



! PRODUCT CATEGORY:
PIEZOMETERS + TRANSDUCERS

Strain Gauge and Vibrating Wire Pressure Transducers

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.

> 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.
- Unique cable seal system ensures water-tight integrity.
- Broad selection of pressure ranges offer a standard range for your specific requirements.
- Instrumentation signal compatibility operates with RST dataloggers, and computer data acquisition systems.

> BENEFITS

- ✓ Increase Safety
- ✓ Increase Productivity
- ✓ High Accuracy
- ✓ High Reliability

WORKS WITH

READY TO RUN

- pre-assembled
- pre-wired
- pre-tested
- pre-programmed

Vibrating Wire Transducer
with 1/4" NPT Port

Strain Gauge Transducer
with 1/4" NPT Thread



Monitor
with
Confidence

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

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



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SPECIFICATIONS + ORDERING

SPECIFICATIONS: STRAIN GAUGE TRANSDUCER

ITEM	SPECIFICATION
Accuracy	±0.1% FS
Standard Pressure Ranges	0.035 through 100 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 Ø25 mm
NPT Thread	1/4 inch male (standard) other sizes available

SPECIFICATIONS: VIBRATING WIRE TRANSDUCER

ITEM	SPECIFICATION
Over range	2 X F.S.
Resolution	0.025% F.S. minimum
Accuracy	0.1% F.S.
Standard Pressure Ranges	0.07 through 75 MPa
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
Dimensions	150 mm X 25 mm
NPT Thread	1/4 inch female (standard) other sizes available

ORDERING

ITEM	PART #
STRAIN GAUGE TRANSDUCER 1/4" NPT THREAD (0 - 3 MPa range)	
Voltage output 0 - 5 Volts - Sealed	ELSGT600
4-20 mA output - Sealed	ELSGT610
4-20 mA output - Vented	ELSGT610V
RS485 output - Sealed	ELSGT620
STRAIN GAUGE TRANSDUCER 1/4" NPT THREAD (>3 MPa range)	
Voltage output 0 - 5 Volts - Sealed	ELSGT601
4-20 mA output - Sealed	ELSGT611
RS485 output - Sealed	ELSGT621
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	
Two twisted pairs cable with polyurethane jacket.	EL380004
OPTIONAL READOUTS	
4-20 mA Transmitter Readout - IR420	ELIR420
Voltage Transducer Readout - IR5000	ELIR5000
Vibrating Wire Readout - VW2106	VW2106
ADDITIONAL ORDERING INFO	
Cable length required.	
Pressure range.	
Output type.	