The probe for Hydrogen peroxide environments

HC2A-S-HH

Standard humidity sensors have difficulty measuring accurately in high concentration H_2O_2 environments. The Hydrogen Peroxide inhibits the measurement of water vapour by occupying the pores on the surface of the sensor. This is why Rotronic has developed a special sensor, the HYGROMER® HH-1. The life of the sensor is greatly extended compared with that of the standard sensor for these applications.

APPLICATIONS

Hydrogen Peroxide sterilization of cleanrooms, incubators and other equipment. In this process the air is saturated by gassing or spraying, resulting in the formation of a microfilm on all surfaces. The hydrogen peroxide kills off all microorganisms. The H_2O_2 is then either recovered mechanically or allowed to decompose naturally over a period of 48 hours to harmless H_2O or O_2. The humidity level during the application is crucial for the effectiveness of the process.

FEATURES

- Accuracy: ±1%rh, ±0.1 K, at 10...30 °C
- Range of application: 0...60 °C / 0...100 %rh
- Digital interface (UART) and scalable analog outputs, 0...1 V
- Standard: adjusted at 23 °C and 10, 35, 80 %rh
- Standard analog output scaling: 0...1 V = -40...60 °C / 0...100 %rh

HC2A-S-HH

Order code	HC2A-S-HH
Probe type	Humidity and temperature probe for H_2O_2
Dimensions	Ø 15 x 108 mm
Range of application	0...60 °C, 0...100 %rh
Accuracy PeakLoad H_2O_2 880 ppm / 1200 mg/m³	HC2A-S-HH: ±1.0 %rh, ±0.1 K at 10...30 °C before and after diffusion phase
Power supply	3.3...5 VDC, adjusted at 3.3 VDC
Sensor type	ROTRONIC HYGROMER® HH-1, PT100 1/3 Class B
Filter type	Without filter element, so that the sensing element is faster dry after condensation phase
Housing material	Polycarbonate
Weight / IP protection	10 g / IP65

Compatible

- Transmitters HF5, PF4, PF5

Delivery package

- Factory adjustment certificate
- Short instruction manual

Recommended accessories

- Mounting flange AC5005
- Filters
- Extension cable 2 m, black E2-02A
- Adapter cable, open ends, 2 m E2-02XX-ACT/01