

General

The electric pressure cell PR310 was designed to measure the ground total pressures in order to evaluate the interaction between the ground and the structures above.

The instruments consist of a membrane uniformly loaded, which works on the first part of its elasticity curve.

The pressure cell is produced in several versions in order to allow versatility to every possible application and montage:

- With hydraulic tube allowing loading the cell, with pressure sensor directly mounted either to the cell or to the tube;
- Without hydraulic tube, with pressure sensor directly mounted to the cell either horizontally or vertically.

Upon request, SIM can also supply a piston in order to have a better contact between the cell and the ground.

Great attention was made to the mechanical parts during design and production, allowing the membrane to have high accuracy and the instrument to be robust.

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

Pressure measurement in masonry, foundations, rocks, ground, structures in concrete etc.

Load up to 100 bar

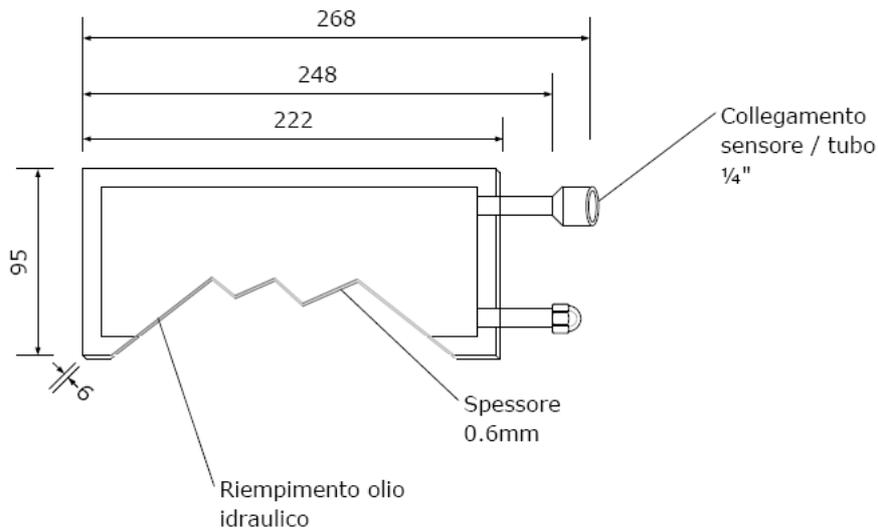
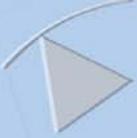
Stainless steel

Waterproof

Robust



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Technical features

Model	PR310
Range	1 ÷ 100 bar
Supply	5, 12 ÷ 18 Vcc
Output	60 mV, 4-20 mA
Linearity	0.25% FS
Repeatability	0.01% FS
Operating temperature	-20 ÷ +70 °C
Protection	IP68
Material	Stainless steel
Dimensions	95 x 230 x 6 mm
Weight	0.600 Kg.

Accessories & spare parts

PR310 - AX - TB01	Injection tube
PR310 - AX - MWS1	Soldering winglets
PR310 - AX - ADTF	"T" adapter
PR310 - AX - ADMF	Male fast connector
PR310 - AX - ADFE	Female fast connector
PR310 - AX - MWPS	Piston

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