



*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.*

## SX30DN

**Pressure Sensors: Measurement Type: Differential, Gage; 0  
psid to 30 psid, Unamplified, "N" Package - Straight Port**

### Features

- Low Cost
- High-Impedance Bridge
- Absolute and Differential (Gauge)
- Low Noise
- Low Power Consumption for Battery Power

### Typical Applications

- Medical
- Instrumentation
- Barometric
- Measurement
- Pneumatic Controls
- Battery Powered Equipment

### Description

The SX Series pressure sensors provide the lowest cost components for measuring pressures up to 150 psi. These sensors are designed for use with non-corrosive, non-ionic media, such as air and dry gases. Convenient pressure ranges are available to measure differential, gauge, and absolute pressures from 0 psi to 1 psi (SX01) up to 0 psi to 150 psi (SX150).

The Absolute (A) devices have an internal vacuum reference and an output voltage proportional to absolute pressure. The differential (D) devices allow application of pressure to either side of the diaphragm and can be used for gauge or differential pressure measurements.

This product is packaged in either the standard low cost chip carrier "button" package, a plastic ported "N" package, or a DIP package.

All packages are designed for applications where the sensing element is integral to the OEM equipment. These packages can be o-ring sealed, epoxied, and/or clamped onto a pressure fitting. A closed-bridge four pin SIP configuration is provided for electrical connection to the "Button" or "N" Package. The DIP Package mounts on a PC board like a standard IC with through-hole pins. This extremely small size package enables the use of multiple sensors in applications with limited space.



## SX30DN

**Pressure Sensors: Measurement Type: Differential, Gage; 0 psid to 30 psid, Unamplified, "N" Package - Straight Port**

Product Specifications	
Measurement Type	Gage, Differential
Signal Conditioning	Unamplified
Pressure Range	0 psid to 30 psid
Maximum Overpressure	90 psi
Supply Voltage	12 Vdc max.
Compensated	No
Output Calibration	No
Response Time	100 $\mu$ S
Termination	PCB
Port Style	Straight
Package Style	N
Typical Sensitivity	0.75 mV/V/psi
Full Scale Span	75 mV min., 110 mV typ., 150 mV max.
Zero Pressure Offset	-35.0 mV min., -20.0 mV typ., 0.0 mV max.
Linearity, Repeatability & Hysteresis Error	- 0.5 min., 0.2 typ., 0.5 max. % Full Scale Span
Repeatability	0.5 % span
Input Resistance	4.1 kOhms typ.
Output Resistance	4.1 kOhms typ.

<b>Operating Temperature Range</b>	-40 °C to 85 °C [-40 °F to 185 °F]
<b>Storage Temperature Range</b>	-55 °C to 125 °C [-67 °F to 257 °F]
<b>Media Compatibility</b>	Clean, dry gases only
<b>UNSPSC Code</b>	411121
<b>UNSPSC Commodity</b>	411121 Transducers
<b>Comment</b>	Lead Temperature Soldering 2 s to 4 s at 250 °C [482 °F]
<b>Availability</b>	Global
<b>Series Name</b>	SX Series

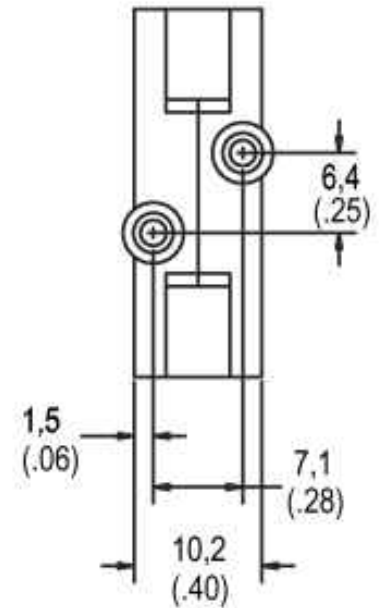
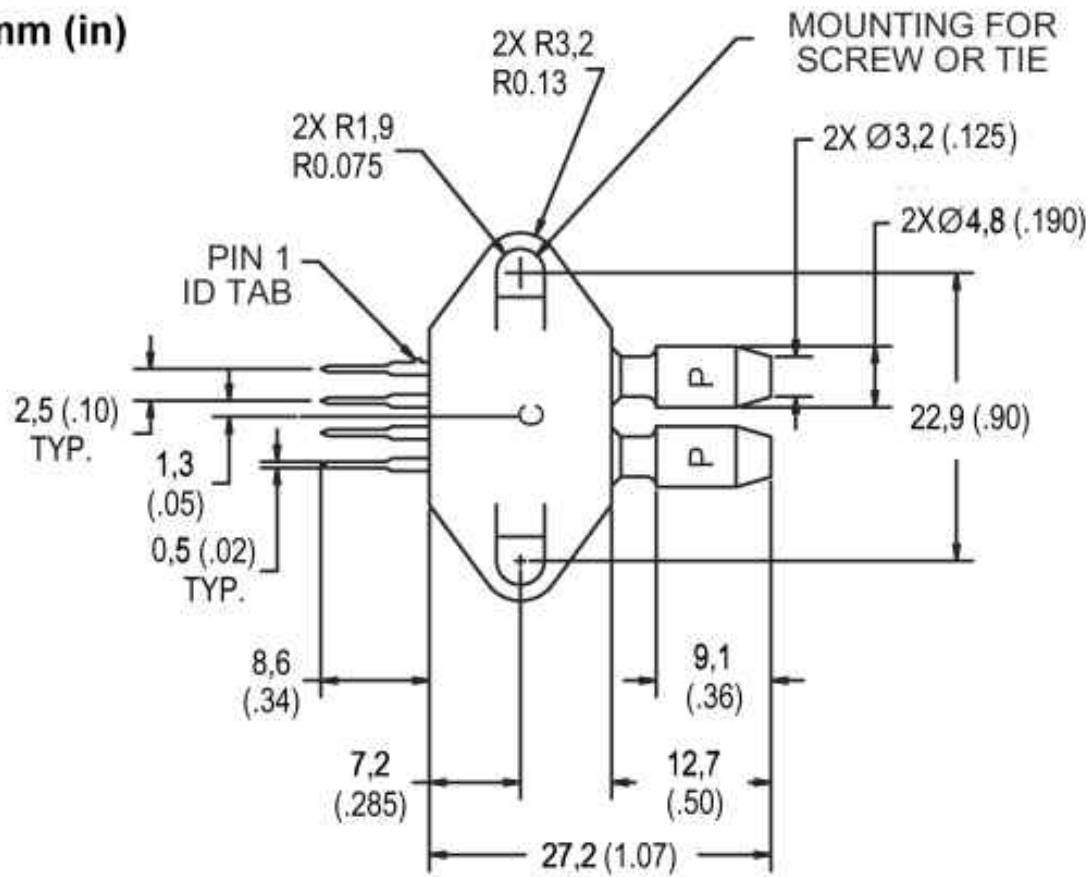
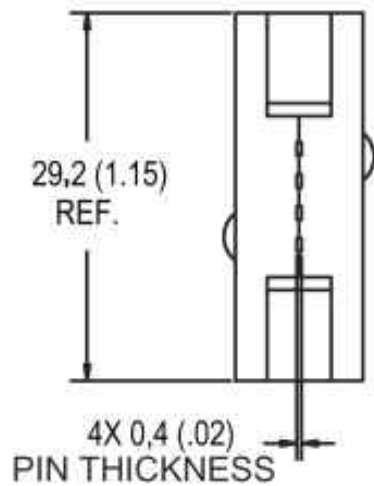
# Honeywell

---

## SX30DN

**Pressure Sensors: Measurement Type: Differential, Gage; 0 psid to 30 psid, Unamplified, "N" Package - Straight Port**

## For Reference Only mm (in)



# Honeywell

## SX30DN

Pressure Sensors: Measurement Type: Differential, Gage; 0 psid to 30 psid, Unamplified, "N" Package - Straight Port

[Electrical Connections]

# Honeywell

## SX30DN

**Pressure Sensors: Measurement Type: Differential, Gage; 0 psid to 30 psid,  
Unamplified, "N" Package - Straight Port**

[Equivalent circuit]

# Honeywell

---

## SX30DN

**Pressure Sensors: Measurement Type: Differential, Gage; 0 psid to 30 psid,  
Unamplified, "N" Package - Straight Port**

### **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.**

© Copyright Honeywell Inc.1998-2004 All rights reserved.