







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 transducers come with either a 1/4" NPT thread or a 1/4" or 1/8" NPT port, for easy connection to pipes or other components of the hydraulic circuit to be monitored. Both transducers can be read dynamically if required by the application.

Highly reliable lightning protection is standard for the strain gauge transducer 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 data loggers, and computer data acquisition systems.

> BENEFITS

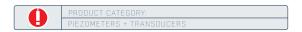
- ✓ Increase Safety
- ✓ Increase Productivity
- √ High Accuracy
- ✓ High Reliability

WORKS WITH
REAUS TO RUN

pre-assembled pre-vired pre-lested pre-programmed



Strain Gauge and Vibrating Wire Pressure Transducers



SPECIFICATIONS + ORDERING

SPECIFICATIONS: STRAIN GAUGE TRANSDUCER		
ITEM	SPECIFICATION	
Accuracy	±0.1% FS	
Standard Pressure Ranges	0.035 MPa through 103 MPa	
Compensated Temp. Range	-10°C to 80°C	
Field Rangeability	Yes	
Signal Output	4-20 mA 0-5 VDC 0-10 VDC 4-20 mA + RS485 0-5 VDC + 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 with a 1/4" or 1/8" NPT thread	

SPECIFICATIONS: VIBRATING WIRE TRANSDUCER		
ITEM	SPECIFICATION	
Over range	1.5 X F.S.	
Resolution	0.025% F.S. minimum	
Accuracy	0.1% F.S.	
Standard Pressure Ranges	0.07 through 20 MPa	
Operating Temperature	-20 to 80°C (-4 to 176°F)	
Diaphragm Displace- ment	<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 Interchange- ability	±0.2°C	
Thermistor Resolution	0.1°C	
Dimensions	150 mm X 25 mm	
NPT Thread	1/4 inch female with a 1/4" or 1/8" NPT thread	

ORDERING		
ITEM	PART #	
STRAIN GAUGE TRANSDUCER 1/4" NPT THREAD (0 - 3 MPa	range)	
4-20 mA output - Sealed	ELSGT610	
STRAIN GAUGE TRANSDUCER 1/4" NPT THREAD (>3 MPa ra	nge)	
4-20 mA output - Sealed	ELSGT611	
VIBRATING WIRE TRANSDUCER 1/4" OR 1/8" FEMALE NPT	PORT	
0.07 Mpa Vibrating Wire Transducer with 1/4" or 1/8" female NPT Port	VW2180-0.07-TEPC VW2180-0.07-SS	
0.17 Mpa Vibrating Wire Transducer with 1/4" or 1/8" female NPT Port	VW2180-0.17-TEPC VW2180-0.17-SS	
0.35 Mpa Vibrating Wire Transducer with 1/4" or 1/8" female NPT Port	VW2180-0.35-TEPC VW2180-0.35-SS	
0.7 Mpa Vibrating Wire Transducer with 1/4" or 1/8" female NPT Port	VW2180-0.7-TEPC VW2180-0.7-SS	
1.0 Mpa Vibrating Wire Transducer with 1/4" or 1/8" female NPT Port	VW2180-1.0-TEPC VW2180-1.0-SS	
2.0 Mpa Vibrating Wire Transducer with 1/4" or 1/8" female NPT Port	VW2180-2.0-TEPC VW2180-2.0-SS	
3.0 Mpa Vibrating Wire Transducer with 1/4" or 1/8" female NPT Port	VW2180-3.0-TEPC VW2180-3.0-SS	
5.0 Mpa Vibrating Wire Transducer with 1/4" or 1/8" female NPT Port	VW2180-5.0-TEPC VW2180-5.0-SS	
7.5 Mpa Vibrating Wire Transducer with 1/4" or 1/8" female NPT Port	VW2180-7.5-TEPC VW2180-7.5-SS	
10 Mpa Vibrating Wire Transducer with 1/4" or 1/8" female NPT Port	VW2180-10-TEPC VW2180-10-SS	
20 Mpa Vibrating Wire Transducer with 1/4" or 1/8" female NPT Port	VW2180-20-TEPC VW2180-20-SS	
Contact RST for larger pressure ranges if needed.		
ELECTRICAL CABLE		
Two twisted pairs cable with polyurethane jacket.	EL380004	
READOUT AND DATA LOGGER		
Vibrating Wire Readout - VW2106	VW2106	
5/10 Channel 4-20MA Transmitter Data Logger/Thermistor Data Logger	DT4205	
RSTAR Affinity Data Logger		
ADDITIONAL ORDERING INFO		
Cable length required.		
Pressure range.		
Output type.		