

## Electrochemical (EC) DrägerSensors® for Fixed Gas Detectors

When you need to selectively measure the smallest concentrations of airborne toxic gases and oxygen under ambient conditions, Electrochemical DrägerSensors are your answer. These long-life EC sensors for Dräger transmitters offer fast response times, high accuracy, and unmatched stability.



ST-383H-2003

## Benefits

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### Designed for a long, reliable lifetime

Dräger combines resistant plastics, such as PTFE, with the purest catalysts making a sensor that provides reliable measurement for a long period of time. A patented internal pressure compensation mechanism compensates for adverse environmental influences such as changes in humidity, temperature expansion, and weather-related variations in air pressure. A large electrolytic reservoir and large electrode areas provide sufficient reserves for a long lifetime, even in harsh industrial environments.

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### Ready for immediate use

All sensors are factory tested with target gas and calibration values are saved in the internal electronic memory. As a result, sensors in the field can be used immediately in the corresponding transmitters. High quality manufacturing ensures long stability and low age-related drift.

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### Designed for use in a wide range of environmental conditions

All sensors have an internal temperature sensor. Between -40°F/-40°C and +149°F/+65°C, the temperature influence is compensated to zero, and the sensitivity is compensated. The internal pressure compensation allows the transmitters to be used in a wide range of environments—from extreme low pressure, to atmospheric high pressure. In combination with exchangeable selective filters, it is possible to reduce the influence of disruptive cross-sensitivities.

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### Advanced sensor technology gives you more options

Select between oxygen sensors for partial pressure measurement or for volume percent measurement. The O<sub>2</sub>-LS is the longest lasting electrochemical oxygen sensor in the world that does not wear out. Due to a replaceable electrolyte, the AC acid gas sensor has an unlimited lifetime. Dräger also offers sensors with organic electrolytes for detection limits in lower ppb range.

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### Unmatched performance

Performance advantages of Dräger's electrochemical sensors include high stability, excellent measurement accuracy, fast response, low detection limits, and optimized selectivity. The sensors offer comprehensive self-diagnosis options and have no position dependency.

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Viton® is a registered trademark of DuPont Performance Elastomers.

## System Components

ST-3811-2003



### Dräger Polytron® 3000

Continuous safety calls for nonstop gas monitoring. The Dräger Polytron® 3000 is an intrinsically safe gas detector for the continuous monitoring of more than 60 toxic gases and oxygen in ambient air. It is part of a new generation of gas detectors developed on a modular platform. The Polytron® 3000 communicates to the central control system via a 4 to 20 mA signal.

ST-3812-2003



### Dräger Polytron® 7000

The Dräger Polytron® 7000 gas detector can satisfy all toxic gas and oxygen measurement applications on a single platform. It meets compliance requirements, as well as the high specification requirements of customized solutions.

D-158-2016-wg



### Dräger Polytron® 5100 EC

The Dräger Polytron® 5100 EC is a cost-effective explosion proof transmitter for the detection of toxic gases or oxygen. It uses a high performance plug and play electrochemical DrägerSensor® to detect a specific gas. A 2 or 3 wire 4-to-20 mA output with relays make it compatible with most control systems.

D-52604-2012



### Dräger Polytron® 8100 EC

The Polytron® 8100 EC is Dräger's top of the line explosion proof transmitter for the detection of toxic gases or oxygen. It uses a high performance plug and play electrochemical DrägerSensor® to detect a specific gas. Besides a 3 wire 4 to 20 mA analog output with relays, it also offers Modbus and Fieldbus protocol making it compatible with most control systems.

## Accessories

ST-5678-2006



### Gassing Adapter

This hard PE adapter is designed for gassing of electrochemical sensors in Dräger Transmitters during calibration, and is also suitable for continuous gassing when used with a suction unit.

Part number: 68 06 978

ST-5676-2006



### Viton® Calibration Adapter

This soft adapter is made of Viton®, for gassing during zero-point testing and when calibrating electrochemical sensors in Dräger transmitters.

Part number: 68 10 536

ST-5679-2006



### Remote Calibration Adapter

This adapter is designed for calibrations in transmitters with electrochemical sensors that are mounted in locations with poor accessibility.

Part number: 68 07 955

ST-5718-2006



### Dust Filter

This hydrophobic dust filter is designed for electrochemical polytron sensors (also see the corresponding sensor data specification).

Part number: 68 09 595

## Accessories

ST-5660-2006



### Start-Up Kit AC, AC L and HF/HCl L

For filling of sensors (Part No. 6809375, 6810595) and Dräger Polytron HF/HCl L (Part No. 6809360), the kit includes bottles with electrolyte and pipette.

Part number: 68 09 381

D-4788-2017



### Selective Filters

Selective filters absorb interfering gases in the ambient air. They are located in the sensor opening of the DrägerSensor and can easily be replaced if worn out.

ST-5628-2006



### Calibration/Process Adapter AC

This gassing adapter is designed for calibration of DrägerSensor AC (Part No. 6810595) and for continuous gassing when used with a suction unit.

Part number: 68 09 380

ST-5686-2006

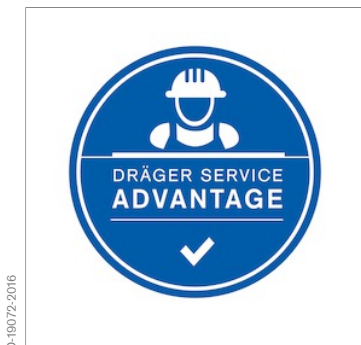


### Splash Guard

This splash guard protects DrägerSensors AC (Part No. 6810595) against dripping water.

Part number: 68 09 379

## Services



### Dräger Service

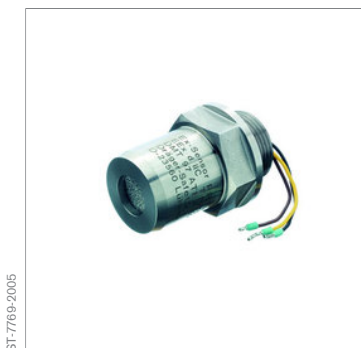
When your operation's safety equipment is backed by over 125 years of experience and supported by the same team that engineered it, you can rely on service and rental solutions that are tailored to meet your unique needs. With Dräger's safety solutions, you get complete peace of mind, budget security, and full-service support that you can count on every step of the way. That's the Dräger Service Advantage.

## Related Products



### DrägerSensor® IR

Upgrade to infrared technology in an instant. The DrägerSensor® IR can replace catalytic Ex sensors (catalytic bead sensors, pellistors) without additional installation work.



### Catalytic Bead DrägerSensors®

Measuring combustible gases and vapors is essential for the safety of your people and your facilities. Intended for Dräger's fixed gas detectors, Catalytic Bead DrägerSensors® are designed for continuous monitoring and detection of combustible gases and vapors—with different versions for different applications and concentrations.

## Ordering Information

**Selective filters for use with DrägerSensors (also see the corresponding sensor data specification):**

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CO (6809605) 6809684 A2F

CO LS (6809620) 6809684 A2F

COCl<sub>2</sub> (6809930) 6809933 K2F

H<sub>2</sub> (6809685) 6809684 A2F

HCl (6809640) 6809643 NF

HCN (6809650) 6809653 BF

Hydride (6809635) 6809658 CF

NO<sub>2</sub> (6809655) 6809658 CF

PH<sub>3</sub>/AsH<sub>3</sub> (6809695) 6809638 MF

SO<sub>2</sub> (6809660) 6809663 KIF

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## Notes

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