

NEWS RELEASE

PR1507E

ALPS Develops Capacitance Type Pressure Sensor to Detect Absolute Pressure*HSPC Series Achieves Compactness and High Sensitivity with Low Current Consumption*

Duesseldorf, Germany, September 06, 2007 – ALPS ELECTRIC EUROPA GmbH has completed development of a capacitance type pressure sensor (HSPC Series) to detect absolute pressure. The sensor can be used to detect, for example, air pressure in tires, air pressure and blood pressure.

Installation of a Tire Pressure Monitoring System (TPMS), which enhances safety by monitoring the air pressure in a car's tires, is being made compulsory in the United States and becoming increasingly widespread throughout the world. Battery driven, TPMS components are required to feature low current consumption. At the same time, components must be compact to allow for installation inside the tire.

As with TPMS, devices for measuring blood, air and other pressures are becoming energy-efficient, with low current consumption, and small enough to be easily portable. Under these circumstances, demand is increasing for highly sensitive devices that can detect the minutest changes in blood and air pressure.

This product detects air, blood and other pressures by means of changes in capacitance. Pressure is detected when pressure changes cause the membrane on the moveable electrodes known as a 'diaphragm' to flex, the capacitance between the

ALPS ELECTRIC EUROPA GmbH
Hansaallee 203
40549 Düsseldorf
Tel. +49-(0) 211-59 77-0
Fax +49-(0) 211-59 77-146
www.alps.de

fixed electrodes changes, and the degree of this change is converted into an electrical signal.

The capacitance-type pressure sensor is generally characterized by high sensitivity and low current consumption. Pressure detection systems that use this product will therefore reduce their current consumption to an extremely low μA (microampere) level, contributing to the general trend for set products to use less current.

Furthermore, leveraging technologies cultivated over several years in thin film process technology, high-precision processing technology, and packaging technology, Alps Electric has realized the industry's smallest (4.8mm long x 4.8mm wide x 1.8 mm high) thin-walled capacitance-type pressure sensor.

The product also minimizes the influence of temperature changes on pressure detection, and due to the ability of the ceramic packaging to withstand changes in temperature, its operation is possible in a wide range of operating temperatures. Reliable pressure detection is possible even in the volatile temperature changes of the automotive environment.

^{*1} Diaphragm: A thin layer with elasticity (partition plate).

Features

Development of a capacitance type pressure sensor that achieves compactness and high sensitivity with low current consumption

1. Capacitance type, so realizes high sensitivity and low current consumption
2. Achieves the greatest degree of miniaturization and compactness in the industry
3. Automotive environment can be supported through a wide range of operating temperatures

ALPS ELECTRIC EUROPA GmbH
Hansaallee 203
40549 Düsseldorf
Tel. +49-(0) 211-59 77-0
Fax +49-(0) 211-59 77-146
www.alps.de

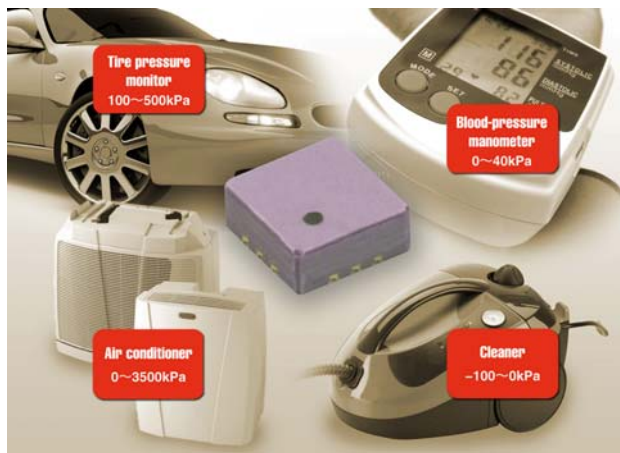
Principal Applications

Pressure detection in TPMS, blood, air and other pressure monitors

Specifications

Product name	HSPC series
Dimensions (W x D x H)	4.8mm x 4.8mm x 1.8mm
Type of pressure	Absolute pressure
Operating temperature	-40 to 125 °C
Measurable pressure range	100kPa to 500kPa
Capacity value at 100kPa	7pF (representative value)
Capacity value at 500kPa	12.6pF (representative value)
Pressure change sensitivity	1.8 (500kPa/100kPa)

This news release and a press photo are available electronically at <http://www.presseagentur.com/alps/en/>



ALPS ELECTRIC EUROPA GmbH
Hansaallee 203
40549 Düsseldorf
Tel. +49-(0) 211-59 77-0
Fax +49-(0) 211-59 77-146
www.alps.de

ALPS Electric Co., Ltd.

Since its establishment in 1948 ALPS has grown as a comprehensive manufacturer of electronic components. At present ALPS is creating innovative high-value-added products in its main business segments – Components, Magnetic Devices, Communications, Peripheral Products, and Automotive Electronics – which are contributing to the advance of a digital society. ALPS is a global company that carries out its operations with 23 production bases in 9 countries as well as 57 sales bases in 14 countries. Consolidated net sales in the year ended March 31, 2007 amounted to YEN 708 billion.

ALPS ELECTRIC EUROPA GmbH, a subsidiary of ALPS Electric Co., Ltd., was established in 1979. Since 1989, the European Head Office has been located in Düsseldorf, where a team of specialists works in Sales, Marketing, and Product Engineering. The activities of our branch offices in Munich, Paris and Milton Keynes, our sales office in Milan and our European distribution work are co-ordinated from Düsseldorf. ALPS Nordic AB, a 100 percent subsidiary of ALPS ELECTRIC EUROPA GmbH, is based in Sweden and services the Scandinavian market.

Contact:**ALPS ELECTRIC EUROPA GmbH**

Ulrich Kuhs / Paul Garratt
Phone.: +49-211-59 77-170 / -250
Fax: +49-211-59 77-146
Email: presse@alps.de
Internet : www.alps-europe.com

PR Agency:

MEXPERTS AG
Kurt Loeffler / Peter Gramenz
Phone.: +49-89-897361-0
Fax: +49-89-87 29 43
Email: kurt.loeffler@mexperts.de
Internet: www.mexperts.de
Press Portal: www.presseagentur.com

ALPS ELECTRIC EUROPA GmbH
Hansaallee 203
40549 Düsseldorf
Tel. +49-(0) 211-59 77-0
Fax +49-(0) 211-59 77-146
www.alps.de