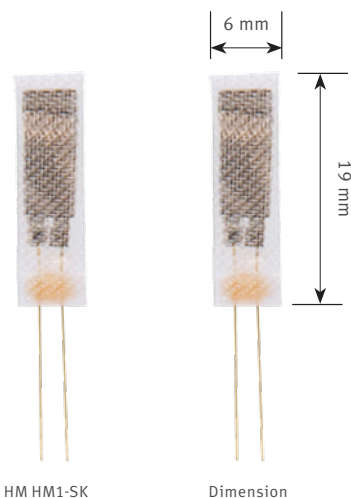


HYGROMER HM1-SK

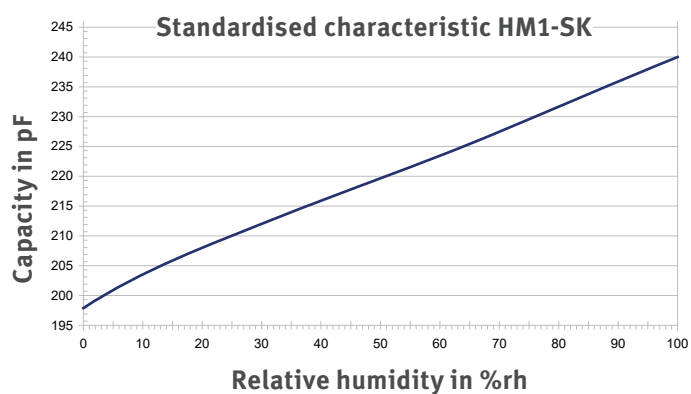


Advantages

- Designed for the use in natural outdoor environment and high humidity areas
- Application range: -50...80 °C / 0...100 %rh
- Advanced sensor construction, mechanical robust
- Coated humidity sensor against pollutants
- Response time < 15 s

Applications

- Meteorology and outdoor measurement
- Agriculture with presence of chemical substances
- High-humidity areas and offshore



Characteristic polynomial

5th degree polynomial

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

$$A_0 = 1.97800E+02$$

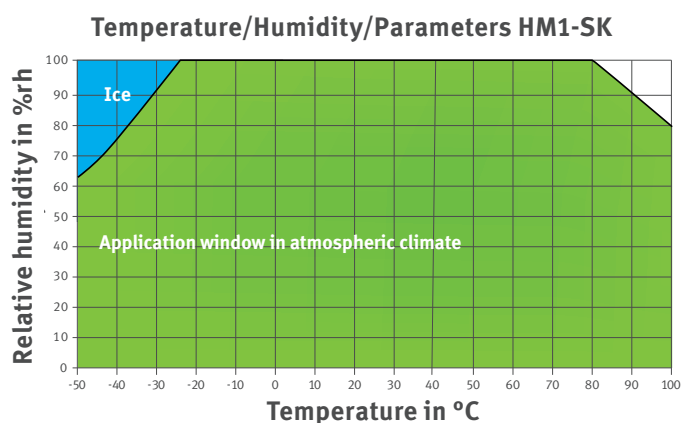
$$A_1 = 6.55390E-01$$

$$A_2 = -9.47800E-03$$

$$A_3 = 1.56000E-04$$

$$A_4 = -1.18900E-06$$

$$A_5 = 3.48430E-09$$



Technical Data

Capacity	220 pF ± 50 pF
Humidity operating range	0...100 %rh
Temperature operating	-50...80 °C
Accuracy at 23°C at optimal characteristic curve	±1.0 rh
Hysteresis (4 hours each at 15 %rh - 90 %rh - 15 %rh)	<0.5 %rh
Response time	<15 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	10...100 kHz
Max. Voltage	±35 VDC