



## VW Settlement Gauge Model 5130 –RT-SSG

### FEATURES

- **Easy to read**
- **Measures a large settlement range**
- **Robust design for long-term monitoring applications**
- **Manufactured with corrosion-resistant materials**
- **Frequency signal easy to process and transmit over long distances**

### APPLICATIONS

The **SSG** Soil Settlement Gauge is used for a wide range of applications including the monitoring of local settlement for the control of road embankments, dams, and other earth works, the measuring of settlement or heave of building foundations, oil tanks, piers, and other structures, and the control of mining induced subsidence. It provides an easy-to-read, high-resolution means of measuring differential settlement.

ROCTEST



SSG Soil Settlement Gauge

### Description

The **Roctest Model 5139-RT-SSG** consists of an all stainless-steel vibrating wire pressure transducer housed in a corrosion-resistant stainless steel body. The housing can be attached to a base plate and connected to a reference station by a twin tubing filled with water (or anti-freeze solution) and fitted with stainless steel connectors. The reference station consists of a sealed liquid-filled reservoir open to atmospheric pressure and located at a known elevation. The settlement or heave is measured relatively to the elevation of the reservoir. The twin tubing can be flushed at regular intervals in order to remove air bubbles.

The **SSG** is robust and stable. It can be installed in boreholes, standpipes, soil or concrete.

The settlement gauge can also be attached to structures for monitoring settlement.

For ultimate accuracy the readings must be compensated regarding temperature and barometric pressure variations. The soil settlement gauge comes equipped with a thermistor located in the transducer so the temperature at the gauge location may be determined in order to compensate for thermal correction factor.

For best results, de-aerated water or antifreeze solution is recommended.

The soil settlement gauge may be read directly with an MB-6T (L) or PALMETO VW readout unit, or with a SENSLOG data acquisition system.

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## Specifications

Model:	SSG-100	SSG-200	SSG-300
<b>Maximum settlement range:</b>	2.54 m (100 in.)	5.08 m (200 in.)	7.62 m (300 in.)
<b>Maximum overpressure:</b>	1.5 x Range	1.5 x Range	1.5 x Range
<b>Accuracy of pressure transducer:</b>	± 0.5% F.S. (± 0.1% F.S. optional)		
<b>Thermal correction factor:</b>	± 1% F.S. / °C for SSG-100 and SSG-200 only		
<b>Resolution:</b>	0.025% F.S. (min.)		
<b>Reservoir:</b>	PVC		
<b>Transducer housing:</b>	Stainless steel		
<b>Tubing connector:</b>	Stainless steel		
<b>Fluid type:</b>	Water (optional antifreeze solution)		
<b>Thermistor:</b>			
Type:	3 kΩ (2 kΩ optional)		
Accuracy:	± 0.5% (0 to 70°C)		
<b>Cable:</b>	-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 polyethylene -CP-455-SS: 2 twisted shielded pairs, 20 AWG, central sis core, 11.5 mm OD -IRC-41A vented: 2 twisted shielded pairs, 22 AWG, 2 nylon vent tubes, PVC jacket, 8.9 mm OD -IRC-390: 2 twisted shielded pairs, 22 AWG, aluminium foil shield, stainless steel, braided armour, 10 mm OD		

### Accessories

- MB-6T(L) or PALMETO VW readout unit
- Splicing kit
- SENSLOG data acquisition system

### Ordering Information

**Please specify:**

- Model
- Cable length
- Twin tubing length
- Fluid type: water or antifreeze solution

Due to on-going design improvements and reviews, we reserve the right to amend product and specifications without prior notice



#### FOR FURTHER INFORMATION

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