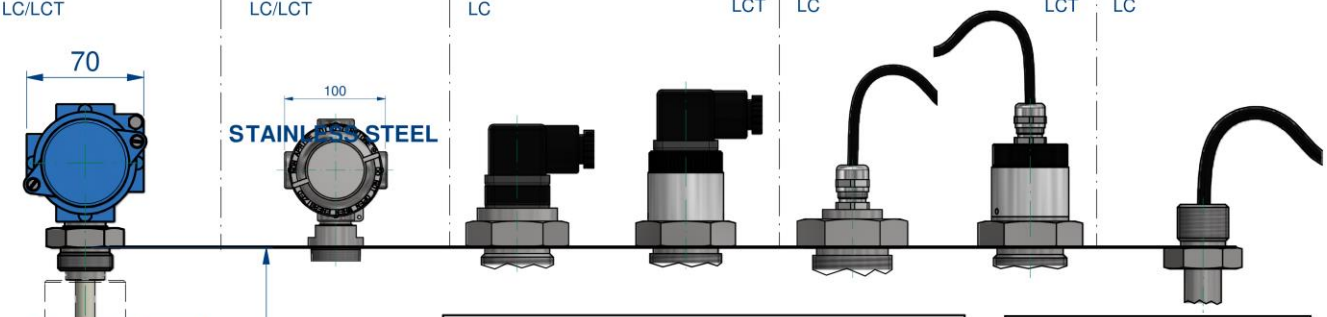
I1 — Electrical housing IP 65
LC= 3 terminals
LCT= 2 terminals
LC/LCT

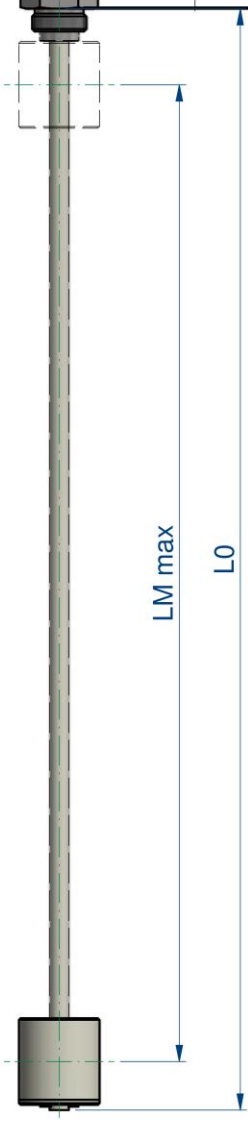
I3 — Electrical housing IP 66/67
LC= 3 terminals
LCT= 2 terminals
LC/LCT

IS1 — Plug DIN 43650
LC LCT

IP1 **IP2** — IP1 Cable-gland brass IP68
IP2 Cable-gland polyamide IP67
L cable.....mm
LC LCT

IC — Only internal mounting
Cable L.....mm
LC





Total length
L0 (mm) _____

Measuring length
LM (mm) _____

Liquid under control: .....
Specific gravity: .....
Maximum pressure: .....
Maximum temperature: .....

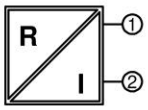
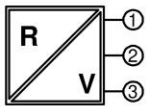
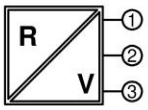
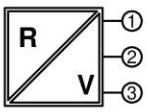
Approvals:
Exia GOST-R Ex

Measuring resolution:
☐ 5 mm ☐ 10 mm ☐ 20 mm

Process connection:
☐ Threaded: ..... ☐ Flanged: .....

Material:
☐ Brass ☐ AISI-316 ☐ PVC ☐ PP ☐ PVDF

Electrical output:

☐ 3-wires potentiometer 	☐ 2-wires potentiometer 	☐ Calibrated potentiometer Empty tank = ...ohm Full tank = ...ohm
☐ 4 ÷ 20 mA output 	☐ 0.5 ÷ 4.5 V output 	☐ 1 ÷ 5 V output 
☐ 0 ÷ 5 V output 	☐ 0 ÷ 10 V output