SMC Innovation in movement control

e-Matters
November 2009

New Technology - helping to expand our senses

Dear Reader.

Many people believe that the ancient Greek philosopher Aristotle (384-322 BC) was responsible for classifying the five human senses of: touch, taste, sight, smell and sound.

In general, the definition of a sense is a system that consists of a group of sensory cells which respond to a specific physical phenomenon that corresponds to an area within the brain where the signals are received and interpreted.

Just like the air we breathe these senses are inextricably linked to all our lives as they are central to the way we communicate, make decisions, and how we perceive the world.

However with the dramatic advances in technology, especially in the development of smaller, more powerful, computers, plus state-of-the-art mobile communications providing internet search capabilities, our world of senses is now being expanded even further.

For example, Popular Science´s Inventor of the Year 09 - Pranav Mistry – recently unveiled his remarkable SixthSense System earlier this summer.

According to Mistry, his SixthSense System is a wearable gestural interface that augments the physical world around us with digital information and lets you use natural hand gestures to interact with that information.

Using a camera, a mirror, a mobile phone and a tiny projector mounted in a small wearable device, the SixthSense not only projects information onto walls and physical objects around you, but it lets you fully interact with the projected information and the specific object itself through the use of your hand and arm movements!

Obviously Pranav Mistry´s SixthSense is a far cry from Aristotle´s original thinking on the five human senses, but we are sure that you´ll agree, this exciting development, which is literally making the entire world your computer, is just the start of amazing sensory things to come.

Anyway, to continue with this topic of signals and responses to information, we have dedicated this edition of e-Matters to our expanding range of pressure switches and sensors which have been developed to provide you with up-to-date performance information at-a-glance.

The European Marketing Centre
SMC Corporation

Special edition on SMC´s Advanced sensors for accurate effective control

CE Digital Pressure Switches with integrated Display

	Series	Key feature	Output: Switch Output 1 - Output	Output: Switch Output 2 - Output	Output: Analogue Output 1 to 5 V	Output: Analogue Output 4 to 20 mA
New	ZSE / ISE10 Air	Compact - Small & Light	●	●	●	---
	ZSE / ISE30A Air	High precision digital basic pressure switch	●	●	●	●
Updated	ZSE / ISE40A Air	Splash proof (IP65)	●	●	●	●
	ZSE / ISE 80 Liquids	Stainless Steel	●	●	●	●
Updated	ISE70 Air	IP67 Enclosure	●	●	---	---
	ISE75 / ISE75H Liquids	Large Pressure Range, IP67 Enclosure & Aggressive fluids (SUS diaphragm)	●	●	---	---

Why going Digital?

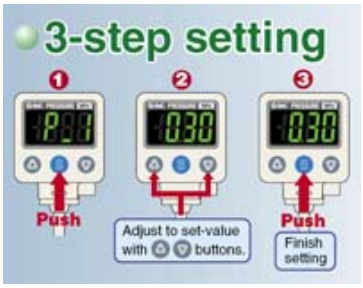
Excellent visibility in the dark

Displays a value with numbers

High accuracy

Main common extra features
- All for vacuum, positive or compound pressure
- New connector available (except for ZSE/ISE10) – M12
- Easy to install and minimize setting time!

Advanced Sensors web site



2-color display
4 different display settings to suit the application

Integrated sensor display type	Remote type
Display and sensor are at the same location	Limited space is required for installation
Pressures from all sensors can be observed at the same time	Response is highly sensitive
No input setting of sensor types	Limited space is required for the display sections (4 channel application)
Low cost compared with a remote type (1 channel application)	Low cost compared with an Integral type (4 channel application)

Basically, the Integrated types are used.
Remote types are used when response is not detected and only a limited installation space is available.
If cost is an important factor for model selection, multi-channel types (4 channel application) are often selected.

Digital Pressure Switches with Remoted Display

	Series	Key feature	Output: Switch Output 1 - Output	Output: Switch Output 2 - Output	Output: Analogue Output 1 to 5 V	Output: Analogue Output 4 to 20 mA
	**PSE 530** Air	Wide pressure range	---	---	●	---
	PSE 540 Air	Very light & compact	---	---	●	---
	PSE 550 Air	Low differential pressure Analogue voltage or current output	---	---	●	●
	**PSE 560** Liquids	IP65 and Aggressive fluids (SUS diaphragm)	---	---	●	●
	**PSE 200**	Able to control up to 4 sensors IP65	5 Switch outputs		---	---
	PSE 300	2 color display	2 Switch outputs		●	●

Advanced Sensors web site

SMC - One supplier for all your automation needs!

SMC - European Marketing Centre -
Zuazobidea 14, Pol. Industrial Jundiz
01015 Vitoria - Spain
emcmarketing@smc.smces.es