



TEL 604 540 1100 info@rstinstruments.com www.rstinstruments.com

RST Instruments Ltd. 11545 Kingston St., Maple Ridge, BC V2X 0Z5 Canada





Vibrating Wire Liquid **Settlement System**

The RST Vibrating Wire Liquid Settlement System SSVW105 monitors settlement or heave in soils and different types of man-made structures such as embankments, and earth and rockfil dams. The system consists of a fluid body, reservoir, flexible tubing, and sensor and readout unit.

A vibrating wire pressure sensor is attached to a settlement plate located at the point to be monitored, and connected via two liquid-filled tubes extending laterally to a reservoir located on stable ground. The sensor measures the hydraulic head of liquid between the sensor and reservoir locations. The liquid filled tubes can also be flushed.





The optional portable D Aerator SS6000 Liquid Settlement System De-Airing Unit is designed for quick and simple field deployment and is housed in its own rugged carrying case. It quickly and efficiently returns a Liquid Settlement System to its original de-aired condition.

Once the instrument is installed on the job site, the reservoir is opened to the atmosphere and will begin to absorb gases which will eventually form gas bubbles in the hydraulic lines. These entrained gas bubbles will influence the transmission of line pressures and result in instrument reading inaccuracies.

To address this issue, the RST D Aerator SS6000 Liquid Settlement System De-Airing Unit has been designed to complete a full exchange and de-airing of the water/glycol mixture in an entire Liquid Settlement System in just a few hours, essentially returning the system to its original de-aired state.

D AERATOR SPECIFICATIONS		
DESCRIPTION	SPECIFICATION	
Power	12 VDC rechargeable battery. 100-240 VAC to 12 VDC charging system with extension cord.	
Dimensions	50 D x 40 W x 19 H cm (19.68 W x 15.74 D x 7.48 H in.)	
Weight	12 kg	

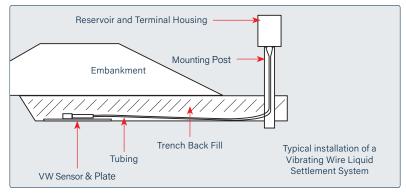
> APPLICATIONS			
Preload consolidation monitoring.			
Embankment construction control.			
Subsidence monitoring.			
Monitor settlement or heave.			
> FEATURES			
Tubes ship pre-filled with water/glycol.			
Pre-tested and calibrated.			
> BENEFITS			
√ Increase Safety			
✓ High Accuracy			
✓ High Reliability			
SPECIFICATIONS			
ITEM	SPECIFICATION		
Standard Ranges	7, 17, 35 m		
Resolution/ Sensitivity	0.05% FS		

curacy

Temperature

iracy	Cal
ability	2x1 Wa
NS	Cus
SPECIFICATION	De
7, 17, 35 m	Mix
7, 17, 55 111	OP
0.05% FS	D A
0.1% FS	De
0.170 1 0	Tub
-20°C to +80°C	NO
	spli

ORDERING	
ITEM	PART#
Vibrating Wire Liquid Settlement System 70 kpa	SSVW105
Vibrating Wire Liquid Settlement System 170 kpa	SSVW105-170
Vibrating Wire Liquid Settlement System 350 kpa	SSVW105-350
Settlement Plate with Cover	SSSP105P-C
Vented Reservoir - 1 Cell	SSSP105RV
Vented Reservoir - 3 Cells	SSSP105RV-3
Vented Reservoir - 5 Cells	SSSP105RV-5
Cable	EL380004
2x1/4" PE Tubing PVC Jacket Water/Glycol	SS003000
Custom enclosure for reservoir and optional data logger	SSP105RV- ENC
De-Aired 60/40 Glycol/Water Mixture - 1L bottle	SSSP106M
OPTIONAL	
D Aerator SS6000 - Liquid Settlement System De-airing Unit	SS6000
Tubing Splice Kit NOTE: Must de-air system after splicing.	PP0175



RST Instruments Ltd. reserves the right to change specifications without notice. SSB0005O



