

Hydrogen Applications

PRESSURE SWITCHES & TRANSDUCERS



Mechanical Pressure Switches

SUCO offers a variety of compact and robust H₂- 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)

1.4 psi - 725 psi
(0.1 bar - 50 bar)

up to 8,700 psi (600 bar) overpressure safety

EPDM diaphragm in SAE 316L grade stainless steel housing

cCSAus certification



H186 (hex 27)

changeover (CO)

7.25 psi - 2,900 psi
(0.5 bar - 200 bar)

up to 10,153 psi (700 bar) overpressure safety

EPDM diaphragm in SAE 316L grade stainless steel housing

cCSAus certification



H183 (hex 27)

changeover (CO)

1,450 psi - 5,800 psi
(100 bar - 400 bar)

up to 8,700 psi (600 bar) overpressure safety

EPDM diaphragm in SAE 316L grade stainless steel housing

cCSAus certification



H344 / H345 (hex 27)

changeover (CO)

4.3 psi - 2,175 psi
(0.3 bar - 150 bar)

up to 4,350/8700 psi (300/600 bar) overpressure safety

EPDM diaphragm in SAE 316L grade stainless steel housing

ATEX / IECEx (M1) certification



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 (LH₂) or as a colourless and odourless gas (H₂) in many sectors such as petrochemistry, energy, mobility or production.

Since gaseous hydrogen combined with oxygen (O₂) 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.

Pressure Transducer and Sensors

We offer 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 H₂-compliant products, especially for oil and gas, marine and subsea applications.



GS4200H

0 psi to 21,755 psi
(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

-14.5 psi to 72,518 psi
(-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 psi to 72,518 psi
(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 psi to 21,755 psi
(0 bar to 1,500 bar)

4x overpressure safety

titanium alloy SoS
pressure sensor

optional certification
acc. to ATEX / IECEx

very high temperature
resistance



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), H₂ transportation in ships, trains and vehicles, refueling of H₂ filling stations, heat generation & supply, HVAC industry ... and many more.

Your local solution provider

In addition to our standard products, we offer customized 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°F ... +257°F (-40°C ... +125°C) against extreme cold / heat.
- ▶ Ready-wired and moulded pressure switches



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

Phone: 1-800-473-7313
Fax: 561-989-8816
CS email: cs@sucoesi.com
Sales email: sales@sucoesi.com

Visit Us

www.sucoesi.com

SUCO ESI North America
6560 W Rogers Cir, Suite 22,
Boca Raton, FL 33487 USA

