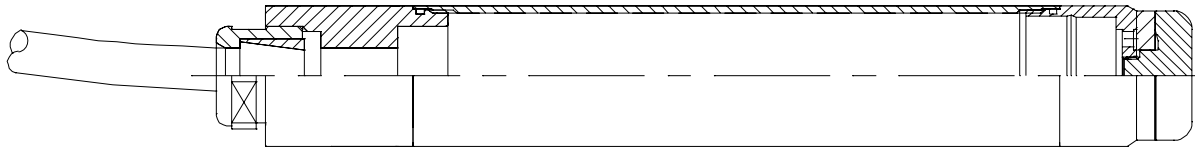


Profound IS – Geotechnical Monitoring System

IS-absolute pressure sensor



IS-pressure sensor

This IS-sensor is not just a pressure sensor: it is equipped with a 24-bit AD converter, micro-processor, clock, network controller and memory chip. Without having to apply difficult conversion factors, this Intelligent Sensor immediately displays the measured values in the correct unit.

If so desired, further data processing (like minimum, maximum and average value), can also take place in the sensor as well.

The sensor has also been equipped with a temperature gauge that measures the temperature at the top of the sensor.

In combination with the battery holder the sensor can be used either stand-alone or inter-connected with other sensors in a fully digital network.

With a special pressure adapter the sensor can be pushed into the ground for pore pressure measurements into the soil (however, in that case sensor cannot easily be retrieved).

Technical specifications

| | | |
|------------------------------------|-------------------------------|----------------------|
| Pressure range | 0...1.6 bar (absolute) | 0...4 bar (absolute) |
| Burst pressure | 10 bar | 16 bar |
| Pressure hysteresis (0 → Pmax → 0) | 0.1% | |
| Linearity error | typical 0.15 %, ≤ 0.35 % | |
| Operating temperature | -20 °C to 60 °C | |
| Temperature accuracy | ± 0.5 °C | |
| Electrostatic discharge | 2500 V | |
| Memory | ≈ 3500 measurements | |
| Current consumption | ≤ 30 mA with 15 V (operating) | |
| Protection | IP 68 | |
| Material | Stainless steel 304 | |
| Weight sensor | 244 gram | |
| Dimensions sensor | Ø 22.8 mm, length 148.8 mm | |
| Standard cable length | 10 m | |

Accessories

| | |
|----------------|---|
| Adapter | |
| Battery holder | 1 X D-size Lithium (operating time ≈ 8 months) 1 X D-size Alkaline (operating time ≈ 4 months) |



P.O. Box 469
2740 AL Waddinxveen
The Netherlands

Tel. + 31 182 - 640 964
info@profound.nl
www.profound.nl