



## Orbisphere High Pressure Hydrogen (H<sub>2</sub>) TC sensor with nitrogen purge, protection cap, ext. temp. sensor (170 bar)

Product #: 31290HP

ZAR Price: Contact Hach

## Allows you to monitor hydrogen in the power production process.

High Pressure Hydrogen TC sensor with nitrogen purge and protection cap. With external temperature sensor adapter.

Sensor cable to be ordered: 32505.03.

Maximum pressure: 170 bar

This sensor is the successor model for 31260HP.

Unique thermal conductivity (TC) sensor design

Selective and precise measurement of hydrogen in gaseous or liquid samples

No specific sample preparation required, the gas concentration is measured directly in the sample

Rugged construction can handle harsh plant conditions and high sample pressures

Flexibility of installation for better process control and very low maintenance

## **Specifications**

Accuracy: (Sample temp.  $20 - 50^{\circ}$ C within  $\pm 5^{\circ}$ C of calibration temperature)

The greater of

Membrane 29561A:  $\pm 1\%$  of reading, or  $\pm 2$  ppb, or  $\pm 0.03$  cc/kg, or  $\pm 1.5$  bar

Membrane 2952A:  $\pm 1\%$  of reading, or  $\pm 8$  ppb, or  $\pm 0.1$  cc/kg, or  $\pm 6$  mbar

Membrane 2935A:  $\pm 1\%$  of reading, or  $\pm 25$  ppb, or  $\pm 0.4$  cc/kg, or  $\pm 20$  mbar

Accuracy 2: (Sample temp. 0 - 50°C independent of calibration temperature)

The greater of

Membrane 2952A:  $\pm 3\%$  of reading, or  $\pm 60$  ppb, or  $\pm 0.6$  cc/kg, or  $\pm 20$  mbar

Membrane 2935A: ±3% of reading, or ±150 ppb, or ±2.5 cc/kg, or ±50 mbar

Application: Power

Certifications: 2004/108/EC - EN 61326-1

Cycle Time: 17 s

Flow Rate: Typical Flow Rate Membrane 29561A: 220 mL/min

Membrane 2952A: 200 mL/min

Membrane 2935A: 100 mL/min

Protection Class: IP65

Purge connection: Nitrogen Purge

Radiation Resistance Level: Membrane 29561A: 10<sup>5</sup> rad

Membrane 2952A: 10<sup>8</sup> rad

Membrane 2935A: 10<sup>8</sup> rad

Range: Range at 25 °C

Membrane 29561A: 0 - 2 ppm, or 0 - 25 cc/kg, or 0 - 1.5 bar

Membrane 2952A: 0 - 10 ppm, or 0 - 120 cc/kg, or 0 - 6 bar

Membrane 2935A: 0 - 20 ppm, or 0 - 220 cc/kg, or 0 - 12 bar

Response Time: 17 s

Sample Pressure: 0 - 170 bar

Temperature Range: -5 - 50 °C

Warranty: 6 months

Weight: 0.95 kg

What's included?: Sensor only.

Controller, sensor cable, flow-chamber or process connection must be ordered separately.

## What's included?

Sensor only. Controller, sensor cable, flow-chamber or process connection must be ordered separately.