



To control the stability of the ground and protect works that may be affected, it is essential to assess the level of groundwater and the pore pressure in the soil. This data can be provided by using:

-a PVC tube made up of multiple blind and micro slotted pipes assembled inside a borehole to make up an **open tube piezometer**. The filters and diameters of these pipes can vary according to the type of application;

- a **Casagrande cell piezometer is** generally used to measure the level of groundwater or the pore pressure in low permeability areas or rocks. The Casagrande cell is made in polyethylene and the tip can be threaded to fit two 1/2 " pipes or one measuring 1"  $1/2 + \frac{1}{2}$ ".



quality and the physical-chemical characteristics of the PVC used;

- dielectric properties: the pipes are made with synthetic materials and are not affected by underground stray currents;

- resistance to corrosion: total protection against corrosion caused by groundwater whose chemical composition is often very aggressive;

- hygiene: the casing is made in compliance with hygiene and health specifications established by the Ministry of Health for supply of drinking water.

Casing technical features:

lifespan: the pipes are long-lasting thanks to their high

| PVC PHYSICAL MECHANICAL FEATU |                               |                                  |  |  |  |  |
|-------------------------------|-------------------------------|----------------------------------|--|--|--|--|
| 1,4                           | g/m3                          |                                  |  |  |  |  |
| 338                           | kg/cm <sup>2</sup>            | ASTM method                      |  |  |  |  |
| 435                           | kg/cm <sup>2</sup>            | ASTM method                      |  |  |  |  |
| 8%                            |                               | ASTM method                      |  |  |  |  |
| 555                           | kg/cm <sup>2</sup>            | DIN 53455                        |  |  |  |  |
| 28                            | kg/cm <sup>2</sup>            | DIN 53457                        |  |  |  |  |
| no break down                 |                               | DIN 53453                        |  |  |  |  |
|                               | 338<br>435<br>8%<br>555<br>28 | 338  kg/cm²    435  kg/cm²    8% |  |  |  |  |

| DIMENSIO          |                  |                   |              |                                |             |  |
|-------------------|------------------|-------------------|--------------|--------------------------------|-------------|--|
| Outer diameter mm | Inches           | Inner diameter mm | Thickness mm | Type of threading and<br>pitch | Pipe length |  |
| 21                | 1/2              | 15                | 3            | M.M. gas                       | 3           |  |
| 33,5              | 1                | 27                | 3,3          | M.M. gas                       | 3           |  |
| 48                | 1 <sup>1/2</sup> | 40                | 4            | M.M. gas                       | 3           |  |
| 60                | 2                | 52,6              | 3,7          | M.M. gas                       | 3           |  |
| 88                | 3                | 78,8              | 4,6          | M.M. gas                       | 3           |  |
| 114               | 4                | 103               | 5,5          | M.F. trap.                     | 3           |  |



product compliant with European directives

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