# SETTLEMENT GAUGE 05.150B NIVOLIC SG



#### **GENERAL DESCRIPTION**

The NIVOLIC SG is a high-precision liquid level system designed to measure relative settlement in a multipoint system. It consists of a series of chambers connected together by a liquid line. In each chamber, a weight is suspended to a vibrating wire transducer.

Changes in elevation of the water level in the chamber modify the buoyancy force acting on the weight, thus modifying the resonant frequency of the vibrating wire. In the multipoint system, one of the chambers is the reference for the calculation of relative movements of all the other chambers. A thermistor is integrated in the gauge, enabling measure of temperature.



## **APPLICATIONS**

To measure differential settlement from:

- Dam foundations
- Deflection of bridges
- Building columns
- Floor slabs

#### **FEATURES**

- Long-term reliability
- Frequency signal easy to process and transmit over long distances
- High accuracy and resolution

# **OPTIONAL ACCESSORIES**

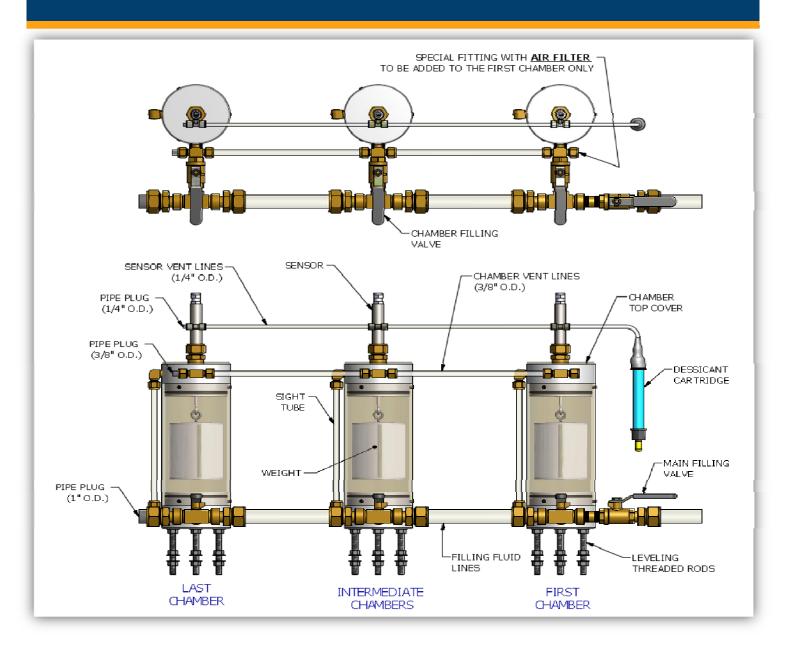
Support brackets

### **ORDERING INFORMATION**

- Range
- Cable and tube lengths
- Number of chambers







# **SPECIFICATIONS**

Range	100, 150, 300, 450, 600 mm
Accuracy*	±0.1% F.S. (each sensor is calibrated individually)
Resolution	- Vibrating wire: 0.02% F.S. (min.) - Temperature: 0.1°C
Fluid type	Water (optional antifreeze solution)
Cables	- IRC-41A: 2 twisted shielded pairs, 22 AWG, with drain wire, PVC jacket, 6.4 mm OD
	- IRC-41AP: Identical to IRC-41A except that jacket is made of polyethylene

\* Achieved with polynomial regression

Roctest Ltd. • 665 Pine Avenue, Saint-Lambert, QC, J4P 2P4 CANADA • Tel. 1-450-465-1113 • Fax 1-450-465-1938 • info@roctest.com • www.roctest-group.com Telemac SAS • 10, avenue Eiffel, 77220 Gretz-Armainvilliers, FRANCE • Tel. +33-1-64-06-40-80 • Fax +33-1-64-06-40-26 • info@telemac.fr • www.roctest-group.com Smartec SA • Via Pobiette 11, CH-6928 Manno, SWITZERLAND • Tel. +41 91 610 1800 • Fax +41 91 610 1801 • smartec@smartec.ch • www.roctest-group.com

