



- Description:
- Transmitter for flammable gases, toxic gases or oxygen (see ExTox Gas- / Transmitter List)
  - 4...20 mA-output with linear curve
  - For industrial and commercial applications

**Features**

- Measured Gas: *ExTox Gas- / Transmitter List*
- Measuring Range: *ExTox Gas- / Transmitter List. On demand the standard measuring range can factory sided be diversified in range 50 to 200 %. Bigger deviations if applicable on demand.*
- Measuring Principles:
- Sens ...-WT: Catalytic Combustion
  - Sens ...-IR: Absorption
  - Sens ...-EC: Electrochemical Cell
  - Sens ...-KE: Electrochemical Oxygen Cell
  - Sens ...-HL: Metal oxide-semiconductor
- Operation Mode: Diffusion (Operation with aspirated flow possible, e. g. in *ExTox IMC*)
- Setting Time: *ExTox Gas- / Transmitter List*

**Range of Application**

- Temperature: *ExTox Gas- / Transmitter List*
- Humidity: 10 r. H to 90 r. H (please avoid condensation)
- Pressure: 800 hPa to 1100 hPa
- Deviations:
- Changes on climatic conditions can be done with the usual rate for atmospheric deviations. Very quick changes, such as for example shock pressures, can cause bigger measuring deviations for short time.
  - Extension of climatic ranges is in particular cases possible acc. to prior agreement with *ExTox*.

**Conformity**

- EC-Directives:
- 2014/30/EU (EMC)
  - only Sens ...-EC/-KE: 2014/34/EU (ATEX) CE Ⓜ II 3G (suitable for Zone 2)
- Protection: Ex nA IIC T6 X Gc (only Sens ...-EC/-KE)
- Measuring Functions:
- designed acc. to  
DIN EN 60079-29-1 (flammable gases)  
DIN EN 45544-1 to DIN EN 45544-3 (toxic gases)  
DIN EN 50104 (oxygen)
  - Sens ...-HL: Restrictions due to measuring principle exist as far as requirements of standards regarding linearity are concerned and on climatic influences. This has to be considered for designing alarm concept.

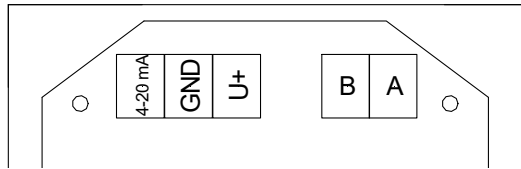
# Transmitter Series Sens

## Mechanical Features

Dimensions: (Length x Width x Height)	<ul style="list-style-type: none"><li>Sens ...-WT/-IR/-EC/-HL: 138 mm x 105 mm x 65 mm</li><li>Sens ...-KE: 188 mm x 105 mm x 65 mm</li></ul>
Weight:	ca. 0.5 kg
Material:	Cast aluminium (lacquered) / Stainless steel
Enclosure Rating:	<ul style="list-style-type: none"><li>IP 65 (except gas inlet)</li></ul>
Installation:	<ul style="list-style-type: none"><li>Wall mounting</li><li>Installation on ceiling by means of angle (as option)</li><li>Installation in pipes by means of adapter (as option)</li><li>Installation in suction systems, e. g. <i>ExTox</i> IMC, by means of flow through adapter (as option)</li></ul>
Storage Temperature:	-25 °C to +60 °C

## Electrical Features

Power Supply:	24 ± 6 V DC
Power Consumption:	<ul style="list-style-type: none"><li>Sens ...-WT/-IR/-HL: 80 mA / 2 W</li><li>Sens ...-EC/-KE: 40 mA / 1 W</li></ul>
Interface:	<ul style="list-style-type: none"><li>4...20 mA, active (other current and voltage ranges on demand)</li><li>linear calibration curve</li><li>Option: RS 485 for remote adjustment (Type Sens-I)</li></ul>
Max. Load:	500 Ω
Cable Gland:	M 16 x 1.5 (diameter of cable 5 to 9 mm)
Terminal Assignment:	U+ Power Supply 24 V GND Ground (power supply and current output) 4-20mA Current output 4...20 mA A, B RS 485-Interface, only Type Sens-I



Line:	<i>ExTox</i> -Cable 3 x 0.8 mm or similar (Sens-I: <i>ExTox</i> -Cable 6 x 0.8 mm or similar)
Line Length:	Depending on resistance of used cable; when using <i>ExTox</i> -Cable (wire resistance of 9 Ω/km) <ul style="list-style-type: none"><li>Sens ...-WT/-IR/-HL: maximum 1000 m</li><li>Sens ...-EC/-KE: maximum 2000 m</li></ul>

(Subject to Technical Changes)