



P-14

Capacitive Humidity Sensor

Product

The P-14 humidity sensor was specially developed to satisfy the wide range of applications in the heating-ventilation and airconditioning sector in an ideal way. By the consistent use of state of the art production technologies and our extensive know-how in the field of high performance polymers, we have succeeded in producing a high quality sensor with an extremely linear characteristic. The possibility for selecting the electrical connections provides users with ideal opportunities for implementing their own sensor design without limitation.

Advantages

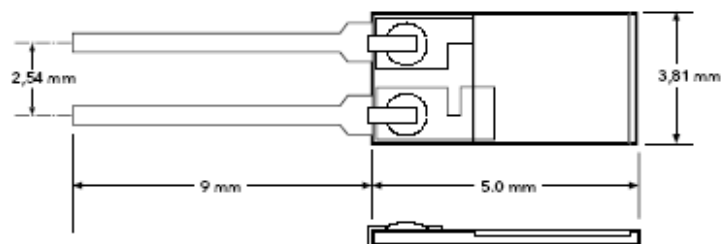
- optimal price-performance ratio
- mechanically robust
- good linearity
- resistant to condensation
- resistant to alcohol
- low hysteresis
- resistant to thermal shock



Technical Data

Sensor Type:	P-14
Measurement principle:	Capacitive Polymer Humidity Sensor
Mechanical dimensions:	W= 3,81 x L= 5,0 x D= 0,4 mm
Humidity Operating Range:	0 ... 100% relative humidity
Operating temperature range:	-30 ... +150 deg C
Accuracy:	150 pF \pm 50 pF (@ 23 deg C and 30% RH)
Sensitivity:	0,25 pF / % RH (15 ... 90% RH)
Loss Factor:	< 0.01
Accuracy:	< 1,5% RH (15 ... 90% RH @ 23 deg C, after one point calibration)
Hysteresis:	< 1,5% RH
Recovery Time:	< 12 s (50% RH \rightarrow 0% RH; Vair = 2 m/s., response time < 7 s typ.)
Frequency Range:	1 ... 100 kHz
Maximum Operating Voltage:	< 12 Vpp AC
Signal Form:	alternating signal without DC bias
Connectors:	SIL, wires or customer specific

Dimensions



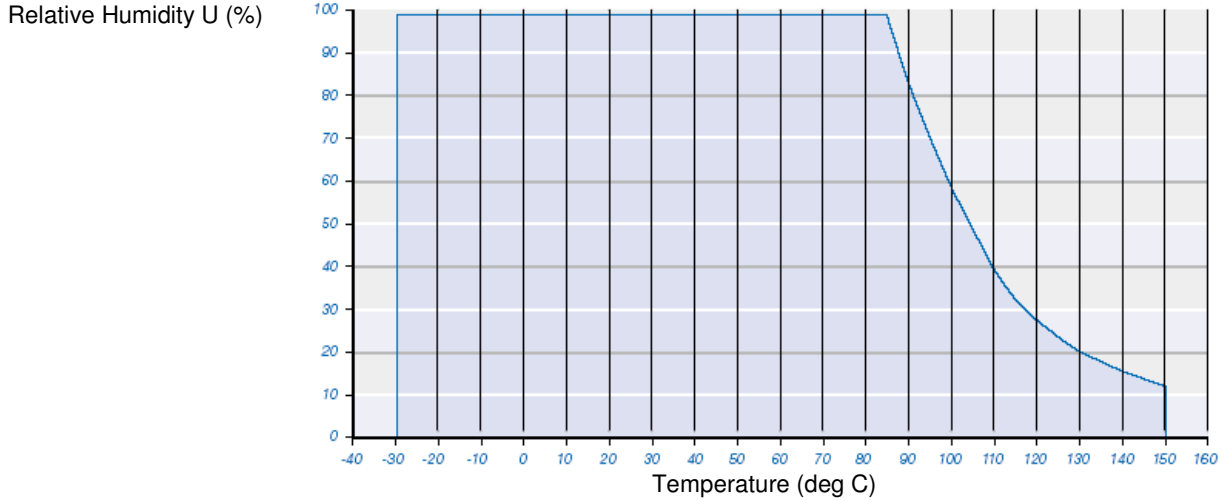
INNOVATIVE SENSOR TECHNOLOGY



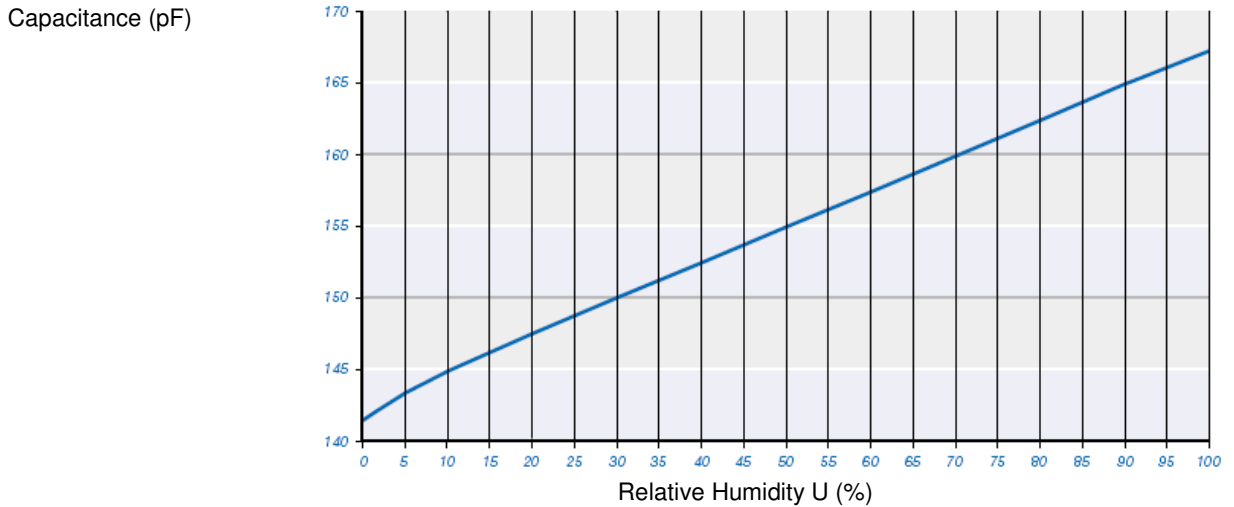
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Capacitive Humidity Sensor

Humidity-Temperature-Range



Sensor Characteristic



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