

## General

The V-Notch FL510, produced by SIM, allow measuring the water flow in open channels. The water is been canalized through a specific calibrated v-notch. The measurement of the level (level variation) is done upstream the v-notch with great precision. The v-notch must be chosen considering that the maximum flow must be at  $\frac{3}{4}$  of the v-notch maximal height. All materials at water contact are produced in plastic material and/or stainless steel material in order to ensure longevity an measuring precision.

The level measuring, with an appropriate range, can be either an ultrasound sensor (LV630) or either a piezometric sensor (LV610). Since has this sensor an electrical output, it can be easily read by any data acquisition system produced by SIM:

- A. MINILOG data acquisition system
- B. NATUN data acquisition system
- C. DATAVIEW read out unit

## Applications

Flow measurement in channels, rivers etc.

**Open channels flow monitoring**

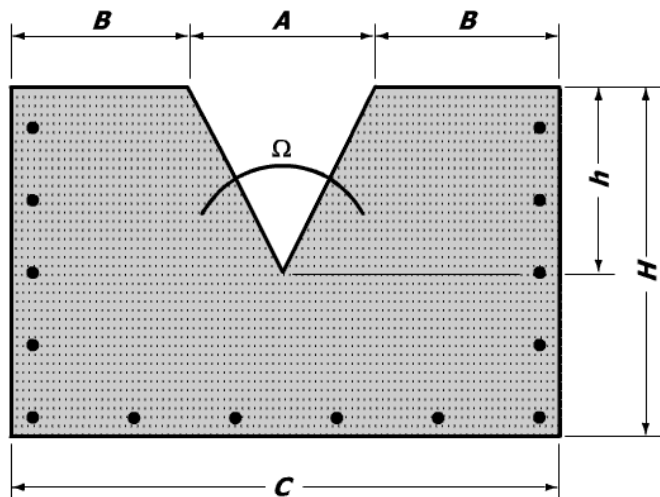
**Stainless steel**

**Barometric pressure compensated**

**Reliability for long term monitoring**



**SIM**  
Strumenti e sistemi  
per la geotecnica  
per il controllo  
di strutture e la  
salvaguardia  
dell'ambiente



Model	Flow (l/s)	A	B	C	H	h	Ω	Th.	Weight (Kg)
FL510 - 10	10	125	63	250	250	150	45	4	1.5
FL510 - 20	20	202	74	350	250	175	60	4	2.0
FL510 - 50	50	300	50	400	300	200	*	4	1.8

\* Rectangular

## Technical features

### Sensor

Sensor type	Piezoelectric
Supply	8 ÷ 28Vcc
Output	4-20mA
Range	0.1 bar
Overload	150% FS
Linearity	0.25% FS
Operating temperature	-25 ÷ +100 °C
Protection	IP68
Dimensions	Ø 22 x 120mm
Weight	0.250 Kg

Sensor type	Ultrasound
Supply	18-30 Vcc
Output	4-20 mA
Range	60-300 mm
Linearity	0.5% FS
Consumption	100 mA
Operating temperature	-25 ÷ +100 °C
Dimensions	25 x 50 x 101 mm
Weight	0.680 kg

### Accessories & spare parts

FL510 - AX - MWU1	Mounting bracket for ultrasound sensor
FL510 - AX - MWP1	Mounting bracket for piezoelectric sensor

FL510\_EN ED01/07



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