

## GENERAL FEATURES

**Magnetostrictive** continuous level transmitters base their operation on the physical principle called Wiedemann effect and allow a continuous and precise measurement of liquid levels. The electronic unit sends a pulse to a waveguide contained in the measuring rod; the magnetic float intercepts the pulse generating an echo that is detected by the same electronic unit.

The elapsing time between the emission of the pulse and its recognition is directly proportional to the position of the float, and then to the value of the level to be measured.

### • PVC – PP – PVDF

- 1 analog output, current or voltage.
- 2 analog outputs, current and voltage.
- 2 factory programmable PNP digital outputs.
- RS485 serial output, Valco protocol.
- Programming via dedicated handheld computer VSP.130, on request.
- Up to 2, 9 m length.
- Working pressure up to 6 bar depending on the used float.
- Operating ambient temperature -30 / +70 °C, RH 90%.
- Working temperature up to 130 °C
- Minimum degree of protection IP67.



See MULTISIGNAL

## TECHNICAL DATA

Tab.1

Power supply	18 ÷ 30 Vcc
Power consumption	< 100 mA
Signal output resolution	< 1 mm
Accuracy	≤ 1 mm
Room temperature	-30 / +70°C
Process temperature	See floats - tab. 2 130°C with heat sink
Measuring length L0	2, 9 m - max. 2, 8 m - max. - 130°C application
Electrical connection	<b>S5</b> Conec M12 x 1, 8 poles
Protection class	IP67

Analog output	Current	• 4-20mA	<b>420</b>
	Voltage	0-5V	<b>005</b>
		0-10V	<b>010</b>
		0,5-4,5V	<b>545</b>
Current / Voltage	4-20mA/0-10V	<b>420/10</b>	
Communication output	RS485 - Valco protocol	<b>RS485</b>	
N.2 Digital output factory programmable	2 x PNP - not protected maximum load 100mA	<b>2PNP</b>	
Programming of instrument	Via dedicated handheld computer VSP.130 available on request		

- Standard, others signal output and indicated option on request

## FLOATS

Tab.2



**F49**  
Ø49x53

**P49**  
Ø49x53

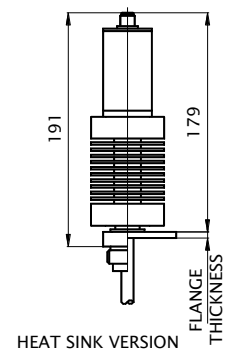
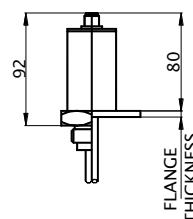
**V49**  
Ø49x53

Material	PVDF	PP - Polypropylene	PVC
Specific gravity	0,8	0,45	0,7
Max. pressure – Bar	6	3	6
Max. temperature – Class	<b>N</b> = 130°C	<b>D</b> = 90°C	<b>B</b> = 60°C

## ELECTRICAL OUTPUT

Tab.3

<b>S5</b>	<b>B</b>	60°C	Standard	Anodized aluminum
	<b>D</b>	90°C		
	<b>N</b>	130°C	With heat sink	



## PROCESS CONNECTIONS Tab.4

Type of float	Mounting from outside			
	50 2"	DN65 Flange	DN80 Flange	DN100 Flange
F49	G-C-N	•	•	•
P49	G-C-N	•	•	•
V49	G-C-N	•	•	•

### Male thread

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

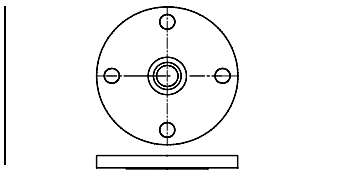
### Available materials

F	P	V
PVDF	PP	PVC

### DN = Available materials

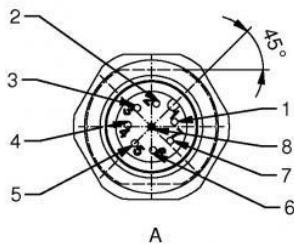
V	S
PVC	AISI-316 on request

### FLANGES Dimensions in mm.

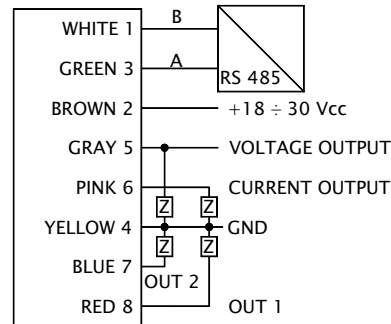


DN = UNI - DIN - ANSI Flanges

### WIRING



PIN	SIGNAL
1	RS485 - line B
2	Power supply +V
3	RS485 - line A
4	Ground
5	Analog output - voltage
6	Analog output - current
7	Digital output - PNP2
8	Digital output - PNP1

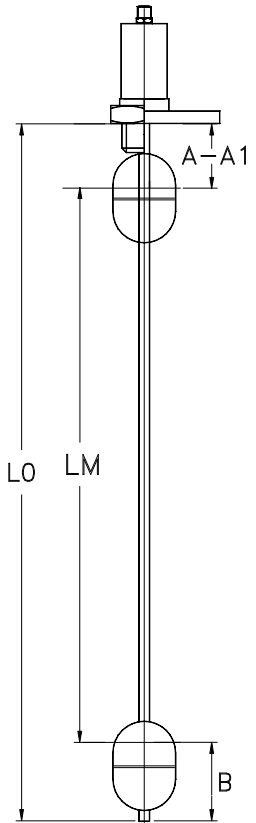


### DIMENSIONS mm. Tab.5

The dimension L0 - LM is measured from the stop of the fitting (A1) or flange (A) connection. Tolerance on dimension L0 - LM ± 3 mm.

	F49	P49	V49
A	60	60	60
A1	50	50	50
B	70	70	70

Damping tube On request	-	- V PVC	- S AISI-316
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### NOMENCLATURE

LCM	V49	1300 / 1400	V	- V	50	G	V	420	S5	B	
•											Type
	•										Tab.2 Float
		•									Tab.5 Measuring length LM / Total length L0 (mm)
			•								Tab.2-4 Rod material
				•							Tab.5 Damping tube (option)
					•						Tab.3 Process connection dimension
						•					Tab.4 Process connection thread
							•				Tab.4 Process connection material
								•			Tab.1 Analog output and options required
									•		Tab.3 Electrical output.
										•	Tab.2-3 Temperature class

<b>CABLE- PLUG</b>	Connection cable 2m. with connector M12x1	Accessory on request
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