CONTINUOUS LEVEL METER BRASS/S.STEEL TYPE LINEAR

Rev.02/2020

GENERAL CHARACTERISTICS BRASS TYPE

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.

STANDARD FEATURES

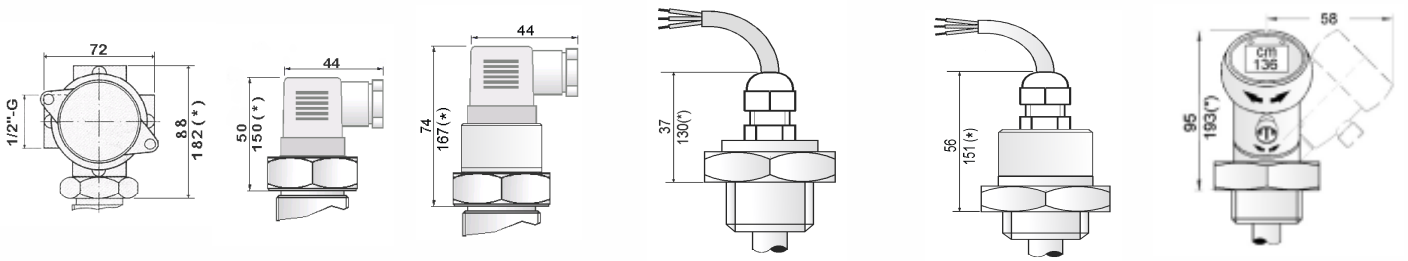
Measuring resolution 5 – 10 – 20 mm.
- Potentiometric signal output (LC).
- 4-20mA analog output (LCT).
- 0-5 / 0-10V analog output (LCTV).
- (0)4-20mA analog output with digital display (LCO).
- Up to 6m length.
- Maximum working pressure 20 Bar
- Operating ambient temperature -30/+55°C UR 90%.
- Standard 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

	B28 Ø20x28	B20 Ø30x20	B45 Ø30x45	B44 Ø44x50
Material	Spansil – Butadiene - Acrylonitrile Copolymer			
Specific gravity	0,4	0,4	0,35	0,45
Measuring resolution - mm	5 - 10	5 - 10	5 – 10 – 20	5 – 10 – 20
Max pressure - Bar	20	20	20	20
Max temperature - Class	**L** = 105°C			
On request	**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**

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CONTINUOUS LEVEL METER BRASS/S.STEEL TYPE LINEAR

Rev.02/2020

PROCESS CONNECTIONS Tab.3

LC type P1–P2 output = Installation from inside		Tipo Gallegg.	LC – LCT – LCTV – LCO type = Installation from outside						
10	15		20	25	32	40	50	FOHX	DN65
3/8"	½"		¾"	1"	1-1/4"	1-1/2"	2"	Flange	Flange
All type of floats All type of threads		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

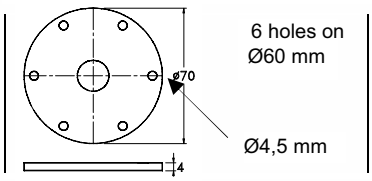
Available materials

O	S
Brass	AISI-316 On request

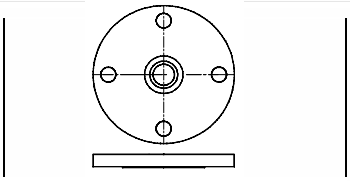
DN = Available materials

C	S
Steel	AISI-316 On request

FLANGES Dimensions in mm.

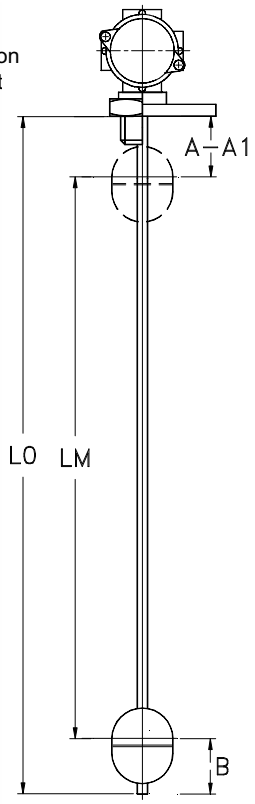


FOHX

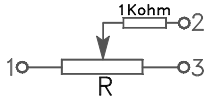
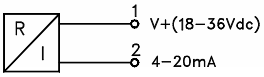
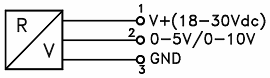
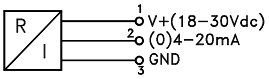


DN = UNI – DIN – ANSI Flanges

A Flanged connection
A1 Threaded connect



WIRING

POTENTIOMETRIC OUTPUT	4-20 mA OUTPUT	0-5 / 0-10 V OUTPUT	4-20 mA OUTPUT WITH DIGITAL DISPLAY
			
R = 1K& ÷ 15K& Depending on LM	Max load 500 Ω Power supply 18 ÷ 36 Vdc		
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	O
		Aluminium	Brass

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 @ 25°C ≤ 500 Ω	Resistance @ 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

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CONTINUOUS LEVEL METER BRASS/S.STEEL TYPE LINEAR

Rev.02/2020

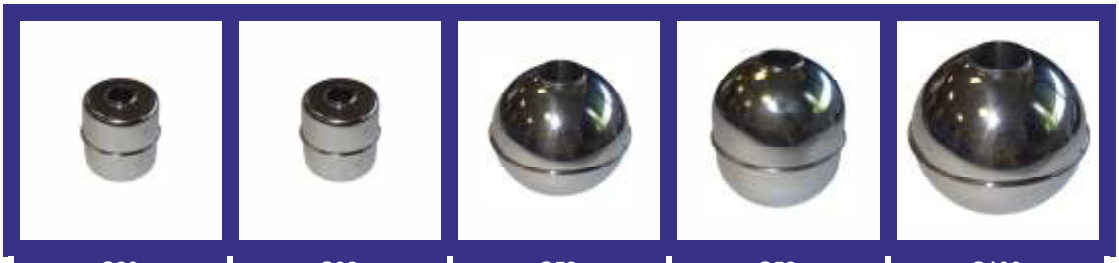
GENERAL CHARACTERISTICS STAINLESS STEEL TYPE

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.

STANDARD FEATURES

- Stainless steel – AISI 316
- 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 50 Bar
- Operating ambient temperature -30/+55°C UR 90%.
- Standard working temperature up to 105°C.
  Executions up to 150°C on request.
- Minimum degree of protection IP65.
- Built-in temperature sensors, on request. PT – PTC – NTC.
- ATEX constructions (See Linear ATEX E – Linear ATEX I series)

FLOATS Tab.1

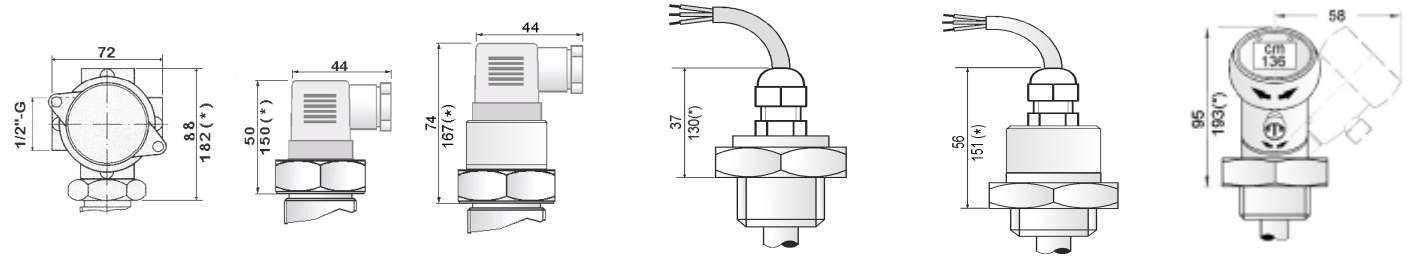


S29 Ø30x32	S32 Ø30x32	S52 Ø52 (S)	S52 Ø52x68	S100 Ø100

Material	Stainless steel – AISI 316				
Specific gravity	0,75	0,55	0,7	0,65	0,6
Measuring resolution - mm	5	5	5	10 – 20	10 – 20
Max – Bar	30	10	50	40	15
Max °C – Class	**L** = 105°C				
On request	**R** = 150°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 R**			

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CONTINUOUS LEVEL METER BRASS/S.STEEL TYPE LINEAR

Rev.02/2020

PROCESS CONNECTIONS Tab.3

TLC type P1–P2 output = Installation from inside		Float type	Type LC – LCT – LCTV – LCO = Installation from outside						
10	15		25	32	40	50	FSHX	DN65	DN125
3/8"	½"		1"	1-1/4"	1-1/2"	2"	Flange	Flange	Flange
All type of floats All type of thread		S29	G	G-C-N	G-C-N	-	●	-	-
		S32	G	G-C-N	G-C-N	-	●	-	-
		S52S	-	-	-	G-C-N	-	●	-
		S52	-	-	-	G-C-N	-	●	-
		S100	-	-	-	-	-		●

Male thread

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

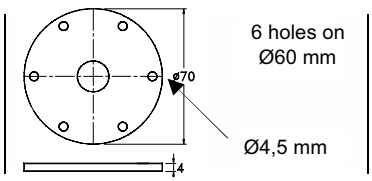
Available material

S
AISI-316

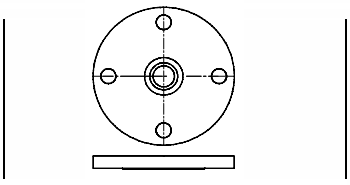
DN = Available materials

S	C
AISI-316	Steel on request

FLANGES Dimensions in mm.

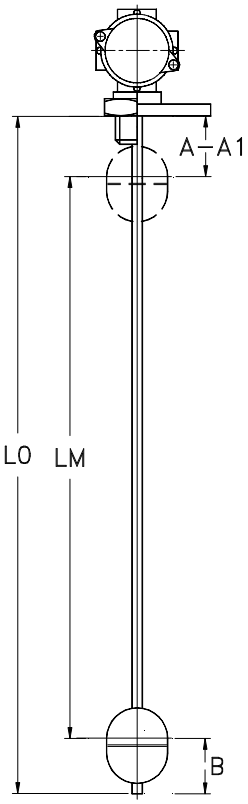


FSHX

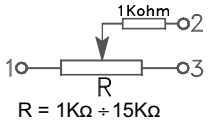
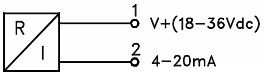
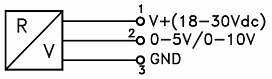
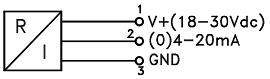


DN = UNI – DIN – ANSI Flanges

A Flanged connection
A1 Threaded connectio



WIRING

POTENTIOMETRIC OUTPUT	OUTPUT 4-20 mA	OUTPUT 0-5 / 0-10 V	4-20 mA OUTPUT WITH DIGITAL DISPLAY
			
R = 1KΩ ÷ 15KΩ Depending on LM	Max load 500 Ω Power supply 18 ÷ 36 Vdc		
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

	S29	S32	S52 (S)	S52	S100
A	15	15	25	35	50
A1	35	35	45	55	-
B	25	25	30	40	60

Damping tube on demand	—	S	V
		AISI-316	PVC

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 @ 25°C ≤ 500 Ω	Resistance @ 25°C 2-5-10-50-100 KΩ
Class B – A (on demand)	Temperature 60°C ÷ 150°C	Precision ± 5% / ± 3% (on demand)

NOMENCLATURE

LC	S52	10	1300 / 1400	S	- S	50	G	S	W1	L	1,5 M		
●													Tipo: **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	Proces 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.

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