Temperature/humidity - transmitter

For intrinsically safe applications (Zone 0)

Measurement transducer for intrinsically safe application:
The type 5610.07 range of intrinsically safe measurement transducers was developed for precise measurement in the range from 0...100% RH and -40...180°C.

The measurement head is approved for use in ZONE 0 and for Temperature Class T6.

The measurement transducer consists of:
- Supply and evaluation unit in accordance with PTB 99 ATX 2042 type testing
- Sensor unit comprising driver unit and measurement head

A current or voltage signal is available for analogue output of humidity and temperature. The analogue outputs can be freely selected and configured via a serial RS232-interface using the latest microprocessor technology.

In addition to humidity and temperature, the transducer also supplies the following measurements:

- Dew-point temperature Td
- Freezing temperature Tf
- Wet-bulb temperature Tw
- Water vapour partial pressure e
- Mixing ratio r
- Absolute humidity dv
- Specific enthalpy h

Technical data	Ref.No.
Transmitter EX-proof	**5610.07**
Relative humidity	
Principle	Capacitive
Measuring range	0 ... 100 % RH
Accuracy	±2% (0...90%), ±3% (90...100%) RH (incl. Hysteresis)
Response time	<30s
Temperature	
Principle	Pt1000 A, DIN EN 60751
Measuring range	-40 ... 180 °C
Accuracy	±0.2°C (at 20°C)

-40...+180°C
EC-type examination tested (PTB)
Approved for Zone 0
Exchangeable humidity sensor