

## Your local solution provider

In addition to our standard products, we offer customised solutions and tailored components for almost any application in which pressure or temperature needs to be reliably and safely monitored, measured or controlled.

- ▶ large selection of connectors and threads
- ▶ protection against overload, overvoltage or short circuit
- ▶ IP protection classes up to IP6K9K and high temperature tolerance (-40°C ... +125°C) against extreme cold / heat.
- ▶ Ready-wired and moulded pressure switches



SUCO GROUP



WORLDWIDE

## The SUCO Group - A reliable and innovative partner worldwide at your side

- ▶ Over 70 years of experience in pressure monitoring.
- ▶ Our products are 100 % function tested and approved for hydrogen before they leave our production facility.
- ▶ Compliance with numerous national and international standards and certifications, such as ISO 9001: 2015.

Please contact us - We look forward to your inquiry.

## Contact us

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# Hydrogen Applications

## PRESSURE SWITCHES & TRANSDUCERS

worldwide at your side



## Mechanical Pressure Switches

SUCO offers a variety of compact and robust H<sub>2</sub>-compliant pressure switches (NO, NC, CO) for hydrogen applications with variable pressure ranges from 0.1 bar to 400 bar made of SAE 316L stainless steel. Various threads and pre-wired versions are available upon request.



**H164 (hex 24)**

normally closed (NC), normally opened (NO)

0.1 bar - 50 bar

up to 600 bar overpressure safety

EPDM diaphragm in SAE 316L grade stainless steel housing

cCSAus certification (pending)



**H186 (hex 27)**

changeover (CO)

0.5 bar - 200 bar

up to 700 bar overpressure safety

EPDM diaphragm in SAE 316L grade stainless steel housing

cCSAus certification (pending)



**H183 (hex 27)**

changeover (CO)

100 bar - 400 bar

up to 600 bar overpressure safety

EPDM diaphragm in SAE 316L grade stainless steel housing

cCSAus certification (pending)



**H344 / H345 (hex 27)**

changeover (CO)

0.3 bar - 150 bar

up to 300 / 600 bar overpressure safety

EPDM diaphragm in SAE 316L grade stainless steel housing

ATEX / IECEx (M1) certification

## Pressure Transducer and Sensors

ESI Technology from Wales has developed a broad product portfolio of high quality pressure transducers and sensors for standard & special requirements up to 5,000 bar to meet the increasing demand for H<sub>2</sub>-compliant products, especially for oil and gas, marine and subsea applications.



**GS4200H**

0 bar to 1,500 bar

4x overpressure safety

titanium alloy SoS pressure sensor

optional certification acc. to ATEX & DNV-GL

very high corrosion resistance



**GD4200HUSB**

-1 bar to 5,000 bar

2x overpressure safety

titanium alloy SoS pressure sensor

ESI-USB software with 1,000 Hz sampling rate

highest precision and accuracy ±0.15% BFSL



**HP1000H**

0 bar to 5,000 bar

1.5x overpressure safety

titanium alloy SoS pressure sensor

optional certification acc. to ATEX & DNV-GL

high resistance to pressure peaks



**HI2000H**

0 bar to 1,500 bar

4x overpressure safety

titanium alloy SoS pressure sensor

optional certification acc. to ATEX / IECEx

very high temperature resistance



Hydrogen (H) being the lightest element is the most abundant element in our universe (70 %). Most hydrogen on earth exists in molecular forms such as water and organic compounds.

It is being used in liquid form (LH<sub>2</sub>) or as a colourless and odourless gas (H<sub>2</sub>) in many sectors such as petrochemistry, energy, mobility or production.

Since gaseous hydrogen combined with oxygen (O<sub>2</sub>) can form an explosive gas mixture („oxyhydrogen“), most applications are subject to special safety pre-cautions regarding fire and explosion protection.

Many possibilities and potentials of hydrogen technology have only been developed and opened up in recent years and today play a key role in climate-neutral energy generation & storage.



Our pressure switches and transducers reliably monitor and control the pressure of liquid and gaseous hydrogen in industrial production, such as climate-neutral energy generation and storage (in fuel cells and tanks), H<sub>2</sub> transportation in ships, trains and vehicles, refueling of H<sub>2</sub> filling stations, heat generation & supply, HVAC industry ... and many more.