

## DUXL01D



**Pressure Sensors: Measurement Type:**  
**Differential, Gage, Vacuum Gage; Signal**  
**Conditioning: Unamplified; Pressure Range:**  
**± 1.0 in H<sub>2</sub>O; Port Style: Barbed**

*Actual product appearance may vary.*

### Features

Low cost/Small size  
Uncompensated/High Sensitivity  
Gage and Differential Pressure  
Ranges  
Pressure Ranges 1 inch H<sub>2</sub>O  
through 30 inches H<sub>2</sub>O  
Operating Temperature Range -  
25 °C to 85 °C [-13 °F to 185 °F]

### Potential Applications

Handheld Instrumentation  
Airflow Controllers  
Medical Monitors  
Smart Microvalves And Switches  
Level Indicators

### Description

The SURSENSE™ line of ultra low pressure sensors is based upon a proprietary, patented technology designed to reduce all output offset or common mode errors. These sensors utilize a silicon, micromachined sensing element which features a unique stress concentration enhanced structure to provide a highly stable linear output that is proportional to applied pressure. Output offset errors due to changes in temperature, warm-up, long term stability and position sensitivity have all been significantly reduced when compared to conventional sensors. The DUXL Series sensors provide a ratiometric millivolt output and are housed in a low profile miniature ported package. These sensors are intended for those applications where customized external signal conditioning is required or available from other sources. The low profile outline is ideal for portable applications where small size is critical.

Product is patented by US patent 6023978.

Product Specifications	
Measurement Type	Vacuum Gage,Gage,Differential
Signal Conditioning	Unamplified
Pressure Range	± 1.0 in H <sub>2</sub> O
Maximum Overpressure	100 in H <sub>2</sub> O
Supply Voltage	4.5 Vdc typ., 8.0 Vdc max.
Compensated	Yes
Output Calibration	Yes
Termination	PCB
Port Style	Barbed
Package Style	Honeywell DI-DUXL
Typical Sensitivity	6 mV/in H <sub>2</sub> O
Full Scale Span	6 mV typ.
Null Offset	0 mV typ.
Null Shift over Temperature	100 $\mu$ V typ.

Span Shift Over Temperature	100 $\mu$ V typ.
Linearity, Hysteresis Error	$\pm$ 1 % Span
Operating Temperature Range	-25 °C to 85 °C [-13 °F to 185 °F]
Storage Temperature Range	-40 °C to 125 °C [-40 °F to 257 °F]
Media Compatibility	P1 port: DRY GASES ONLY: Media must be compatible with epoxy based adhesive. P2 port: Wetted materials; Media must be compatible with nylon housing, epoxy adhesive and silicon.
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers
Availability	Global
Series Name	DUXL