

DATAQ Voltage Output Pressure Transducers



- ✓ Measure Gauge Pressure from -14.5 to 10000 PSIG
- ✓ Measure Absolute Pressure from 15 to 60 PSIA
- ✓ Made with 316 stainless steel and high temperature auto-graded plastic
- ✓ 0.5 – 4.5V linear output
- ✓ Accuracy: 0.5% FS
- ✓ Works for oil, fuel, water or air pressure
- ✓ Mating connector and wire harness (3 ft pigtail) included
- ✓ IP65-66 Rated
- ✓ Select from 1/8-27 NPT or 1/4-18 NPT thread
- ✓ Customization available on ranges, gauge or absolute pressure, sealing material, process connection, and/or supply voltage

Voltage Output Pressure Transducers

Description

The DATAQ voltage output pressure sensor measures up to 10,000 PSI. It's ideal for monitoring oil, fuel, air and water pressure. Compatible with most standard pressure sensor applications, it also integrates seamlessly with data loggers for reliable data storage.

Features

- Measure Gauge Pressure from -14.5 to 10,000 PSIG
- Measure Absolute Pressure from 15 to 60 PSIA
- Made with 316 stainless steel and high temperature auto-graded plastic
- 0.5 – 4.5V linear output
- Accuracy: 0.5%
- Works for oil, fuel, water or air pressure
- Mating connector and wire harness (3 ft pigtail) included
- IP65-66 Rated, RoHS/RoHS3 compliant
- Select from 1/8-27 NPT thread (2000361) or 1/4-18 NPT thread (2000500)
- Customization available on ranges, gauge or absolute pressure, sealing material, process connection, thread size, and/or supply voltage
- Customized sealing material EPDM available for Brake Fluid applications (DOT3/DOT4)

Pressure Transducer Cable



3-Foot Pressure Transducer Cable Included

Part Number: 2000361-PIGTAIL

3-foot long wire harness (pigtail) with mating connector and seal for 2000361/500/600/700 family pressure sensors

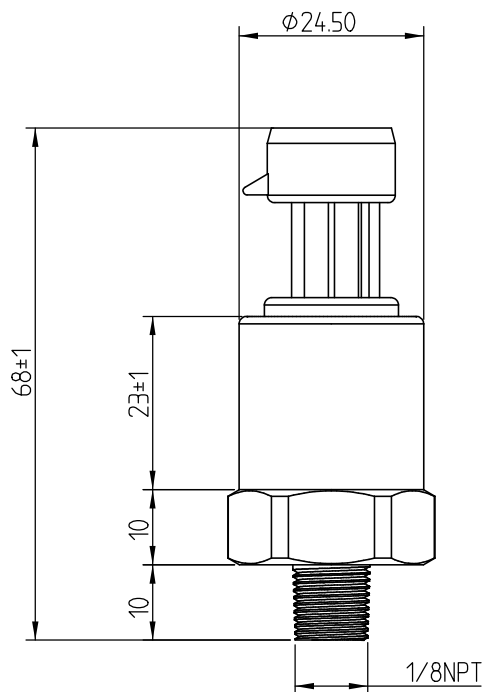
10-Foot Pressure Transducer Cable Sold Separately

Part Number: 2000361-PIGTAIL10

10-foot long wire harness (pigtail) with mating connector and seal for 2000361/500/600/700 family pressure sensors

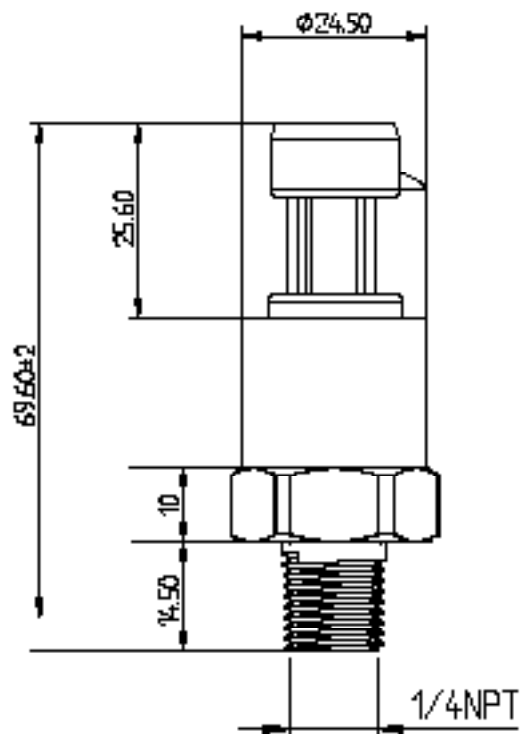
Voltage (3 Wire)	
Red	Supply V+
Black	Ground
Yellow or Green	0-4.5V Signal Output

Dimensional Drawing



1/8-27 NPT Thread

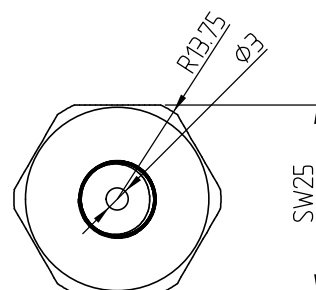
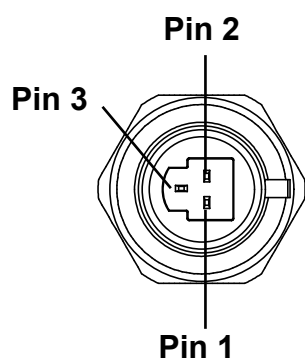
1/8-27 NPT thread available for -14.5 to 5000 PSI
1/4 NPT pipe fitting available for up to 2000 PSI



1/4-18 NPT Thread

1/4-18 NPT thread available for 1000 to 10000 PSI
Contact DATAQ for 1/4-18 NPT on all other ranges

Top Down Connector View



Voltage (3 Wire)

Pin 1:	Supply V+
Pin 2:	Ground
Pin 3:	0-4.5V Signal Output

Specifications

Voltage Pressure Transducers

Pressure Type:	Gauge pressure available for -14.5 to 10000 PSIG Absolute pressure available for 15 to 60 PSIA Contact DATAQ Sales for absolute pressure on all other ranges
Measurement Range:	-14.5 PSI to 10,000 PSI
Process Media:	Air, Water, Oil, Fuel For other applications, see Customization
Material:	316 stainless steel and high temperature auto-graded plastic
Type of Sensor:	Oil-filled diffused silicon piezoresistive
Thread:	1/8-27 NPT thread available for -14.5 to 5000 PSI 1/4-18 NPT pipe fitting available for up to 2000 PSI 1/4-18 NPT thread available for 1000 to 10000 PSI Contact DATAQ Sales for custom 1/4-18 NPT on all other ranges

Electrical

Output:	0.5V – 4.5V linear voltage output
Supply Voltage:	5V+/- 5%
Max Current:	0.05W
Protection Class:	Typical IP65-66, depending on electric connection

Accuracy & Performance

Accuracy:	±0.5%FS 15-25°C ±1%FS -20 to 70°C * Ranges lower than +5 PSI has 0.5-1% accuracy at room temperature
Burst Pressure:	For transducers of full range up to 1450 PSI, 4 times span For transducers of full range 1500 to 10000 PSI, 17400 PSI
Overload Pressure:	For transducers of full range up to 1450 PSI, 2.5 times span For transducers of full range 1500 to 10000 PSI, 14500 PSI
Long-term stability:	± 0.5%FS/year
Long Term Working Temperature:	-40°C to 80°C
Temperature Effect on Zero:	Typical: ±0.02%FS/°C Maximum: ±0.05%FS/°C
Temperature Effect on Sensitivity:	Typical: ±0.02%FS/°C Maximum: ±0.05%FS/°C
ADC Response Time:	≤1ms
Insulation Resistance:	>100mΩ 500VDC
Customize Process Connections:	G 1/4, M14x1.5, M12x1.5, 1/4-18NPT
Electromagnetism Compatibility:	EN61326-1:2013 EN61326-2-2:2013 The EMC Directive2014/30/EU

Housing

Housing Material:	Stainless Steel 304, Cu, Al
Sealing Material:	FKM For EPDM and other sealing types, see Customization
Wetted Material:	Stainless Steel 316L

Wiring

Wiring connector:	Water sealed quick-disconnect. Mating connector and wire harness (3 ft pigtail) included.
Wiring:	Red for +5V Supply Voltage Black for GND Yellow for OUT

Logger inaccuracy not included in these specifications.

Ordering Information

Description	Order No.	
	1/8-27 NPT Thread	1/4-18 NPT Thread
-14.5 to 15 PSIG Compound High Accuracy Pressure Transducer Measure gauge pressure from -14.5 to 15 PSIG, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-N1515H	N/A
-14.5 to 30 PSIG Compound High Accuracy Pressure Transducer Measure gauge pressure from -14.5 to 30 PSIG, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-N1530H	N/A
Negative, 0 to -14.5 PSIG High Accuracy Pressure Transducer Measure negative gauge pressure from 0 to -14.5 PSIG, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-N15H	N/A
0-15 PSIG High Accuracy Pressure Transducer Measure gauge pressure from 0-15 PSIG, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-15H	N/A
0-15 PSIA High Accuracy Pressure Transducer Measure absolute pressure from 0-15 PSIA, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000600-15H	2000700-15H
0-30 PSIG High Accuracy Pressure Transducer Measure gauge pressure from 0-30 PSIG, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-30H	N/A
0-30 PSIA High Accuracy Pressure Transducer Measure absolute pressure from 0-30 PSIA, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000600-30H	2000700-30H
0-50 PSIG High Accuracy Pressure Transducer Measure gauge pressure from 0-50 PSIG, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-50H	N/A
0-60 PSIG High Accuracy Pressure Transducer Measure gauge pressure from 0-60 PSIG, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-60H	N/A
0-60 PSIA High Accuracy Pressure Transducer Measure absolute pressure from 0-60 PSIA, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000600-60H	2000700-60H
0-100 PSIG High Accuracy Pressure Transducer Measure gauge pressure from 0-100 PSIG, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-100H	N/A
0-150 PSIG High Accuracy Pressure Transducer Measure gauge pressure from 0-150 PSIG, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-150H	N/A
0-200 PSIG High Accuracy Pressure Transducer Measure gauge pressure from 0-200 PSIG, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-200H	N/A
0-300 PSIG High Accuracy Pressure Transducer Measure gauge pressure from 0-300 PSIG, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-300H	N/A
0-500 PSIG High Accuracy Pressure Transducer Measure gauge pressure from 0-500 PSIG, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-500H	N/A
0-1000 PSIG High Accuracy Pressure Transducer Measure gauge pressure from 0-1000 PSIG, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-1000H	2000500-1000H
0-1500 PSIG High Accuracy Pressure Transducer Measure gauge pressure from 0-1500 PSI, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-1500H	2000500-1500H

Ordering Information

Description	Order No.	
	1/8-27 NPT Thread	1/4-18 NPT Thread
0-1600 PSIG High Accuracy Nitrous Bottle Pressure Transducers Measure nitrous bottle pressure from 0-1600 PSI, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included. 1/8-27 NPT Thread.	2000361-1600H	N/A
0-2000 PSIG High Accuracy Pressure Transducers Measure gauge pressure from 0-2000 PSI, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-2000H	2000500-2000H
0-3000 PSIG High Accuracy Pressure Transducers Measure gauge pressure from 0-3000 PSI, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-3000H	2000500-3000H
0-5000 PSIG High Accuracy Pressure Transducers Measure gauge pressure from 0-5000 PSI, 0.5V – 4.5V linear voltage output, mating connector with 3 ft pigtail cable included	2000361-5000H	2000500-5000H
0-10000 PSIG High Accuracy Pressure Transducers Measure gauge pressure from 0-10000 PSI, 0.5V – 4.5V linear voltage output, mating connector with 3 ft cable included. 1/4-18 NPT thread standard for 10000 PSI.	N/A	2000500-10000H
Customizable High Accuracy Pressure Transducers Customization available on ranges, gauge or absolute pressure, sealing material, process connection, and/or supply voltage	2000361-CH	
4-20mA Linear Output Pressure Transducers All ranges available for 4-20mA, Click here to view full selection of 4-20mA Pressure Transducers		
Accessories		
Description	Order No.	
Stainless Steel Reducer Hex Bushing To convert pressure transducer fitting from 1/8 NPT to 1/4 MNPT Max operating pressure: 2000 PSI	2000361-PIPEFITTING	
DC/DC Converter for Sensors Allows you to power 5V rating sensor with a battery. Input voltage: DC8-35V, (12V/24V changes to 5V); Output parameter: DC5V 3A, 15W MAX	101087-1	
AC/DC Adapter AC Adapter for Sensor Excitation.: AC input: 100V-240V. DC output: 5V 2A. Cable length: 2.95ft. DC plug connector size: 5.5x2.5mm. Includes screw terminal connector.	101099	
3-Foot Pressure Transducer Cable 3-foot long wire harness (pigtail) with mating connector and seal	2000361-PIGTAIL	
10-Foot Pressure Transducer Cable 10-foot long wire harness (pigtail) with mating connector and seal	2000361-PIGTAIL10	



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