



» piezometers

Strain Gauge and Vibrating Wire Pressure Transducers

**RST Instruments Ltd.**11545 Kingston St.,
Maple Ridge, BC
Canada V2X 0Z5Telephone: 604 540 1100
Facsimile: 604 540 1005
Toll Free: 1 800 665 5599

info@rstinstruments.com

www.rstinstruments.com



Vibrating Wire Transducer with 1/4" NPT Port

Strain Gauge and Vibrating Wire Pressure Transducers are used for uplift measurement in the foundation of concrete dams, overflow settlement measurement in earthfill and rockfill dams, and all other applications where a rugged and reliable pressure transducer is required for measuring fluid pressure in closed circuits.

The pressure transducer comes with a 1/4" NPT thread, or NPT port, for easy connection to pipes or other components of the hydraulic circuit to be monitored. The strain gauge transducers can be read dynamically if required by the application.

Highly reliable lightning protection is standard for the strain gauge transducer with 4-20 mA output and for the vibrating wire transducer.

strain gauge transducer specifications

ITEM	SPECIFICATION
Accuracy	±0.1% FS
Standard Pressure Ranges	0.035 through 21 MPa
Compensated Temp. Range	-10°C to 80°C
Field Rangeability	Yes
Pressure Output	0 to 5 VDC 4 to 20 mA, RS485
Temperature Output	Optional
Wetted Materials	Standard 316L SS Polyamide Fluorocarbon
Electrical Termination	Sealed Cable
Dimensions	109 mm X Ø21 mm
NPT Thread	1/4 inch (standard) other sizes available

vibrating wire transducer specifications

DESCRIPTION	SPECIFICATION
Over range	2 X F.S.
Resolution	0.025% F.S. minimum
Accuracy	0.1% F.S.
Operating Temperature	-20 to 80°C (-4 to 176°F)
Diaphragm Displacement	<0.001 cc at F.S.
Thermal Zero Shift	<0.05% F.S./°C
Materials	Hermetically sealed stainless steel housing
Thermistor Type	NTC 3K Ohms @ 25°C
Thermistor Interchangeability	±0.2°C
Thermistor Resolution	0.1°C

applications

Uplift pressure measurement in concrete dam foundations.

Retrofit of earthfill dam settlement systems.

Fluid pressure measurement in closed circuits.

features

1/4" NPT port or thread.

Small, rugged package withstands harsh environments.

Broad selection of pressure ranges offer a standard range for your specific requirements.

Unique cable seal system ensures water-tight integrity.

Instrumentation signal compatibility operates with RST dataloggers, and computer data acquisition systems.

G E O T E C H N I C A L . M I N I N G . E N V I R O N M E N T A L . S T R U C T U R A L



E180032C



specifications + ordering info

Strain Gauge and Vibrating Wire Transducers



ordering info

ITEM PART

STRAIN GAUGE TRANSDUCER 1/4" NPT THREAD

Voltage output 0 - 5 Volts	ELSGT600
4-20 mA output	ELSGT610
RS485 output - Sealed	ELSGT620

VIBRATING WIRE TRANSDUCER 1/4" NPT PORT

0.07 Mpa Vibrating Wire Transducer with 1/4" NPT Port	VW2180-0.07
0.175 Mpa Vibrating Wire Transducer with 1/4" NPT Port	VW2180-0.175
0.35 Mpa Vibrating Wire Transducer with 1/4" NPT Port	VW2180-0.35
0.7 Mpa Vibrating Wire Transducer with 1/4" NPT Port	VW2180-0.7
1.0 Mpa Vibrating Wire Transducer with 1/4" NPT Port	VW2180-1.0
2.0 Mpa Vibrating Wire Transducer with 1/4" NPT Port	VW2180-2.0
3.0 Mpa Vibrating Wire Transducer with 1/4" NPT Port	VW2180-3.0
5.0 Mpa Vibrating Wire Transducer with 1/4" NPT Port	VW2180-5.0
7.5 Mpa Vibrating Wire Transducer with 1/4" NPT Port	VW2180-7.5
10 Mpa Vibrating Wire Transducer with 1/4" NPT Port	VW2180-10
35 Mpa Vibrating Wire Transducer with 1/4" NPT Port	VW2180-35
75 Mpa Vibrating Wire Transducer with 1/4" NPT Port	VW2180-75

electrical cable specs

Material	Two twisted pairs cable with polyurethane jacket.
Part Number	EL380004

optional equipment

- Readout
- Data loggers
- Terminal stations

ordering info

- Cable length
- Pressure range
- Accessories



Strain Gauge Transducer with 1/4" NPT Thread

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