## Sens4 A/S

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### **History and background**

- Founded in 2017 by Ole Wenzel after a 14-year career at MKS Instruments, serving as managing director with responsibility for R&D and business development of the MKS 900 Series vacuum gauging.
- Experienced team with broad vacuum technology and application knowledge.



## **Products and services**

# **«ISENS**<sup>4</sup>

#### Vacuum

- 1•10<sup>-6</sup> to 1000 mbar
- MEMS Pirani and diaphragm sensor
- 0-10 VDC output
- 4-20 mA output
- Digital interface
- Setpoint relay
- User configurable

#### Pressure

- 0 to 50 bar
- Absolute and gauge
- Ceramic & stainless-
- steel sensors
- 0-10 VDC output
- 4-20 mA output
- Setpoint relay
- User configurable

### Temperature

- -50 to 150 °C
- MEMS sensor
- 0-10 VDC output
- 4-20 mA output
- Setpoint relay
- User configurable

#### Data management

- Datalogging
- Presentation
- Analysis
- Predictive maintenance
- Quality control
- Remote access









**MSENS**<sup>4</sup>

### SmartPirani<sup>™</sup> vacuum transducer

### Advantages and strengths

- Ultra-wide range from 1•10<sup>-6</sup> to 1333 mbar.
- Unmatched measurement performance
- Analog and digital outputs
- Solid-state setpoint control output
- User configurable through USB converter

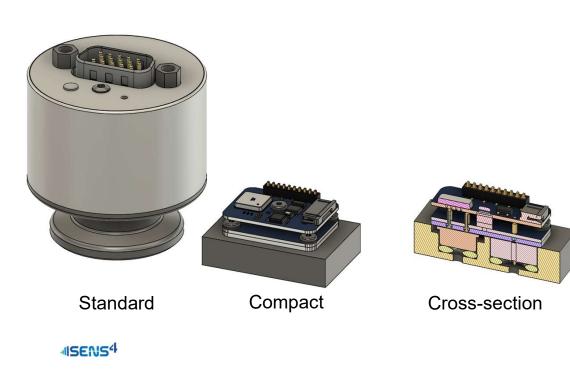




### **Customized solutions**

**Compact sensor with digital interface** 

- Small footprint
- Easy integration into equipment
- User configurable
- Private branding possible



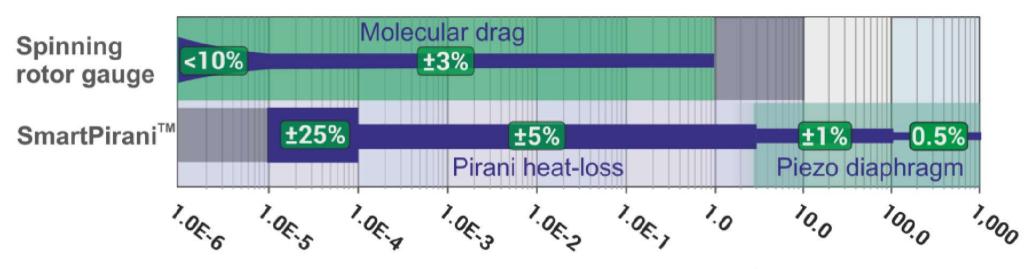
## **VIM-1 Spinning rotor gauge**

### Advantages and strengths

- Excellent long-term stability •
- Digital RS-232 or RS-485 interface
- Corrosion resistant sensor
- Bakeable all-metal sensor design
- Low-cost disposable sensor
- Passive sensor without ion- or heat source



### **Measurement range and accuracy**



Measurement range in mbar and accuracy of reading

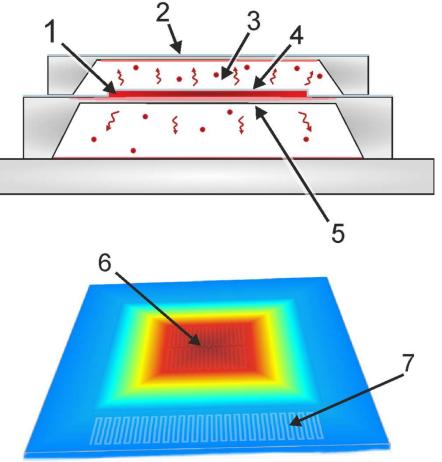
**«ISENS**<sup>4</sup>



### SmartPirani<sup>™</sup> technology

### **MEMS** sensor design

- **1.** Nickel resistive element
- 2. Silicon top cover
- 3. Measurement cavity
- 4. Silicon Nitride protective coating
- 5. Silicon Nitride diaphragm
- 6. Hot resistive element
- 7. Temperature compensation resistive element



ISENS4

## **SRG Technology**

- 1. Sensing ball levitation coil
- 2. Sensing ball element
- 3. Sensor tube
- 4. Rotation driving coil
- 5. Permanent magnet
- 6. Measurement coil
- 7. Damping coil
- 8. Vacuum flange

