# P3GW-40000 Hydrogen Sensor



### **Applications**

Energy, Electric Power, Petrochemical, Mining, etc.

# **Technical Specification**

#### **MEASUREMENT**

**Principle** 3-electrodes electrochemical

ModelP3GW-40000Gas measuredHydrogenDetection Range $0\sim40000$ Sensitivity (nA/ppm) $1\pm0.2$ Overload (ppm)50000Resolution (ppm)100

Response Time ( $T_{90}$ ) <30seconds Baseline Offset (20°C/ppm) -100 ~ 50 Zero Drift (-20°C-40°C/ppm) <150 Repeatability 2% of signal

Output Signal Linear

 $\textbf{Long Term Output Drift} \hspace{1.5cm} <0.5\% \hspace{0.1cm} signal/month \\$ 

#### **ENVIRONMENTAL**

Working Temperature Range  $-40 \sim 60^{\circ}$ C Storage Temperature Range  $-20 \sim 40^{\circ}$ C

**Operating Humidity Range**  $5 \sim 95\%$  (non-condense)

Operating Pressure Range  $50 \sim 150$  (kPa)

#### **LIFETIME**

Service Life >5 years
Storage Life 5 years

#### PHYSICAL CHARACTERISTICS

Weight 16g

## **Key Features & Benefits**

\* Fast: T90 <30seconds

\*Accurate:High accuracy in 0~4% H2

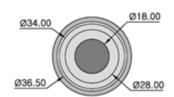
\* Reliable: Drift of sensitivity < 0.5%/month

\*Durable: Long service life of over 5 years

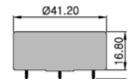
\*Intelligent:Free from environmental influence

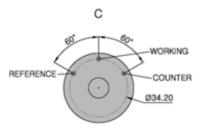
# **Product Dimension**

Α



В





Notes: 1 All dimensions in mm

2 All tolerances ±0.15mm
unless otherwise stated.

### P3GW-40000 Hydrogen Sensor

### **Cross-Sensitivity Data**

#### **Notes:**

- 1 The cross-sensitivity data is collected from a certain number of gases
- 2 It is intended to indicate sensor response to other gases except target gas
- 3 The data may change from batch to batch and may behave differently according to the test environment
- 4 Connection should be made via PCB sockets only. Soldering to the pins will seriously damage the sensor

Gas	Concentration Used /ppm	Hydrogen Concentration/ppm
СО	500	75
C2H4	100	5
H2S	50	0
SO2	50	0
NO2	50	0

### **Precautions:**

- 1 The sensor should be prevented from organic solvents or corrosive gases
- 2 The sensor should not be stored in dusty, dirty areas and anaerobic environment
- 3 Excessive shock or vibration should be prevented to avoid internal damage
- 4 The pins should not be broken or bent
- 5 The working and reference electrodes should be in short-circuit condition in storage
- 6 All performance data is based on condition at 20°C, 50%RH & 1013mbar. For sensor performance data under other conditions, please contact us.



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