# Dräger

# Dräger Catalytic Ex-Sensors Sensors for Portable Gas Detectors

The catalytic DrägerSensors<sup>®</sup> are particularly insensitive to shock and offer excellent poisoning resistance. The high product quality and long-term stability ensure low operating costs. Fast response times provide reliable warnings of gas hazards.



## **Benefits**

### Our own design

We develop the sensors with our own engineering knowledge. In this way, we can assure their quality and we know the measurements are accurate. This allows them to be fully utilised in combination with our full line of inhouse developed Dräger gas detectors.

### Shock resistance

The DrägerSensor CatEx SR (SR=shock resistant) is characterised by a special insensitivity to shock. A fall from a great height, which exceeds the standard requirements, has no effect on the sensor signal. The usual adjustment of the zero point and sensitivity required after impact loading can be omitted, which saves time and effort.<sup>1</sup>

### Durable and resistant against sensor poisons

Hydrogen sulphide and silicone are known catalytic poisons that may be present in environments where flammable gases can occur. Thanks to the imrpoved pellistor composition, the sensors are highly resistant to poisoning from these substances. This leads to extraordinarily stability over the long-term and ensures low operational costs.

### Vapour sensitivity

Unknown gas hazards and higher hydrocarbons pose a particular challenge to the display sensitivity of catalytic sensors. The DrägerSensors CatEx are characterized by such a sensitivity. The detection of all hydrocarbons (from methane to nonane) has been certified in a measurement performance certificate for the device series X-am<sup>®</sup> 2500/5000 and X-am 3500/8000.<sup>2</sup>

### Versatile measurements, easy adjustment

Dräger's catalytic sensors are suitable for warning of known and unknown flammable gas hazards. The sensors offer the possibility to adjust the instrument to a variety of different combustible gases or vapours including hydrogen. Via a simple instrument function different test gases can be used for the adjustment. The necessary calculations are performed by the gas measuring devices. Manual conversions are not necessary.

### **Rapid response times**

A rapid warning for flammable gases and vapours is vital. The CatEx sensors' fast response times minimise the timespan between danger and warning.

## **Benefits**

### Fast calibration capability

With the DrägerSensor CatEx SR, fresh air calibration is possible after a maximum of only 60 seconds after switching-on the device. This saves valuable time and allows you to perform a fresh air calibration shortly before the shift, for example.

### From the LEL to 100 vol. %

Our catalytic sensors are suitable for measurements from the lower explosion limit to 100 vol. %.

The X-am 8000 features the option to automatically switch the measurement ranges, making it easier to read off results when monitoring for high methane concentrations: if the CatEx sensor measures values above 100 % LEL, the display switches to the range of 0 to 100 vol. %.

<sup>1</sup> An adjustment is only necessary if, in case of high drop heights, the fresh air reading deviates from 0 after the impact.

<sup>2</sup> Nonane-suitable pump adapter required. Please contact Dräger.

# System Components



### Dräger X-am<sup>®</sup> 2500

The Dräger X-am<sup>®</sup> 2500 was especially developed for use as personal protection. The 1 to 4 gas detector reliably detects combustible gases and vapours, as well as O<sub>2</sub>, CO, H<sub>2</sub>S, NO<sub>2</sub> and SO<sub>2</sub>. Reliable and fully mature measuring technology, durable sensors and easy handling ensure a high degree of safety with extremely low operating costs.

# System Components



### Dräger X-am<sup>®</sup> 2800

The X-am 2800 multi-gas detector measures up to four gases and is equipped with a particularly shock-resistant CatEx sensor. With the Dräger Gas Detection Connect software, it offers live data transmission and powerful fleet management. Designed for personal monitoring, the X-am 2800 offers the highest level of safety at a low cost of ownership.

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### Dräger X-am<sup>®</sup> 5000

The Dräger X-am<sup>®</sup> 5000 belongs to a generation of gas detectors, developed especially for personal monitoring applications. This 1- to 5-gas detector reliably measures combustible gases and vapors as well as oxygen and harmful concentrations of toxic gases, organic vapors, Odorant and Amine.

### Dräger X-am<sup>®</sup> 3500

The Dräger X-am<sup>®</sup> 3500 was especially designed for clearance measurements. The 1 to 4 gas detector reliably detects flammable gases and vapours as well as  $O_2$ , CO,  $H_2S$ ,  $NO_2$  and  $SO_2$ . The innovative signalling design and extensive range of accessories ensure optimum safety and easy handling.



### 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**



### **Dräger Infrared Sensors**

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.

### **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.



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### **DrägerSensor XXS**

Dräger has developed miniature electrochemical sensors specially for the Dräger Pac<sup>®</sup>, X-am<sup>®</sup> 1/2/5 and X-am<sup>®</sup> 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	Detection of	Device	Order no.
DrägerSensor <sup>®</sup> CatEx	0 – 100 % LEL or	Gases and vapours	Dräger X-am <sup>®</sup> 2500,	68 12 950
125 PR	0 – 100 Vol% CH <sub>4</sub>		Dräger X-am <sup>®</sup> 5000,	
			Dräger X-am <sup>®</sup> 3500	
			Dräger X-am <sup>®</sup> 8000	
DrägerSensor <sup>®</sup> CatEx	0 – 100 % LEL or	Gases	Dräger X-am <sup>®</sup> 2500,	68 13 080
125 PR-Gas	0 – 100 Vol% CH <sub>4</sub>		Dräger X-am <sup>®</sup> 5000,	
			Dräger X-am <sup>®</sup> 8000	
DrägerSensor <sup>®</sup> CatEx	0 - 100 % LEL	Gases and vapours	Dräger X-am <sup>®</sup> 2800	68 51 900
SR				
SR = shock resistant				
PR = poison resistant				

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