



- 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
 - Application in explosion hazardous areas of Zones 1 and 2

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:	<ul style="list-style-type: none"> ▪ ExSens ...-WT: Catalytic Combustion ▪ ExSens ...-IR: Infrared-Absorption ▪ ExSens ...-EC: Electrochemical Cell ▪ ExSens ...-KE: Electrochemical Oxygen Cell ▪ ExSens ...-HL: Metal oxide-semiconductor
Operation Mode:	Diffusion (Operation with aspirated flow possible, e. g. in ExTox IMC)
Response 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:	<ul style="list-style-type: none"> ▪ 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. ▪ Climatic range extension sometimes possible acc. to prior agreement with ExTox.

Conformity

EC-Directives:	<ul style="list-style-type: none"> ▪ 2014/30/EU (EMC) ▪ 2014/34/EU(ATEX) CE_{0158} Ex II 2G (suitable for Zone 1 and 2)
Type Test:	<ul style="list-style-type: none"> ▪ EU-Type Test: BVS 04 ATEX E 066 X (EN 60079-0 and EN 60079-1) with 1st and 2nd amendment ▪ Performance: BAM 07 ATEX 0301 X (EN 60079-29-1), Methane to Hexane
Protection:	<ul style="list-style-type: none"> ▪ ExSens ...-WT/-IR/-HL: Ex db IIC T4 (-20 °C ≤ T_{amb} ≤ 60 °C) Gb ▪ ExSens ...-EC: Ex db IIC T5 (-20 °C ≤ T_{amb} ≤ 49 °C) Gb Ex db IIC T4 (-20 °C ≤ T_{amb} ≤ 70 °C) Gb ▪ ExSens ...-KE: Ex db IIC T6 (-20 °C ≤ T_{amb} ≤ 43 °C) Gb Ex db IIC T5 (-20 °C ≤ T_{amb} ≤ 58 °C) Gb Ex db IIC T4 (-20 °C ≤ T_{amb} ≤ 70 °C) Gb
Measuring Function:	<ul style="list-style-type: none"> ▪ Designed acc. to EN 60079-29-1 (flammable gases) EN 45544-1 to DIN EN 45544-3 (toxic gases) EN 50104 (oxygen) ▪ ExSens ...-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 ExSens

Article-No. 251...

Mechanical Features

Dimensions:	▪ ExSens ...-WT/-IR/-HL:	170 mm x 138 (145)mm x 100 mm
(Length x Width x Height)	▪ ExSens ...-EC:	180 mm x 138 (145)mm x 100 mm
	▪ ExSens ...-KE:	198 mm x 138 (145)mm x 100 mm

Weight: ca. 2.5 kg

Material: ▪ Housing: cast aluminium, lacquered
▪ Sensor block: stainless steel

Enclosure Rating: ▪ IP 65 (except gas inlet)

Installation: ▪ Wall mounting
▪ Installation on ceiling by means of angle (as option)
▪ Installation in pipes by means of adapter (as option)

Storage Temperature: -25 °C to +60 °C

Electrical Features

Power Supply 24 ± 6 V DC

Power Consumption: ▪ ExSens ...-WT/-IR/-HL: 80 mA / 2 W
▪ ExSens ...-EC/-KE: 40 mA / 1 W

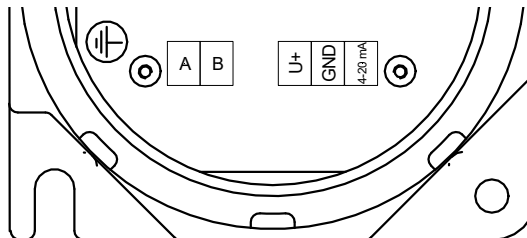
Interface: ▪ 4...20 mA, active (other current and voltage ranges on demand)
▪ linear calibration curve
▪ Option: RS 485 for remote adjustment (Type ExSens-I)

Max. Load: 500 Ω

Cable Gland: M 16 x 1.5 (diameter of cable 4 to 8.5 mm)
(ExSens-I: M 16 x 1.5, diameter of cable 6 to 12 mm)

Terminal Assignment:

U+	Power Supply 24 V
GND	Ground (power supply and current output)
4-20mA	Current Output 4...20 mA
A	RS 485-Interface, only Type ExSens-I
B	RS 485-Interface, only Type ExSens-I



Line: ExTox-Cable 4 x 0.8 mm or similar
(ExSens-I: ExTox-Cable 6 x 0.8 mm or similar)

Line Length: Depending on resistance of used cable; when using ExTox-Cable (wire resistance of 9 Ω/km)
▪ Sens ...-WT/-IR/-HL: maximum 1000 m
▪ Sens ...-EC/-KE: maximum 2000 m

(Subject to Technical Changes)