

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: ± 1.0 in H₂O; Port Style: Barbed

Features

- Ultra Low Pressure Sensing, down to 1" H₂O
- 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 $\lt; \pm 0.25\% \text{ Span}$

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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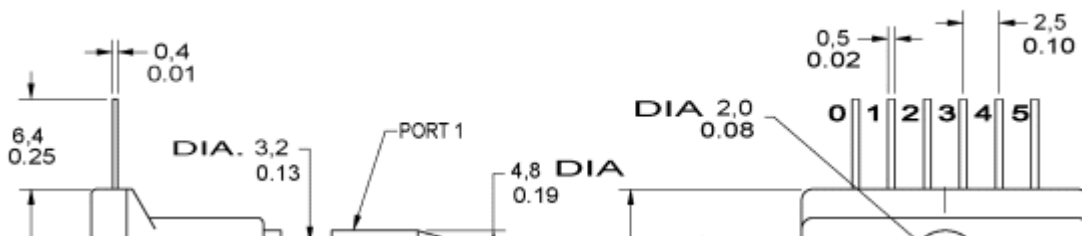
Product Specifications	
Measurement Type	Differential, Bidirectional Gage
Signal Conditioning	Amplified
Pressure Range	± 1.0 in H ₂ O
Maximum Overpressure	100 in H ₂ O
Supply Voltage	7.0 Vdc to 30.0 Vdc

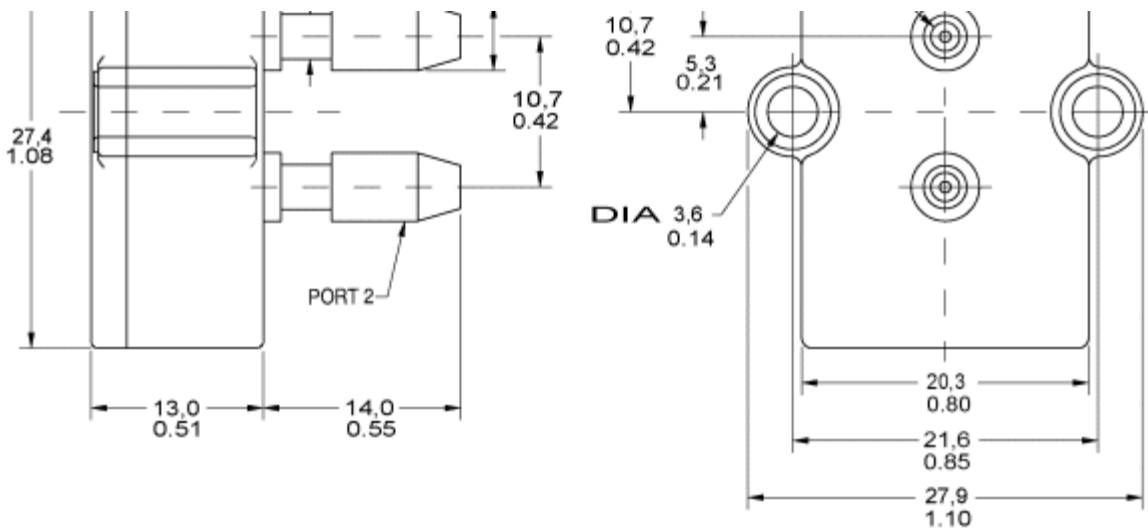
Compensated	Yes
Output Calibration	Yes
Termination	PCB
Port Style	Barbed
Package Style	Honeywell DI-DC
Typical Sensitivity	5 V/in H ₂ O
Full Scale Span	± 2.0 V typ.
Null Offset	3.5 Vdc typ.
Offset Position Sensitivity	± 10 mV
Total Error (% Full Scale)	± 2.0 % typ., ± 3.0 % max. (See Note 1)
Accuracy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

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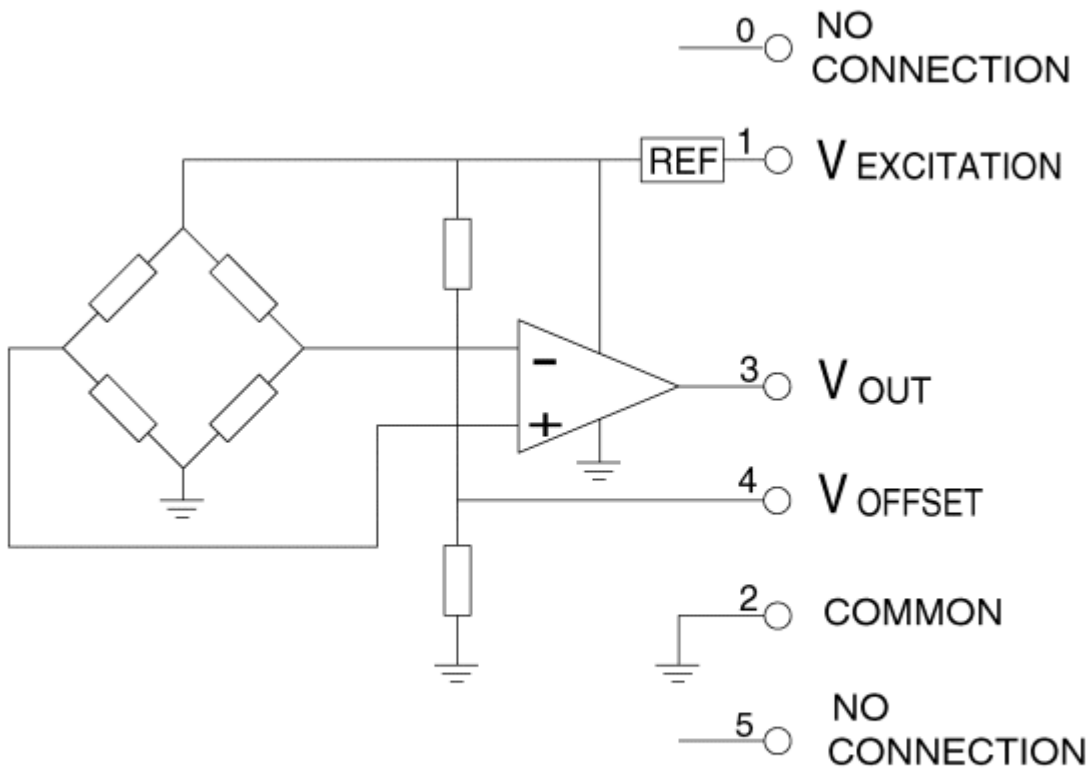




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WARNING

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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