

#### Features

Measured Gas	: Flammable Gases
Measuring Range	: 0 to 100 % LEL
Measuring Principle	: IR-Absorption
Operation Temperature	: -25 °C to +55 °C
Humidity	: 0 r. H. to 95 r. H. (Please avoid condensation)
Pressure	: 800 hPa to 1100 hPa
Response Time $t_{90}$	: 20 s

#### Mechanical Features

Dimensions	: 138 mm x 105 mm x 65 mm (Length x Width x Height)
Weight	: approx. 0.5 kg
Material	: Cast aluminium (lacquered) / stainless steel
Enclosure Rating	: IP 54 (with the exception of gas inlet)
Installation	: Wall mounting, installation in pipes with adaptor (optional)
Storage Temperature	: -25 °C to +60 °C

#### Electrical Features

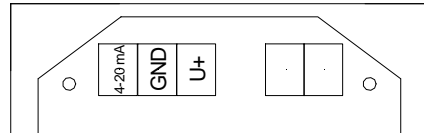
Power Supply	: 24 ± 6 V DC
Power Consumption	: 80 mA / 2 W
Interface	: 4-20 mA (linear)
Max. Load	: 500 $\Omega$
Cable Gland	: M 16 x 1.5 (diameter of cable 5-9 mm)

#### Conformity

EC-Directives	: CE 89/336/EEC (EMC)
Measuring Function	: Designed according to EN 61779-1 with EN 61779-4

## Installation

- Place : Close to potential sources of release, if known. Otherwise near to the floor (for gases heavier than air) or ceiling (for gases lighter than air, for example hydrogen, methane, ammonia)
- Position : sensor opening to be placed downwards
- Fixing : drilling jig as Download on our *ExTox* Homepage
- Terminal Assignment :



U+ : Power supply 24 V  
GND : Ground (Power supply and current output)  
4-20 mA : Current output 4-20 mA

- Line Length : max 1,000 m when using *ExTox*-Cable 3 x 0.8 mm (corresponds to a wire resistance of 9 Ω)
- Time of Stabilisation : approx. 1 min (90%), approx. 30 min (99%)

## Use

- Description of the Measuring Principle : Many gases absorb IR-light at specific wave lengths. In case a cell with measured gas is lighted through by an IR-Source, the attenuation of light intensity measured at the output has to be considered as size for the measured gas concentration.

- Cross Sensitivity :
  - The IR-Sensor reacts upon all hydrocarbons. There might be various differences in relative sensitivity depending on substance.
  - Hydrogen does not supply with a measuring signal due to the principle.

- Special Influences :
  - Keep dust and condensate away.
  - Alarm levels from 10 % LEL

- Sensor Lifetime : typical: 2-5 years, depending on operation conditions

## Maintenance

- Intervals : Minimum every half year.  
We recommend to keep EN 50073 and national regulations (or German BG Chemie-Information BGI 518)

- Test Gas (Zero Point) : Nitrogen, synthetic air

- Test Gas (Sensitivity) : 0.4 to 0.8 Vol.-% propane in air

- Test Gas Application : 0.5 to 1 l/min by means of *ExTox*-Calibration Adapter for minimum 60 s  
Article No. 620005

## Sensor Element, Replacement

- Further Information : EN 50073, BG Chemie-Information BGI 518 (German version only)

This Data Sheet is at the same time a type specific supplement to the Instruction Manual *ExTox Transmitter ExSens/Sens*.

(Subject to technical change)