



Relative air humidity and temperature sensor

- Accurate also at high RH
- Electronics encapsulated by silicone
- Solid stainless steel housing
- Built-in heating
- Recalibration not necessary
- Built-in compensation for temperature function

Introduction

The HS-91 is a relative air humidity and temperature sensor with high accuracy, even in the case of higher relative humidity (RH) values. The electronics are moulded into a solid stainless steel housing, and the device can therefore be used virtually everywhere. A built-in heating system prevents condensation on the sensor element when the dew point is reached. A chip programmed by Contronics compensates for temperature fluctuations. The sensor is already calibrated on delivery. Follow-up calibration is unnecessary due to the excellent stability.

HS-91P

The HS-91 can also be delivered with a DIN plug for direct connection to a Contronics humidifier. (Order number: HS-91P)

Specifications HS-91 (P)

Relative humidity:

Output 0-1 Volt: 0-100% RH linear or
0-10 Volt: 0-100% RH linear

Temperature:

Output 0-4 Volt linear 0 V = -50 °C
0,5 V = 0 °C
1,0 V = 50 °C

Supply voltage 12-15 Volt direct current

RH performance specifications:

Resolution 0.5% RH min.
0.3% RH typical

Absolute accuracy 10-90% < 2% RH
0-10% 2-4% RH
90-100% 2-4% RH

Range 0-100%

Reaction time 4 sec.

Long-term stability < 1% RH/year

T performance specifications:

Resolution 0.04 °C min.
0.01 °C typical

Absolute accuracy 0.5 °C at 25 °C

Range - 40 °C min.
+ 70 °C max.

Reaction time 5 sec.