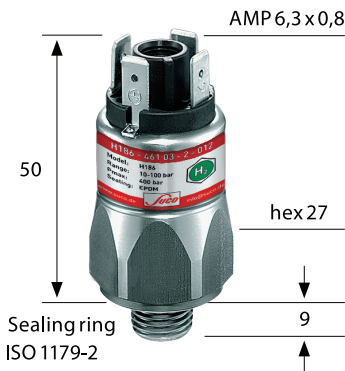


## 0H96 / 0H97

hex 27

Diaphragm or piston pressure switch up to max. 24 V with plug-in connection for hydrogen applications

- Housing made of stainless steel 1.4404 (AISI 316L)
- With built-in changeover contact
- With gold contacts Overpressure safe up to 5,800 / 10,152 psi (400 / 700 bar\*)
- Hysteresis adjustable at the factory



P max	Setting range	Tolerance at room temperature	External thread	Article number
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### 0H96 Diaphragm pressure switch with plug-in connection

5,801 psi (400 bar*)	7.2 - 72.5 psi (0.5 – 5 bar)	±4.3 psi (±0.3 bar)	G 1/4-E ISO 1179-2	0H96 - 457 41 - 2 - 080
	14.5 - 145 psi (1 – 10 bar)	±72.5 psi (±0.5 bar)		0H96 - 458 41 - 2 - 080
	145 - 725 psi (10 – 50 bar)	±43.5 psi (±3.0 bar)		0H96 - 459 41 - 2 - 080
	145 - 1,450 psi (10 – 100 bar)	±43.5 - 72..5 psi (±3.0 – 5.0 bar)		0H96 - 461 41 - 2 - 080

### 0H97 Piston pressure switch with plug-in connection

10,152 psi (700 bar*)	725 - 2,900 psi (50 – 200 bar)	±72.5 psi (±5.0 bar)	G 1/4-E ISO 1179-2	0H97 - 460 41 - 2 - 080
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### Sealing materials - areas of application

EPDM	Hydrogen, oxygen, water, forming gases, all inert and non-toxic gaseous or liquid media **	2
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\* Static value. Dynamic value 30 to 50% lower.

\*\* We offer other seal and material combinations for numerous media.



## Mechanical pressure switches for hydrogen applications

0H64, 0H69,  
0H86, 0H87,  
0H96, 0H97,  
0H83

Type 0H64, 0H69, 0H86, 0H87, 0H96, 0H97, 0H83

Temperature Range	EPDM -22 °F ... +248 °F (-30 °C ... +120 °C)
Burst pressure 0H64, 0H69	10,152 psi (700 bar)
Burst pressure 0H86, 0H96	10,152 psi (700 bar)
Burst pressure 0H87, 0H97, 0H83	14,503 psi (1,000 bar)
Switching frequency	200 / min
Mechanical life	1.000.000 switching cycles (for diaphragm pressure switches, the service life applies only to switching pressures up to max. 50 bar)
Rate of pressure rise	≤ 14,503 psi (1,000 bar/s)
Hysteresis 0H64, 0H69	Not adjustable
Hysteresis (only adjustable in the factory)	Adjustable average value 10 ... 30% depending on type
Vibration resistance	10 g; 5 ... 200 Hz Sinus; DIN EN 60068-2-6
Shock resistance	294 m/s <sup>2</sup> ; 14 ms Semi-sinus; DIN EN 60068-2-27, DIN EN 60068-2-27
Protection class	IP65 with attached cable plug, terminals IP00
Weight 0H64, 0H69	approx. 90 g
Weight 0H86 / 0H87, 0H96 / 0H97, 0H83	approx. 100 g

### Overview switching capacity and materials

Type	0H64	0H69	0H86 / 0H87	0H96 / 0H97	0H83
5 ... 24 VDC				●	
10 ... 42 VAC/DC	●	●			
10 ... 250 VAC/DC			●		●
3 ... 50 mA				●	
10 mA ... 4 A	●	●	●		●
Gold contacts				●	
Silver contacts	●	●	●		●
Adjustable hysteresis			●	●	●
Stainless steel 1.4404 (AISI 316L)					

## Mechanical pressure switches for hydrogen applications

0H64, 0H69,  
0H86, 0H87,  
0H96, 0H97,  
0H83

Type 0H86, 0H87, 0H83

Rated operating voltage U <sub>e</sub>	Rated operational current I <sub>e</sub>	Usage category
250 VAC 50 / 60 Hz	4 A	AC12
250 VAC 50 / 60 Hz	1 A	AC14
24 VDC	4 / 2 A	DC12 / DC13
50 VDC	2 / 1 A	DC12 / DC13
75 VDC	1 / 0.5 A	DC12 / DC13
125 VDC	0.3 / 0.2 A	DC12 / DC13
250 VDC	0.25 / 0.2 A	DC12 / DC13
Rated insulation voltage U <sub>i</sub>	300 V	
Rated impulse withstand voltage U <sub>imp</sub>	2.5 kV	
Conventional thermal electricity I <sub>the</sub>	5 A	
Switching overvoltage	< 2.5 kV	
Rated frequency	DC and 50 / 60 Hz	
Rated current of the short-circuit device	up to 5 A	
Conditional short circuit current	< 350 A	