

## Dräger Infrared Sensors Sensors for Portable Gas Detectors

Dräger infrared sensors deliver optimal measurement results and are unaffected by sensor poisons. The long service life of these sensors results in hardly any follow-up costs. You can also use Dräger infrared sensors to take Ex and CO<sub>2</sub> measurements simultaneously.



## Benefits

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### Infrared Sensors

- monitoring of explosive mixtures and CO<sub>2</sub>
  - recommended for frequent occurrence of explosive gases
  - compatible with: X-am 5600 / 7000 / 8000
  - measuring range: lower explosion limit up to 100 vol.%, for CO<sub>2</sub> up to 5 or rather up to 100 vol.%
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### Low operational costs thanks to long service life

The long service life of this type of sensor (anticipated length of use > 5 years) as well as its reduced drift and 12-month calibration interval result in low operational costs.

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### Extremely precise and impervious to sensor poisons

The infrared sensor technology distinguishes itself by its high level of accuracy. Combined with the imperviousness to sensor poisons, they enable the detection of gases and vapours in a wide range of application areas.

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### Measurements in extraordinary conditions

Measuring explosive gases and vapours in environments with hydrogen sulphide and silicones, as well as in inert atmospheres, has no impact on the performance of this sensor.

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### Simultaneous Ex and CO<sub>2</sub> measurement

Depending on the application, it is necessary to measure explosive gases and monitor carbon dioxide concentrations simultaneously, e.g. in the sewage sector. For this, only one sensor is needed – the Dual IR-Ex/CO<sub>2</sub> sensor fulfils both measurement tasks. This increases your flexibility when configuring the gas warning device.

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### Our own design

The sensor set-up, selection of detectors and type of gas ingress are just a few of the factors that have a direct influence on the measuring performance of an IR sensor. Developing the sensors ourselves gives Dräger the opportunity to optimise these parameters, so they fulfil the requirements of various applications, e.g. personal monitoring, clearance measurements and leak detection.

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### From LEL to 100 vol. %

The infrared Ex sensors can be used for the most diverse measurement tasks: in the range of the lower explosive limit and also for measurements up to 100 vol. %. The IR measuring method can also be used for

## Benefits

carbon dioxide. Furthermore, we offer you a dual sensor for simultaneously measuring explosive gases in the range of the LEL or rather up to 100 vol. % and carbon dioxide up to 100 vol. %.

## System Components

D-23637-2009



### Dräger X-am® 5600

Featuring an ergonomic design and innovative infrared sensor technology, the Dräger X-am® 5600 is one of the smallest gas detection instrument for the measurement of up to 6 gases. Ideal for personal monitoring applications, this robust and water-tight detector provides accurate, reliable measurements of flammable and toxic gases and vapors as well as oxygen.

D-6491-2017



### Dräger X-am® 8000

Clearance measurement was never this easy and convenient: The 1 to 7 gas detector detects toxic and flammable gases as well as vapours and oxygen all at once – either in pump or diffusion mode. Innovative signalling design and handy assistant functions ensure complete safety throughout the process.

## Related Products



D-27736-2017

### Dräger Catalytic Ex-Sensors

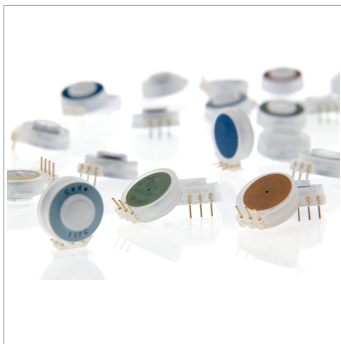
High product quality, low operational costs: Thanks to DrägerSensor CatEx PR technology, our sensors are resistant to poisoning and particularly stable over the long-term. They also deliver fast response times for rapid warnings of gas hazards.



D-19891-2017

### PID sensors

PID sensors are the ideal choice for detecting low concentrations of volatile organic compounds. A PID (photoionization detector) is used to measure hazardous substance groups or can even be adjusted to measure individual substances.



D-12191-2010

### DrägerSensor XXS

Dräger has developed miniature electrochemical sensors specially for the Dräger Pac®, X-am® 1/2/5 and X-am® 8000 generation. The sensors detect many different gases and vapours. They are also very reliable and stable over the long-term, thereby reducing your operating costs.

## Ordering Information

Description	Measuring range	Device	Order no.
DrägerSensor Dual IR Ex / CO <sub>2</sub> ES	0 – 100 % LEL or 0 – 100 vol.-% CH <sub>4</sub> 0 – 5 vol.-% CO <sub>2</sub>	X-am® 5600, X-am® 8000	68 51 880
DrägerSensor IR Ex ES	0 – 100 % LEL or 0 – 100 vol.-% CH <sub>4</sub>	X-am® 5600, X-am® 8000	68 51 881
DrägerSensor IR CO <sub>2</sub> ES	0 – 5 vol.-% CO <sub>2</sub>	X-am® 5600, X-am® 8000	68 51 882
DrägerSensor® Dual IR Ex / CO <sub>2</sub> HC	0 - 100 % LEL or 0 - 100 vol.-% CH <sub>4</sub> 0 - 100 vol.-% CO <sub>2</sub>	X-am® 8000	68 00 276
DrägerSensor Smart IR Ex	0 – 100 % LEL or 0 – 100 vol.-% CH <sub>4</sub>	X-am® 7000	68 10 460
DrägerSensor Smart IR CO <sub>2</sub>	0 – 5 vol.-% CO <sub>2</sub>	X-am® 7000	68 10 590
DrägerSensor Smart IR CO <sub>2</sub> HC	0 – 100 vol.-% CO <sub>2</sub>	X-am® 7000	68 10 599
ES = Energy saving			
HC = High concentration			

## Notes

Not all products, features, or services are for sale in all countries.  
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