

## Installation Instructions for the SURSENSE® Ultra Low Pressure Sensors

ISSUE 2

PK 80164

### DUXL Series

#### **▲WARNING**

##### **PERSONAL INJURY**

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

#### **GENERAL INFORMATION**

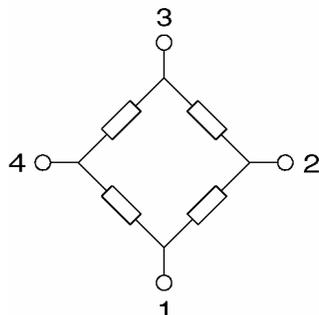
The DUXL Series sensors provide a ratiometric mV output and are housed in a low profile miniature ported package. These sensors are intended for applications where customized external signal conditioning is required or available from other sources. The low profile outline is ideal for portable applications where small size is critical.

Product is patented by US patent 6023978.

#### **SOLDERING/ASSEMBLY**

Limit soldering to 315 °C [600 °F] maximum, with duration of five seconds maximum. Leads must be adequately supported during any forming/shearing operation to ensure that the leads are not stressed inside the plastic case.

#### **EQUIVALENT CIRCUIT**



#### **PIN DESIGNATIONS**

1. -V Supply
2. +V Output
3. +V Supply
4. -V Output

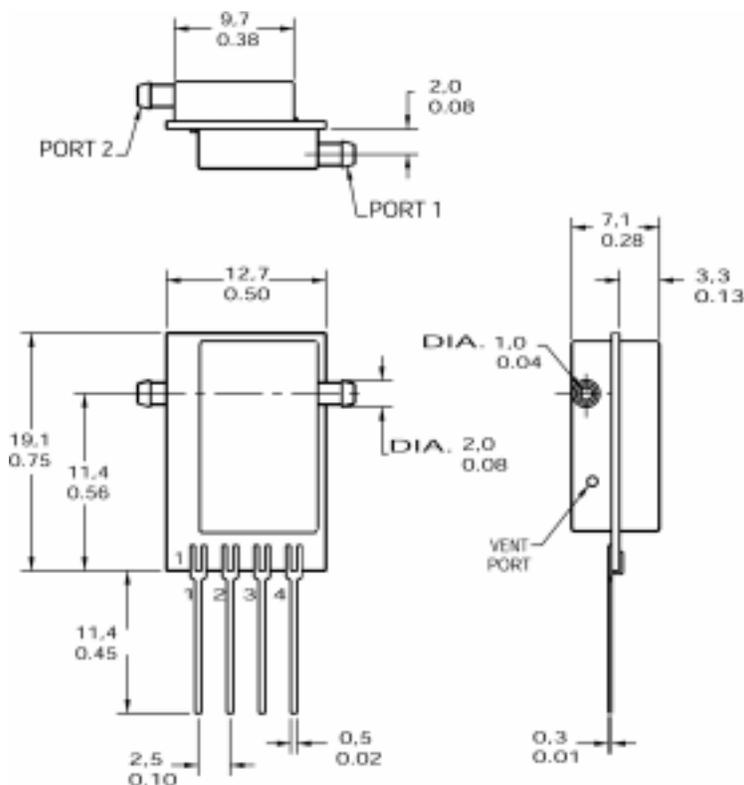
#### **ELECTRICAL SPECIFICATIONS**

**@ 25 °C, 4.5 VDC (UNLESS OTHERWISE NOTED)**

Pressure Range	0 in H <sub>2</sub> O [0 mBar] to 1 in H <sub>2</sub> O [2,50 mBar]
	0 in H <sub>2</sub> O [0 mBar] to 5 in H <sub>2</sub> O [12,50 mBar]
	0 in H <sub>2</sub> O [0 mBar] to 10 in H <sub>2</sub> O [25,0 mBar]
	0 in H <sub>2</sub> O [0 mBar] to 0 20 in H <sub>2</sub> O [50,0 mBar]
	0 in H <sub>2</sub> O [0 mBar] to 30 in H <sub>2</sub> O [75,0 mBar]
Offset	0 ±10 mV
Span (P2>P1)	
0 in H <sub>2</sub> O to 1 in H <sub>2</sub> O	6.0 ±2 mV
0 in H <sub>2</sub> O to 5 in H <sub>2</sub> O	22.5 ±7.5 mV
0 in H <sub>2</sub> O to 10 in H <sub>2</sub> O	30 ±15 mV
0 in H <sub>2</sub> O to 20 in H <sub>2</sub> O	30 ±15 mV
0 in H <sub>2</sub> O to 30 in H <sub>2</sub> O	30 ±15 mV
Supply Voltage	3.0 Vdc min., 8.0 Vdc max.

#### **ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature	-25 °C to 85 °C [-13 °F to 185 °F]
Storage Temperature	-40 °C to 125°C [-40 °F to 257°F]
Hysteresis and Linearity	0.1% Span, Typ.
Media Compatibility	<b>P1 Port (Dry Gases Only):</b> Media must be compatible with epoxy-based adhesive. <b>P2 Port:</b> Media must be compatible with nylon housing, epoxy adhesive and silicon.

**MOUNTING DIMENSIONS** (for reference only) mm/in**WARRANTY/REMEDY**

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is **in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.**

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

For application assistance, current specifications, or name of the nearest Authorized Distributor, contact a nearby sales office. Or call:  
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 1-815-235-6847 International

**FAX**

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