

Honeywell Pressure, Airflow and Force Sensors

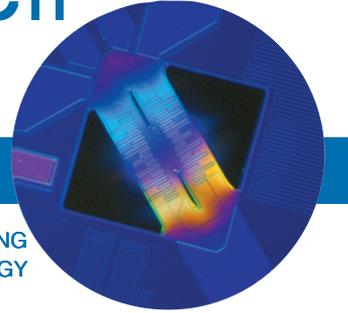


SENSING AND CONTROL

Product Range Guide

Honeywell

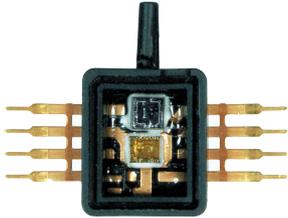
Pressure, Airflow and Force Sensing at Honeywell



AIRFLOW SENSING USING MICROMACHINED SILICON TECHNOLOGY

Honeywell Sensing and Control offers one of the broadest lines of pressure, airflow and force sensing capabilities in the world.

In the 1980s, Honeywell developed a full line of piezoresistive pressure sensors featuring excellent repeatability, high accuracy and reliability under varying environmental conditions. In addition, they feature highly consistent operating characteristics from one sensor to the next and interchangeability without recalibration.



ASICS FOR SIGNAL CONDITIONING

In 1998, Honeywell acquired Data Instruments and added stainless steel and high purity pressure sensors, as well as the Advanced Silicon Group, or ASG family of pressure sensors. Data Instruments, formerly the Tyco Instrument Division of Tyco Laboratories, was formed in December, 1977. Data Instruments is best known for their sensors' precision and performance in applications that require high accuracy.



TRUE SURFACE MOUNT PACKAGING CAPABILITIES

In 2002, Honeywell acquired Invensys Sensor Systems, including SenSym ICT, which brought a full line of high pressure, industrial products from the ICT side of the business, and a full line of low pressure plastic products from the SenSym side. SenSym, founded in 1982, is best known for their low pressure plastic products and their willingness to produce custom sensors and packages. ICT (formerly Foxboro ICT – founded in 1974) is known for their highly accurate pressure sensors that are used in industrial applications. ICT is also known for their willingness to work with customers to create custom pressure sensor solutions to meet challenging customer needs.

In 2003, Honeywell purchased Sensotec. Founded in 1973, Sensotec designs and manufactures one of the broadest and most comprehensive product lines of pressure, load cells and electronic sensor instrumentation. Sensotec products are best known for their quality of engineering and customization.



ADVANCED THICK FILM TECHNOLOGY USED FOR MEDIA ISOLATION IN THE MLH OEM PRESSURE PLATFORM

For more information on these, or any of our products, visit our Web site and interactive catalog at www.honeywell.com/sensing.

Sensing and Switching Technology at Honeywell

From basic switching to on-chip, signal conditioned sensors, Honeywell Sensing and Control offers a wide variety of system critical sensing and switching solutions for all of your application needs. For more information, visit our Web site and interactive catalog at www.honeywell.com/sensing.

Test and Measurement Products

The Honeywell Sensotec product range of industrial pressure transducers, load cells and electronic sensor instrumentation is one of the broadest in the world. We have a comprehensive range of strain gage-based, piezoelectric and coil wound transducers. We offer pressure ranges to 12k bar [170k psi] and load ranges to 13,500k N [3 million lb] with complete instrumentation and signal conditioning. We achieve accuracies of 0.05 % in pressure sensing and our calibration load cells have accuracies of 0.02 %.

The Sensotec range of transducers can be designed to withstand the harshest environments such as temperatures as low as -198 °C [-325 °F] or as high as 218 °C [425 °F], or ambient conditions up to 3,048 m [10,000 ft] of seawater. For more information about these products visit www.honeywell.com/sensotec



Humidity Sensors

Humidity sensors from Honeywell are configured with integrated circuitry to provide on-chip signal conditioning. These sensors contain a capacitive sensing die set in thermoset polymers that interacts with platinum electrodes. Absorption based humidity sensors provide both temperature and % RH (Relative Humidity) outputs. On-chip signal processing ensures linear voltage output versus % RH. Sensor laser trimming offers +5 % RH accuracy, and achieves 2 % RH accuracy with calibration. Packages are chemically resistant and operate in ranges of -40 °C to 85 °C [-40 °F to 185 °F] to accommodate harsh environments.



Thermal Sensors

Temperature sensors provide a change in a physical parameter such as resistance or output voltage that corresponds to a temperature change. These sensors are suitable for applications that require small package size, accuracy and linear outputs. Honeywell also offers a full line of heaters, thermistors and thermostats.



Basic Switches

Honeywell's basic switch family includes standard size basics, miniature, subminiature, hermetically sealed, and high temperature switches. The precision snap-action mechanisms are offered with a wide variety of actuators and operating characteristics. Basic switches are ideal for applications requiring compactness, light weight, accurate repeatability and long life. These products provide a very cost-effective solution for applications that require presence/absence detection where physical contact with an object is permissible.



Magnetic Position Sensors

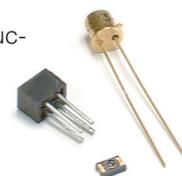
The Honeywell magnetic position sensor family includes digital and analog Hall-effect position sensors, magnetoresistive digital sensors, Hall-effect vane sensors, gear tooth sensors, Hall-effect basic switches, and magnets. Magnetic position products are reliable, high speed, long life sensors and are directly compatible with other electronic circuits.

These sensors respond to the presence or the interruption of a magnetic field by producing either a digital or an analog output proportional to the magnetic field strength. Digital and analog "sensor-only" devices are operated by the magnetic field from a permanent magnet or electro-magnet. Position sensors from Honeywell are used in applications that require accurate, reliable outputs.



Infrared Sensors

Optoelectronic sensors from Honeywell integrate optical principles and semi-conductor electronics. These sensors are reliable, cost-effective sensors for applications which require object presence sensing, motion sensing, position encoding, limit sensing, movement detection and counting.



Warranty/Remedy

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, 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. In no event shall Honeywell be liable for consequential, special, or indirect damages.

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.

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.

Sales and Service

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

E-mail: info.sc@honeywell.com

Internet: www.honeywell.com/sensing

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