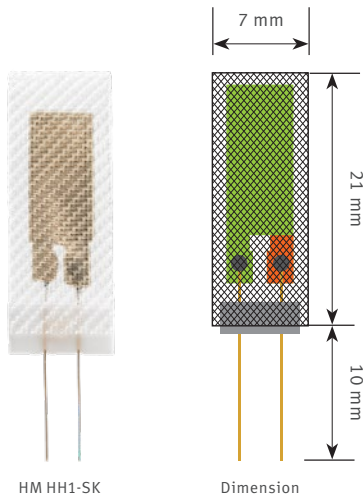


HYGROMER HH1-SK



Advantages

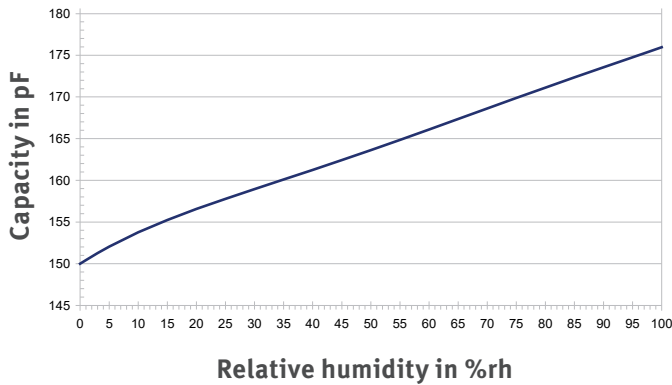
- Designed for the use in **H₂O₂** environment
- Advanced chemical resistant sensor
- Application range: -50...100 °C / 0...100 %rh
- Advanced sensor construction, mechanical robust
- Response time < 15 s

Applications

- Decontamination & sterilization processes
- Sterilization of medical equipment, incubators and clean rooms
- Pharmaceutical industry



Standardised characteristic HH1-SK



Characteristic polynomial

5th degree polynomial

$$Y = A_0 + A_1 \cdot x + A_2 \cdot x^2 + A_3 \cdot x^3 + A_4 \cdot x^4 + A_5 \cdot x^5$$

$$A_0 = 150$$

$$A_1 = 0.45064$$

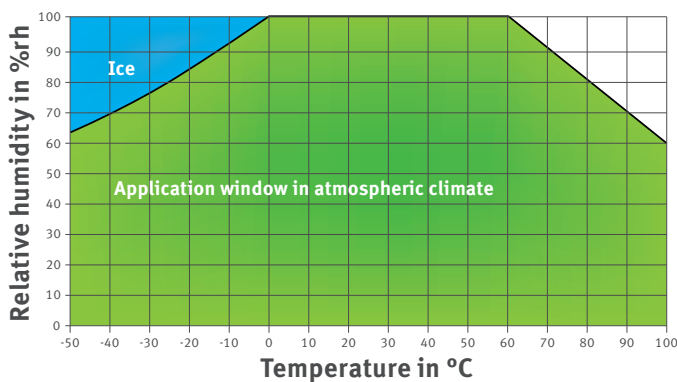
$$A_2 = -8.8894E-03$$

$$A_3 = 1.64369E-04$$

$$A_4 = -1.3683E-06$$

$$A_5 = 4.2252E-09$$

Temperature/Humidity/Parameters HH1-SK



Technical Data

Capacity	200 pF ±40 pF
Humidity operating range	0...100 %rh
Temperature operating	-50...100 °C
Accuracy at 23°C at optimal characteristic curve	±1.5 rh
Hysteresis (4 hours each at 15 %rh - 90 %rh - 15 %rh)	<1.0 %rh
Response time	<10 seconds (t ₆₃ , 23 °C and 1 m/sec. wind speed)
Long-term stability	<1 %rh / year
Uncompensated temperature deviation	Approximately -0.15 %rh / °C between 30...90 %rh
Frequency range	1...50 kHz
Max. Voltage	±12 VDC

The shown data are guide values. The resistance of the sensor strongly depends on the temperature and humidity conditions as well as on exposure duration to the pollutant. Allowed fault caused from the pollutant: ±2 %rh (10...90 %rh)

Contaminant/Pollutant	Formula	MAC value		Permissible constant concentration					
		ppm	mg/m ³	IN-1		HH-1		HT-1	
				ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Hydrogen peroxide	H₂O₂	1	1.4	90	130	880	1200	90	130