

## SUCO 0H44/0H45 ATEX HYDROGEN PRESSURE SWITCH

Diaphragm (0H44) / Piston (0H45) Switch

0H44-45941-2-020

0H44, 10 ... 20 bar, G1/4-E, CO, EPDM, Screw, Hydrogen, ATEX

- Suitable for hydrogen applications
- Up to 250V
- Adjustment ranges up to 150 bar
- Up to 600 bar overpressure safety
- Changeover (SPDT)



### PRODUCT DESCRIPTION

These switches are built in a Hex 27 stainless-steel (AISI 316L) housing, certified ATEX and IECEx for use in gas zones 1 & 2 and dust zones 21 & 22, ensuring explosion protection via Ex db IIC T6/T5 Gb and Ex tb IIIC T80/100 °C Db ratings. The 0H44 model uses a diaphragm sensor while the 0H45 is piston-based, both offering SPDT (changeover) switching at up to 250 VAC/DC. The adjustment range spans from 0.3 bar to 150 bar, with overpressure safety up to 300 bar on the diaphragm type and 600 bar on the piston variant. Accuracy is tight,  $\pm 0.2$  bar at the lower range to  $\pm 5$  bar at the highest, with EPDM seals that are fully compatible with hydrogen, oxygen, water, and inert gases.

Ideal for hydrogen-based systems these switches provide reliable pressure control with intrinsic safety in potentially explosive atmospheres. The robust stainless construction, ATEX certification, and hydrogen-compatible sealing ensure durability under high-pressure transients, while the SPDT output enables safety interlocks, compressor control, or emergency shut-downs. Available in diaphragm or piston versions, the 0H44/0H45 models offer engineering flexibility to match specific media cleanliness and pressure needs, making them a dependable choice for sophisticated hydrogen infrastructure projects.

### TECHNICAL DATA

|                       |                                      |
|-----------------------|--------------------------------------|
| Adjustment range max  | 20 bar                               |
| Adjustment range min  | 10 bar                               |
| Approvals             | IEC, IECEx, RoHS 3, EX, CE           |
| Deviation max         | $\pm 1.0$                            |
| Electrical connection | Adjusting screw hexagon socket Hex 3 |
| Function              | Changeover (SPDT)                    |
| Material membrane     | EPDM                                 |
| Material of body      | Stainless steel 316L                 |
| Pressure max          | 300 bar                              |
| Process connection    | G1/4-E                               |
| Voltage max           | 250 V                                |

