

## GENERAL CHARACTERISTICS

The principle of operation of these instruments is based on the drive of one or more magnetic reed contacts, placed inside of the measuring rod, by one or more floats. The only moving element is the float that moves, for buoyancy, along the measuring rod, this guarantees extreme robustness and a limited need for maintenance.



- **PVC – PP – PVDF**
- Up to 6 switch points.
- Up to 5 m length depending on the used float.
- Working pressure up to 6 bars.
- Operating ambient temperature -30/+55°C UR 90%
- Standard working temperature up to 130°C.
- Minimum degree of protection IP65
- Built-in temperature sensors, on request.  
PT – PTC – NTC – Thermostat.
- ATEX Executions (See Multipoint E – Multipoint I series)

## FLOATS

Tab.1



Material	PVDF						PP - Polypropylene						PVC	
	F20 Ø20x25		F25 Ø25x25		F49 Ø49x53		P20 Ø20x25		P49 Ø49x53		V49 Ø49x53			
Specific gravity	0,7		0,65		0,8		0,5		0,45		0,7			
Contact type	3	7D	3	7D	4	7	3	7D	4	7	4	7		
Max N. of contacts	6	4	6	6	6	6	6	4	6	6	6	6		
Max. bar	6						3						6	
Max. °C - Class	N = 130°C						D = 90°C						B = 60°C	

## ELECTRICAL CONTACTS

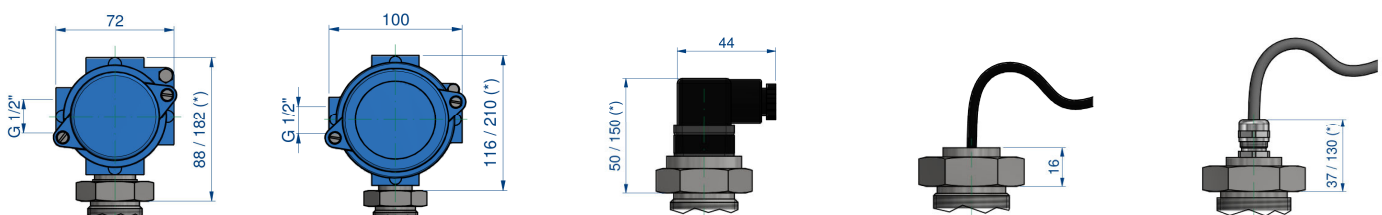
Tab.2

TYPE		POWER		VOLTAGE		CURRENT	
		VA	W	AC	DC	AC	DC
SPST	3	70	50	300	350	0,5	0,7
SPST	4	80	80	250	250	1,3	1,3
SPDT	7	60	60	230	230	1	1
SPDT	7D	20	20	150	150	0,5	0,5

## ELECTRICAL OUTPUT

Tab.3

W1	W2	S1 – S2	C1 – C2 – T1	P1 – P2
IP65 Housing	IP65 Housing	DIN IP65 Plug	Cable – Leads	Cable-gland
Max. 5 terminals	Max. 18 terminals	S1 DIN43650 29x29 S2 DIN43650 15x15	C1 Cable L = 1,5m C2 Cable L = 3,0m T1 Leads L = 1,5m	P1 Brass IP68 P2 Polyamide IP67



## PROCESS CONNECTIONS Tab.4

Installation from inside C– P–T output				Float type	Installation from outside – available thread and flanges						
06	08	10	15		20	25	32	50	F..HX	DN	
1/8"	1/4"	3/8"	1/2"		3/4"	1"	1 1/4"	2"	Flange	Flange	
All type of floats All type of thread				F20	G-C-N	G-C-N	-	-	•	-	
				F25	-	G-C-N	G-C-N	-	•	•	
				F49	-	-	-	G-C-N	-	•	•
				P20	G-C-N	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

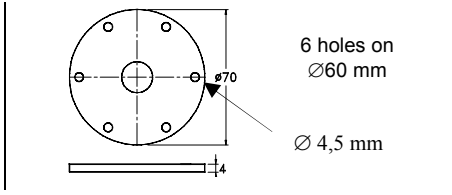
### Available materials

V	P	F	S
PVC	PP	PVDF	AISI-316
On request			

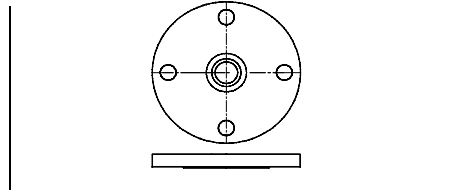
### DN - Available materials

V	S
PVC	AISI-316
On request	

### FLANGES dimensions in mm.



FVHX - FPHX - FFHX - FSHX



DN = UNI – DIN – ANSI Flanges

## WIRING Tab.5

I	Independent	Separately wired contacts	1	NO
C	Common	Common wired contacts	2	NC
S	Custom	Contacts wired on customer request	3	SPDT

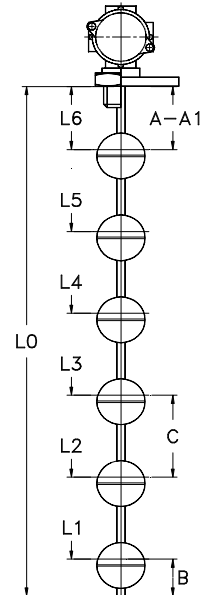
Contacts status in no level conditions

## SWITCH POINTS Tab.6

The switch points L1 ÷ L6 are measured from the stop of the fitting or flange connection.  
General tolerances on switch points ± 3 mm.

	Minimum distance in mm.											
	F20		F25		F49		P20		P49		V49	
A	20	20	40	20	40	40	20	40	40	40	40	40
A1	35	35	60	35	60	60	35	60	60	60	60	60
B	25	25	40	25	40	40	25	40	40	40	40	40
C	50	50	80	50	80	80	50	80	80	80	80	80
Contact type	3	7D	3	7D	4	7	3	7D	4	7	4	7
Max. N. of contacts	6	4	6	4	6	4	6	4	6	4	6	4

A Flanged connection  
A1 Threaded connection



## OPTION – Built-in temperature sensor

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

PT100 – PT1000	PTC	NTC	TRM (Thermostat)
EN 60751 – IEC 751	Resistance at 25°C ≤ 500 Ω	Resistance at 25°C 2-5-10-50-100 KΩ	40°C ÷ 120°C - 10°C step
Class B – (Class A on request)	Temperature 60°C ÷ 120°C	Precision ± 5% / ± 3% (on request)	Precision ± 5% Differential 10°C ± 4°C

## NOMENCLATURE

M2	V49	4	1300	V	50	G	V	W1	B	I22	L1+L6	
•												Number of contacts S1 / M2+M6
	•											Tab.1 Float
		•										Tab.2 Electrical contact
			•									- Total length = L0 in mm. (See drawing)
				•								Tab.4 Rod material
					•							Tab.4 Process connection dimension
						•						Tab.4 Process connection thread
							•					Tab.4 Process connection material
								•				Tab.3 Electrical output
									•			Tab.1 Temperature class
										•		Tab.5 Wiring and contact status
											•	Tab.6 Switch points (mm)



# MULTIPOINT VF



## Request form

### External mounting

### Internal mounting

**W1** **W2**

Electrical housing IP 65  
W1 max. 5 terminals 70mm  
W2 max. 18 terminals 100mm

**S1** **S2**

Plug DIN 43650  
29x29 or 15x15  
Max 3 terminals

**P1** **P2**

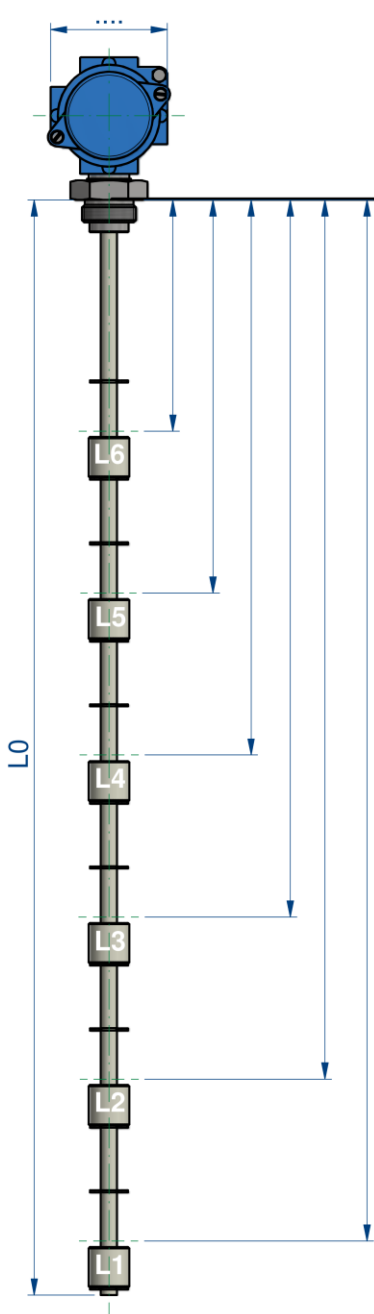
P1 Cable-gland IP68  
P2 Cable-gland IP67  
L cable.....mm

**C** **T**

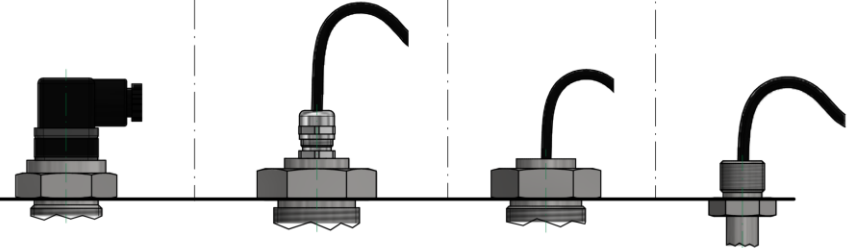
Cable or Leads  
L.....mm

**C**

Only internal mounting  
Cable L.....mm



Total length L0 (mm)



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

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

Material:  
 Brass  AISI-316  PVC  PP  PVDF

Wirings:

Independent contacts NO or NC (Max. 6 contacts)

Independent SPDT contacts (Max. 4 contacts)

Common wired NO or NC (Max. 6 contacts)

Common wired SPDT contacts (Max. 5 contacts)