

# Honeywell



Representative photograph, actual product appearance may vary.

Due to regional agency approval requirements, some products may not be available in your area. Please contact your regional Honeywell office regarding your product of choice.

## DC001NDR5

**Pressure Sensors: Measurement Type: Bidirectional Gage, Differential; Signal Conditioning: Amplified; Pressure Range:  $\pm 1.0$  in H<sub>2</sub>O; Port Style: Barbed**

### Features

- Ultra Low Pressure Sensing, down to 1" H<sub>2</sub>O
- ASIC Enhanced
- Available in Gage and Differential Pressure Ranges
- Available in Ratiometric and Regulated
- Temperature Compensated over 0 °C to 50 °C [32 °F to 122 °F]
- Combined Linearity and Hysteresis error <math>\lt; \pm 0.25\% \text{ Span}</math>

### Typical Applications

- Medical Instrumentation
- HVAC
- Environmental Controls
- Portable Monitors

### Description

The DC pressure sensor combines our SURSENSE™ precision high sensitivity silicon sensing capabilities with the latest in ASIC technology to produce one of the most precise, reliable pressure sensors in the market. The SURSENSE technology provides Dynamic Self Compensation which substantially reduces offset errors due to changes in temperature, stability to warmup, long term instability and position sensitivity. When operated with a fixed 5.0 Vdc supply the DC sensors provides a ratiometric 0.25 Vdc to 4.25 Vdc output (4.0 Vdc span). Regulated voltage units are also available for applications involving variable supply voltages (see electrical specifications).

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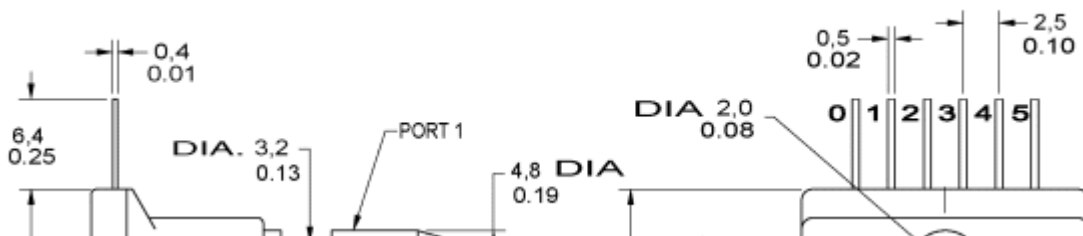
Product Specifications	
<b>Measurement Type</b>	Differential, Bidirectional Gage
<b>Signal Conditioning</b>	Amplified
<b>Pressure Range</b>	$\pm 1.0$ in H <sub>2</sub> O
<b>Maximum Overpressure</b>	100 in H <sub>2</sub> O
<b>Supply Voltage</b>	7.0 Vdc to 30.0 Vdc

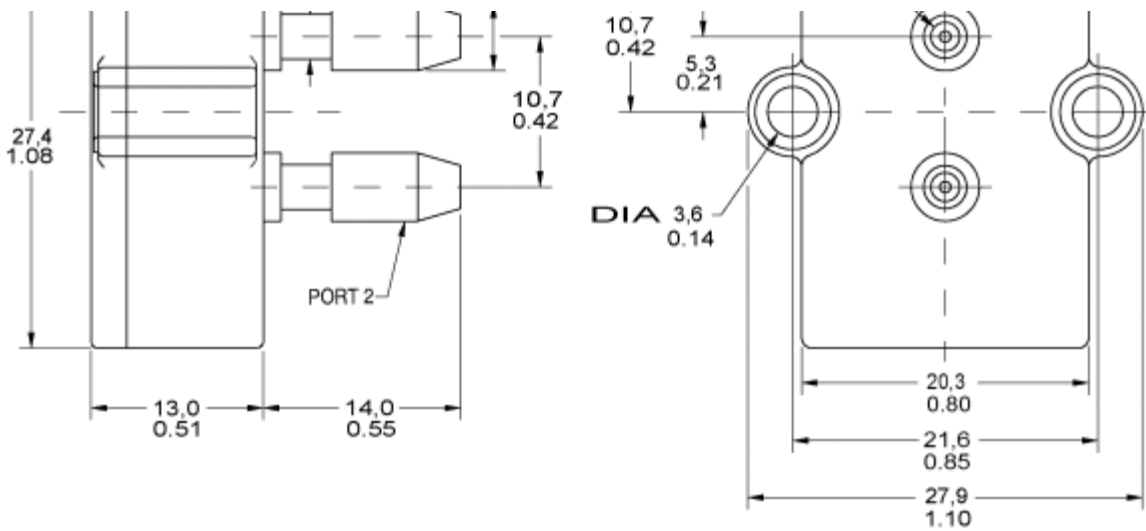
<b>Compensated</b>	Yes
<b>Output Calibration</b>	Yes
<b>Termination</b>	PCB
<b>Port Style</b>	Barbed
<b>Package Style</b>	Honeywell DI-DC
<b>Typical Sensitivity</b>	5 V/in H <sub>2</sub> O
<b>Full Scale Span</b>	± 2.0 V typ.
<b>Null Offset</b>	3.5 Vdc typ.
<b>Offset Position Sensitivity</b>	± 10 mV
<b>Total Error (% Full Scale)</b>	± 2.0 % typ., ± 3.0 % max. (See Note 1)
<b>Accuracy (% Best Fit Straight Line)</b>	± 0.25 % (See Note 2)
<b>Operating Temperature Range</b>	-25 °C to 85 °C [-13 °F to 185 °F]
<b>Compensated Temperature Range</b>	0 °C to 50 °C [32 °F to 122 °F]
<b>Storage Temperature Range</b>	-40 °C to 125 °C [-40 °F to 257 °F]
<b>Media Compatibility</b>	P2 port: DRY GASES ONLY: Media must be compatible with epoxy based adhesive. P1 port: Wetted materials; Media must be compatible with nylon housing, epoxy adhesive and silicon.
<b>UNSPSC Code</b>	411121
<b>UNSPSC Commodity</b>	411121 Transducers
<b>Note 1</b>	Percentage of Full Scale includes: zero calibration, temperature effect on zero and span, nonlinearity, hysteresis, repeatability, and stability over the compensated temperature range.
<b>Note 2</b>	Percentage of Best Fit Straight Line includes: nonlinearity, hysteresis, and repeatability
<b>Availability</b>	Global
<b>Series Name</b>	DC Series

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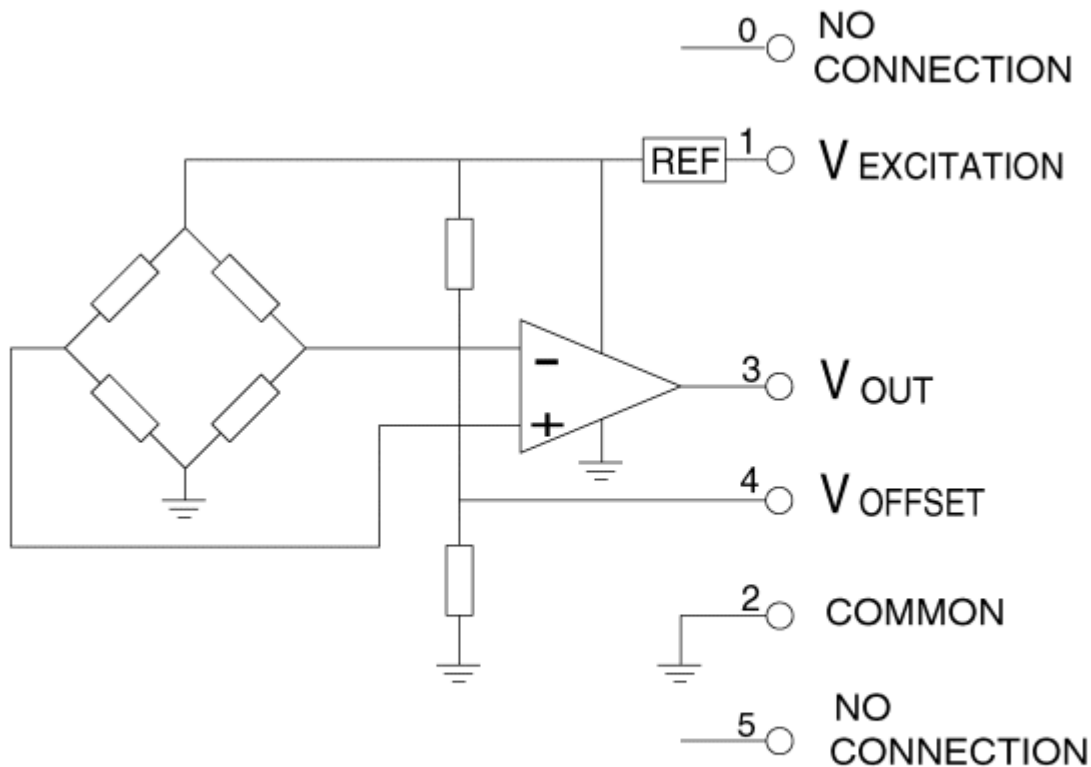




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### **WARNING**

#### **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.**

### **WARNING**

#### **MISUSE OF DOCUMENTATION**

- The information presented in this product sheet (or catalog) is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

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

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