


## GENERAL CHARACTERISTICS

The principle of operation is of potentiometric type, based on the gradual shutdown of a chain of resistors and reed contacts, placed inside the guiding rod, by a magnetic float. The only moving element is the float that moves, for buoyancy, along the measuring rod. This ensures a high degree of reliability.

- **Brass – Spansil**
- Measuring resolution 5 – 10 – 20 mm.
- Potentiometric signal output (**LC**).
- 4-20mA analog output (**LCT**).
- 0-5 / 0-10V analog output (**LCTV**).
- (0)4-20mA analog output with digital display (**LCO**).
- Up to 6m length.
- Maximum working pressure 20 Bar
- Operating ambient temperature -30/+55°C UR 90%.
- Standard working temperature up to 105°C. Executions up to 120°C on request.
- Minimum degree of protection IP65.
- Built-in temperature sensors, on request. PT – PTC – NTC.
- ATEX  Executions (See Linear ATEX E – Linear ATEX I series)



## FLOATS

Tab.1

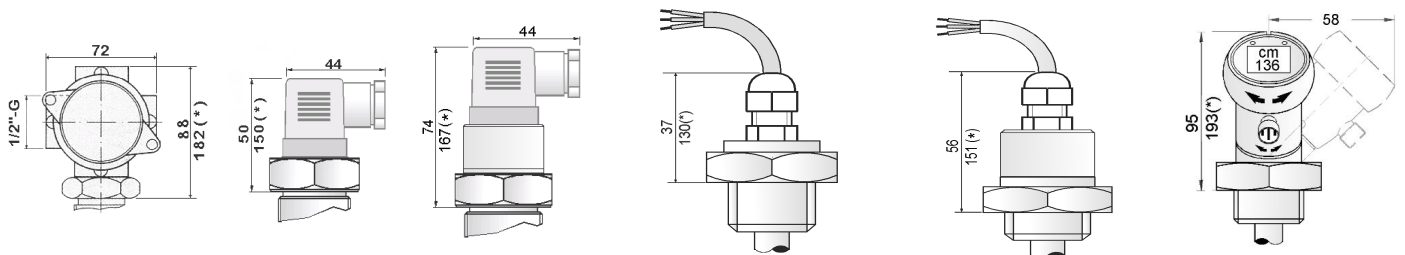


	Spansil – Butadiene - Acrylonitrile Copolymer			
<b>Material</b>	Spansil – Butadiene - Acrylonitrile Copolymer			
<b>Specific gravity</b>	0,4	0,4	0,35	0,45
<b>Measuring resolution - mm</b>	5 - 10	5 - 10	5 – 10 – 20	5 – 10 – 20
<b>Max. bar</b>	20	20	20	20
<b>Max. °C - Class</b>	L = 105°C			
<b>On request</b>	M = 120°C			

## ELECTRICAL OUTPUT

Tab.2

W1	S1	S1	P1 - P2	P1 - P2	O1
IP65 Housing	DIN 43650 IP65 Plug	DIN 43650 IP65 Plug	P1 Brass cable-gland IP68 P2 Polyamide cable-gland IP67	P1 Brass cable-gland IP68 P2 Polyamide cable-gland IP67	OMNI electric head



LC – LCT - LCTV	LC	LCT - LCTV	LC	LCT - LCTV	LCO
With heatsink – see dimension (*)					
LCT – LCTV – LCO = Temperature class M					

We reserve the right to change the data without notice

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## PROCESS CONNECTIONS

Tab.3

LC type P1-P2 output = Installation from inside		Float type	LC - LCT - LCTV - LCO type = Installation from outside						
10 3/8"	15 1/2"		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	FOHX Flange	DN65 Flange
All type of floats All type of thread		B28	G-C-N	G-C-N	-	-	-	•	-
		B20	-	G	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

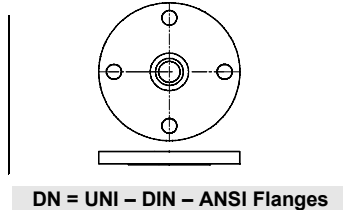
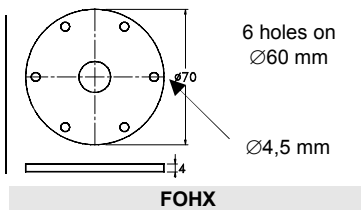
### Available materials

O	S
Brass	AISI-316 On request

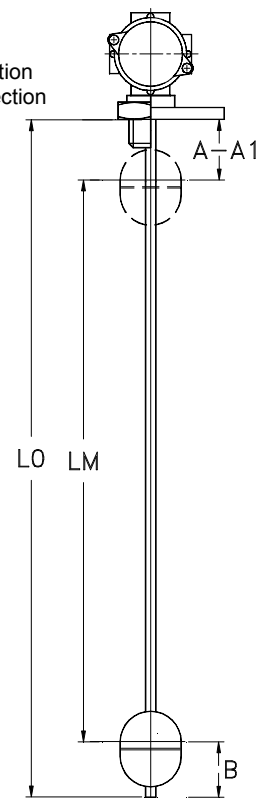
### DN = Available materials

C	S
Steel	AISI-316 On request

### FLANGES Dimensions in mm.

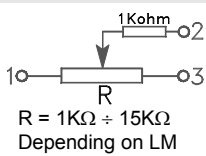


A Flanged connection  
A1 Threaded connection

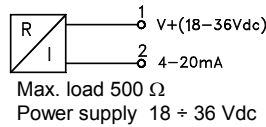


## WIRING

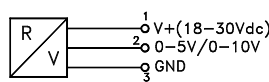
### POTENTIOMETRIC OUTPUT



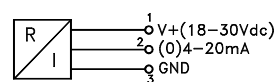
### 4-20 mA OUTPUT



### 0-5 / 0-10 V OUTPUT



### 4-20 mA OUTPUT WITH DIGITAL DISPLAY



LC

LCT

LCTV

LCO

## 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.

	B28	B20	B44	B45
A	15	10	25	25
A1	30	25	45	40
B	20	15	30	30

Damping tube On request	-	- L Aluminium	- O Brass
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## OPTION - Built-in temperature sensor

Only for LC type = On request, it is possible to install a temperature sensor located at the bottom of the rod inside the instrument.

PT100 - PT1000	PTC	NTC
EN 60751 - IEC 751	Resistance at 25°C ≤ 500 Ω	Resistance at 25°C 2-5-10-50-100 KΩ
Class B - (Class A on request)	Temperature 60°C ÷ 120°C	Precision ± 5% / ± 3% (on request)

## NOMENCLATURE

LC	B45	10	1300 / 1380	O	- L	25	G	O	W1	L	1,5 M	
•												Type: LC - LCT - LCTV - LCO
	•											Tab.1 Float
		•										Tab.1 Measuring resolution (mm).
			•									Tab.4 Measuring length LM / Total length L0 (mm).
				•								Tab.3 Rod material.
					•							Tab.4 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 (P1 - P2) 1,5m / 3m, other lengths on request.