

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

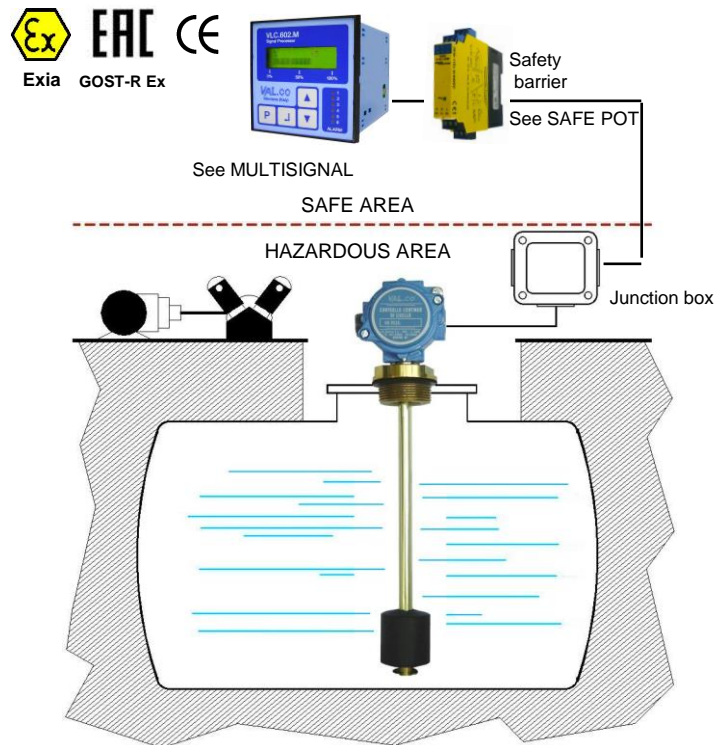
These instruments, intrinsically safe certified:

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

- **Brass – Spansil – Stainless steel rod**
- Measuring resolution 5 – 10 – 20 mm.
- Potentiometric signal output (**LC**).
- 4-20mA analog output (**LCT**).
- 0-10V analog output via safety barrier **SAFE POT**.
- Up to 6 m length depending on the used float.
- Maximum working pressure 20 Bar.
- Working ambient temperature.
 -40/+40°C = T6, -40/+55 °C = T5, -40/+80 °C = T4
- Standard working temperature up to 100°C.
 Execution up to 120°C on request.
- Minimum degree of protection IP65



FLOATS

Tab.1



Material	Spansil – Butadiene - Acrylonitrile Copolymer				
Specific gravity	0,44	0,4	0,4	0,35	0,45
Measuring resolution - mm	5 – 10	5 – 10	5 – 10	5 – 10 – 20	5 – 10 – 20
Max. pressure – Bar	20	20	20	20	20
Max. temperature – Class	L = 100°C				
On request	M = 120°C				

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 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 (*)		LC – LCT = Temperature class M			

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"		20 3/4"	25 1"	32 1 1/4"	40 1 1/2"	50 2"	FOHX Flange	DN50 Flange	DN65 Flange
All type of floats All type of thread		B20	-	G	G-C-N	-	-	•	•	-
		B22	G-C-N	G-C-N	-	-	-	-	-	-
		B28	G-C-N	G-C-N	-	-	-	-	-	-
		B44	-	-	-	G	G-C-N	-	-	•
		B45	-	G	G-C-N	G-C-N	-	-	•	•

Male thread

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

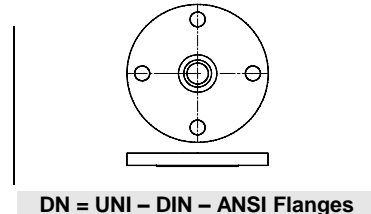
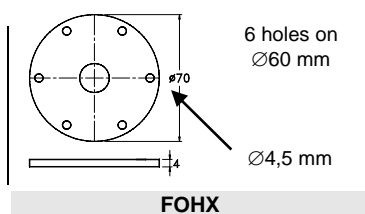
Available materials

O	S
Brass	AISI-316 On request

DN = Available materials

C	S
Steel	AISI-316 On request

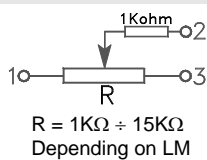
FLANGES Dimensions in mm.



A Flanged connection
A1 Threaded connection

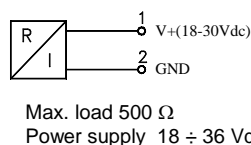
WIRING

POTENTIOMETRIC OUTPUT



LC

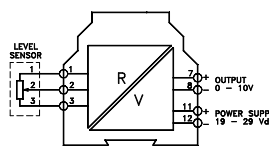
4-20 mA OUTPUT



LCT

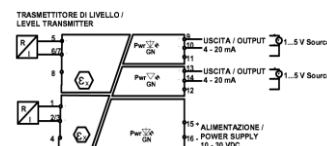
0-10 V output

Available on SAFE POT barrier



1-5 V output

Available on SAFE ANG barrier



SAFETY BARRIERS

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.

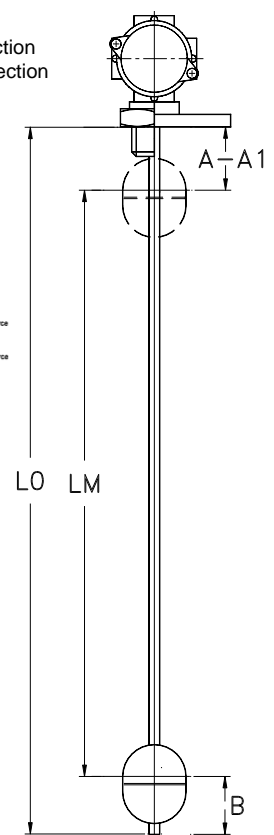
DIMENSIONS mm.

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.

	B22	B28	B20	B44	B45
A	10	15	10	25	25
A1	25	30	30	45	45
B	15	25	20	35	35

Damping tube	- L	- O
On request	aluminium	brass



NOMENCLATURE

LC B45 10 1300 / 1380 S - L 25 G O I1 L 1,5 M

•														Type : LC - LCT
	•													Tab.1 Float
		•												Tab.1 Measuring resolution (mm).
			•											Tab.4 Measuring length LM / Total length L0 (mm).
				•										- Stainless steel 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 O - ATEX I



Request form

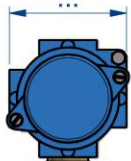
External mounting

Internal mounting

I1

Electrical housing IP65
LC= 3 terminals
LCT= 2 terminals

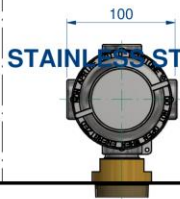
LC



I3

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

LC/LCT



IS1

Plug DIN 43650

LC



IP1

IP1 brass cable-gland IP68
IP2 Polyamide cable-gland IP67
L cable.....mm

LC



IP2

LCT



IC

Only internal mounting
Cable L.....mm

LC



LM max

L0

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

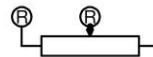
PVDF

Electrical output:

3-Wires potentiometer



2-wires potentiometer

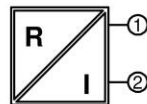


Calibrated potentiometer

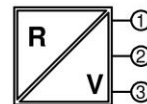
Empty tank =ohm

Full tank =ohm

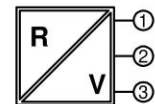
4 ÷ 20 mA output



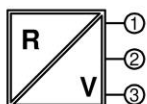
0.5 ÷ 4.5 V output



1 ÷ 5 V output



0 ÷ 5 V output



0 ÷ 10 V output

